

A high-angle, nighttime photograph of a dense urban skyline, likely Hong Kong. The city is illuminated with warm yellow and orange lights from buildings and streets, reflecting on the water in the foreground. The sky is a deep blue with a hint of purple from the twilight. The image serves as the background for the report cover.

Pankaj Ghemawat with Steven A. Altman

# DHL GLOBAL CONNECTEDNESS INDEX 2012

Analyzing global flows and their  
power to increase prosperity



# DHL GLOBAL CONNECTEDNESS INDEX 2012

Pankaj Ghemawat  
with Steven A. Altman,  
IESE Business School



Dear Reader,

Among the forces shaping the future of business and society, globalization stands out as one of the most prominent drivers of change. From poverty reduction to job growth and major advances in technology, the benefits of cross-border interactions can be felt everyday. Globalized countries maintain a competitive edge, and their populations enjoy more prosperity.

Since the onset of the global financial crisis in 2007, however, global connectedness has been faltering and has even suffered reversals, according to the DHL Global Connectedness Index 2012. This is an alarming finding given the huge gains that global connectedness has brought to the world's citizens.

Five years into the crisis, some might argue that the risks of globalization – particularly in the form of volatile capital flows – outweigh the benefits. For globalization skeptics and supporters alike, this year's DHL Global Connectedness Index presents a wide range of evidence showing that deeper ties indeed contribute to prosperity.

And while the economic benefits of global connectedness dominate today's debate, it is important to remember that a globalized world is also about advances in human development: in education, health and the environment, for example.

At Deutsche Post DHL, we like to think of ourselves as active and enthusiastic ambassadors of globalization. With our world-class network and logistics capabilities, we enable cross-border commerce by connecting people and markets. We strongly believe that these connections improve people's lives, and that's something all of our 470,000 employees are proud of.

And because we recognize the important role business must play in solving global issues, we engage with governments and NGOs in areas where we can make a strong impact, such as disaster management, environmental protection and educational opportunity.

Simply put, global connectedness is part of the fabric of our organization. We hope our 2012 Global Connectedness Index will inspire you to think about how it can become part of yours.

I wish you an enjoyable reading experience!

A handwritten signature in black ink, appearing to read 'Frank Appel', written in a cursive style.

Frank Appel  
CEO, Deutsche Post DHL



Dear Reader,

At a time of economic weakness in countries around the world, increasing the connectedness among them represents one of the most powerful levers available for boosting growth. This second edition of the DHL Global Connectedness Index documents both the potential to increase global connectedness and the problems the world has actually encountered in doing so, since the world is less globally connected today than it was in 2007!

The DHL Global Connectedness Index was developed to provide readers the most comprehensive and timely source of hard data and analysis depicting the actual extent and direction of globalization around the world. This second edition has been expanded significantly compared to the first edition as well as being thoroughly updated. Key enhancements in this year's report include: detailed tracking of how globalized the world is as a whole (Chapter 1), analysis of global connectedness at the industry level (Chapter 3), and brief country case studies illustrating policies to promote connectedness (in Chapter 4). The industry analysis focuses on mobile phones, passenger cars, and pharmaceuticals, and the country cases feature the Netherlands, Vietnam, and Mexico. Fifteen more countries were also added to this year's index, increasing its coverage to 99% of the world's GDP and 95% of its population. And to help readers interpret the country profiles at the back of this report, each profile now contains a brief summary at the bottom of the page.

The data behind this year's report have also been completely refreshed, incorporating both the most recent updates (2011 data for most components) as well as revisions to earlier data going back to 2005. Estimated values that were used in last year's report were also replaced with actual values where available.

I am grateful to Steven A. Altman, my partner in conducting this research and the co-author of this report, to Tamara de la Mata for the skill and care with which she helped compile the data and conduct the statistical analyses, and to Paola Elice and Joel Serra Bevin for research assistance. Finally, I would like to thank Deutsche Post DHL for supporting this research. I am particularly grateful to Dr. Jan Dietrich Müller for his role in launching this initiative and to Jill Meiburg for guiding the development of this year's report.

A handwritten signature in black ink that reads "Pankaj Ghemawat". The signature is fluid and cursive, with a long horizontal stroke at the end.

Pankaj Ghemawat  
Barcelona, November 12, 2012





## Ten Key Take-aways

1

The world today is less globally connected than it was in 2007. Global connectedness was hit hard at the onset of the financial crisis and despite modest gains since 2009 has yet to recapture its pre-crisis peak.

2

Capital markets are fragmenting and services trade is stagnant. While merchandise trade has recovered robustly since 2009 and information flows continue growing, capital connectedness is on a declining trend and the intensity of services trade has not risen since 2009.

3

Global connectedness is also weaker than is commonly perceived, which softens and even reverses some widespread fears about globalization.

4

Distance and borders still matter – even online. Most international flows take place within rather than between regions. Even online connections are mainly domestic and decline with distance.

5

Europe is the world's most globally connected region: a reminder of what EU integration has managed to achieve – and what its fragmentation might put at risk. The Netherlands retains the top rank on this year's DHL Global Connectedness Index, and 9 of the 10 most connected countries are in Europe.



6

Sub-Saharan African countries averaged the largest connectedness increases.

Sub-Saharan Africa remains the least connected region, but the top 5 countries in terms of connectedness increases over the past year were all in this region.

7

Potential gains from boosting global connectedness can reach trillions of dollars.

As global growth slows and much of the world struggles with its debts, increasing global connectedness can accelerate growth.

8

Every country has untapped possibilities to benefit from more connectedness.

Even in the most connected countries, most activities that could take place either within or across borders are domestic, not international.

9

Countries' domestic and international policies can help them connect more. This report identifies a broad array of policy levers that have been shown to deepen connectedness.

10

The world's shifting economic center of gravity reshapes industry connectedness, with significant business implications as shown in this report's analyses of the mobile phone, passenger car, and pharmaceutical industries.

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Chapter 4 presents evidence on the benefits of global connectedness and then turns to policies that countries can implement to improve their connectedness. A broad variety of policy measures are discussed and then the Netherlands, Vietnam, and Mexico are examined as case examples to emphasize how connectedness policies and strategies must be tailored to a country's unique structural and historical conditions.



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## Executive Summary



The world is less globally connected today than it was in 2007, and global connectedness also falls far short of the levels commonly assumed by business executives and the general public. In light of research indicating that deepening global connectedness can be a powerful lever for increasing prosperity, this report's findings of limited and faltering global connectedness imply that strengthening countries' connectedness offers large untapped potential to help accelerate economic recovery. The fact that the world is less globalized than is often presumed also helps calm many fears about globalization.

The 2012 DHL Global Connectedness Index measures and analyzes the global connectedness of 140 countries, covering 99% of the world's GDP and 95% of its population. It measures the depth and breadth of countries' trade, capital, information, and people flows. Twelve distinct components of connectedness are incorporated across those four pillars, with historical coverage back to 2005. More than one million data points were included into the calculation of this year's DHL Global Connectedness Index.

The DHL Global Connectedness Index is based entirely on hard data in order to separate the facts about global connectedness from commonly held myths. It relies on the most recent data available, which for most components are from 2011. It focuses on measures of actual international flows (and stocks cumulated from prior flows) so as to distinguish clearly between connectedness and its enablers. This makes it more useful for policy analysis than globalization indices that mix flows and enablers together.

At the global level, this report reveals a detailed picture of how the world's connectedness has changed since the onset of the financial crisis in 2007–2008, both in terms of the size of countries' international flows relative to their domestic economies (depth) as well as the extent to which

countries' international connections span the globe or remain more narrowly focused or regionalized (breadth). While merchandise trade has staged a strong recovery since 2009, its growth is slowing, and the intensity of services trade has stagnated. Capital markets are fragmenting, as investors keep more of their funds at home and target their foreign investments more narrowly. Information flows continue to expand, though actual connectedness lags the growth of potential connectivity on this pillar. And connectedness on the people pillar has barely grown since 2005.

The global connectedness patterns traced in this report also highlight how distance, far from being dead, continues to depress connectedness of all types. While the distance between a randomly selected pair of countries is roughly 8,500 km, the average distance traversed by merchandise trade, foreign direct investment flows, telephone calls, and human migration all cluster in the range from 3900 km to 4750 km. This accords with the finding that most international flows take place within rather than between continental regions.

At the country level, while all countries have headroom to increase their connectedness with rest of the world, countries do vary widely with respect to the depth and breadth of their global connectedness. The top ranked countries overall on this year's DHL Global Connectedness Index are, in descending order, the Netherlands, Singapore, Luxembourg, Ireland, Switzerland, the United Kingdom, Belgium, Sweden, Denmark and Germany.

The fact that 9 of the top 10 countries are located in Europe reflects Europe's broader standing as the world's most globally connected continental region. Europe is also the top ranked region on the people pillar. The East Asia & Pacific region tops the trade pillar and North America leads on the capital and information pillars.



Looking more broadly, the top 50 countries include representatives from all six inhabited continents. Singapore, with the 2nd rank worldwide, is the only non-European country in the top 10. The top North American country on the list is the United States, ranked 20th. Australia holds the 30th position as the top ranked country in the South Pacific. Morocco is the highest ranked African country, in 38th place, and South Africa leads among Sub-Saharan African countries, in the 48th position. And Chile is the top ranked South American country, at 41st place.

Sub-Saharan Africa is the least connected region today, but Sub-Saharan African countries averaged the largest increases in connectedness over the past year, with their gains driven primarily by the trade pillar. The top 5 countries in terms of connectedness score increases over the past year are all located in Sub-Saharan Africa: Mozambique, Togo, Ghana, Guinea, and Zambia.

Turning to the depth and breadth dimensions of overall connectedness, the leading countries and territories with respect to the depth of their international connections are Hong Kong (China), Singapore, Luxembourg, Ireland, and the Netherlands. The countries with the broadest connections with the rest of the world are the United Kingdom, the United States, the Netherlands, Switzerland, and Germany. Overall, richer countries tend to have deeper and broader global connections than poorer countries. Smaller countries tend to lead on depth while larger countries tend to lead on breadth.

This report also incorporates analysis of global connectedness at the industry level. The depth and breadth of 20 industries are compared, and the CAGE (cultural, administrative/political, geographic, and economic) distance framework is introduced as a tool to explain the wide variation in industries' connectedness patterns. And three

of these industries – pharmaceuticals, passenger cars, and mobile phones – are analyzed in somewhat greater detail. Mobile phones already has most of its production and sales in emerging markets, passenger cars is in an intermediate position, and the pharmaceutical industry (in value terms) remains focused in the advanced economies. Their different positions in this respect provide some perspective on the broad shift of economic activity toward emerging markets that has accelerated since the onset of the financial crisis, a theme throughout this year's report: 72% of GDP growth around the world from 2008 to 2011 took place in emerging market countries, and according to IMF projections, emerging markets will deliver about 60% of growth from 2012 to 2017. Each of the three brief industry studies illustrates the globalization of sales and production, relates those trends to trade patterns, and identifies lessons and implications.

This year's DHL Global Connectedness Index also features policy analysis aimed at helping countries capture more benefits of global connectedness. Increasing global connectedness has the potential to contribute economic gains valued in trillions of dollars on a global basis as well as more qualitative non-economic benefits. A specific set of policy and structural measures are identified that explain nearly 80% of the observed variation among countries' global connectedness depth scores. Policies that directly target expanding international flows as well as policies that focus on improving countries' domestic business environments both turn out to contribute significantly to deepening countries' global connectedness.

Three country cases are examined in more detail to illustrate national policies to promote global connectedness in diverse contexts. The case of the Netherlands, the most globally connected country in the world, highlights the power of regional integration to increase a country's global

connectedness but also reminds us even the top-ranked country has significant headroom to become more connected. The case of Vietnam provides a dramatic example of how a very poor country can, with appropriate policy shifts, deepen its connectedness very rapidly and reap large gains. And Mexico provides an opportunity to examine the interplay between the depth and breadth of a country's connectedness: in this case, limited breadth is responsible, in part, for also limiting depth.

The country profiles at the back of this report provide detailed data on each country's connectedness pattern, track country-level connectedness trends, and display rooted maps based on countries' export patterns. A brief summary is also included at the bottom of each profile.

Despite evidence of faltering global connectedness, arguments based on assertions about globalization continue to feature prominently in political debates, business strategy deliberations, and in everyday life. Dialogue about globalization, however, is seldom backed up with hard data, and much of it is so far removed from reality that it seems accurate to describe it as "globaloney." The DHL Global Connectedness Index brings together a comprehensive and up-to-date set of facts and analyses to help readers to make more informed judgments about the possibilities associated with forging more cross-border connections. Its basic premise was well-expressed by the late Daniel Patrick Moynihan when he said, "Everyone is entitled to his own opinion, but not to his own facts."



# 1. How Globalized is the World?



The world is less connected than is commonly presumed, and overall global connectedness as measured on the DHL Global Connectedness Index remains significantly lower today than it was in 2007, before the onset of the global financial crisis. This chapter unpacks those surprising findings to examine the evolving depth and breadth of trade, capital, information, and people flows.

In light of the evidence that will be presented in Chapter 4 on the benefits of global connectedness, this chapter's findings of limited and faltering global connectedness suggest that there are large potential untapped gains available from strengthening and expanding it. The same findings also soften many of the arguments against globalization, revealing most (but not all) to be exaggerated or misplaced.

To provide a structured description of global levels of connectedness and associated trends, this chapter begins with a very brief introduction to how the DHL Global Connectedness Index measures globalization followed by analysis of overall trends in levels of connectedness. The chapter then digs deeper into each of the four pillars of the DHL Global Connectedness Index: trade, capital, information, and people. Finally, it summarizes current levels of connectedness and highlights how far perceptions of globalization have overrun reality – a phenomenon the authors of this report like to refer to as “globaloney.”

### Measuring Global Connectedness

*Global Connectedness* is defined in this report as the depth and breadth of a country's integration with the rest of the world as manifest by its participation in international flows of products and services, capital, information, and people.

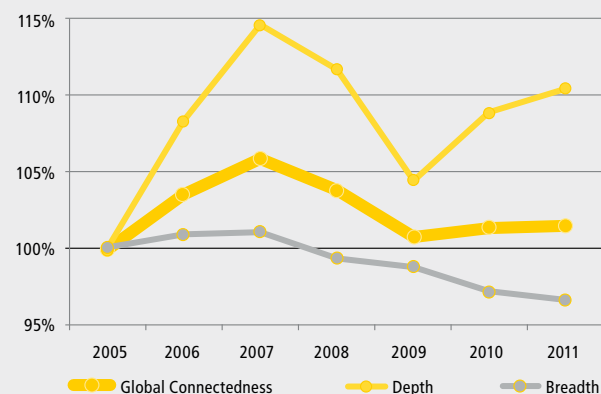
One of the novel features of the DHL Global Connectedness Index is its coverage of both the depth and the breadth of global connectedness, concepts that are explained briefly here, and are described in much greater detail in Chapter 5 of this report, which reviews the complete index methodology.

*Depth* measures how much of a country's activities or flows are international versus domestic by comparing the size of its international flows with relevant measures of its domestic economy. For example, to assess the depth of Hong Kong SAR (China)'s merchandise exports, its exports are compared to its GDP: Hong Kong's merchandise exports-to-GDP ratio is 187%, the highest in the world and 37 times higher than Nepal's (the lowest – only 5%).

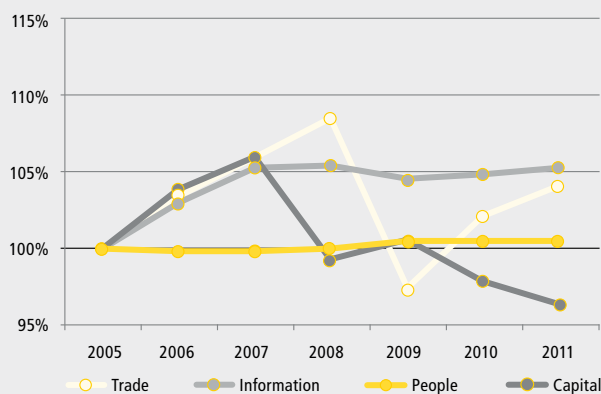
*Breadth* complements depth by looking at how broadly the international component of a given type of activity is distributed across countries. To illustrate the importance of incorporating breadth into assessments of global connectedness, consider inbound tourism in the Bahamas. While the Bahamas ranks first in terms of the number of inbound tourists per capita (a depth metric), more than 80% of those tourists come from the United States. Thus, while depth of inbound tourism in the Bahamas is high, its breadth is limited, especially when one notes that less than 15% of outbound international tourists worldwide come from the United States.

The DHL Global Connectedness Index measures breadth, as suggested by the example of tourism in the Bahamas, by comparing the distribution of a country's international

Figure 1.1 Global Connectedness Trends, 2005–2011  
Overall Connectedness Depth and Breadth



Overall Pillars



Global connectedness dropped sharply from 2007 to 2009 at the onset of the global financial crisis. Depth was hit the hardest but has recovered more than half its losses, while breadth continues a pattern of moderate decline. Trade flows have recovered, but capital connectedness has continued to fall amid, in particular, the Eurozone turmoil.

flows (inbound tourists in this example) with the global distribution of the same flow in the opposite direction (outbound tourists). If the Bahamas attracted tourists from all around the world in proportion to where the all world's outbound tourists come from, the Bahamas would have the highest possible breadth score. In contrast, if all of the Bahamas' tourists came from just one country that sends tourists nowhere else, it would receive the lowest possible score.

This method of measuring breadth is an attractive basis for comparing countries because scores aren't biased based on where countries are located. However, for the global rather than country-specific comparisons that are the focus of this chapter, simpler breadth measures are also valuable. Therefore, this chapter will also characterize breadth in terms of the average distance traversed by international flows and the proportion of flows that take place between versus within regions of the world.

### Global Connectedness Trends

In the years before the onset of the global financial crisis, global connectedness, both depth and breadth, grew robustly, powered by rising trade, capital, and information flows, as shown in **Figure 1.1**. The capital pillar was the first to suffer a steep decline, falling from 2007 to 2008 back to slightly below its 2005 level. The sharp drop in 2008 was driven, in particular by a decline in valuations of international investment stocks. For example, measured at the end of 2008, the global stock of international portfolio equity assets accounted for only 16% of world GDP, as compared to 31% one year earlier. More details on particular types of capital flows are provided in the section on capital flows below. The broad message, however, is that capital connect-

edness staged a moderate recovery in 2009 before continuing to decline up to the present.

Trade was the next domino to fall, with exports of goods and services plummeting in 2009 to 25% of GDP (from 30% in 2008).<sup>1</sup> In contrast to capital, however, trade began a strong recovery in 2010 and by 2011 had recovered more than half of its prior losses. Nonetheless, as the next section will elaborate, that recovery was driven entirely by the depth of merchandise trade, with services trade depth failing to grow since 2009. Furthermore, recent reports indicate a softening of merchandise trade growth in 2012, pointing to renewed weakness on this pillar of connectedness.

The information and people pillars have proven more robust through this turbulent period. On the information pillar, the broad pattern has been one of expanding connectivity driving strong gains on the depth of connectedness, offset in part by a puzzling pattern of declining breadth. The stability of the people pillar may be overstated due to data limitations, because the data on migration, in particular, are not updated as frequently as the other components of the index, as elaborated on below.

The net result of these developments across different types of flows is that the world as a whole is only slightly more globally connected than it was in 2005 and notably less so than it was in 2007. That is a striking finding, since only a few years ago globalization was being celebrated or decried – depending on one's perspective – as an inevitable trend or unstoppable force.

How should we interpret these recent trends? Again, it is important to distinguish between depth and breadth. The

The world as a whole is only slightly more globally connected than it was in 2005 and notably less so than it was in 2007.

evidence presented in Chapter 4 indicates that the depth of global connectedness is a powerful contributor to prosperity. So, while the steep decline in depth that took place from 2007 to 2009 was a major blow, the increases since then are a positive development.

The more moderate decline in breadth is a pattern that should be noted, but one that cannot be characterized in blanket terms as either positive or negative. That is because while the evidence strongly suggests that increasing depth is beneficial, the breadth of countries' engagement with the rest of the world can be either too much or too little, and therefore must be analyzed on a case-by-case basis. As a result, an aggregate decline in breadth at the global level is neither clearly positive nor clearly negative.

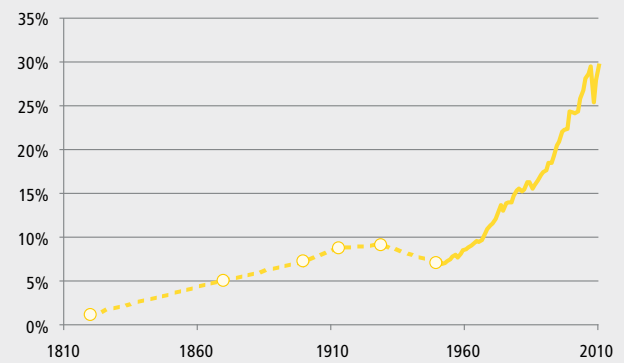
### The Trade Pillar: Goods and Services Flows

Of all of the goods and services produced in the world, what proportion cross international borders on the way to their final end customers? And how far do the goods and services that do get exported typically travel?

**Figure 1.2** tracks total trade over two centuries. Exports are currently running at a historical high of roughly 30% of world GDP. This ratio reached its first peak of roughly 9% immediately before the Great Depression and then retreated back to about 7% during the period between World War I and World War II. After World War II, it broke previous records and continued growing with few interruptions until it approached 30% in 2008. While the recent financial crisis and macroeconomic downturn led to a steep drop-off in 2009, the world exports-to-GDP ratio quickly began to rebound in 2010.

While the growth of international trade in recent decades has been impressive, some important caveats should be kept in mind when interpreting figures such as today's record 30% ratio of exports to GDP. First, this ratio – while

**Figure 1.2 Total Exports of Goods and Services As a Percentage of World GDP, 1810–2011**



The depth of trade in goods and services has regularly scaled new heights since the end of the Second World War. Trade depth plunged in 2009 but recovered strongly in 2010 and 2011. Sources: 1820–1992: Angus Maddison, *Monitoring the World Economy 1820–1992*; OECD 1995; 1993–2011: World Bank World Development Indicators and IMF World Economic Outlook

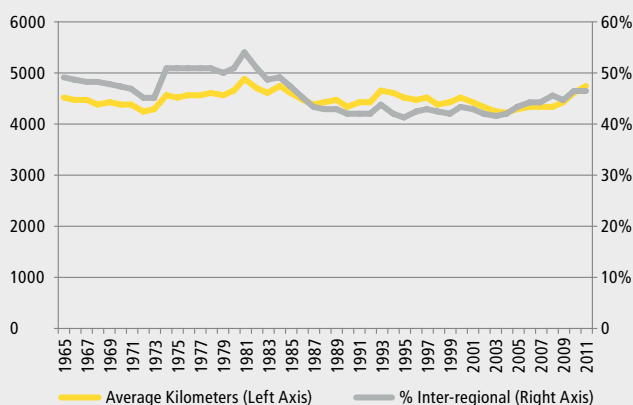
the best available measure of exports depth across all countries – overstates the proportion of economic output that is traded because it counts the full value of a product every time it crosses a border. Thus, if the contents of a product are exported multiple times (components, for example, are imported into a country for final assembly, and then the finished product exported again to a third country), this ratio will double- or even triple-count those contents. Rough estimates of correction factors to address this problem suggest that the true share of the value added in the global economy that gets traded is closer to 20% than 30%.<sup>2</sup>

Furthermore, while 20% (or even 30%) of goods and services being traded across borders is far more than the same ratio mere decades ago, it is still far short of the 90% or more that one would expect if borders and distance did not matter at all. If the world truly became “flat,” countries’ exports-to-GDP ratios would tend toward an average of 1 minus their shares of world GDP since buyers would be no more likely to purchase goods and services from their home countries than from abroad. Borders and distance still matter a great deal, implying that even the most connected countries have substantial headroom available to participate more in international trade.

Turning to the breadth of trade and focusing on trade in goods only rather than goods and services combined, as of 2011, 47% of trade took place between countries in different regions rather than within the same region, a proportion that has typically been between 40% and 50% since 1965. The average distance traveled by a dollar worth of traded



**Figure 1.3 Merchandise Trade Breadth: Average Kilometers Traveled and % Inter-regional Trade**



Slightly more than half of all merchandise trade takes place within regions. This metric as well as the average kilometers traveled by a dollar worth of traded merchandise has not changed very much even as trade flows have increased.

merchandise in 2011 was roughly 4,750 kilometers, also in line with historical norms over the past four decades as shown on **Figure 1.3**.

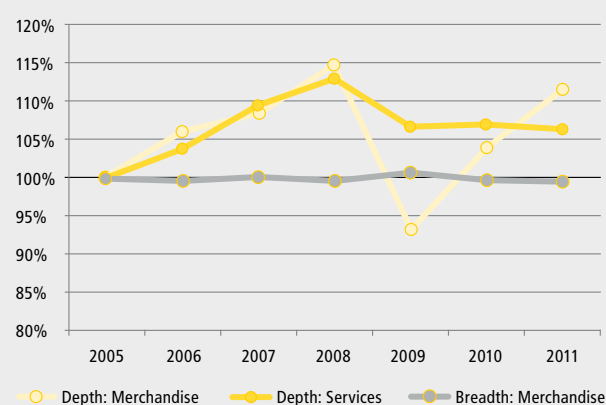
Thus, while the depth of merchandise trade (the volume of goods traded in comparison to total economic output) has scaled new heights in recent decades, that trend has not been matched by an extension of the distances traveled by traded goods on average. Rather, much of the action in terms of trade integration has been the weaving together of national economies within the same region. (The term “region” in this report refers to the roughly continent-sized regions of East Asia & Pacific, Europe, Middle East & North Africa, North America, South and Central America and Caribbean, South & Central Asia, and Sub-Saharan Africa. Refer to Appendix B for the specific classification of countries into these regions.)

With that historical background in mind, turn to a closer examination of trends in the trade pillar since 2005.

**Figure 1.4** shows that the depth of both merchandise and services trade both grew 15% from 2005 to 2008 before taking different paths since the onset of the crisis. In 2009, the depth of merchandise trade plunged by 18% (to a level last seen in 2004) while services trade dropped only 6%. Merchandise trade depth then rebounded strongly to approach its all-time peak of 26% of GDP by 2011. Services trade depth, however, has stagnated since 2009 at only 6% of GDP, despite a considerable amount of hype about it growing faster than merchandise trade.<sup>3</sup>

The breadth of merchandise trade has remained stable since 2005. While trade volumes can fluctuate widely from

**Figure 1.4 Trade Pillar Components Since 2005**



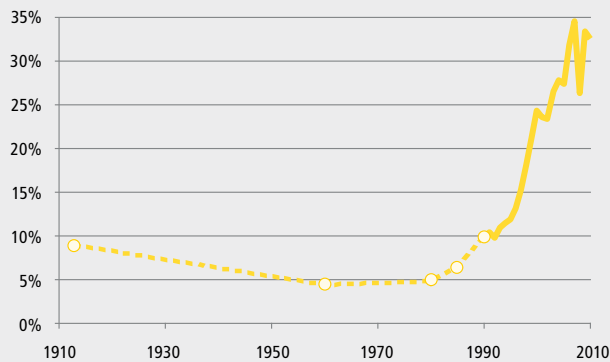
Merchandise trade depth plummeted in 2009 but has since recovered strongly. Services trade depth declined less but has stagnated since then. Merchandise trade breadth has remained stable. Services trade breadth not shown due to data limitations.

year to year in line with macroeconomic conditions, the trade patterns that underlie calculations of breadth tend to remain much more stable over time. This reflects constants such as geography (countries tend to trade most intensively with their immediate neighbors) as well as other factors that change relatively slowly such as infrastructure investments and the mix of languages people speak in particular countries. Data are insufficient to provide a precise reading on the breadth of services trade, but point roughly toward a somewhat higher degree of regionalization, with services traded over shorter distances than merchandise.

Looking beyond the 2011 annual trade data that are the latest figures incorporated into this year’s DHL Global Connectedness Index, monthly trade data in 2012 point to renewed weakness in this pillar of global connectedness. The latest WTO estimates are that merchandise trade will grow only 2.5% in 2012 and 4.5% in 2013, down from 5% in 2011 and 14% in 2010.<sup>4</sup> IMF projections imply services trade growth of 2.3% in 2012 and 3.8% in 2013.<sup>5</sup> And despite commitments to eschew protectionism proclaimed by leaders of the world’s major economies at the onset of the crisis, Global Trade Alert reports three times more discriminatory trade policy measures implemented since November 2008 than liberalizing or transparency-enhancing measures.<sup>6</sup>

To summarize, roughly 20 percent of the value added around the world is presently exported, and while the broad trend since World War II has been one of robust trade growth, plunging trade volumes in 2008–2009 provide a fresh reminder that increasing trade integration is not inevitable.

**Figure 1.5**  
Historical FDI Depth Trend, 1913–2010



Foreign direct investment stock as a percentage of world GDP has surged since the 1980s, although volatility since 2008 reflects the potential for significant reversals. Sources: 1913–1985: World Investment Report 1994; 1990–2010: World Investment Report 2011

### The Capital Pillar: Investment Flows

Of all of the fixed investment that takes place around the world, how much is invested internationally? The FDI flows depth metric used in this report, FDI flows as a percentage of gross fixed capital formation (roughly the value of a country's new investment in fixed assets), stood at 10% in 2010. This ratio tends to rise during waves of cross-border M&A activity – it peaked at nearly 20% in 2000.

A somewhat rougher metric, FDI stocks as a percentage of world GDP, allows a longer-run characterization of trends in capital market integration. As **Figure 1.5** shows, FDI depth has surged since the 1980s, regularly setting new records in the 1990s and 2000s. Thus, while recent reversals reveal the vulnerability of FDI, it remains close to historical peak levels.

Given the financial roots of the current economic doldrums and the ongoing crisis around monetary integration within the Eurozone, it is unsurprising that the last few years have seen remarkable turbulence in the capital pillar of the DHL Global Connectedness Index. The general trend since 2008 has been one of declining depth and breadth as investors have kept more of their funds at home and become more selective about their foreign investments – to the point where there is now talk of the Balkanization of financial markets.

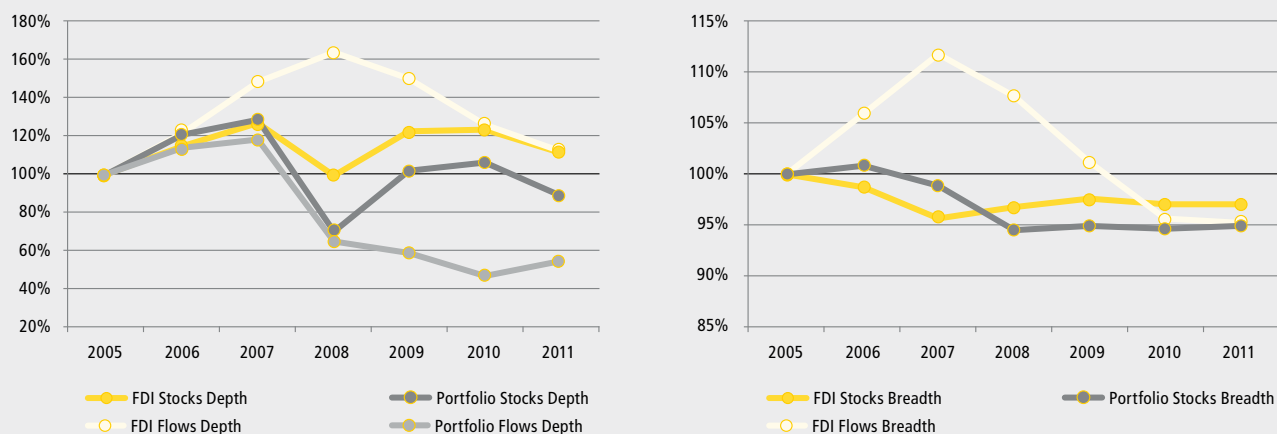
The left side of **Figure 1.6** shows depth trends since 2005. To understand these patterns, it is helpful to review the metrics covered. First, note that two distinct types of flows are considered: foreign direct investment and portfolio equity investment. (Foreign debts were excluded from the

index for reasons explained in Chapter 5). The difference between these two types of equity investment is whether or not the investor owns a controlling stake in the foreign enterprise. Foreign direct investment (FDI) involves controlling stakes and is the mechanism typically used by firms buying or building operations in foreign countries. Portfolio equity investment, in contrast, does not involve a controlling stake: an individual buying shares in a foreign company on a stock exchange would be an example.

Second, it is important to distinguish between investment flows and stocks. Foreign investment flows reflect the amounts that are actually invested in a particular year. Because these values tend to be highly volatile, the DHL Global Connectedness Index measures them based on a rolling average over the last three years. Foreign investment stocks reflect the total value of investments held at a given point in time, including those made in prior years that have not since been resold or wound down. Foreign investment stocks are included in the DHL Global Connectedness Index alongside flows because of the persistent linkages they represent between economies. For example, when a U.S. company invests in China to buy or build a business there (FDI), as long as that business continues to operate, it represents a continuing link between the U.S. corporate headquarters and the Chinese subsidiary rather than just a one-time connection in the year the investment was made.

Given that background, it is unsurprising that portfolio equity flows and stocks were hit hardest at the onset of the global financial crisis in 2008.<sup>7</sup> Since portfolio investments don't involve taking control of foreign operations, they tend to be subject to shorter time horizons than FDI. And the fact that FDI depth continued rising in 2008 reflects the use of three-year averages to smooth volatile flows. If this smoothing – which under more normal circumstances prevents misleading year-to-year volatility from entering the index – was removed, FDI depth would also have declined in 2008.

**Figure 1.6**  
Capital Pillar Components Since 2005



Amid financial and economic turmoil since 2008, the depth and breadth of capital flows have declined. Short-run portfolio equity investment flows have fallen faster and farther than FDI flows.

The divergence since 2008 of recovering investment stocks and declining capital flows reflects differences between how these components are measured. Portfolio equity stocks are re-valued each year, and the strong recovery in their depth from 2008 to 2009 reflected the broad recovery of equity market valuations from year-end 2008 to year-end 2009. Flow measures are not impacted by the revaluation of investments made in prior years and so their weakness reflects actual smaller flows in the specific periods shown.

The right side of **Figure 1.6** reveals that the breadth of FDI flows rose up to 2007 and has declined since then. This pattern of declining breadth scores was not matched by declines in the average distance “traveled” by FDI or the proportion that occurs between rather than within regions. Rather, the average distance “traveled” by FDI flows rose from 2007 to 2010 from roughly 4000 to 4900 kilometers and the proportion taking place within regions declined from 58% to 52%. These patterns suggest that while investors are indeed keeping more money at home (declining depth), they are not generally shifting their foreign investments from distant countries to neighbors. Rather, they are selectively choosing a narrower set of investment destinations, some of which may be distant safe havens, selected in part to diversify risks in investors’ home regions.

The breadth of FDI and portfolio equity stocks declined less than FDI flows, reflecting the fact that the geographical distribution of investment stocks changes more gradually than flows. Portfolio equity investment tends to be less sensitive to geographic distance than FDI. The average distance “traveled” by portfolio equity stock was 5700 km and only 37% of it was intra-regional in 2010.

Other metrics as well as recent predictions also point to faltering connectedness in the capital pillar. In the second half of 2011, cross-border bank lending suffered its largest decline since 2008, much of it accounted for by the Euro-zone<sup>8</sup> where financial markets are rapidly fragmenting as of this writing, reversing years of efforts at integrating them. The United Nations Conference on Trade and Development (UNCTAD) also forecasts that FDI will grow more slowly in 2012 than in 2011.<sup>9</sup>

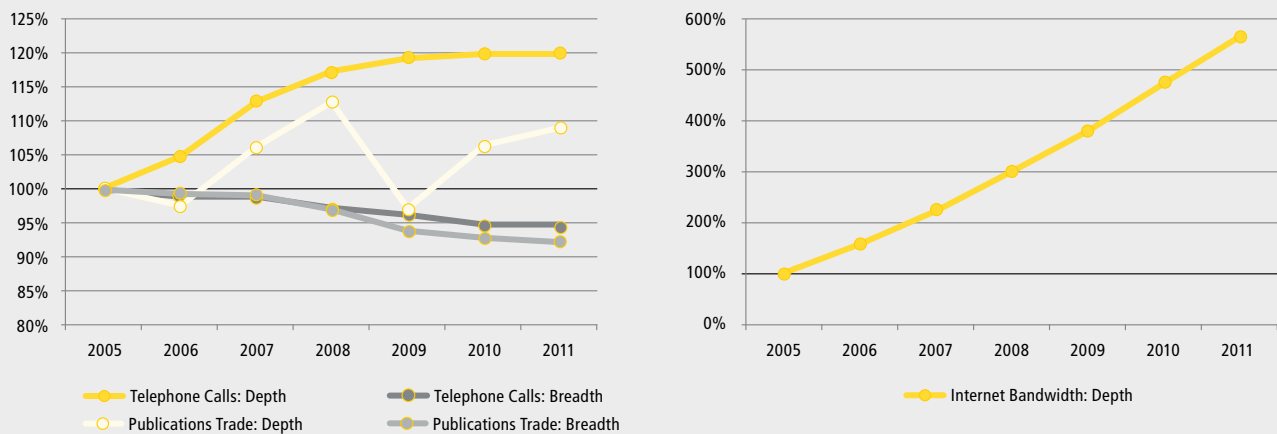
### The Information Pillar

Examination of international information flows reveals the most dramatic divergence between connectivity – the technological potential to connect across large distances – and actual connectedness. While new technologies indeed have made it far easier and cheaper to share information with people on the other side of the world, we actually tend to use these technologies much more intensively to connect to people close to home.

Consider, first of all, postal communications. As a result of efforts spearheaded by the Universal Postal Union, organized in 1874 and one of the world’s first global institutions, it has long been fairly simple to send mail anywhere in the world. And yet, only about 1 percent of all letter mail sent around the world is international.<sup>10</sup>

What about telephone calls? Only 2 percent of voice calling minutes are international<sup>11</sup> despite rapidly falling costs and improving call quality. These figures do exclude calls placed over the internet via services such as Skype, but including calls over such services would not push this ratio up past 5%.<sup>12</sup>

Figure 1.7  
Information Pillar Components Since 2005



Internet bandwidth per internet user has more than quintupled since 2005, dwarfing all other developments in the pillar. The depth of international telephone calls has also grown over this period, at a much more measured pace, while breadth has declined moderately.

On a global basis, the average person places about 40 minutes of international phone calls per year, 51% of which are intra-regional, and international calls average a distance of 4300 kilometers. The depth of international phone calls (minutes per capita) has grown roughly 20% since 2005, as shown on the left side of **Figure 1.7**, with slowing growth in recent years, perhaps due to the exclusion of internet telephony from these figures due to data limitations. The breadth of international phone calls has declined modestly, with no clear explanation available for the decline.

Trade in printed materials such as books and magazines represents another mechanism for international information flows. While one might imagine the depth of such flows to be falling as more such materials are transmitted digitally, Figure 1.7 indicates moderate growth through much of this period, apart from a decline in 2009 that mirrors the overall decline in trade volumes in that year. The breadth of trade in printed material has, nonetheless, declined in recent years with, once again, no obvious explanation. Trade in printed publications is much more distance-sensitive than both telephone calls and overall merchandise trade, with 65% of trade taking place within regions and printed materials traveling on average a distance of 3800 kilometers. And another indication of the limited reach of published material is provided by new research showing that only 3% of books published in the US and UK are translated from another language, proportions that rise only to 8% in Germany and 14% in France.<sup>13</sup>

Moving beyond mail, phone calls, and printed publications, much of the recent excitement about growing connectedness on the information pillar has centered on the power of the

internet and social media to bring people closer together. An indication of this potential is provided by the fast growth in the depth of international internet bandwidth (international internet bandwidth per internet user) shown in Figure 1.7. International internet bandwidth is shown on a separate graph (right side of the figure) because the magnitude of its growth is so large that it renders developments on the other components unreadable if shown on the same graph.

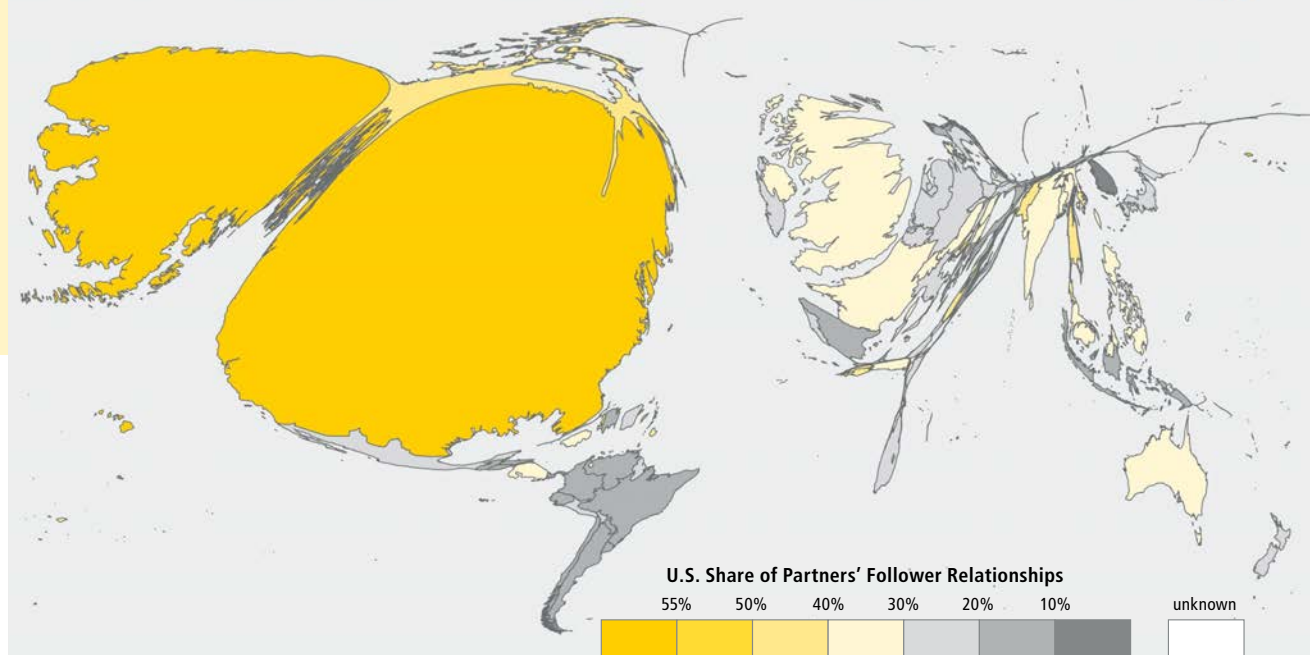
International internet bandwidth is reflective of connectivity rather than connectedness – an exception to the index's focus on actual flows that has been incorporated because of the importance of the internet to recent developments on the information pillar and the absence of country-level data on international data flows.

Global data on information flows over the internet, however, indicate that while internet traffic is more international than phone calls or mail, it remains primarily domestic, with international internet traffic accounting for about 17% of the total.<sup>14</sup> And what about communications on social media? Facebook aims to provide a platform for “frictionless” sharing that theoretically makes it as easy to “friend” someone around the world as one's next door neighbor. But the reality is that relationships on social media reflect offline human relationships that remain highly distance sensitive. Less than 15 percent of Facebook friends live in different countries.<sup>15</sup>

Twitter is somewhat more international than Facebook with roughly 25% of followers of Twitter users, on average, located outside of a user's home country. But even on Twitter, geographic distance and language effects are promi-



Map 1.1  
Map of Followers of U.S. Twitter Users



The followers of U.S. based Twitter users are overwhelmingly domestic. And outside of the U.S., foreign Twitter users are much more likely to follow Americans in countries where English is widely spoken. Source: P. Ghemawat and TCS Innovation Labs

ment.<sup>16</sup> **Map 1.1** resizes countries in proportion to their share of the followers of U.S. Twitter users, revealing that the followers of U.S. Twitter users are mainly located in the United States itself, and most of the foreign followers are in countries where English is widely spoken.

A final type of information flow to consider relates to what we learn about other countries via the news media. While the growth of international internet bandwidth implies that we can just as easily read foreign news websites as domestic ones, people still overwhelmingly get their news from domestic sources when they go online: news page views from foreign news sites constitute 1% of the total in Germany, 3% in France, 5% in the United Kingdom and 6% in the United States (and are in single digits everywhere else sampled – as low as 0.1% in China).

Furthermore, news coverage by domestic sources itself tends to be very domestic. In the U.S., 21% of U.S. news coverage across all media was international according to a recent study, and of that 11 percent dealt with U.S. foreign affairs (such as U.S. diplomacy and military engagements), leaving only 10% of coverage for topics entirely unrelated to the U.S.<sup>18</sup> In Europe, 38 percent of news was international, but of this, almost half related to coverage of news stories involving other countries in Europe.<sup>19</sup>

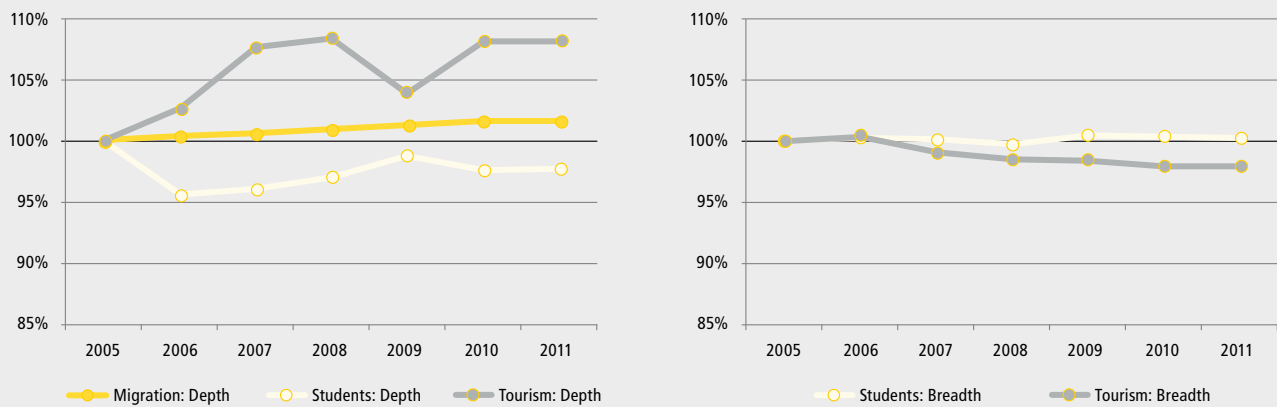
So where does this leave the information pillar? The technological capacity for connecting to people on the other side of the world continues to grow, expanding possibilities for both the depth and the breadth of international information flows. However, our actual interactions will continue to reflect patterns of human relationships that change much more slowly, which will moderate the expansion of global connectedness on this pillar.

### The People Pillar

The people pillar of the DHL Global Connectedness Index covers international flows of people of different types: migration as an indicator of long-term flows, students attending universities abroad as a medium-term indicator, and tourism for short-term flows. Put differently, migrants are a stock figure, international students a stock that reflects only recent temporary flows, and tourism is purely a flow indicator.

To start with migration, first generation immigrants account for roughly 3% of the world's population – a figure that, surprisingly, is exactly the same as it was back in 1910! While some countries and regions have indeed experienced large waves of immigration in recent history, migration on a global basis has failed to set new records. This may be puzzling since transportation and telecommunications make migration much easier today than it was in 1910 and wide gulfs in prosperity between countries continue to entice migrants.

**Figure 1.8**  
People Pillar Components Since 2005



International tourism depth grew strongly up to 2008, declined in line with macroeconomic conditions, and then rebounded back to its 2008 level. The depth of international students has generally been rising since 2006 and migration depth has increased very modestly from 2005 to 2010.

An important part of the explanation is provided by the accumulation of public policies designed to restrict migration (in contrast, for instance, to policies that have generally increased openness to trade since World War II). In fact, “prior to 1913, visas were not required for transit between most countries, and work permits were also not required for employment of foreigners.”<sup>20</sup> Contrast that with the complicated legal processes required to work abroad today – and the fact that a passport itself costs more than 10 percent of one in ten countries’ per capita income<sup>21</sup> – and one gets a clear sense of why migration failed to grow in line with other forms of connectedness.

In addition, over the more recent time frame depicted in **Figure 1.8**, the dearth of timely updates to global migration data may play a role. For the depth of immigration, data were available from official UN sources only for 2005 and 2010, and so the pattern depicted in the figure reflects a simple linear interpolation between those years. Depth data on emigration and breadth data on migration flows have not been updated since 2002 and so are not shown in the figure.

The depth of international tertiary education has also remained fairly stable in recent years with students studying overseas accounting for 2 percent of university students around the world. The decline in depth from 2005 to 2006 shown in Figure 1.8 is anomalous, driven primarily by a large increase in the number of domestic tertiary students in China rather than an actual decline in the number of students studying abroad.

Tourism depth, on the other hand, grew more strongly up to the onset of the financial crisis, declined in 2008, and then quickly rebounded to its 2009 level. In 2010, for every

100 people in the world population, there were 12 international tourist arrivals.

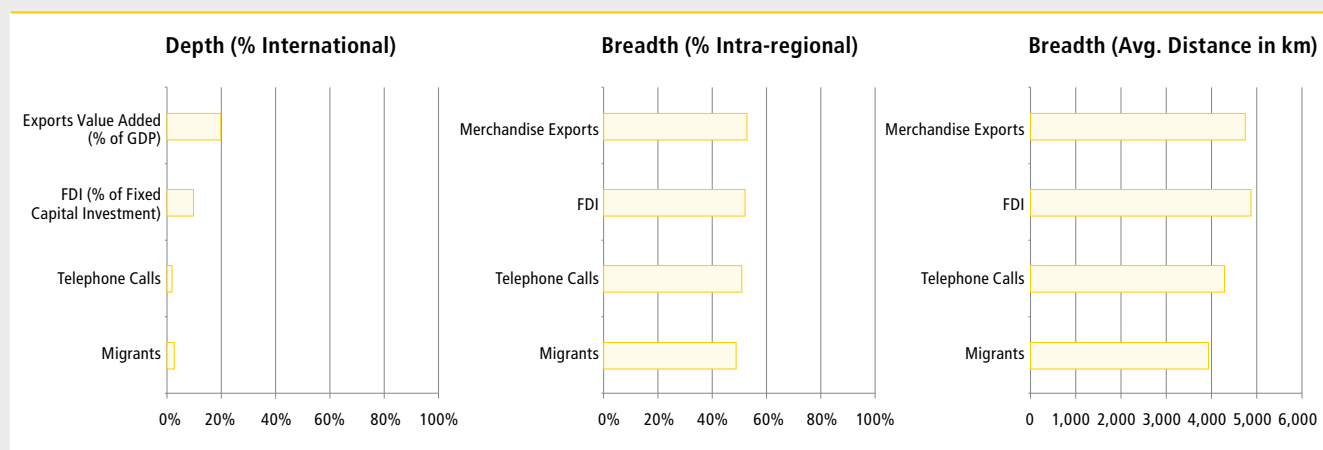
There are more dramatic differences between the breadth of different types of people flows. International tourism is very strongly intra-regional, with 75 percent of trips taking place within rather than between regions, and the average distance traveled on international trips is just 2500 kilometers. Long term migration has a more moderate level of distance-sensitivity with 49 percent staying in their home regions and migrants relocating an average distance of 3900 kilometers. International students are the least distance-sensitive with only 43 percent staying in their home regions and the average student studying in a country 5600 kilometers from his or her home country.

Looking forward, policy trends point toward continued divergence among the components of the people pillar. With high unemployment plaguing most of the advanced economies and a resurgence of nationalism in some countries’ politics, significant opening up to more long term migration looks unlikely, at least in the medium run. On the other hand, many countries are actively courting international tourists to spur employment and improve foreign exchange balances, and are adjusting visa policies accordingly. And trends in openness to international students fall somewhere in between those extremes, with many countries trying to attract more foreign students but wary of abuse of student visas and concerned about students turning into long-term immigrants.

## Conclusion

The preceding four sections have described a wealth of connectedness metrics and tracked their changes over time. A common thread that ties them together is that they tend to indicate that the world is less connected than popular notions such as the “flat world” or the “death of distance” have led many people to believe.

The bar charts below summarize depth and breadth metrics for one representative flow from each of the four pillars. Starting with the depth metrics shown on the left panel of the figure, I have asked more than one hundred audiences to guess these values during my speeches and every single audience has overestimated them by a large margin. To gather more systematic evidence, I also arranged for Harvard Business Review to survey its readers in this regard. Respondents’ guesses were, on average, three times as high as the actual values of the depth metrics – and the guesses of the CEOs among them were four times as high!<sup>22</sup>



The depth and breadth of international flows across all four pillars of the DHL Global Connectedness Index are lower than is commonly presumed. In an online survey, Harvard Business Review readers overestimated these depth metrics by an average of three times.

Turning to the middle and right panels of the figure, audiences also tend to be surprised that roughly half of all four types of flows shown occur within rather than between regions. Distance, far from having become irrelevant, still shapes international interactions. The average distance traversed for the four metrics shown ranges from 3,900 km to 4,750 km, whereas the average distance between a randomly selected pair of countries is about 8,500 kilometers. And as this report will elaborate, a more accurate understanding of the factors that shape international flows comes from considering distances and differences that include but go beyond geographic factors.



More specifically, the CAGE (cultural, administrative/political, geographic, economic) framework identifies four categories of factors that help explain the distance sensitivity of international integrations. Using merchandise trade as an example and citing one factor under each of the categories: countries that share a common language (a cultural factor) trade 42 percent more than countries that don't, countries in the same trade bloc (an administrative factor) trade 47 percent more, and if you double the (geographic) distance between a pair of countries their trade will drop in half. Finally, the impact of economic differences is more complicated because in some industries, trade occurs mainly between countries with similar levels of development whereas in other industries trade leverages economic differences to take advantage of cost arbitrage possibilities, but across the board, economic differences shape patterns of international flows. Because countries in the same region tend to be closer together culturally, administratively and economically as well as geographically, it becomes unsurprising that half or more of most international flows occur within rather than between geographic regions.

The purpose of this elaborate attempt to correct exaggerated perceptions of globalization or "globaloney" is twofold. First, false notions such as the idea that the world is already close to completely globalized blind us to the possibility of gains from increasing global connectedness. As Chapter 4 of this report will describe, the potential gains can easily run into the trillions of dollars.

And second, recognizing the fact that levels of global connectedness actually tend to be quite low softens or dispels many fears about globalization. To cite one example, the French public on a recent survey estimated that immigrants make up 24% of France's population.<sup>23</sup> The correct figure was only 8%. Would anti-immigrant rhetoric have been so prominent in the 2012 French elections if the public had a more accurate read on the present extent of globalization?

The next chapter turns to country-by-country assessment of global connectedness, ranking and scoring countries in terms of how connected they are with the rest of the world. This material will highlight the most connected countries, but it is important to remember that the most connected countries stand out only within the context of a world that still far from perfectly connected. Even the top ranked countries could benefit from substantially more global connectedness.



## 2. How Globalized are Individual Countries and Regions?



This chapter compares countries' and regions' global connectedness as measured on the DHL Global Connectedness Index. First, countries' overall levels of connectedness are ranked and analyzed, followed by shorter discussions of the depth and breadth of countries' connectedness. Second, changes from 2010 to 2011 in countries' individual levels of connectedness are shown, and the countries whose connectedness increased or decreased the most are highlighted. Third, regions' levels and patterns of connectedness are compared and discussed. Particular emphasis is devoted to Europe – the region with the highest level of connectedness today – and to Sub-Saharan Africa – the region with the largest increase in connectedness over the past year.

Readers wishing to examine trends over time should review the scores and ranks computed for this edition of the index, which are provided back to 2005 (see Tables A.1 to A.3 in Appendix A as well as the Country Profiles), rather than comparing this year's report with last year's. There are three reasons for this: First, this report incorporates the latest revisions to the source data underlying the index, including the replacement of estimated with actual values as they have become available. Second, 15 new countries and territories have been incorporated into this year's index – the largest among them being Taiwan (China), Angola, Myanmar and Kenya – expanding the number of countries covered from 125 to 140. All ranks have been recomputed based on this larger base of countries covered. And third, comparing results across years within a single edition of this report rather than across editions is consistent with the technical requirements of the normalization used to compute this index, as described in Chapter 5.

## 2012 Scores and Rankings

**Figure 2.1** displays the overall 2012 DHL Global Connectedness Index scores and ranks, and highlights the composition of each country's score based on the depth and breadth of its connectedness. For pillar level scores and ranks, please refer to **Figures A.1 to A.4** in Appendix A. As described in Chapter 5, depth and breadth are both scored on a scale from 0 to 50, so that when they are added together, overall global connectedness is measured on a scale from 0 to 100.

The top ten ranks on the 2012 DHL Global Connectedness Index were held, in descending order, by the Netherlands, Singapore, Luxembourg, Ireland, Switzerland, United Kingdom, Belgium, Sweden, Denmark and Germany. The countries that fell to the bottom of the rankings were, in ascending order, Burundi, Central African Republic, Rwanda, Myanmar, Burkina Faso, Paraguay, Botswana, Nepal, Tajikistan, and Lao PDR.

This juxtaposition of the countries with the highest and the lowest ranks suggests some obvious effects of levels of economic development and geographic locations on global connectedness. The top 10 are all among the world's most advanced economies in terms of per capita income, human development and other metrics. And nine of the top 10 are located in Europe. In contrast, five of the bottom 10 countries are located in Sub-Saharan Africa and all of them except Botswana are classified as low or lower middle income countries by the World Bank.

Statistical analysis reveals that the rough generalizations implied by looking at the highest and lowest ranked countries indeed reflect patterns that hold across all countries, patterns that highlight important structural influences on countries' levels of connectedness. In fact, three economic and geographic factors alone can explain roughly 60% of the variation among countries' global connectedness






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The fact that 9 of the top 10 countries are located in Europe reflects Europe's broader standing as the world's most globally connected continental region.

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scores: GDP per capita, remoteness, and whether or not a country is landlocked.

Richer countries indeed are consistently more connected than poorer countries. All else equal, if one country has twice as large a GDP per capita as another, its global connectedness score will tend to be 16% percent higher. If countries are assigned remoteness scores between 0 and 10 based on their proximity or distance from foreign markets around the world, a doubling of remoteness scores is associated with an 18% percent decline in connectedness. And if a country is landlocked – that is it does not have direct access to the sea – its global connectedness score would tend to be 18 points lower.

In addition to these three major explanatory factors, speaking a common language with other major economies and having a large population also have more moderate associations with higher overall global connectedness scores.

Returning to the highest and lowest ranked countries, then, it is unsurprising that 9 of the top 10 are in Europe, which is the region where countries average the lowest remoteness (due to the many large economies close by). And while 2 of the top 10 are landlocked, even those – Switzerland and Luxembourg – benefit from well developed institutional and physical infrastructure to connect them to world markets. The 9 landlocked countries in the bottom 10 lack such compensating advantages. And that 5 of the bottom 10 are located in Sub-Saharan Africa also fits with the fact that Sub-Saharan Africa is the region that is farthest from international markets.

Focusing on the top 10 countries listed above should not, however, foster the misconception that global connectedness is restricted to the richest countries in the most privileged locations. Chapter 4 will highlight benefits of increasing connectedness across all countries. And look-

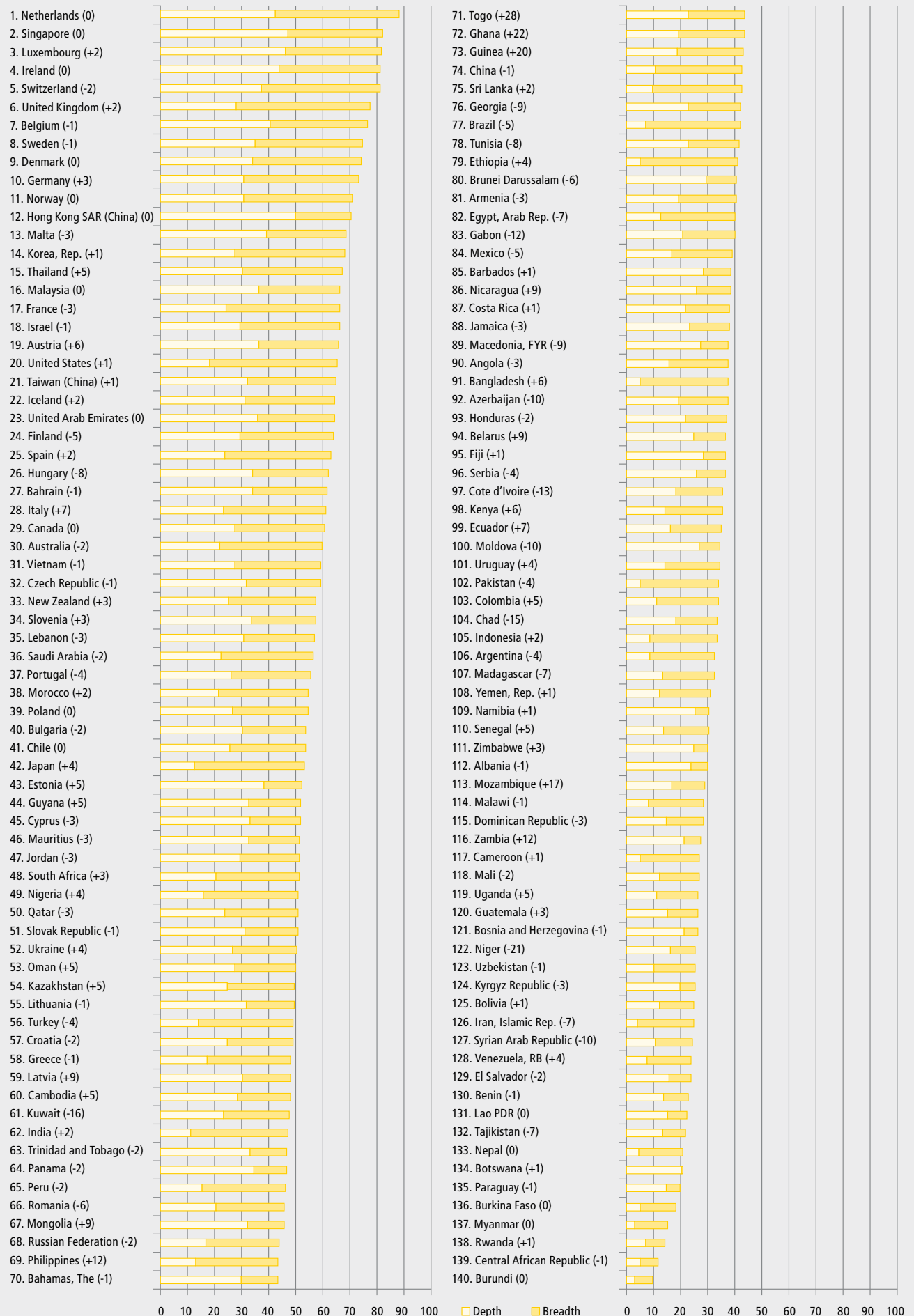
ing just a bit lower down the rankings, to the 11th to 15th positions, we find three more Asian economies: Hong Kong SAR (China), South Korea, and Thailand, as well as Malta, whose inclusion draws attention to how the leading countries range across the size spectrum.

The geographic diversity of the leading countries expands substantially if one looks at the top 50 countries. Israel is the top ranked country in the Middle East, holding the 18th rank. North America enters the list with the United States ranked 20th. Australia holds the 30th position as the top ranked country in the South Pacific. Morocco is the highest ranked African country, in 38th place, and South Africa leads among Sub-Saharan African countries, in the 48th position. Chile is the top ranked South American country, at 41st place. Regional differences in connectedness will be explored further in the final section of this chapter.

Turning to depth and breadth, as the split bars on Figure 2.1 indicate, the leading countries earned their places in the top 10 based on a mix of strengths on the depth and breadth dimensions. The top ranked country, the Netherlands, excelled on both dimensions (ranking fifth on depth and third on breadth). Ireland, Switzerland, Sweden, Belgium, and Denmark also earned their places based on balanced scores across both dimensions. Singapore and Luxembourg, earned their top ranks based on the depth of their international integration relative to the size of their domestic economies. In contrast, the United Kingdom and Germany earned their positions in the top 10 based on the global breadth of their connectedness. United Kingdom ranks first on breadth but only 43th on depth, while Germany ranks fifth on breadth and 30th on depth.

On the depth dimension, as shown in **Figure 2.2**, the top ranks are held by Hong Kong SAR (China), Singapore, Luxembourg, Ireland, Netherlands, Belgium, Malta, Estonia,

Figure 2.1 The 2012 DHL Global Connectedness Index, Overall Results  
(Legend: Parentheticals Reflect Rank Changes)








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From 2010 to 2011, 83 countries increased their absolute levels of connectedness while 57 saw their levels of connectedness decline.

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Switzerland, and Malaysia. The lowest ranked countries on the depth dimension were Burundi, Myanmar, Iran, Nepal, Ethiopia, Central African Republic, Bangladesh, Cameroon, Pakistan, and Burkina Faso. Casual observation of Figure 2.2 suggests that countries with higher depth scores tend to be both wealthy and relatively small, as exemplified by the top 3: Hong Kong SAR (China), Singapore, and Luxembourg. Naturally, advanced economies with relatively small internal markets will have a larger share of their trade, investment, communications, and even people, outside of their own borders.

Such patterns are indeed found to be statistically significant, with higher depth scores positively associated with countries' GDP per capita but negatively associated with their populations. Depth is also positively associated with linguistic commonality and negatively impacted by remoteness and landlockedness. Additional statistical analysis presented in Chapter 4 will highlight the economic benefits for countries of raising their depth scores and the impact that specific policy choices can have on the depth of countries' global connectedness.

**Figure 2.3** ranks countries according to their breadth scores. The top 10 countries on the breadth dimension of global connectedness are the United Kingdom, the United States, the Netherlands, Switzerland, Germany, France, Japan, South Korea, Norway and Denmark. The lowest ranked countries on breadth are Botswana, Zimbabwe, Bosnia and Herzegovina, Paraguay, Namibia, Kyrgyz Republic, Zambia, Albania, the Central African Republic, and Burundi. The countries with the highest breadth scores are both large and wealthy. Thus, while the same country characteristics used to describe depth scores are also significant factors for explaining breadth, the main contrast is that breadth is positively – rather than negatively – associated with countries' having larger populations.

The pattern that larger economies have higher breadth scores and lower depth scores holds up even in the extreme cases of the largest emerging markets, which helps explain why those countries are so globally significant even though most of their economic activity remains domestic. Each of the BRIC countries (Brazil, Russia, India, and China), have higher breadth than depth scores, with an average difference of 21 points (and an even higher difference of 25 points when Russia is excluded). The MIST countries of Mexico, Indonesia, South Korea and Turkey also have higher breadth than depth, with an average difference of 15 points. The magnitude of these differences is considerable, especially when one recalls that both depth and breadth are scaled from 0 to 50, so the maximum possible difference is 50 points, and the largest observed difference is close to 30 points.

Consider the example of China, which ranks 122nd (out of 140 countries) on depth and 35th on breadth. As the world's second largest economy and as a country ranked in the upper quartile on breadth (and with stronger outward than inward connectedness), China's global impact is very large. But China's depth score provides a useful reminder that even in China, the overwhelming majority of flows are domestic, as they are in all other large economies. China ranks 82nd in terms of the depth of its merchandise exports, a rank that is high only in comparison to other very large economies: the U.S., Japan, and India rank 133rd, 124th, and 112th, respectively, on this metric. Of course, China's rank in terms of the depth of its merchandise imports, 111th, is much lower.

### Changes in Country Level Connectedness, 2010–2011

Turning to how specific countries' levels of connectedness and ranks shifted from 2010 to 2011, 83 countries increased their absolute levels of connectedness while 57 saw their levels of connectedness decline. **Table 2.1** lists the countries with the largest increases and decreases in both their scores

Figure 2.2 The 2012 DHL Global Connectedness Index, Depth Dimension  
(Legend: Parentheticals Reflect Rank Changes)

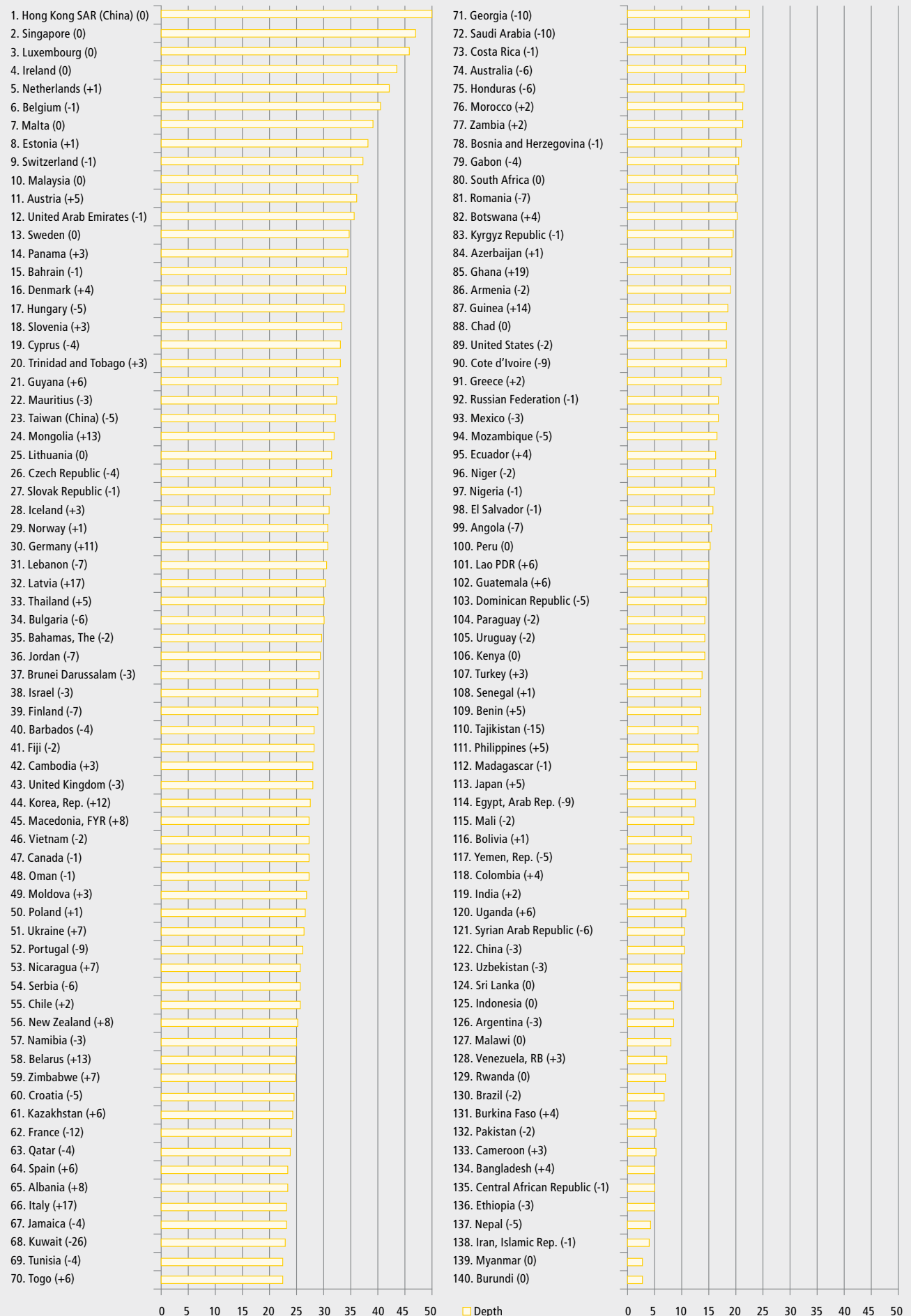
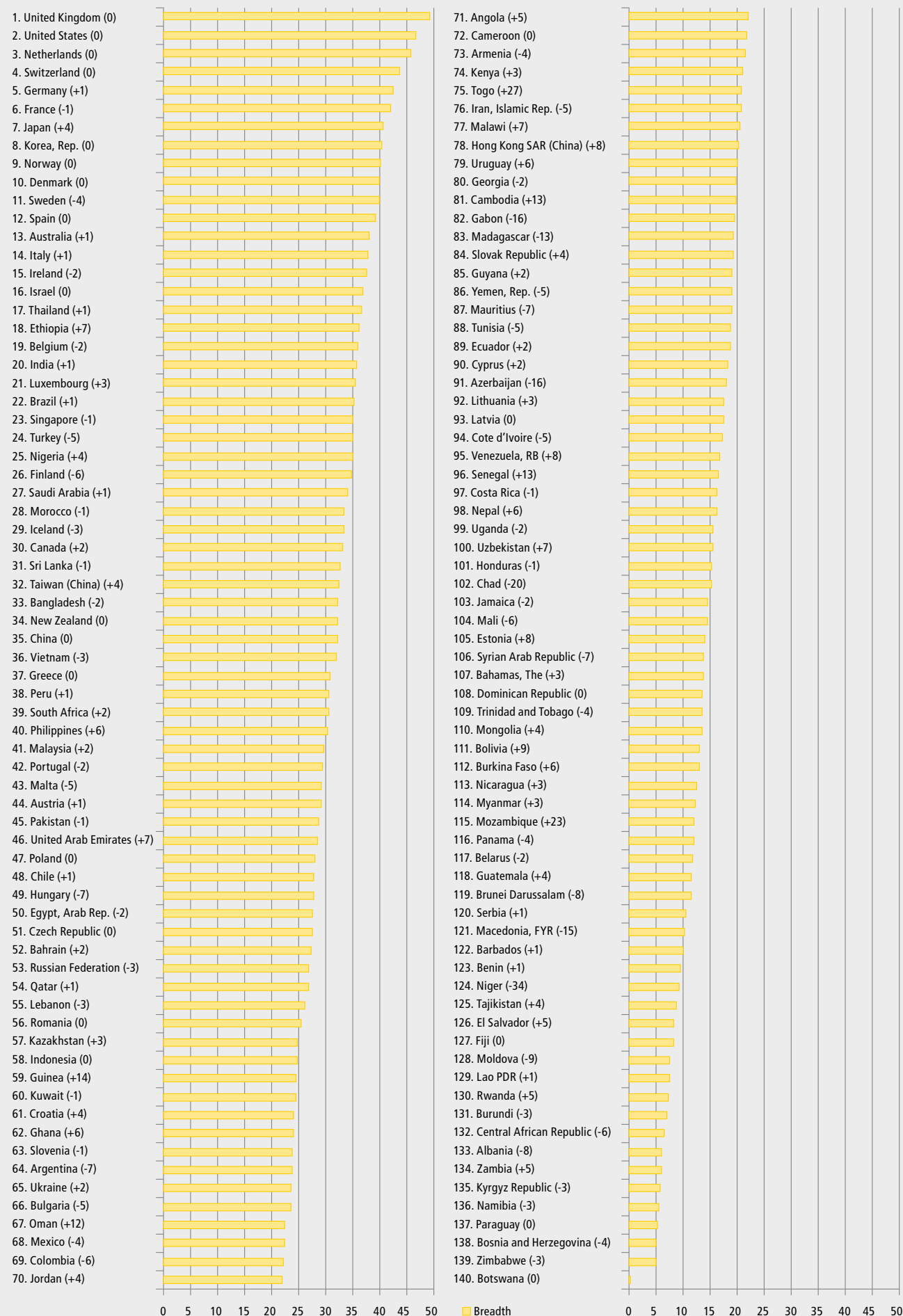


Figure 2.3 The 2012 DHL Global Connectedness Index, Breadth Dimension  
(Legend: Parentheticals Reflect Rank Changes)



**Table 2.1 Largest Changes in Overall Global Connectedness Scores and Ranks, 2010–2011**

**Largest Increases**

Country	Score Change	Country	Rank Change
Mozambique	9	Togo	28
Togo	8	Ghana	22
Ghana	7	Guinea	20
Guinea	6	Mozambique	17
Zambia	6	Zambia	12
Italy*	5	Philippines	12
Mongolia	4	Nicaragua	9
Latvia	4	Mongolia	9
Venezuela, RB	4	Latvia	9
Germany*	4	Belarus	9

**Largest Decreases**

Country	Score Change	Country	Rank Change
Niger	-10	Niger	-21
Chad	-5	Kuwait	-16
Kuwait	-4	Chad	-15
Hungary	-4	Cote d'Ivoire	-13
Cote d'Ivoire	-3	Gabon	-12
Gabon	-3	Azerbaijan	-10
Azerbaijan	-3	Moldova	-10
Moldova	-3	Syrian Arab Republic	-10
Syrian Arab Republic	-3	Georgia	-9
Madagascar	-3	Macedonia, FYR	-9

Note: Italy and Germany enter this year's the top 10 based on 2008 capital flows that no longer enter into three year averages. If capital connectedness scores are calculated based on this year's data only (without three year averages), these countries do not rank in the top 10.

(which reflect changes in absolute levels of connectedness on a flow-by-flow basis) and their ranks (reflecting changes in relative levels of connectedness).

The largest gains in the period 2010–2011 in terms of absolute levels of connectedness (scores) were posted, in descending order, by Mozambique, Togo, Ghana, Guinea,

Zambia, Italy, Mongolia, Latvia, Venezuela and Germany. Notably, the top 5 countries on this list are all located in Africa, with the others drawn from Europe, Asia, and South America.

Mozambique's position as the country with the largest increase in its overall global connectedness score (pushing it up from the 130th rank to the 113th) was based primarily on rising breadth of its merchandise exports. Exports that had previously been directed disproportionately to the Netherlands were redirected toward other countries, principally China and the United Kingdom. Mozambique also grew the value of its exports by 33%. The other African countries among the top 10 in increasing global connectedness also achieved their gains based on the trade pillar, with all of them increasing the depth and breadth of their exports as well as the depth of their imports. All except Togo also increased the breadth of their imports.

The list of countries with the largest gains in global connectedness from 2010 to 2011 also includes two of the world's largest economies: Germany (with the world's 4th largest GDP) and Italy (9th). Both countries' connectedness scores rose based on depth in the capital pillar, particularly portfolio equity flows. These gains, however, reflect prior-year effects that impact the three year averages used to calculate capital connectedness rather than actual changes over the past year. A large crisis-induced downturn in capital flows for these countries in 2008 that had impacted the three year averages for these flows in 2010 no longer dragged down their values in 2011, causing the three year averages to rise dramatically in spite of relatively weak capital flows in 2011. If single year data are used instead of three year averages, a decline in these two countries' portfolio equity flows is observed from 2010 to 2011, and they drop off of the list of the 10 countries with the largest increases in overall global connectedness.



Figure 2.4  
Regional Average Scores



Europe is the most connected region overall, followed by North America and East Asia & Pacific. Europe leads on Depth and North America leads on Breadth. Sub-Saharan Africa is the least connected region.

The countries with the largest absolute declines in global connectedness were, starting with the largest decline, Niger, Chad, Kuwait, Hungary, Cote d'Ivoire, Gabon, Azerbaijan, Moldova, Syrian Arab Republic and Madagascar. Among the countries that had the largest declines in absolute levels of connectedness, there are, again, 5 countries from Sub-Saharan Africa, with the balance distributed across other regions.

Niger's posting the largest decline from 2010 to 2011 represents a dramatic reversal, after this country was highlighted in last year's DHL Global Connectedness Index report as having achieved the largest increase in overall connectedness from 2005 to 2010. Niger's connectedness score fell 10 points, which caused its rank to decline from 101st to 122nd. This volatility reflects Niger's dependence on a single export commodity (Uranium or thorium ores and concentrates) and a small number of export destinations. Whereas in 2009, 47% of Niger's exports had gone to France (98% of them uranium or thorium ores and concentrates), this flow fell by 85% in 2010, dramatically increasing the breadth of Niger's exports. However, in 2011, exports to France accounted for 63% of Niger's total exports, prompting its breadth score to plummet.

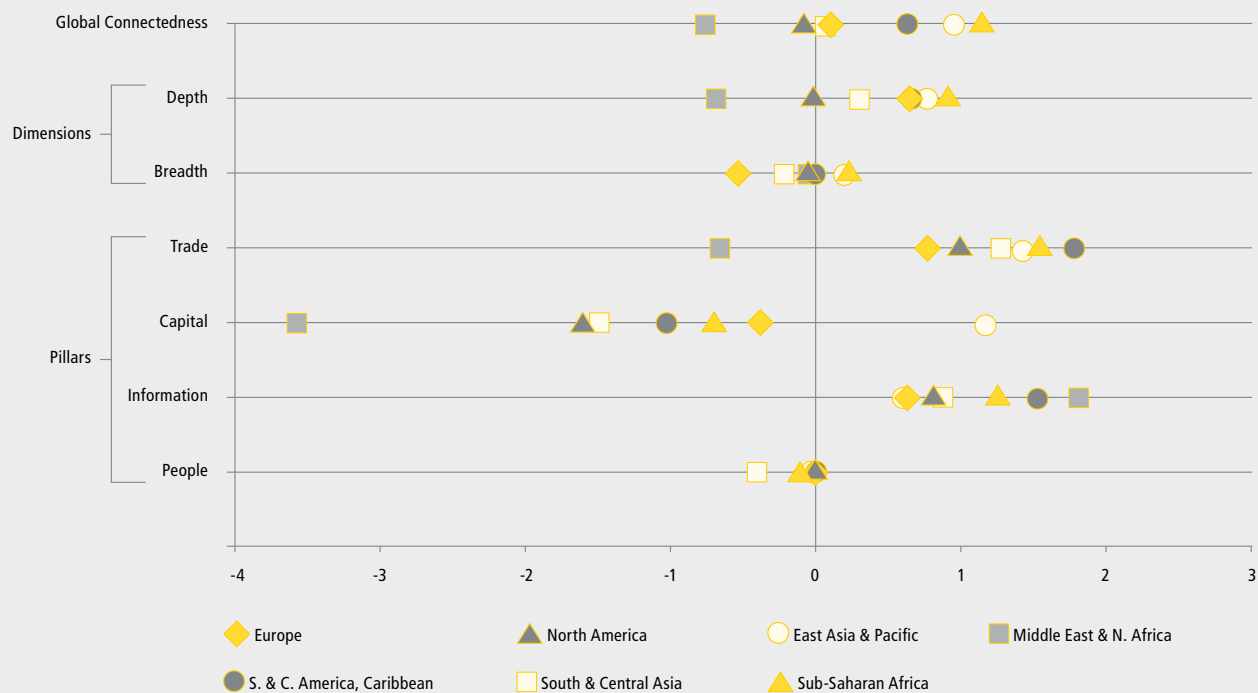
Among the countries with the largest declines in global connectedness, Hungary is the one with the largest economy.

Hungary's fall in global connectedness was driven by the capital pillar, especially its depth and most significantly its outward portfolio equity flows, where negative flows were registered in 2011.

The drop in global connectedness in Syrian Arab Republic, which had been very stable until 2010, came primarily from the trade pillar, in both depth and breadth. Syria's declining connectedness is unsurprising since it has been hit by trade sanctions such as a ban by the European Union on importing oil from Syria (mineral fuels historically made up about half of Syria's exports) as well as bans on exporting various types of goods to Syria. Declining export volumes hit Syria's export depth while a forced re-focusing on intra-regional exports drove down its breadth.

Turning to other large economies that were neither among the largest gainers or decliners in terms of global connectedness, the United States maintained a basically stable level of connectedness from 2010 to 2011, increasing its score on the trade pillar by one point. China's connectedness was also stable, gaining one point on information and losing one point on capital. However, stability in its trade pillar score while other countries increased their scores caused China's rank on the trade pillar to fall by six positions. Japan increased its overall global connectedness score by 2 points from 2010 to 2011 based on improvements in both depth

**Figure 2.5**  
Regional Average Changes in Scores from 2010 to 2011



Sub-Saharan Africa tallied the largest average increase in global connectedness from 2010 to 2011, followed by East Asia & Pacific and South & Central America & the Caribbean. Middle East & North Africa was the only region to suffer a large drop in its global connectedness.

and breadth of connectedness, mainly in the capital pillar. Moving beyond the world's three largest economies to look at the rest of the BRIC countries, India increased its overall connectedness by 2 points, mainly based on a 5 point gain in the trade pillar. Brazil gained 4 points in information connectedness, but lost 4 points in capital connectedness. Russia lost 3 points in the capital pillar, but held steady on the rest of the pillars. Relatively stable global connectedness in the BRIC countries kept this set of economies in the middle of the pack on overall connectedness, with all four ranking between 62nd and 77th out of the 140 countries covered in the index.

This section was able to highlight only a small number of countries, and it is difficult to glean broader patterns from reviewing country-by-country results. The next section seeks to remedy this and provide additional insights by analyzing patterns of connectedness and changes over time at the regional level.

### Regional Differences in Global Connectedness

As described in Chapter 1, nearly all of the flows covered in the DHL Global Connectedness Index take place in larger volumes within rather than between regions. Roughly 50–60 percent of trade, foreign direct investment, migration and telephone calls are all intra-regional, as well as 75% of tourism and 65% of trade in printed publica-

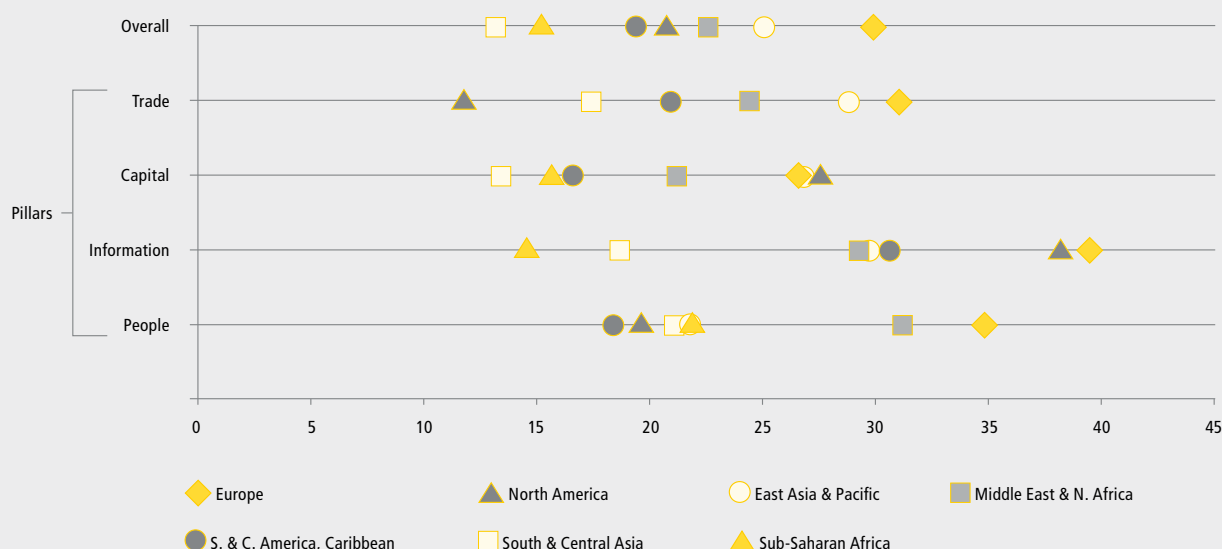
tions. This pattern suggests that countries' levels of global connectedness should be assessed not only on a global basis but also in relation to the integration of their own regions.

This section begins by introducing a set of comparisons among regions, and then delves into discussion of connectedness patterns in each of the world's regions. Note that the regional analysis of global connectedness, depth, and breadth scores that follows is based on averaging scores across the countries in each of the regions, so what are described for compactness as comparisons among regions reflect, more precisely, comparisons among average countries within the regions. For a list of how countries were classified into regions for this analysis, please refer to Appendix B.

**Figure 2.4** displays average global connectedness, depth and breadth, and pillar scores for countries in each region. In terms of overall global connectedness, it reveals two sets of regions: one with relatively higher levels of connectedness – Europe, North America, East Asia & Pacific, and Middle East & North Africa – and one with notably lower overall connectedness – South & Central America & Caribbean, South & Central Asia, and Sub-Saharan Africa.

**Figure 2.5** shows the average changes in scores from 2010 to 2011 for each of the regions. It shows that Sub-Saharan

Figure 2.6  
Regional Average Depth Scores by Pillar



Europe leads by a wide margin on overall global connectedness depth, followed by East Asia & Pacific. North American countries have strong capital and information depth, but lag far behind on the depth of their trade and people flows.

Africa had the largest gain in overall global connectedness during the past year, followed closely by East Asia & Pacific and South & Central America & the Caribbean. It also reveals that the Middle East & North Africa was the only region to suffer a large drop in its global connectedness.

To understand more clearly what global connectedness means to different regions, it is useful to compare regions' average depth scores and the intra-regional proportion of their international flows, focusing on the four pillars of the DHL Global Connectedness Index, as shown in **Figures 2.6 and 2.7**. This juxtaposition suggests, first of all, that while depth and breadth at the country level are only weakly correlated (the correlation coefficient is 0.27), there seems to be a strong association between regions' average depth scores and the intra-regional share of their international flows. The regions generally follow the same rank order on both metrics. Given the CAGE distance effects described in Chapter 1, regional integration has been an essential part of rather than an alternative to global integration.

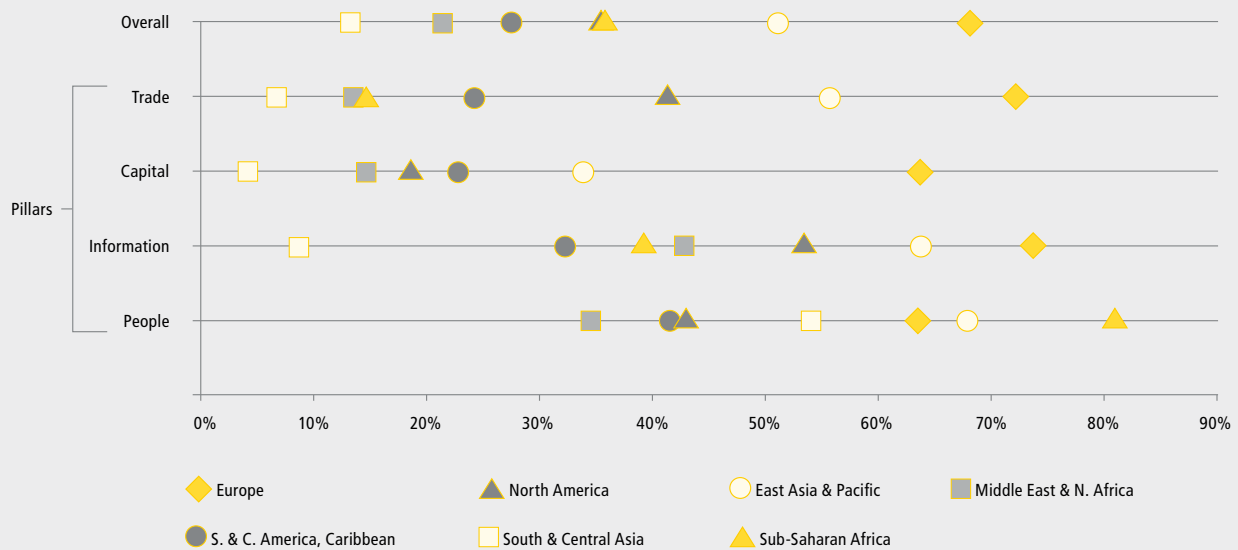
The one notable exception to the pattern described in the previous paragraph is Middle East & North Africa, which ranks near the middle on depth but second from last on intra-regional integration. Presumably, this reflects in part the importance of oil exports to this region, which are traded in large volumes over long distances, and contribute to other flows, such as this region's ability to employ large numbers of migrant workers (who also come mainly from

outside of the region, boosting depth without intra-regional integration).

A second point from Figure 2.7 in particular is the magnitude of the differences across regions in their proportions of intra-regional flows. The high proportion of intra-regional flows globally was noted above, but is far from uniform across regions, which suggests that "international" takes on a distinct meaning in different parts of the world. Consider, for example, the contrast on the trade pillar between Europe and South & Central Asia. In Europe, the weighted average (using DHL Global Connectedness Index weights, as described in Chapter 5) intra-regional share of trade flows exceeds 70% whereas the same metric in South & Central Asia is less than 10%. For European countries, "international" is best understood first and foremost as the rest of Europe, whereas for South & Central Asian countries, it means the opposite – distant countries rather than neighbors.

And finally, a third important point from Figure 2.7 is the correlation between levels of intra-regional integration and prosperity, as revealed by the contrast between the top regions on this aspect of connectedness (Europe and East Asia & Pacific) versus the bottom two (South & Central Asia and Sub-Saharan Africa). While the prosperous North American region might initially seem like an exception to this pattern, that largely reflects the fact that it is a region comprised of only three countries, which naturally reduces the intra-regional share of its international flows.

Figure 2.7  
Regional Average Intra-regional Share of Flows by Pillar



The wide gulf between the countries with the highest and lowest intra-regional shares of their international flows reveals “globalization” to be a very distinct phenomenon in, for example, Europe, where international connectedness primarily involves ties to other European countries, versus South and Central Asia, where intra-regional ties barely register.

Turning then to region-by-region discussion of global connectedness patterns and trends, *Europe* is the world’s most globally connected region, reflecting both its structural characteristics (many wealthy countries in close proximity) as well as decades of policies aimed at promoting integration via the European Union (EU) and its predecessors. Europe leads specifically on the depth dimension and on the people pillar, but its overall strength is reflected by the fact that it, uniquely, ranks either first or second on all of the pillars. On the trade and information pillars, Europe’s scores came in just slightly below those of the leading regions, East Asia & Pacific and North America, respectively. For more discussion of policies that contribute to connectedness in Europe, refer to the discussion of the Netherlands in Chapter 4.

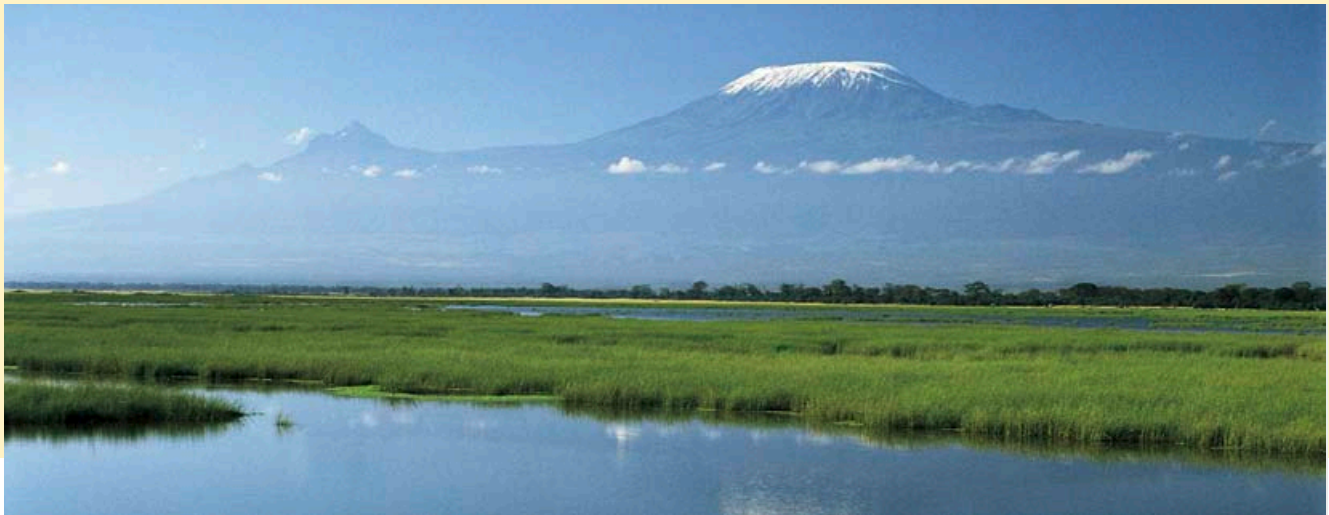
The overall global connectedness of European countries was steady from 2010 to 2011. The average European country’s depth score rose while its breadth score declined. At the pillar level, gains on the trade and information pillar offset a decline on the capital pillar. Note also that the use of three year averages masks the extent of the decline in Europe’s capital pillar connectedness from 2010 to 2011. While the standard results (incorporating three year averages of capital flows) show Europe having the smallest decline on this pillar among all of the regions where capital connectedness fell (everywhere except East Asia & Pacific), if the smoothing effect of three year averages is removed, Europe is revealed to have suffered the third steepest decline in capital pillar connectedness from 2010 to 2011,

with only South & Central Asia and Sub-Saharan Africa having experienced larger drops.

Given the emphasis on intra-regional integration in the discussion above, Europe’s leading position on this aspect of global connectedness should also be underscored. Europe had the highest proportion of intra-regional flows across all pillars except people, where it ranked third behind Sub-Saharan Africa and East Asia & Pacific. More specifically, 73% of exports from Europe (considering the whole region; members and non-member countries of the EU) go to other European countries. A similar pattern also holds for capital flows, with 68% of outward foreign direct investment from Europe remaining within the continent.

Without forsaking the benefits of continued intra-regional integration, however, projections for European economies to grow relatively slowly even after the present crisis is over, particularly in comparison to Asian economies, suggest that European business executives and policymakers need to also emphasize increasing Europe’s connections to faster growing, more distant economies. The importance of this is clear when one considers that even based on projections from before the latest Euro crisis, Europe’s share of world GDP was expected to decline from 30% in 2010 to 25% in 2030, while Asia’s rises over the same period from 29% to 37%. Policy tools to promote breadth can extend beyond obvious ones such as trade agreements with distant partners to incorporate others such as teaching a broader range





of foreign languages in schools, investing more in diplomatic and economic missions in the far abroad, opening up to more immigration from distant countries, and so on.

*North America* holds the second place ranking in overall global connectedness, leading by a wide margin on breadth while ranking in the middle on depth. This reflects both the overall high level of economic development in North America (defined here as the members of the North American Free Trade Agreement or NAFTA: the United States, Canada and Mexico) as well as the fact that all three countries in this region have relatively large populations. Recall that countries with larger populations tend to have higher breadth scores and lower depth scores. The United States, Mexico, and Canada rank 3rd, 11th, and 35th globally in terms of the size of their populations.

North America is the leading region on the capital and information pillars, ranks second on the people pillar, and lags near the bottom on the trade pillar (where North America ranks last on depth). North America's poor showing on trade depth in particular should provide impetus to renewed efforts both to strengthen NAFTA as well as to promote exports beyond NAFTA (exports being emphasized for this region in particular given persistent trade deficits in the region's largest economy, the United States). North America's trade ties are also held back by gaps in Mexico's domestic supply base, which prevent Mexico from taking full advantage of its broad range of free trade agreements, as described in Chapter 4.

*East Asia & Pacific* averaged the third highest level of overall global connectedness and was the region with the second largest increase in connectedness from 2010 to 2011. East Asia & Pacific has balanced strength across both depth and breadth, with trade clearly standing out as its strongest pillar (on which it is the top ranked region). This result, as described in last year's DHL Global Connectedness Index

report, is somewhat surprising given the very limited institutional infrastructure for integration in East Asia & Pacific. However, countries in this region have in large part pursued export oriented economic development strategies, complemented by private sector-led development of integrated multi-country production chains across the region.

The prevalence of regional production chains in East Asia & Pacific contributes to the region's second place rank, behind Europe, on the intra-regional proportion of its trade flows. Chapter 3 will highlight one such chain, that for mobile phones, where many of the components for the most advanced smartphones are manufactured in Korea (and Japan and Taiwan, China), in part from imported raw materials, and then shipped to mainland China for assembly, before the finished products are exported worldwide.

East Asia & Pacific's achievement of the world's second largest increase in connectedness from 2010 to 2011 was driven in large part by the fact that it was the only region to increase its connectedness on the capital pillar, while the average country in every other region saw its connectedness on this pillar decline.

*Middle East & North Africa* ranked fourth in overall connectedness, placing in the middle of the pack on both depth and breadth and across the pillars. However, from 2010 to 2011, this was the only region where the average country suffered a significant drop in its overall global connectedness, a pattern that is underscored by the fact that the Middle East & North Africa was also the only region to have more countries' scores drop than rise (with 11 countries' scores declining and only 4 rising).

This region's decline in global connectedness was driven by the depth dimension, and in particular, the trade and capital pillars, and was offset in part by rising connectedness on the information pillar. Broadly speaking, the Arab

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Sub-Saharan Africa ranks last, with scores that reflect its limited connectedness across the board, but did average the largest increases in connectedness from 2010 to 2011 among all regions. Sub-Saharan Africa's rising connectedness was driven by the trade and information pillars.

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Spring and associated instability in this region seem to have suppressed trade and investment flows, while at the same time contributing to rising integration into global information flows.

The other aspect of the Middle East & North Africa's results that raises concern is its very low intra-regional integration across all four pillars. Given this pattern, the standard prescription for new governments in the region to try to deliver economic development would be to boost intra-regional trade. However, until national governments consolidate their domestic standing, regional integration will likely take a back seat to domestic politics.

*South & Central America & the Caribbean* ranks third to last overall and on depth, next to last on breadth. This region's combination of low breadth scores and low intra-regional integration reflects a pattern where countries in the region have narrow ties to specific countries outside of the region, the United States being the most prominent example. In terms of pillar scores, Central & South America & the Caribbean ranks last on trade and capital, next-to-last on people, and holds the middle position on information.

South & Central America & the Caribbean was, however, among the three regions that posted significant gains in terms of its overall level of connectedness from 2010 to 2011. It had the largest gain on the trade pillar and the second largest increase on the information pillar.

*South and Central Asia* lags across nearly all aspects of global connectedness. This region ranks last on depth and third from last on breadth. Furthermore, its relatively higher breadth than depth is a reflection of the poor levels of integration within the region, depressed in particular by the animosity between the region's two largest economies, India and Pakistan. In fact, this is the region with the low-

est proportion of intra-regional merchandise exports, only 7% during the period 2005–2011.

Given South and Central Asia's very low level of global connectedness in 2010, it is even more worrisome to note that the connectedness of countries in this region, on average, remained basically stagnant from 2010 to 2011. There was a small increase on depth, a small decline in breadth, and a middling performance across the pillars.

Finally, *Sub-Saharan Africa* ranks last, with scores that reflect its limited connectedness across the board, but did average the largest increases in connectedness from 2010 to 2011 among all regions. Since this increase was only slightly larger than East Asia & Pacific's and since Sub-Saharan Africa lags far behind the leading regions, it does not imply that Sub-Saharan Africa will soon be closing the gap with respect to its level of connectedness. However, its increasing connectedness is indeed an encouraging sign, particularly in light of the fact that its connectedness rose fastest not only overall but also on the depth dimension which, as Chapter 4 will elaborate, is associated more directly than breadth with faster economic growth.

Sub-Saharan Africa's rising connectedness was driven by the trade and information pillars. Within the trade pillar, it is important to note that only 14% of Sub-Saharan Africa's trade is intra-regional. Expanding intra-regional trade can help Sub-Saharan Africa continue to increase its trade depth. The challenge of weaving this region closer together, however, is exacerbated by the fact that much of its physical infrastructure was designed by former colonial powers with the aim to efficiently ship resources out of Africa rather than to facilitate intra-regional trade. And more basic infrastructure improvements could also have large impacts: by one estimate, if all the interstate roads in West Africa were paved, that might as much as triple trade within that subregion.<sup>1</sup>

Sub-Saharan Africa's gains on the information pillar are particularly noteworthy in light of the fact that this is the pillar on which it lags farthest behind other regions. Africa's very fast adoption of mobile telephony that is described in Chapter 3 provides additional encouragement about how fast Africa can catch up on this pillar, particularly in light of opportunities for leapfrogging directly into newer technologies (such as mobile instead of fixed line telephone service).

Extending Sub-Saharan Africa's connectedness gains is of global rather than merely regional importance. The United Nations forecasts that nearly half of the population growth that will take place between 2012 and 2050 will happen in Africa.<sup>2</sup> And medium term economic forecasts for Sub-Saharan Africa are also encouraging: the IMF forecasts that Sub-Saharan Africa will deliver the second fastest GDP growth in the world (after "Developing Asia") between 2012 and 2017.<sup>3</sup> Such forecasts imply expanding opportunities both for Africa to connect to the rest of the world as well as for other countries and regions to connect more to Africa.

## Conclusion



This chapter has compared the global connectedness of countries and regions around the world. The world's most connected countries based on this year's DHL Global Connectedness Index are: the Netherlands, Singapore, Luxembourg, Ireland, and Switzerland. The least connected countries are: Burundi, Central African Republic, Rwanda, Myanmar, and Burkina Faso. The countries with the largest increases in their global connectedness scores from 2010 to 2011 are: Mozambique, Togo, Ghana, Guinea, and Zambia.

Wealthier countries tend to be more globally connected in terms of both depth and breadth. Countries with larger populations tend to score higher on breadth but lower on depth. Sharing a common language with other countries is positively associated with connectedness, and geographic remoteness and landlockedness are negatively associated with global connectedness.

Europe is the top-ranked region in terms of overall global connectedness and also leads on the people pillar. North America is the most connected region on the capital and information pillars, and East Asia & Pacific leads on the trade pillar. Countries in Sub-Saharan Africa averaged the largest increase in their connectedness scores from 2010 to 2011.

Regions also vary widely with respect to the intra-regional proportion of their international flows, which reveals "globalization" to be a very distinct phenomenon in different parts of the world. In Europe, where nearly 70% of international flows (taking a weighted average across types of flows) are intra-regional, international connectedness primarily involves ties to other European countries. In South & Central Asia, where less than 15% of international flows are intra-regional, international ties imply connections to distant partners rather than neighbors.

This chapter has revealed that, within the broad conclusion of limited global connectedness presented in Chapter 1, countries and regions vary widely in terms of how deeply and broadly they connect with the rest of the world. Its emphasis on regions also highlights the importance of thinking about connectedness on a regional basis. In light of cultural, administrative, geographic, and economic (CAGE) similarities within regions, countries' strongest natural connections tend to be with their neighbors. Therefore, openness at the regional level can be an important contributor to individual countries' connectedness.



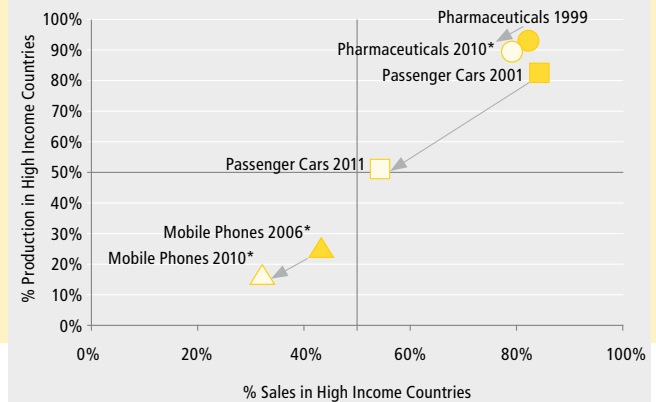
### 3. How Globalized are Specific Industries?



This chapter zooms in from the macro global and country level material presented in the first two chapters to analyze global connectedness at the level of particular industries. It begins with a brief comparison across more than twenty types of products showing broad variation among industries' levels of globalization, with a focus on merchandise trade. Then, it delves into three industry case studies: pharmaceuticals, passenger cars, and mobile phones.

These three examples represent industries at varying stages of responding to the global shifts of both production and consumption to emerging markets. The importance of thinking about industries along these dimensions derives from the fact that 72% of GDP growth around the world from 2008 to 2011 took place in emerging market countries and according to IMF projections, emerging markets will deliver about 60% of growth from 2012 to 2017. The countries that the World Bank classified as high income countries in 2012<sup>1</sup> produced 77% of world GDP in 1980. Their share is already down to 67% in 2012, and is projected to fall to just about half by 2030.<sup>2</sup> From a geographic standpoint, the world's economic center of gravity has already moved from the mid-Atlantic in 1980 to around Izmir, Turkey, by 2008, and forecasts suggest that it will be on the Chinese-Indian border by 2050.<sup>3</sup>

Figure 3.1 Proportion of Production and Sales in High Income Countries (Versus Developing/Emerging Markets)<sup>4</sup>



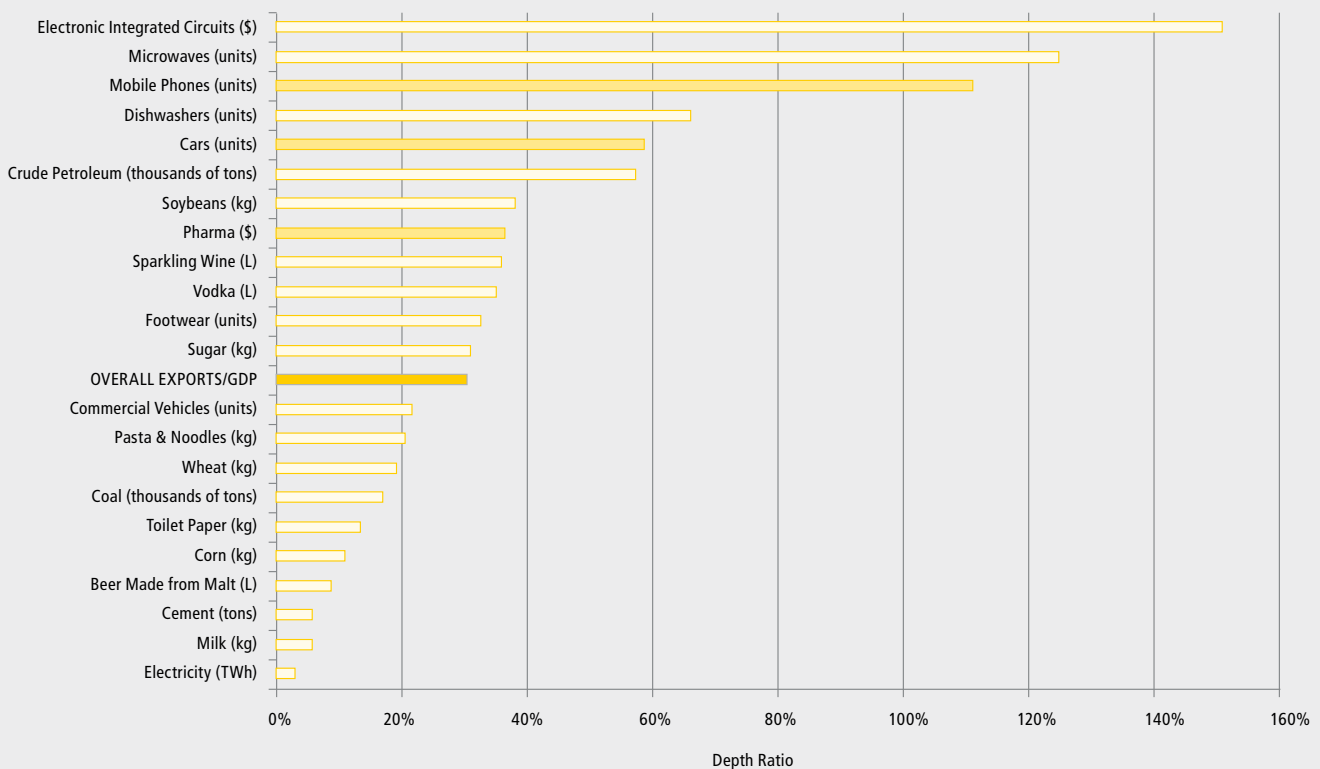
Pharmaceuticals is slowly shifting focus beyond the advanced economies, passenger cars has migrated to an intermediate position over the past decade, and mobile phones is already an industry where most production and sales take place in emerging markets.

Note: The vertical positions of the points marked with asterisks (\*) are approximate. Refer to the endnote associated with this figure for details.

**Figure 3.1** plots the three focal industries according to the share of their production and sales taking place in high income countries (advanced economies), with the balance of course coming from low and middle income countries (developing and emerging markets). The pharmaceutical industry is a traditional industry where advanced economies dominate both production and consumption (in the upper-right corner of the matrix), and is also the industry that moved the least during the period analyzed. Automotive is an intermediate case where rapid shifts over the past decade have divided production and consumption more or less evenly between advanced and emerging economies (the middle of the matrix). And mobile phones is an industry where the majority of both production (or at least assembly) and consumption are already in emerging markets (the bottom left cell of the matrix).

The three industries shown on the matrix follow the diagonal from high income countries to low and middle income countries, in line with global macroeconomic trends, leaving the upper left and bottom right cells vacant. There are, however, many examples of products that are manufactured mainly in emerging markets and sold mainly in advanced economies that could be placed in the lower right cell. Within the mobile phone industry, the smartphone segment falls in this cell. Examples of products that are mainly produced in advanced economies and sold in emerging markets (upper left cell) are, however, very rare.

Figure 3.2  
Industry Depth Comparisons, 2010<sup>8</sup>



The depth of industries' global connectedness, measured by comparing exports or imports of their finished products to their production or consumption, varies from 3% in the case of electricity to over 100% for electronic integrated circuits, microwaves, and mobile phones.

### Industry Depth and Breadth Comparisons

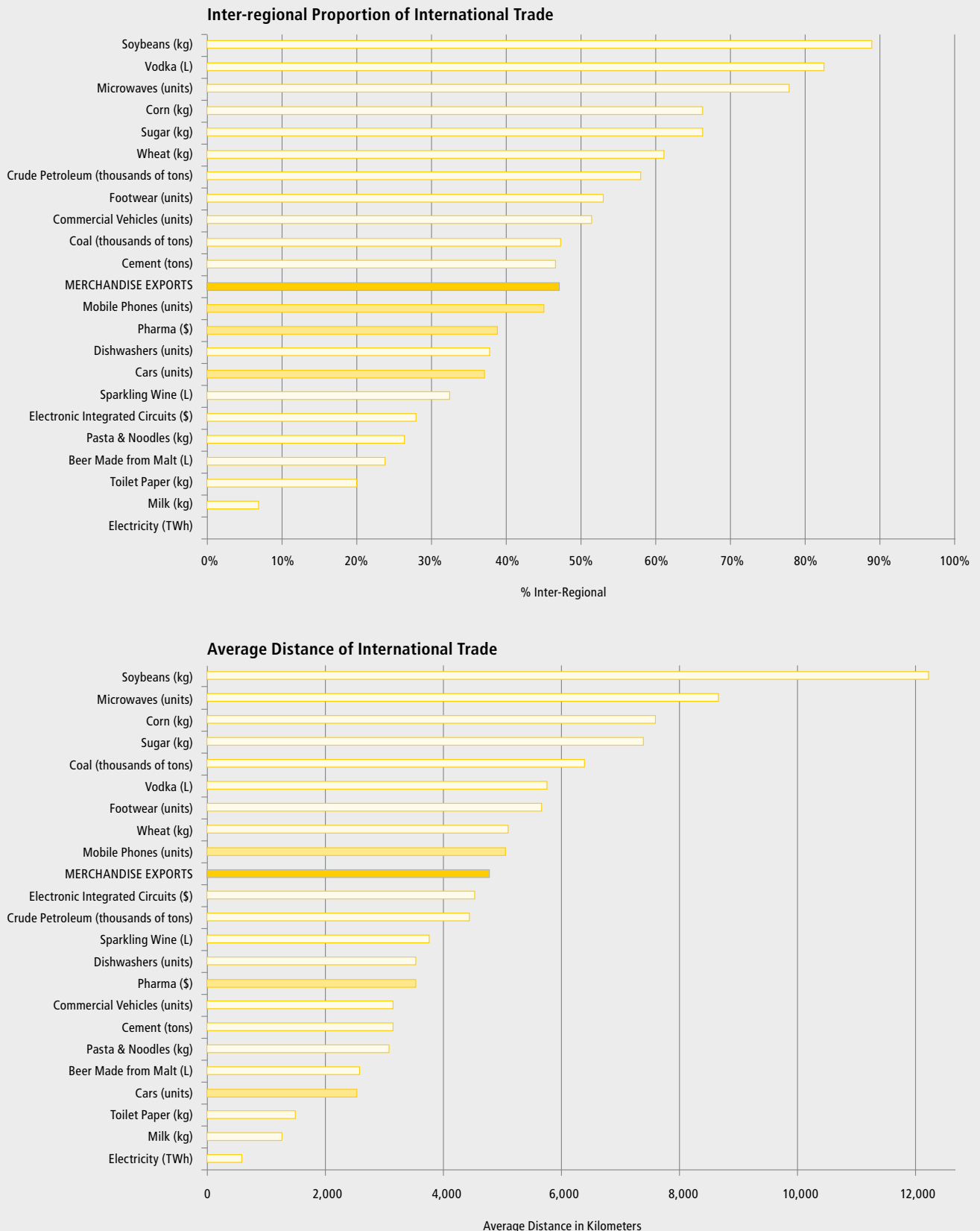
Before delving into the case examples, this section places them in broader context by comparing how globalized a larger set of industries are, using the now-familiar concepts of depth and breadth. In spite of “globaloney” implying that every industry is rapidly becoming global, industries vary substantially in terms of their levels of globalization and at least some remain very local.

Starting with depth, one way to analyze the depth of an industry's global connectedness in terms of trade is by calculating the ratio of the imports or exports of its finished products to its overall sales or production. As **Figure 3.2** shows, this depth metric varies widely across types of products. At the top of the figure are industries where nominal trade exceeds production or consumption, such as integrated circuits and microwave ovens.<sup>5</sup> At the other extreme, the industry with the lowest depth among those studied is electricity, of which only 3% is traded across national borders. Recalling that exports account for 30% of world GDP provides a benchmark against which industries may be characterized as more or less deeply integrated across borders than the world economy as a whole.<sup>6</sup>

The three types of energy shown in Figure 3.2 exemplify how trade intensities can vary widely even among industries within a single sector. Crude petroleum, the price of which is used to predict global macroeconomic trends, is unsurprisingly in the top tier, with 57% of production exported in 2010. Coal is in the middle with a depth score of 17%, and, as already mentioned, only 3% of electricity is traded across national borders. Analysis at the level of the energy sector as a whole would have missed these large differences.

The focal industries that will be discussed in more detail in this chapter all have depth scores that are higher than the world economy as a whole but still vary widely. The mobile phone industry is among the most deeply integrated (its depth score is 110% – for an explanation of how this can exceed 100%, see the endnote referenced above for integrated circuits and microwave ovens). The passenger car industry has roughly half the depth of mobile phones (58%). And the pharmaceutical industry comes in just slightly above the cross-industry benchmark, with imports accounting for 36% of consumption by value.<sup>7</sup> The focal industries are also all R&D-intensive. R&D intensity tends to correlate with internationalization as firms in industries where R&D expenditures form a large proportion of sales tend to enter

Figure 3.3  
Industry Breadth Comparisons, 2010



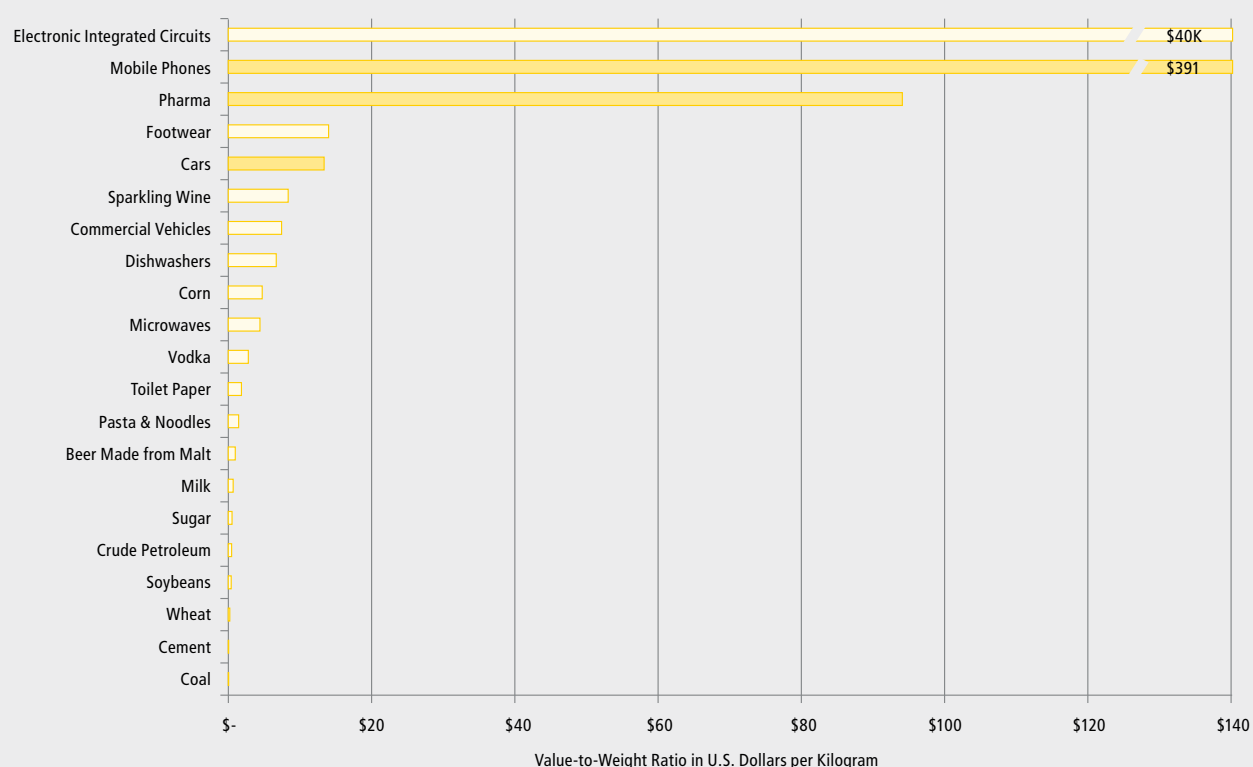
Industries' breadth, as measured here in terms of regionalization and average distance traversed by traded products, also varies widely, ranging from electricity which is only traded among neighboring countries to soybeans, where almost 90 percent of trade is between countries in different and distant regions.

Note: Average distance is based only on distance traversed by internationally traded goods. Distance traversed by goods that are consumed domestically is not reflected. Refer to the endnote associated with Figure 3.2 for a complete list of sources. The pharmaceuticals and electronic integrated circuits categories are based on value whereas all other categories are based on quantity, which introduces some biases that are described in the specific context of pharmaceuticals later in this chapter.



Figure 3.4

Value-to-Weight Ratio Comparison (Value of Traded Merchandise in U.S. Dollars per Kilogram), 2010



Products that have higher value-to-weight ratios tend to be traded more heavily across international borders. Electronic integrated circuits has, by far, the highest value-to-weight ratio among the industries studied and also has the highest depth score. Note: This chart is based on traded goods only, whose value-to-weight ratios may differ from goods of the same type that are consumed domestically. The data are based on declared values and weights reported by national customs authorities, which may be affected, for example, by tax-motivated transfer pricing strategies.

international markets to spread their R&D costs over larger sales volumes.

**Figure 3.3** compares the *breadth* of industries' global connectedness using the simple metrics that were introduced in Chapter 1: the proportion of exports that take place between versus within regions and the average distance traversed by those exports. Again, there is very wide variation across industries. Starting from the bottom of these graphs, we can see that not only is very little electricity traded across borders, but what is exported does not travel very far. In fact, 87% of the electricity that is traded internationally is traded between countries that share a common border. At the top of the graphs, soybeans travel the greatest distance on average, reflecting the fact that nearly 70% of soybean exports in 2010 were from the Americas to East Asia & Pacific.

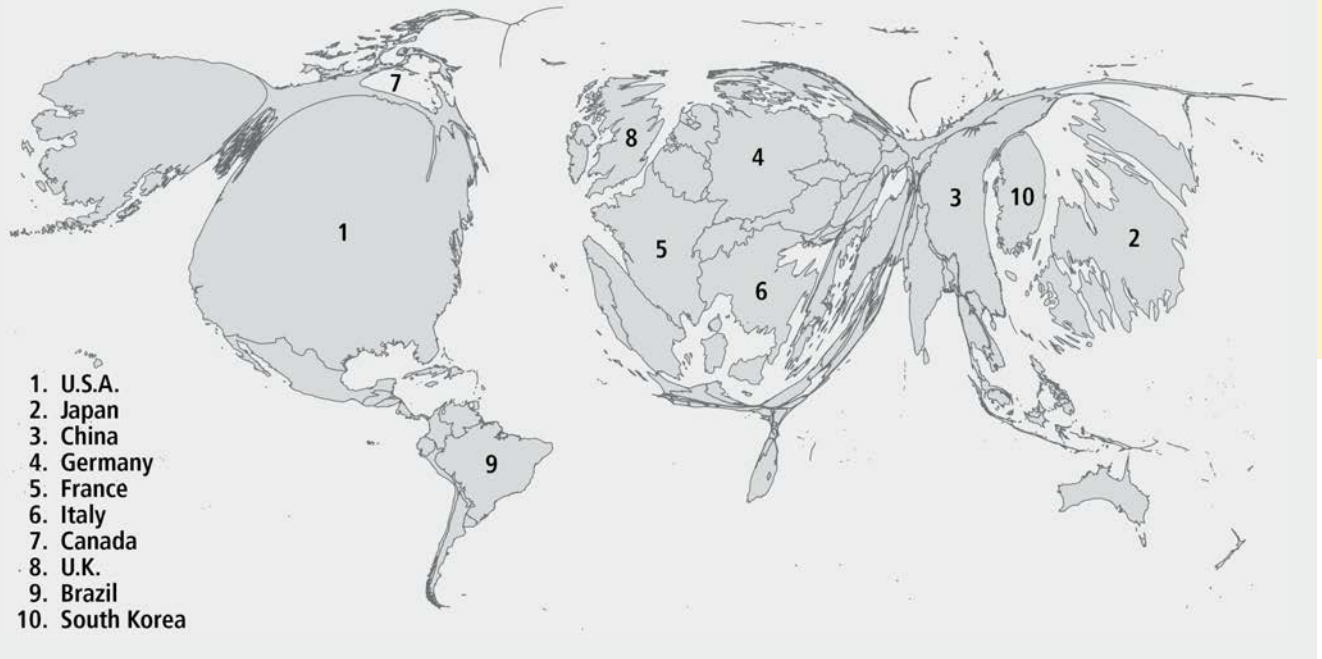
Mobile phones, pharmaceuticals, and passenger cars all cluster together in terms of their proportions of inter-regional trade (ranging from 37% to 45%, just below the cross-industry average of 47%). Thus more than one half of trade in each of these industries occurs within regions. However, the average distances traversed range from only

2500 km in the case of passenger cars to 3500 km for pharmaceuticals to 5000 km for mobile phones (versus the global benchmark of 4750 km).

How can we explain the patterns shown in Figures 3.2 and 3.3? The CAGE (cultural, administrative/political, geographic, economic) distance framework, which was introduced in Chapter 1 to help understand patterns of regionalization, can also help explain differences in industries' levels of global connectedness. Different industries have different levels of sensitivity to each of the four categories of CAGE distance – and to the sub-categories into which they have been elaborated in other writings on this topic.<sup>9</sup>

**Figure 3.4** highlights one indicator of industries' varying levels of sensitivity to the geographic dimension of the CAGE framework: (exported) products' value-to-weight ratios. Products with high value-to-weight ratios are more likely to be traded internationally, since, in the simplest terms, their value makes them worth transporting over long distances. The correlation coefficient between the value-to-weight ratios and the depth scores across the industries covered in this analysis is .62.

Map 3.1  
World Map with Countries Sized According to 2010 Pharmaceutical Expenditures



High income countries account for 79% of pharmaceutical spending despite the fact that these countries contain only 17% of the world's population. Pharmaceutical revenues are concentrated in the United States, Western Europe, and Japan. Sources: Generated based on data from the World Health Organization, OECD, IMS, and author estimates.

To summarize, some industries are much more globally connected than others, and this variation is not random. By considering the CAGE factors, one can typically explain a good part of an industry's depth and breadth. And, as the case studies that follow will illustrate, such analysis also helps to identify opportunities and challenges for companies doing business internationally in particular industries. The case studies follow a common structure: each begins with sales patterns (demand), then turns to production and trade patterns (supply), and finally sums up lessons and implications.

### Pharmaceuticals

Global pharmaceutical sales in 2011 were \$956 billion and were expected to grow 4% annually to reach \$1.2 trillion by 2016.<sup>10</sup> 79% of expenditures on pharmaceuticals in 2010 came from high income countries – countries with only 17% of the world's population.<sup>11</sup> Thus, this is a traditional industry in which advanced countries dominate production as well as consumption.

As depicted in **Map 3.1**, 34% of world expenditures on pharmaceuticals in 2010 were accounted by the United States, followed by Europe (24%) and Japan (12%).<sup>12</sup> Sales of the newest drugs were even more narrowly focused: the United States accounted for 56% of the sales of medicines introduced between 2006 and 2010.<sup>13</sup> Another way to highlight the pharmaceutical industry's focus on advanced

economies is to look at per capita spending on medicines: \$1033 in 2011 in the U.S., \$551 in Germany, \$50 in China, and \$12 in India.<sup>14</sup>

Analysis based on sales value (rather than volume) such as that presented above and in Map 3.1, however, does exaggerate the proportion of pharmaceuticals consumed in high income countries because of greater use of more expensive pharmaceuticals in those countries. One contributor to this pattern is the wide variation in sales of generic pharmaceuticals across markets. In China, 84% of pharmaceutical sales in 2010 came from generics, versus only 13% in the U.S.<sup>15</sup> Nonetheless, while ensuring access to essential medicines is one of the Millennium Development Goals, the World Health Organization's 2012 progress report states that, "surveys conducted in more than 70 mainly low- and middle-income countries indicate that the average availability of selected generic medicines at health facilities was only 42% in the public sector and 64% in the private sector."<sup>16</sup> Improved access to essential medicines could potentially be an important human benefit associated with increasing connectedness in this industry.

Growth in emerging markets is also a business priority for pharmaceutical companies in light of challenges in the industry's major advanced economy markets. In addition to the headwinds all industries are facing in advanced economies due to macroeconomic conditions, the pharmaceuti-




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Improved access to essential medicines could potentially be an important human benefit associated with increasing connectedness in the pharmaceutical industry.

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cal industry faces a “patent cliff” with many blockbuster drugs going off patent. Patent expiration was expected to put \$33 billion of industry revenues in 2012, nearly all from advanced economies, at risk.<sup>17</sup> One analysis projected that more than 75% of the industry’s absolute growth from 2010 to 2020 would come from outside of the industry’s traditional markets!<sup>18</sup>

Among the emerging markets, China was projected to deliver the largest absolute growth through 2016, to the extent that IMS classified it alone as the Tier I “pharmerging” market. From 2011 to 2016, China’s pharmaceutical spending was projected to grow from \$67 billion to \$161 billion. The remaining BRIC countries (Brazil, Russia, and India) were classified as Tier 2 and were projected to grow from \$60 to \$103 billion. Tier 3 included (in descending order) Mexico, Turkey, Poland, Venezuela, Argentina, Indonesia, South Africa, Thailand, Romania, Egypt, Ukraine, Pakistan, and Vietnam. The 13 Tier 3 markets were projected to grow from \$67 to \$95 billion.<sup>19</sup>

### International Trade in Pharmaceuticals

Turning from demand to supply, international trade in pharmaceuticals (excluding bulk pharmaceuticals) amounted to 36% of the value of total pharmaceutical expenditures in 2010, lower than the depth scores for the other two focal industries covered in this chapter and just slightly greater than the overall ratio of exports to world GDP. Note, however, that because of data constraints, this industry’s depth ratio is calculated based on value whereas the other industries’ depth ratios are calculated based on quantity or volume metrics. That biases this industry’s depth score downward because distribution and retail markups as well as taxes can increase expenditures relative to trade values. Since these calculations are based on the value of traded goods declared to customs authorities, they can also be affected by firms’ transfer pricing decisions that may, in part, be motivated by tax considerations.

With those caveats in mind, why isn’t there more international trade in pharmaceuticals? Pharmaceuticals’ very high value-to-weight ratio (which permits them to be shipped by air over long distances) provides an indication that the geographic dimension of the CAGE framework does not significantly impede trade in this industry.

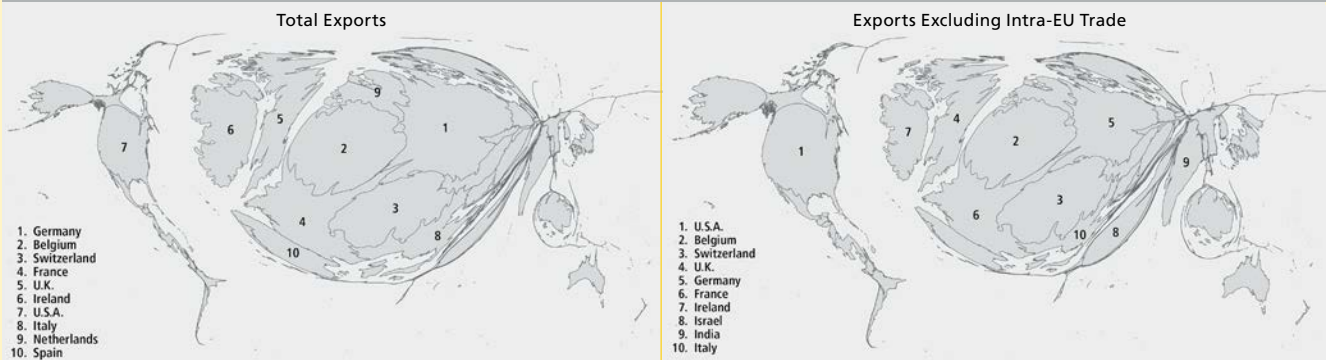
Cultural differences do matter somewhat – e.g. via preferences for traditional medicines in some countries – but are also a relatively minor factor. The main barriers to pharmaceutical trade are economic and administrative (regulatory).

Differences in affordability rooted in countries’ levels of economic development and income distributions are the most prominent economic consideration. And the pharmaceutical industry naturally has high administrative sensitivity: it is heavily regulated since it is essential for life and health. Furthermore, in countries where government funding covers a large part of health care expenses, economic (cost) considerations mingle with safety and efficacy concerns on the administrative dimension of the CAGE framework. Policies that determine whether or not a drug can be reimbursed by public and private insurers in a country exert a profound influence on sales patterns.

Registration requirements for each country where a drug is to be sold (which sometimes require new clinical trials to be conducted) present an additional regulatory hurdle. And in some countries, governments enact policies aimed at promoting local pharmaceutical production, also inhibiting trade.

Furthermore, while the depth scores presented here focus on finished medicines, an additional set of considerations arise with respect to trade in bulk medicines. While regulations in some countries encourage companies to “finish” products in the markets where they will be sold, concerns about intellectual property protection, parallel trade, and

Map 3.2  
Pharmaceutical Exports in 2010



94% of pharmaceutical exports come from high income countries. After excluding intra-EU trade, Europe produces 65% of pharmaceutical exports.

Source: Generated based on data from UN Comtrade (H.S. 3004).

local manufacturing quality are also considerations that enter into such decisions.

Turning to the breadth of pharmaceutical trade, 62% of pharmaceutical trade was intra-regional and the average distance traveled by pharmaceutical exports was about 3500 kilometers. To understand this pattern, one must recognize the extent to which pharmaceutical trade (like pharmaceutical sales) remains focused in the advanced economies, and especially in Europe.

94% of pharmaceutical exports in 2010 were from high income countries, which also accounted for 82% of imports.<sup>20</sup> Europe alone was the source of 81% of pharmaceutical exports, followed by North America with 9%, as shown on the left side of **Map 3.2**. However, Europe's very large share of exports, may be somewhat misleading from a global standpoint, as nearly half of all pharmaceutical trade worldwide is intra-EU trade. Harmonization of regulations across the EU was one factor contributing to intra-EU pharmaceutical trade. The right side of Map 3.2 removes intra-EU trade, revealing how trade patterns look if the EU is considered a single integrated market. Europe is still the leading exporter, but with this adjustment holds only a 65% share of world exports by value.

Repeating the same calculations as in the previous paragraph based on the weight of the medicines traded rather than their value does somewhat reduce advanced economies' share of exports: in 2010, high income countries' share of pharmaceutical exports by weight was 78% (versus 94% by value). Note, however, that even after removing price effects, high income countries remain the dominant exporters of pharmaceuticals.

Why do pharmaceuticals flow more from advanced economies to emerging markets than vice versa? In addition to regulatory factors, the largest reason is that the cost savings available from shifting drug production to emerging markets are smaller than those in, for example, mobile phone assembly. According to one analyst, "Manufacturing costs for proprietary drugs are negligible – at 3 percent to 5 percent of the ex-factory price for chemical drugs, and typically below 20 percent for biotech drugs."<sup>21</sup> Pharmaceutical manufacturing also requires a relatively small number of highly skilled workers, who are more abundant in the industry's traditional centers.

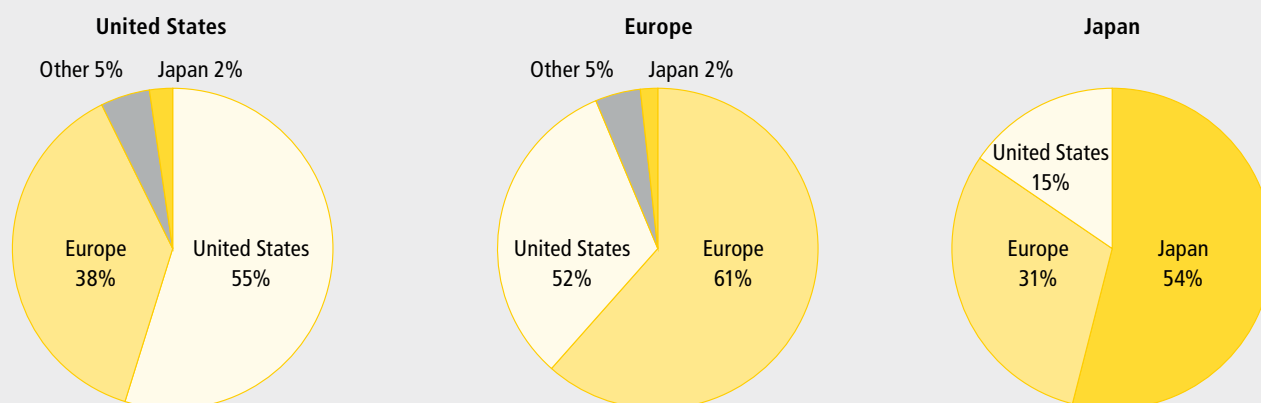
Emerging markets, nonetheless, have been increasing their share of pharmaceutical production and exports in recent years, in line with the broad shift of economic activity to emerging markets underlying Figure 3.1. Producers in emerging markets have, in particular, gained significant positions in the production of active pharmaceutical ingredients (APIs) and generic drugs. India, for example, is the world's second largest producer of APIs<sup>22</sup> and manufactured 20–22 percent of the world's generic drugs by volume in 2010.<sup>23</sup>

Tax incentives represent another type of economic difference that shapes pharmaceutical manufacturing and trade patterns, spurring the growth of exporters such as Ireland and Puerto Rico. Ireland was the world's 6th largest pharmaceutical exporter<sup>24</sup> in 2010, and pharmaceuticals accounted for 40% of its merchandise exports.<sup>25</sup>

Because the manufacturing and distribution of the physical medicines themselves represents only a relatively small portion of the pharmaceutical industry's value-added, the next two subsections provide brief treatments of global connectedness in pharmaceutical marketing and R&D, before turning to lessons and implications.



Figure 3.5 Prescription Drug Market Share Among Top 20 Pharmaceutical Companies by Company Headquarters Country in United States, Europe, and Japan, 2009–2011



In each of the three major pharmaceutical markets, companies from the home region hold more than 50% market share among the top 20 firms.

Source: Calculated based on Evaluate Pharma, "World Preview 2018: Embracing the Patent Cliff," June 2012.

### Pharmaceutical Marketing

While manufacturing costs comprise a relatively small portion of the overall cost structure of a branded pharmaceutical firm, marketing and sales account for a substantial 20%<sup>26</sup> of sales, and are more labor intensive and geographically bound than manufacturing. A marketing related indicator of limited global connectedness in this industry is provided by looking at regional market share data: among the top 20 firms in each region, more than 50% of the sales are generated by firms headquartered within the region, as shown in **Figure 3.5**.

There are several reasons for the dominance of locally based firms in their home regions, within the advanced economies. One is the requirement for local sales forces to "detail" medicines – to go to doctor's offices to provide information about a company's products. This local marketing requirement demands high geography-specific investments. Another is that in countries where governments are active in the procurement of medicines via national health care systems, local firms may, formally or informally, have an edge. Such considerations have historically been significant drivers of international licensing agreements in this industry, with pharmaceutical companies licensing medicines to competitors with stronger positions in particular geographic markets in order to benefit from better sales coverage.

### Pharmaceutical Research & Development

A typical branded pharmaceutical company spends 17–19% of its sales on research and development (R&D), making pharmaceuticals one of the most R&D-intensive industries. For comparison, computer hardware and software companies average 8–10% and automobile & auto parts companies about 4%.<sup>27</sup>

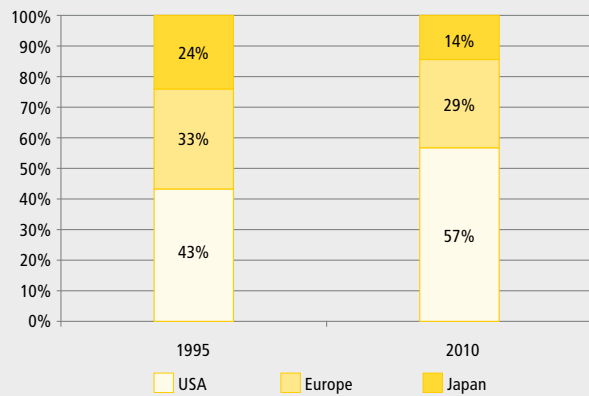
The bulk of pharmaceutical R&D is conducted in the industry's major markets, with the U.S. having increased its share of R&D expenditures in advanced economies over the past decade and a half as shown in **Figure 3.6**. This trend is largely a product of U.S. pharmaceutical firms having kept most of their R&D activity at home while European firms shifted R&D to the U.S.<sup>28</sup> Reasons cited include lower regulated pricing in Europe requiring firms to recoup R&D costs from the U.S. market, labor market regulations, and restrictions on advertising prescription medicines directly to consumers.<sup>29</sup>

What about offshoring of R&D activity to emerging markets? While the pharmaceutical industry is considered a latecomer to offshoring, a trend toward R&D offshoring has emerged in recent years. Clinical trials, rather than drug discovery, however, represent the activity where offshoring has achieved the greatest traction to date. According to research by the consultancy McKinsey, clinical trials represent 50–60 percent of the cost of developing a new drug, and by including patients in developing countries in their clinical trials, firms can reduce their costs per patient by 40–60 percent and speed recruitment by 20–30%.<sup>30</sup> Given the economics of the industry, the gains in terms of speed to market can be even more important than the cost savings.

### Lessons and Implications

The pharmaceutical industry's position near the top-right corner of Figure 3.1, with 79% of pharmaceutical expenditures coming from the 17% of the world's population who reside in high income countries underscores the importance for this industry of figuring out how participate more effectively in emerging markets. This is, thus, an example of an industry where the depth of global connectedness is constrained by its limited breadth.

Figure 3.6 Distribution of Pharmaceutical R&D Expenditures between USA, Europe, and Japan, 1995 vs. 2010



The U.S. share of R&D among the three major regions has increased as U.S. firms kept most of their R&D at home while European firms shifted a larger portion of their R&D to the U.S. Source: Calculated based on "The Pharmaceutical Industry in Figures: Key Data 2012," European Federation of Pharmaceutical Industries and Associations.

The central challenge associated with increasing connectedness in the pharmaceutical industry arises from a set of unusual conflicts between different types of connectedness due to its combination of regulated pricing, patent protection (and the related factors of R&D costs and risks), and status as a necessity for health. Because of stark differences in patients' and health care systems' capacity to pay for medicines across countries, charging different prices in different countries for the same medicines ("differential pricing") is the welfare-maximizing solution identified by economic models. However, for differential pricing to work, markets must be separated so that the lower prices charged in poor countries do not "leak" across to more affluent countries, undermining firms' profitability and capacity to invest in future generations of medicines.

More differentiated pricing would increase connectedness with respect to sales of innovative pharmaceuticals in poorer countries, either via trade in physical products or via FDI or licensing for local manufacturing. One study indicates that varying price levels across (but not within) countries increases consumer access by a factor of 4 to 7 times versus a uniform global price.<sup>31</sup> And while there is some variation of prices across countries, such variation is significantly less than what models indicate would be optimal. Why? Because more differentiated pricing would require two other aspects of connectedness to be actively curtailed: parallel trade (also referred to as parallel or gray market imports) and international reference pricing.<sup>32</sup>

Parallel imports refer to "medicinal products produced genuinely under protection of a trademark, patent, or copyright, placed into circulation in one market, and then

imported by an intermediary into a second market without the authorization of the local owner of the intellectual property right."<sup>33</sup> Whereas trade normally increases efficiency and reduces price levels, parallel trade in patent-protected pharmaceuticals may have the opposite effect. Since patent protection restricts the entry of alternative suppliers and price levels are regulated by governments and reflect in large part R&D costs rather than marginal manufacturing costs, efficiency based arguments for parallel trade in pharmaceuticals are weaker than general arguments for expanding trade.

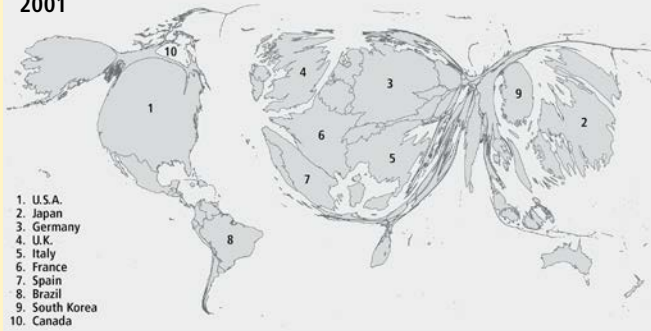
International reference pricing involves regulators in one country incorporating information about prices in other countries (information pillar of global connectedness) into domestic pricing policies. The motivation is to ensure that a given country is not paying more for the same medicine than other reference countries. With international reference pricing, according to one analysis, "manufacturers are reluctant to price a drug cheaply in one country if this would undermine potentially higher prices in other countries. Companies often try to keep the launch price of a drug within a narrow band, preferring to delay or not launch in countries that do not meet the price target"<sup>34</sup>

In light of the human and business benefits of more closely linking domestic pharmaceutical prices to country-level affordability, it would make sense for regulators (with encouragement from industry) to restrict those aspects of connectedness (parallel trade and international reference pricing) that inhibit differential pricing. Regulators in poorer countries in particular could also act to ensure that savings are indeed passed along to payers.

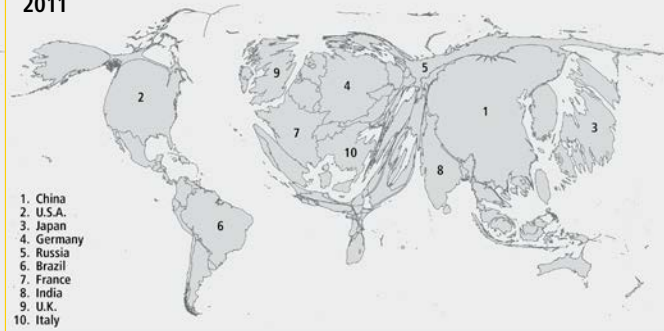
Map 3.3

World Maps with Countries Sized Based on Car Sales (in Units)

2001



2011



Between 2001 and 2011, the Chinese automotive market took off, overtaking the U.S. as the largest in 2009 and playing a key role in boosting sales in emerging markets to roughly the same level as sales in advanced economies. Source: Generated based on data from WardsAuto

Focusing more specifically on competitive considerations for pharmaceutical companies in emerging markets, it is possible that if the leading multinationals do not significantly expand their presence in the emerging markets rather quickly, their low market share positions in those countries may become basically irreversible as local champions become entrenched. Multinationals, accordingly, are increasing their investment in emerging markets. Astra-Zeneca, for example, allocated 47% of its global sales and marketing workforce to emerging markets in 2011, up from 16% in 2002.<sup>35</sup> Eli Lilly has targeted to double its emerging markets sales from 2010 to 2015.<sup>36</sup>

In addition to sales and marketing investments in emerging markets, R&D offshoring to emerging markets also helps build up firms' presence in key countries and may ultimately contribute to sales (as well as R&D) objectives. Note how, in light of the highly regulated nature of this industry, such investments may be important to strengthen relationships with national regulators. Broader efforts to support governments' health care agendas, such as contributions to patient and physician education, can also be important. Innovative approaches can also extend to social enterprise concepts designed to tackle the multifaceted challenges of rural markets (education, distribution, etc.). Novartis's Arogya Parivar program, which started in India, represents one example. Such activities can also be pursued in partnership with NGOs.

Major pharmaceutical firms, however, have recently struggled to achieve their targeted sales growth in emerging markets. According to Pfizer CEO Ian Reed, "The majority of the growth is going to local companies...It is difficult for multinationals to keep up with that growth because we don't have the products there." An Ernst & Young study estimated that pharmaceutical companies' actual revenues from emerging markets will fall short of their targets by \$47 billion over the next four years.<sup>37</sup> The higher market

shares of locally based companies (among the top twenty at the regional level) in advanced economies exhibited in Figure 3.5 hint that foreign firms are unlikely to achieve the same market shares in the large emerging markets that they enjoy in their home regions. Therefore, while global industry leaders must indeed accelerate their growth in emerging markets, some tempering of expectations is probably in order.

### Passenger Cars

The global automotive manufacturing industry earned revenues of nearly \$1.5 trillion in 2011, ranking it among the world's largest. This case will focus on the passenger car segment of the industry, whose revenues were roughly \$800 billion in 2011.<sup>38</sup> There were 60 million cars manufactured around the world in 2011, up 3% from the prior year.<sup>39</sup> This subsection describes the geographic pattern of automobile sales, and the next subsections turn to production and trade.

**Map 3.3** shows the shift in global automobile sales over the period from 2001 to 2011 that was referred to at the beginning of this chapter. In 2001, 84% of car sales took place in high income countries, but by 2011, sales, in unit terms, were split about evenly between advanced economies and emerging markets. In 2011, East Asia and Pacific was the largest car market (33% of the world total), followed by Europe (32%), and North America (14%).

The growth of automobile sales in emerging markets, however, was not as broad a trend across countries as the adoption of mobile phones that will be described in the next case example. More than half (56%) of the growth of emerging market automobile sales came from just one country: China. In, 2009, car sales in China overtook those in the United States for the first time, making China the world's largest automobile market.<sup>40</sup>

In 2001, 84% of car sales took place in high income countries, but by 2011, sales, in unit terms, were split about evenly between advanced economies and emerging markets.



Macroeconomic trends support expectations that car sales will continue to grow rapidly in emerging markets. An industry rule-of-thumb in the early 2000s suggested that when a country's GDP per capita reaches \$1,000, it can support a profitable automotive industry, and at \$4,000, rapid industry growth begins.<sup>41</sup> China crossed the \$1000 mark in 2001 and, in constant 2000 dollars, exceeded \$4000 in 2010. India, again in constant 2000 dollars, reached \$1000 of GDP per capita in 2007.<sup>42</sup>

Broad rules-of-thumb based on GDP per capita do, however, gloss over other CAGE differences that influence the volume and mix of automobile demand. Just a few of these influences will be cited, starting with culture. In addition to different styling preferences in different countries, culture (as well as economics) influences car design in emerging markets based on whether or not buyers who can afford them tend to hire chauffeurs or to drive themselves. Where chauffeurs are common, the back seat necessarily has to be more comfortable than in countries where buyers are normally in the driver's seat. Administratively, cars are subject to myriad administrative regulations ranging from fuel economy and emissions standards to how darkly car windows may be tinted. Geography influences both the volume of car sales (e.g. based on land area and degree of urbanization and suburbanization), as well as what features cars need (e.g. climate's influence on needs for air conditioning, tires that can drive on snow, and so on). And economics factors in not only regarding how many and what types of cars buyers can afford, but also, for example, via available infrastructure. China's massive investments in road and highway infrastructure, for example, presumably have contributed to the growth of its auto sector.

### Automobile Production

The globalization of automobile production dates back nearly to the inception of the industry. Foreign plants were originally set up to reduce the costs of transporting vehicles

to market and by 1928, Ford and GM had assembly locations in 24 countries.<sup>43</sup> As tariffs rose in the inter-war years, trade barriers became the primary motivator for localizing manufacturing. While trade barriers generally came down after World War II, spurring the global increases in the depth of merchandise trade described in Chapter 1, the automotive industry remained, in relative terms, among the more protected sectors. Governments considered automotive manufacturing to be a strategic industry because they viewed it as central to industrial (and military) strength and as a large employer in most industrialized countries.

The next section will turn to trade patterns in the automotive industry and highlight the integration of automobile production within regions, but this historical backdrop underpins the general pattern that "final vehicle assembly, and by extension, parts production, has largely been kept close to end markets because of political sensitivities."<sup>44</sup> Thus, while this chapter focuses primarily on trade, FDI should also be recognized as central to the globalization of the automotive industry and as the dominant form of inter-regional integration. **Map 3.4** shows how the geography of automotive production followed the shift of car sales toward emerging markets from 2001 to 2011. High income countries' share of auto production fell from 83% to 51%, closely paralleling the decline from 84% to roughly 50% in advanced economies' share of car sales.

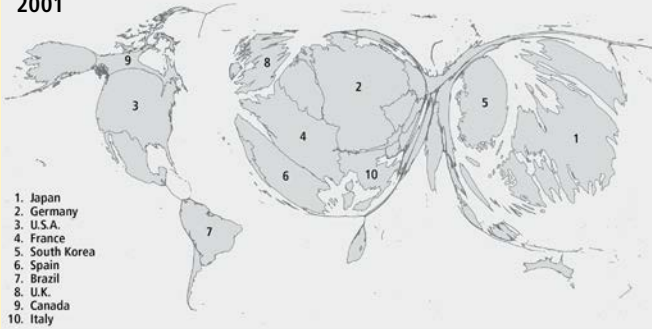
China, where the majority of emerging markets auto industry growth took place, highlights the importance of FDI to shifts in this sector. More than half of the cars sold in China in 2011 were produced in China by joint ventures between foreign and Chinese automakers (foreign automakers were required to set up joint ventures with domestic firms to produce cars in China). Imported cars accounted for less than 10% of sales. Thus, the majority of the growth in the largest emerging market was served by competitors funded in part by FDI. And it was, again, to



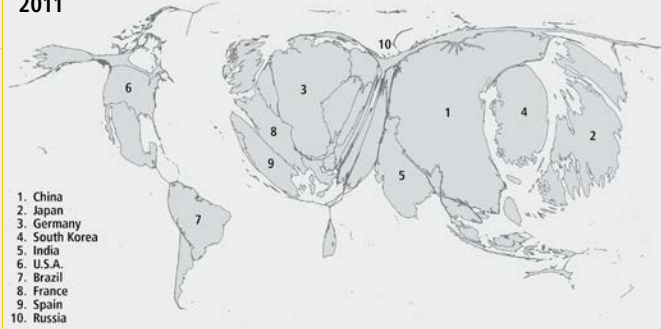
Map 3.4

World Maps with Countries Sized Based on Car Production (Assembly, in Units)

2001



2011



Car production accompanied the shift of car sales to emerging markets. The share of cars manufactured in high income economies fell from 83% to 51% from 2001 to 2011. Source: Generated based on data from OICA

FDI in the form of acquisitions of troubled Western brands that Chinese automakers turned to try to bolster their own capabilities. The most notable recent example was Geely's 2010 acquisition of Volvo.

While the world's top automakers had been investing abroad to manufacture near their customers for almost a century, that pattern also became more important for major automotive components companies over the past decade. With automakers emphasizing global platforms as described below, suppliers were required to set up the capacity to deliver across all of the locations where cars would be assembled based on a given platform.

For suppliers, just-in-time manufacturing and local content requirements also contribute to distance sensitivity, and hence to FDI rather than trade as a mode of participation in foreign markets. Given the bulkiness of many automotive components, air transport is uneconomical, and just-in-time manufacturing cannot accommodate the time lags associated with seaborne shipment. Local content requirements provide additional incentives for OEMs to localize or regionalize their supply bases. For a car manufactured in Mexico to qualify for tariff-free entry into the United States or Canada under the North American Free Trade Agreement (NAFTA), for example, 62.5% of the content in that car must have been produced within the NAFTA region.<sup>45</sup>

### Automobile Trade

While the previous subsection emphasized FDI as the dominant mode for automakers to participate in distant markets, this industry's depth score of 58% does reflect very substantial international trade. How do these patterns fit together? In very general terms, automakers have tended toward strategies that combine inter-regional FDI with intra-regional trade.

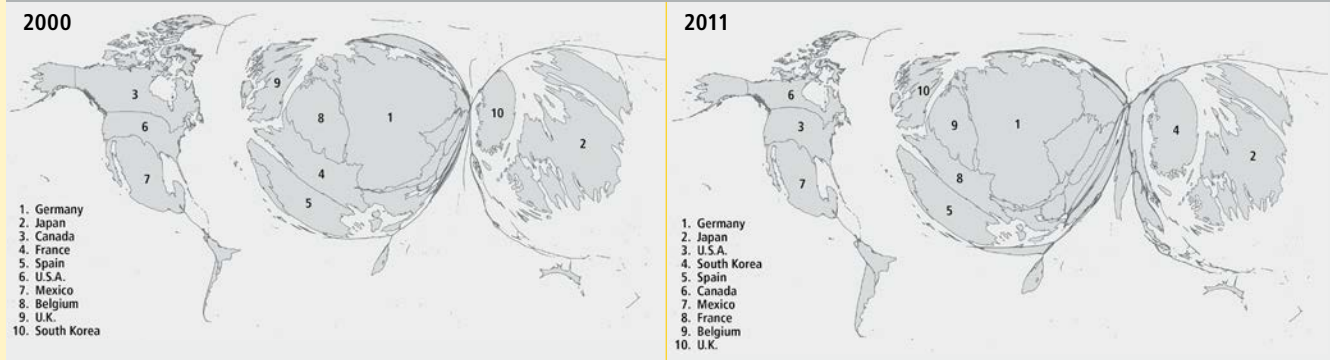
Trade liberalization in the automotive industry proceeded in the late 20th and early 21st centuries in large part via the integration of regional trade blocs, and automakers crafted their international strategies accordingly. As Toyota Chairman Fujio Cho described his company's plans for its production network in the early 2000s, "the network will be organized around regions because Toyota expects expanded free-trade agreements within the Americas, Europe, and East Asia, but not *across* them."<sup>46</sup>

The regionalization of automobile manufacturing in light of trade policy as well as shipping time and cost considerations is reflected in the placement of passenger cars on the cross-industry comparisons at the beginning of this chapter: in the upper tier in terms of depth but the bottom tier in terms of average distance traveled (and modestly below average in terms of the share of inter-regional trade). Car exports, on average, travel only 2500 kilometers.

The regionalization of automotive production and trade, and more generally the pattern of assembly close to final markets, results in the surprising contrast between **Map 3.5**, which is based on car exports in 2000 and 2010, and Maps 3.3 and 3.4, based on sales and production respectively. The geographic distribution of automotive exports has scarcely changed over the past decade, while auto sales and production shifted dramatically. Looking at these maps more closely, some notable shifts within regions toward emerging markets can be observed (Mexico's rising share of North American exports, growing Eastern European exports in Europe), but the broad pattern across regions is remarkably stable.

The emphasis in this section on intra-regional trade, however, should not gloss over the substantial inter-regional automotive exports that do take place, and that underscore the importance of a segmented view of the market. 63%

**Map 3.5**  
World Maps with Countries Sized Based on Car Exports (Value)



The geographic distribution of car exports has remained relatively stable from 2000 to 2010, in stark contrast to the major shifts in car sales and production over that period. The growth of car sales in large emerging markets has been achieved primarily via domestic production. Source: Generated based on data from UN Comtrade

of inter-regional car exports in 2011 came from just three countries: Japan (26%), Germany (24%), and Korea (13%). Japanese and Korean inter-regional exports seems to be related to the fact that Asia's auto industry, lacking the same administrative integration via a trade bloc such as the EU or NAFTA, does not exhibit the same level of intra-regional integration. 79% of the East Asia & Pacific region's car exports are inter-regional.

The example of Germany exemplifies another general pattern of distance sensitivity. Luxury cars, like luxury products in general, tend to traverse greater distances to market than cars aimed at mass market buyers. Germany's strength in the luxury segment, contributing to the lower distance sensitivity of its exports, is apparent in the value-to-weight ratios of its automobile exports. The global average value-to-weight ratio for cars that are traded internationally, as shown in Figure 3.4, is \$13 per kilogram. German cars average \$18 per kilogram, and the German cars that are exported outside of Europe tend to be even more expensive, averaging \$20 per kilogram. The German cars that are exported all the way to East Asia & Pacific average \$25 per kilogram and exports to China specifically average \$30 per kilogram.<sup>47</sup>

### Lessons and Implications

The automotive industry, with its long history of globalization, provides a rich set of lessons for doing business in the messy reality of a world marked, as this report has emphasized, by limited and uneven global connectedness. Four are highlighted here:

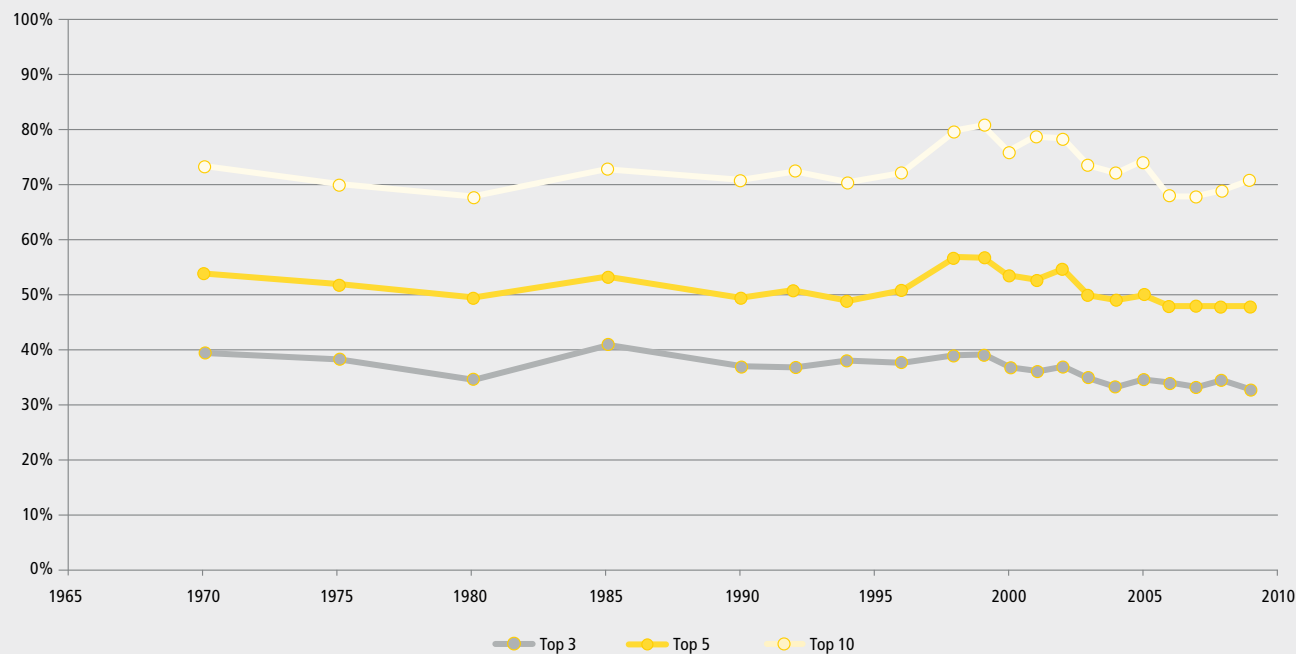
First, recognize limits to standardization and respond with creative adaptation strategies. Automakers have tried and failed for nearly a century to build a single car that could be sold all around the world – Ford's "1928 plan" called for supplying the Model A globally from three huge plants

in the United States, Canada and the United Kingdom.<sup>48</sup> Complete standardization, at least since the days of the Model T, has always been stymied by the extent of the CAGE differences that this industry has to contend with, only some of which were highlighted in the first subsection of this case. Other factors are even more industry-specific, such as which side of a car the steering wheel should be placed on. Relatively lower fuel prices in the United States as compared to most other countries (impacting vehicle size, power, etc.) have historically also been a major barrier to the design of a single car for all major markets.

Facing substantial requirements to adapt its products to different markets, the automotive industry has been a pioneer of techniques to increase the efficiency of adaptation, such as the use of platforms and modularity, which build standard interfaces between the aspects of a product that can be made the same across markets and those that require customization.<sup>49</sup> In the auto industry, this typically involves the use of standard platforms in the underbody and transmission on top of which cars that cater to different market requirements can be built. While platforms are not new to the automotive industry, they are receiving greater emphasis: as of 2011, Ford was focusing on only five global platforms, down from 15 just five year earlier.<sup>50</sup>

Second, automakers exemplify the rising emphasis companies across industries are placing on aggregation along the economic dimension of the CAGE framework, in addition to their traditional regional (geographic) aggregation strategies. Possibilities for leveraging similarities across emerging markets are a particular emphasis. Some automakers have also designated particular regions or countries as "hubs" for particular vehicle categories. India, for example, has been tagged as a "small car hub" by multiple manufacturers, though labor and other challenges have slowed its growth.<sup>51</sup> And such developments have also led

**Figure 3.7**  
Global Concentration Levels in the Auto Industry



Contrary to common wisdom – even within the industry – the global concentration levels in autos have not increased over the past 40 years. This is one of many examples that help dispel fears about globalization leading to a few firms dominating their industries on a global basis. Source: 1970–1999 based on Center for Global Business Studies; 2000–2009 based on OICA.

to realignments of managerial reporting relationships that would have been unthinkable a mere decade ago: nearly all of GM's operations outside of the Americas (except for Opel in Europe) now report up via its international operations headquarters in Shanghai.

Third, China's shifting role in the global industry is worth emphasizing. Given the automobile manufacturing capacity that has been built up in China, its slowing economic growth and recent governmental efforts in some cities to curb car sales in order to reduce congestion, China's automotive industry looks set to place greater emphasis on exports. For now, China's small but fast-growing auto exports are comprised almost entirely of cars produced by its domestic auto firms that are sold at rock-bottom prices in other emerging market countries. But China's exports of auto components have recently made significant inroads in advanced economies, as evinced by the 2012 case at the World Trade Organization brought by the U.S. against China. The general pattern of inter-regional auto exports from Asia and the size of China's auto industry imply that if it did shift its focus to exports to any significant extent, that would have a large global impact.

The global ambitions of China's automakers can also be anticipated to complicate the already hard-to-manage joint ventures between the world's leading automakers and their

Chinese partners. These joint-ventures were intended by the Chinese government as a conduit to transfer technology to local firms to accelerate their development. To date, the Chinese partners in these joint ventures have achieved only limited success in building their own brands. But given the shifting power balance between the Chinese and foreign partners as well as their divergent interests, the management of these joint ventures will undoubtedly be a major challenge in the near-to-medium term.

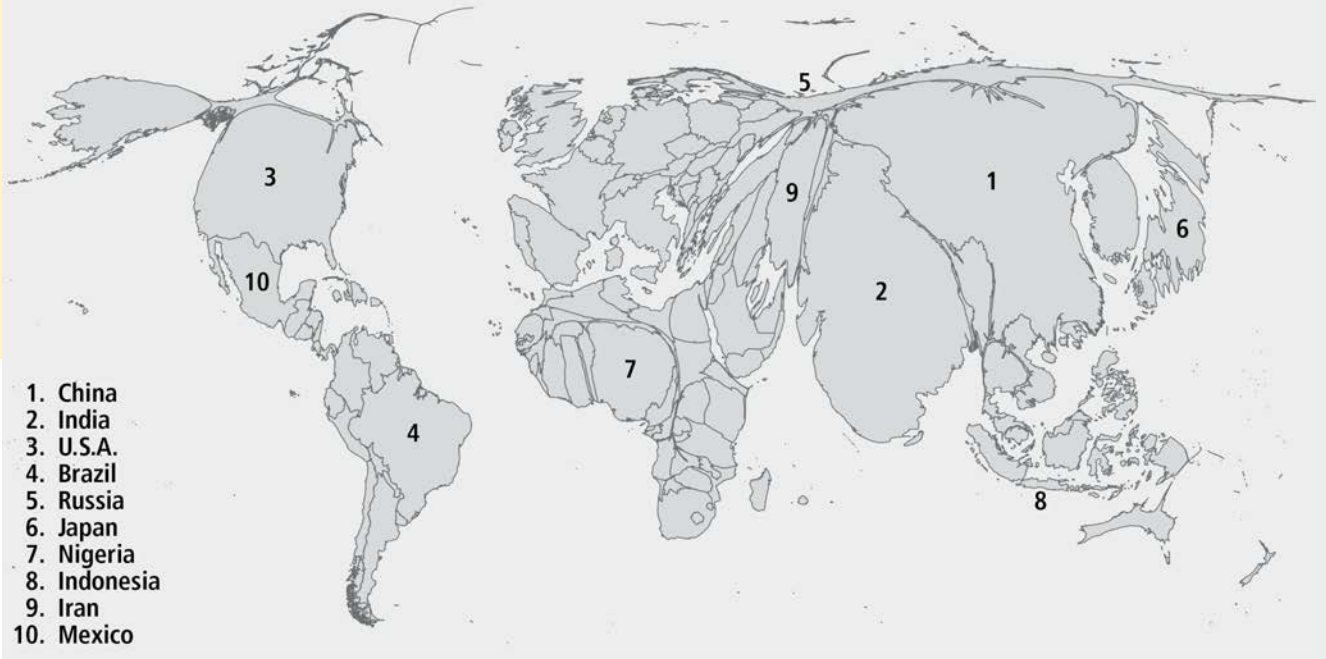
Fourth, the automotive industry illustrates the dangers of buying into the myth that globalization inexorably tends to lead to a handful of firms dominating an industry worldwide, requiring competitors to bulk up (via mega-mergers) or get left behind. The same misperception also fuels public concern about globalization, and the auto industry (see **Figure 3.7**) is just one example among many where globalization has not entailed rising industry concentration. Related misconceptions also prompt executives across industries to overestimate cross-border synergies and economies of scale – one of the drivers of the disastrous 1998 Daimler-Chrysler merger that was unwound in 2007.

#### Mobile Phones

The \$240 billion<sup>52</sup> mobile handset industry is among the most globalized in terms of its depth score, with more phones crossing national borders in a given year than are

Map 3.6

## World Map with Countries Sized According to 2011 Mobile Phone Sales



Widespread adoption of mobile phones in even the world's poorest countries has made them one of the world's most global products in terms of its demand pattern. This map bears a striking resemblance to similar maps drawn with countries sized according to their populations. Notes: Based on units (number of phones sold), not value. Sources: Generated based on data from Euromonitor, World Bank World Development Indicators, Author Estimates

ultimately sold to end consumers! The breadth of the industry's exports, however, is more moderate. 55% of mobile phone exports are intra-regional, roughly matching the 53% average across all merchandise trade. Mobile phone exports average a distance of approximately 5,000 km, just marginally higher than the 4,750 km cross-industry average. This pattern reflects the weight of Asia as the leading region in both the production and the sales of mobile phones.

Mobile phones, in stark contrast to pharmaceuticals, are sold in the largest quantities in the emerging market economies (see **Map 3.6**). In 2011, 69% of mobile handsets were sold in low and middle income countries, a figure that drops only to 64% when calculations are based on the value of the phones sold rather than the quantity.<sup>53</sup> Asia/Pacific accounted for nearly half of global sales (43% of units sold), followed by Africa and the Middle East (18%), Europe (17%), and North America (13%).

The growth of mobile telephony in the emerging economies took place very rapidly over the past 10–15 years. In the 49 countries that the UN classifies as the world's poorest – countries where only 36% of households have access to hygienic toilets<sup>54</sup> – there was roughly one mobile phone subscription per thousand people in 1999, one per hundred in 2002, and 34 subscriptions per hundred people in 2010.<sup>55</sup> The introduction of low cost handsets in emerging markets

was a major factor bringing the global average retail price of a mobile phone down from \$170 to \$86 over the period from 2002 to 2010.<sup>56</sup>

Mobile phone possession rates in emerging markets continue to grow rapidly as of this writing, particularly outside of East Asia, as shown in **Figure 3.8**. India had the world's fastest subscriber growth in 2010, adding a staggering 227 million new subscriptions.<sup>57</sup> In 2008, China's mobile phone possession rate overtook Germany's<sup>58</sup> highlighting the special importance of mobile phones in countries where fixed line phones and computers with internet access are less common: a clear example of leapfrogging.

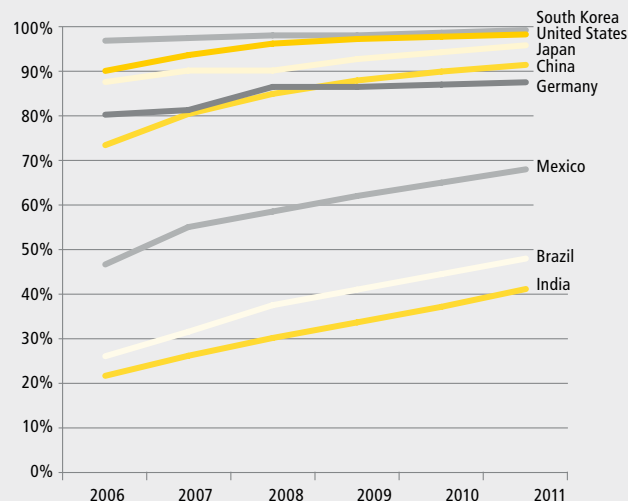
Segmenting the industry into smartphones (phones developed on a mobile computing platform such as Google's Android and Apple's iOS) versus more basic "feature phones" does, however, draw some attention back from emerging markets to advanced economies. In 2011, 30% of mobile handsets sold were smartphones, but that global average masked substantial regional variation. In North America and Europe, 63% and 51% of mobile phones sold, respectively, were smartphones, whereas in the rest of the world smartphones remained less than 20% of the market.<sup>59</sup>

### From Components to Assembly

Shifting from demand patterns to supply, this section and the next explore where mobile phones come from and



**Figure 3.8**  
Mobile Phone Possession Rates by Households



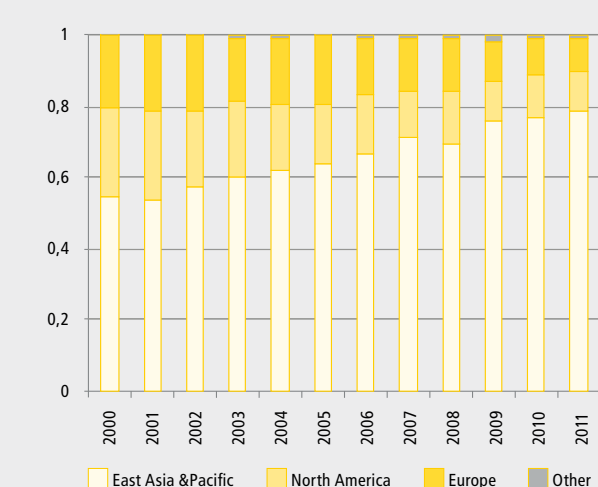
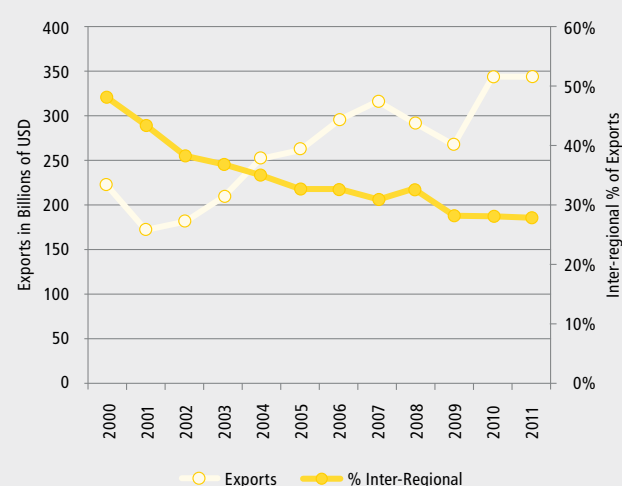
Since 2008, a larger proportion of Chinese households have had mobile phones than German households. Mobile phone possession rates still lag in developing countries outside of Asia but are growing very rapidly.

Source: Euromonitor

how they make their way to consumers around the world. Apple's iPhones, which battle Samsung's Galaxy series for market leadership in the smartphone segment, bear the label, "Designed by Apple in California. Assembled in China." But assembly of the iPhone accounts for only 4% of the cost of the physical product (and an even smaller fraction of the selling price), indicating that the example of the iPhone, at least, suggests that a meaningful answer to the question of where mobile phones really come from must begin farther back in the production cycle with the phone's components. Hence the article in a Korean newspaper in 2010 titled "iPhone 4 'Made in Korea'" pointing out that the iPhone 4's display, CPU, battery, and other components were all manufactured in Korea and sent to China only for assembly.<sup>60</sup>

Before exploring the iPhone in somewhat greater detail, a broader perspective can be gained by looking at a component used in all mobile phones as well as virtually every other type of electronic gadget: integrated circuits. Integrated circuits as a category of inputs account for 31% of the average selling price of a typical smartphone and 23% of the value of a feature phone.<sup>61</sup> As shown in the figures in the opening section of this chapter, the market for integrated circuits has a very high depth score, with components often moving across borders multiple times (in line with its very high value-to-weight ratio), but is also very regionalized, with 72% of trade taking place within regions. The pattern shown in **Figure 3.9** depicts trends in the trade in integrated circuits over the period from 2000–2011.

**Figure 3.9**  
Trade Patterns in Integrated Circuits, 2000–2011



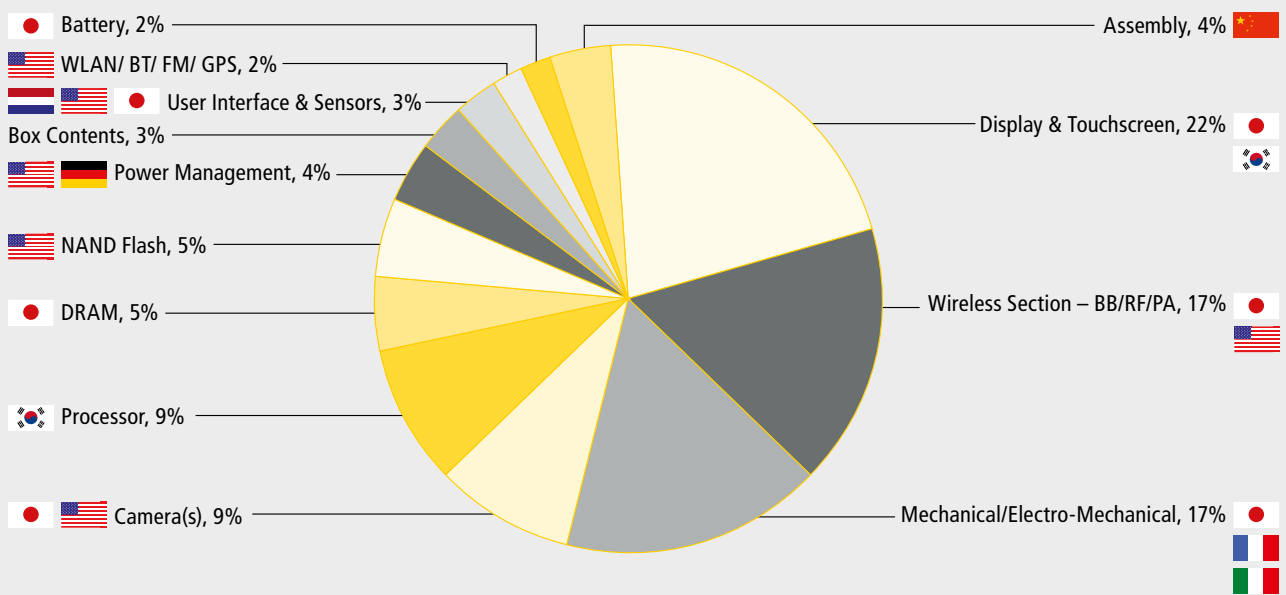
Rising trade volumes and falling inter-regional trade (top) accompanied by a shift to Asia (bottom) reflect growth of East Asian multi-country production chains over the past decade in the electronic components industry.

Source: UN Comtrade

Growth in trade volumes has been accompanied by rising levels of intra-regional trade and a large increase in Asia's share of world trade in these products. This reflects the growth of the multi-country production chains, centered in East Asia, that are typical in the electronics industry. Intermediate goods move from country to country and often from specialist component suppliers to contract assemblers, crossing national borders multiple times before finished products reach consumers.

Returning to the example of the iPhone, **Figure 3.10** breaks up the value of the components in the iPhone 5 according to the home countries of the suppliers. Analysis based on suppliers' headquarters locations, of course, provides an incomplete picture of where components come from because many suppliers operate production facilities outside their home countries. Nonetheless, one can safely conclude that

Figure 3.10  
iPhone 5 Component Costs by Supplier Headquarters Location and China Assembly Cost



While the iPhone 5 is assembled in China, it consists, almost entirely, of components produced by firms headquartered in Korea, the United States, and Japan. Assembly accounts for only 4% of the iPhone's total manufacturing cost. Source: Based on data reported in Andrew Rassweiler, "Many iPhone 5 Components Change, But Most Suppliers Remain the Same, Teardown Reveals," IHS iSuppli Press Release, September 25, 2012.

even though Apple is based in the United States, the iPhone is a product of the East Asian electronics production chain. By one report, at least 90 percent of the parts that go into an iPhone come from outside the United States.<sup>62</sup>

### From Assembly Plant to World Market

The epicenter of mobile phone assembly is Southern China's Guangdong Province, in the Pearl River Delta region near Hong Kong. In 2010, roughly 70% of the world's mobile phones were assembled in China, and half of those were put together in Guangdong Province.<sup>63</sup> Guangdong hosts the world's largest agglomeration of electronics manufacturing and assembly facilities, including the famous "Foxconn City" in Longhua (Shenzhen) with more than 200,000 employees.<sup>64</sup>

Guangdong does face intensifying competition from other assembly locations. Foxconn, assembler of Apple's iPhone line and the world's largest electronics manufacturing service company, announced in late 2011 that it was expanding its production in central China's Henan Province to make its complex there (in the provincial capital of Zhengzhou) the world's largest smartphone producing facility.<sup>65</sup> Vietnam is another emerging location for mobile phone assembly, having recently won commitments from Samsung and Nokia to build plants. But since most of the world's mobile phones are still assembled in China, it is unsurprising that China is the top mobile phone exporter, with a 56% share of exports (including shipments from both mainland China and Hong Kong), as shown in **Map 3.7**. China's mo-

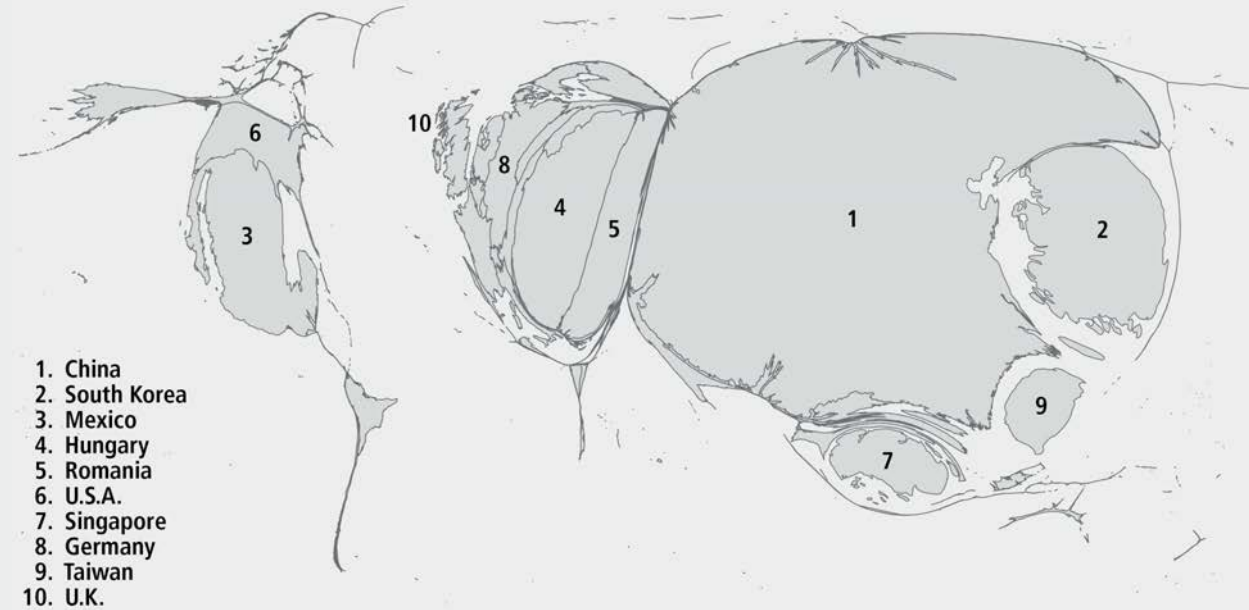
bile phone exports reach all major markets, with the U.S. and India (the second and third largest country markets for mobile phones, after China) ranking as China's top two export destinations in 2010.

The destination mix of other leading exporters, however, reveals greater specialization and regionalization. South Korea is the second largest exporter and two-thirds of its exports go to the United States and Japan, reflecting its focus on exporting higher-end products for those markets. The third and fourth largest exporters, Mexico and Hungary, focus on regional markets. Three-quarters of Mexico's exports are to the United States and Canada, while 68% of Hungary's exports are to Europe, the Middle East, and North Africa.

The path from assembly plant to retail site for smartphones destined for the advanced economies is the typical one traveled by other high-end consumer electronics. Air freight is commonly used, to the extent air freight rates from China to the U.S. have reportedly spiked by up to 20% in advance of Apple's major product launches because of the very large scale of its bookings.<sup>66</sup> With short innovation cycles and high costs associated with obsolescence, speed to market and supply chain flexibility are critical in smartphones. Margin pressure, however, is leading to growing interest in cost reduction even in this segment, prompting companies to look into greater use of direct deliveries and surface transport.

Map 3.7

World Map With Countries Sized According To 2010 Mobile Phone Exports



More than 70% of the world's mobile phones are assembled in China and more than half of mobile phone exports come from China. Notes: Based on units (number of phones exported), not value. Sources: Generated based on data from United Nations Commodity Trade Database (Comtrade)

It is interesting to note the relevance of port and customs efficiency to choices about the possibility of shifting transport of some mobile phones from air to sea. Given the importance of speed, ocean freight is a more interesting possibility over shorter distances (e.g. from East Asia to India or Africa), but the time required to offload and clear the goods can sometimes push the balance back to air freight. The importance of efficiency in these respects is revisited from a public policy perspective in Chapter 4.

Paths to market for low-end phones sold in Africa are rather different, though changes are also afoot in this segment. One study estimated that as of 2007 or 2008, 20% of all of the mobile phones in use in Africa had passed through the hands of traders in a single building in Hong Kong: the tenement-style complex called Chungking Mansions. Traders often carried phones they purchased in Asia back with them to Africa in their luggage, reporting that they could carry 250–300 phones within standard airline baggage allowances and up to 700 phones if paying excess baggage charges. They reportedly had their phones “packed and wrapped in a particular fashion so that the baggage screening machines will not pick up on the fact that the phones have batteries in them, which is against some airlines’ rules.”<sup>67</sup>

More recently, however, given the rising importance of the African market to mobile phone companies, Asian OEMs in particular are pushing the development of formal channels in order to take greater control of their brands and sales in Africa and to provide better aftermarket support.

As OEM-driven sales and distribution infrastructure continues to develop, the “trader” channel may be expected to diminish in relative importance.

### Lessons and Implications

Standard theories of the product life cycle imply that a high tech sector such as mobile phones would be focused in the advanced economies. Thus, a first lesson that should be taken from this case is that, in defiance of such theories, mobile phones demonstrate that it is possible for such an industry to succeed in emerging market countries. While space constraints preclude too much elaboration on the factors behind this success, consider briefly how it reflected some of the components of the CAGE framework.

Mobile handsets themselves, able to transmit content from any culture and with settings that allow users to select their own languages, require relatively little adaptation to cultural differences. Administratively, governments tend to regulate network carriers more closely than they do handset makers, given their greater interest in the cost (and content) of telecommunications than in the handsets consumers use. And, while it does raise concerns, the sale of handsets in informal markets in developing countries bypasses administrative controls. Geographically, mobile phones’ high value-to-weight and value-to-bulk ratios make them economical to export over long distances. Finally, low-cost phones, pre-paid accounts, and mobile payment programs for populations without bank accounts all reflect adaptation to economic differences.

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Diversification to reduce supply chain risk as well as rising labor costs in China suggest a broadening of assembly locations. In other words, even in the mobile phone industry, there may soon no longer be “one best place” to perform assembly.

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Turning to patterns of production, recent developments such as the riots at one of Foxconn’s plants that coincided with the launch of the iPhone 5 illustrate the risk associated with concentration of particular activities in a small number of locations or with a small number of suppliers. Diversification to reduce supply chain risk as well as rising labor costs in China suggest a broadening of assembly locations. In other words, even in this atypically geographically concentrated industry, there may soon no longer be “one best place” to perform assembly.

Finally, consider the geography of competition in this industry as its segments mature. In 2000, mobile phone producers from Europe and North America held 75% of the market (with nearly all of the rest divided between Japanese and Korean companies).<sup>68</sup> By 2011, European and North American companies held only 34% and small, hardly recognizable Asian brands sold myriad varieties of low-end handsets. At the same time, two brands, Apple and Samsung dominated the new smartphone segment, capturing the majority of the industry’s profits.<sup>69</sup>

As the feature phone segment matured, companies that were closer to the largest markets and production locations (Asia) took share from the (Western) incumbents. With the smartphone revolution, activity shifted back to advanced economies. But as this segment also begins to mature, a similar shift appears to be underway already. Apple’s market share in China fell by half in the second quarter of 2012, as Chinese competitors such as Lenovo, ZTE, and Huawei scored gains.<sup>70</sup> It will probably rebound somewhat with the iPhone 5 launch – shortly before the launch, Apple CEO Tim Cook was in Beijing to announce new features aimed specifically at the Chinese market. Nonetheless, facing an onslaught of less expensive competitors, observers think it is unlikely to recapture its earlier market share peaks in China.

This pattern implies that incumbent smartphone vendors will have to further strengthen their efforts to adapt to cross-country differences in order to sustain their market positions. That adaptation might not, however, always take the form of proliferating product variety. Rather, as Apple’s current strategic direction suggests, some might take the path tread by the Western (particularly European) luxury brands that have found tremendous success in Asia: limited product adaptation complemented by adaptation of other components of the marketing mix such as advertising, public relations and retail strategies.

In feature phones, the focus on costs and the declining share of such phones sold in advanced economies suggest that Asian firms will continue to grow their lead in this segment, even as it shrinks as a proportion of total handsets sold, to a projected 46% by 2013.<sup>71</sup> Motorola Mobility, in light of such pressures and its focus on Android phones after being acquired by Google, was reportedly planning to exit the feature phone business by the end of 2012.<sup>72</sup>

Finally, the shifts that have taken place in this industry over its short history suggest that firms need to be ready for rapid changes. While it is hazardous to make predictions in this rapidly fast moving industry, one fairly safe conclusion, based on its CAGE characteristics, is that the mobile phone industry will remain the most globally connected of the three highlighted in this chapter for the foreseeable future.



## Conclusion

This chapter has introduced four tools that can help business executives to understand global connectedness in their industries and its business implications. First, the matrix introduced in Figure 3.1 provides a convenient way of summarizing where an industry is situated with respect to the shift of economic activity to emerging markets. For an industry such as pharmaceuticals that still remains concentrated in the advanced economies, the primary challenge for improving global connectedness relates to tapping better into the world's growth markets.

Second, the depth and breadth ratios introduced in Figures 3.2 and 3.3 distil down to a few numbers the extent to which an industry is primarily domestic or international, and the extent to which its international flows are spread out globally or more focused at the regional level. Such considerations have clear implications for both the geography of competition within an industry as well as the extent to which decision-making within companies should be local versus regional versus global. When depth scores are low, the country (or smaller within-country regions) should usually be emphasized managerially and analytically. And when depth scores are high, if a high proportion of international flows are intra-regional, it usually makes more sense to vest greater authority in regional headquarters whereas if most of the international flows are inter-regional, more coordination at the global level tends to be required.

Third, in each of the three industries that were selected for brief case studies in this chapter, maps that sized countries according to factors such as sales, production, and trade were provided. While the same data could have been presented in pie charts, for example, such maps are useful because they emphasize the persistent effects of geography on business since, as Chapter 1 noted, geographic distance – despite globaloney to the contrary – continues to have a significant dampening effect on trade and investment. Rooted maps drawn from the perspectives of a company's home country or at the company level itself can provide additional insights.<sup>73</sup>

Fourth, the CAGE framework has been used throughout this chapter both to explain current patterns of international interactions as well as the challenges and opportunities associated with globalization in particular industries. By thinking through an industry's sensitivity to cultural, administrative, geographic, and economic distance, one can achieve a reasonable understanding of why a given industry ranks where it does on depth and breadth metrics as well as why a given industry's rooted maps look the way they do. And when an understanding of the CAGE factors that matter most in a given industry is combined with insights into the specific differences between countries where a company is already successful and where it intends to go, a clear list of high priority differences that must be addressed in the new market can be identified.



Analysis of global connectedness at the industry level should also incorporate a dynamic component, reflecting changes that are underway and how fast or slow they are proceeding. Here, the differences among the industries covered in this chapter are again instructive. Pharmaceuticals, a slow-cycle industry where it can take ten years to bring a new drug to market, will naturally proceed down the diagonal on Figure 3.1 more slowly than the other two industries. And it is unsurprising that mobile phones, the most dynamic of the three industries with rapid (feature-adjusted) real price declines, already shifted to the bottom left cell of the matrix before data were available to track its precise position. The automotive sector is intermediate in terms of both its cycle speed and its position on the matrix.

Additionally, while the focus of this chapter has been on industry-level analysis, note that the same four tools introduced here are also useful for company-level competitive analysis. Executives can plot their own companies as well as their competitors on the matrix displayed in Figure 3.1, prepare rooted maps based on their company and their competitors' sales and production patterns, and so on.

The next chapter will return to country level analysis, focusing on identifying policies that countries can use to capture more benefits of global connectedness. Some policies to promote connectedness, however, may be targeted at the industry level, suggesting that policymakers may also find it useful to think through the same tools that were described in this chapter. An intermediate level of analysis between looking at companies and at industries on a global basis, for example, could involve assessing the depth and breadth of industries in a particular country and comparing them to global or regional benchmarks to identify deficiencies that policies might aim to remedy.



## 4. How Can National Policies Boost Connectedness?





Increasing global connectedness has the potential to contribute to economic gains valued in trillions of dollars. This chapter briefly reviews some of the evidence on the benefits of increasing global connectedness and then turns to policies and strategies that countries can employ to capture more of those benefits for their citizens. Because cross-country differences preclude one-size-fits-all prescriptions, this chapter then turns to three country examples: the Netherlands, Vietnam, and Mexico.

The Netherlands and Vietnam are countries whose global connectedness depth scores are significantly higher than those of other countries with similar structural characteristics. Thus, these cases offer the possibility to look at policies that appear to have made large contributions to increasing countries' depth scores. The case of the Netherlands highlights how this country achieved the top rank on the DHL Global Connectedness Index and how it still has substantial headroom to benefit from more connectedness. And the case of Vietnam exemplifies how a fast-developing country can, with appropriate policy shifts, deepen its connectedness very rapidly and reap large gains.

Mexico is a country with a depth score that is roughly in line with what is observed for other countries with similar structural conditions, and thus a more representative case for highlighting the substantial untapped opportunities that countries typically have to increase their connectedness. As the "most prolific signer of free trade agreements" <sup>1</sup> with pacts covering 44 countries <sup>2</sup> but with a very high level of dependency on trade with the United States, Mexico also permits a finer analysis of the interplay between the depth and breadth of connectedness.

### Benefits of Deepening Global Connectedness <sup>3</sup>

This section highlights some of the evidence that the *depth* of global connectedness contributes to economic development. It focuses on depth rather than breadth because more depth as measured in the DHL Global Connectedness Index <sup>4</sup> is thought to be generally beneficial, whereas whether countries should increase their breadth has to be evaluated on a country-by-country basis.

To briefly explain why breadth can be either too high or too low, recall (as described in Chapter 1) that because of cultural, administrative, geographic and economic (CAGE) similarities, countries' connections naturally tend to be stronger with particular partners (typically neighbors) rather than uniformly distributed across all other countries. However, some countries' ties are too narrowly focused while others are spread too thin across partners. In both cases countries forego economic gains. The discussion of Mexico later in this chapter will provide an example of the analysis required to determine whether a country's breadth is too high or too low.

Focusing, therefore, on depth, there is a strong positive correlation between countries' GDP per capita and their global connectedness depth scores, as noted in Chapter 2. This provides a first indication that the depth of global connectedness might contribute to higher levels of prosperity. But correlation does not necessarily imply causation. Other forms of evidence are also required to make the case.

Another very basic but suggestive piece of evidence that the depth of connectedness indeed contributes to prosperity is provided by regression analyses that use depth scores to predict countries' GDP per capita growth rates after controlling for their initial GDP per capita. This type of analysis (detailed in **Table B.3** in Appendix B) reveals a positive relationship between global connectedness depth scores and the growth rate of a country's GDP per capita.



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The benefits of expanding merchandise trade are much larger than traditional models indicate, and to those one needs to add gains from services trade to have a complete picture of the benefits of increased trade flows. Then, on top of trade, other kinds of cross-border flows double the estimated economic benefits to at least 8% of global GDP.

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A weaker but still positive relationship is also observed between overall global connectedness and economic growth, which is consistent with the expectation that depth has a more direct relationship with growth than breadth.

The same basic regression analysis also permits a rough calibration of how much global growth could accelerate if countries improved their global connectedness depth scores by particular amounts. While the depth score increases that follow were chosen for illustrative purposes only, calculations based on them do illustrate the large impact that improvements in connectedness could have on growth. If the (weighted) average of countries' depth scores increased by 20%, this regression implies that GDP growth would rise by 0.2% per year, compounding over a ten-year period to a 2% or \$1.4 trillion increase in world GDP. Or, more aggressively, if depth scores rose by one (weighted) standard deviation (9.6 points), that would imply an increase of 5.5% or \$3.9 trillion to world GDP over 10 years!

### Channels for ADDING Value

A distinct and more powerful way of looking at the evidence that the depth of global connectedness can increase prosperity is by analyzing the channels through which those gains might be generated. Start with the gains from expanding merchandise trade. The traditional economic models developed for assessing trade agreements provide estimates of how much global output would expand if tariffs and some kinds of non-tariff barriers to trade were reduced or removed. The gains such models estimate – about 0.1% of world GDP for the stalled Doha round of trade negotiations and roughly 0.5% for complete liberalization of merchandise trade – aren't very inspiring, but they actually leave out far more than they include.

Trade facilitation, just one of the tools that are left out of traditional models, could alone grow global GDP by 1%.<sup>5</sup> And in calculating the benefits of additional trade, these

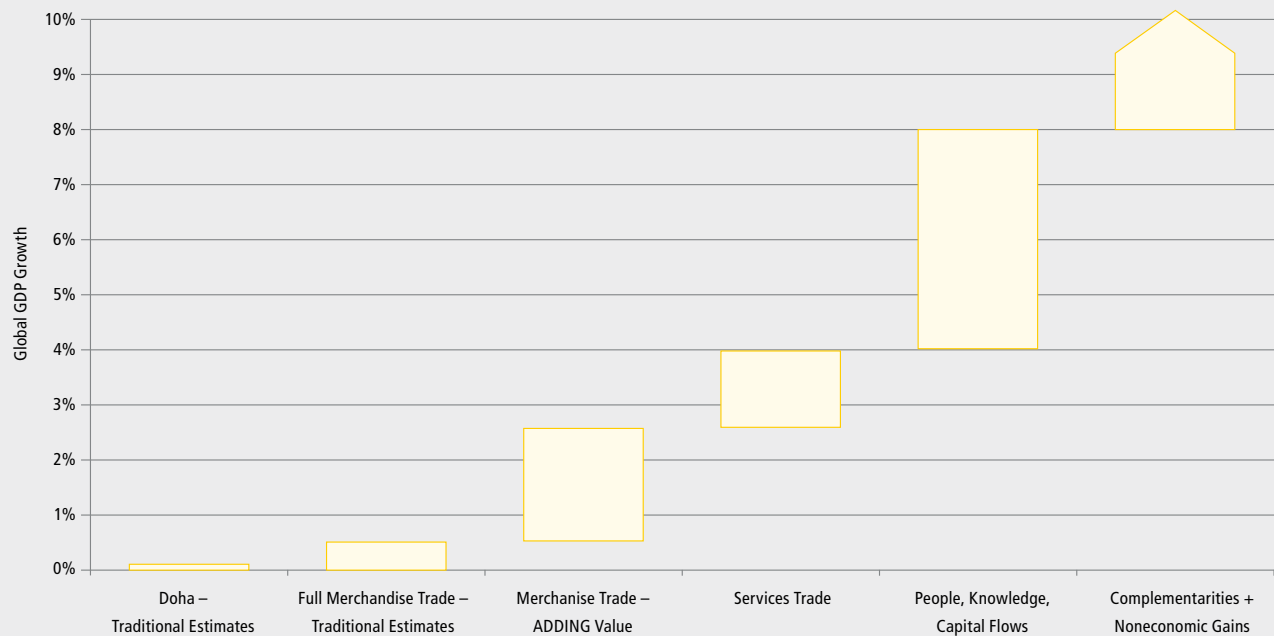
kinds of models focus almost exclusively on growth generated by reductions in production costs as each country's output becomes more specialized, a limited fraction of the potential gains.

To broaden the range of benefits covered, consider a modified version of the ADDING Value Scorecard, a framework originally developed to help businesses evaluate international strategies. ADDING is an acronym for the following sources of value: Adding Volume, Decreasing Costs, Differentiating, Intensifying Competition<sup>6</sup>, Normalizing Risk, and Generating and Diffusing Knowledge.

Because traditional models assume full employment (especially problematic in times like these) and leave out scale economies, they capture only part of the gains in the first two categories, Adding Volume and Decreasing Costs. And they entirely leave out the last four categories, whose benefits can be seen clearly, for example, in the U.S. automobile industry. Decades ago, Japanese automakers started offering consumers differentiated (more reliable) products. Increased competition prompted U.S. automakers to improve their own quality. Now, GM sells more cars in China than in the U.S., diversifying its risks and helping it recover from the crisis. And cars are becoming "greener" faster because of international knowledge flows. Taking this broader set of factors into account, the estimated gains from expanding merchandise trade grow to 2–3% of world GDP or more.<sup>7</sup>

Next, consider services trade. The service sector is roughly two-thirds of world GDP but only one-fifth of international trade. Barriers to services trade are more complex and some services (like haircuts) will always be delivered locally, but potential gains from opening up services trade have been estimated to be at least 1.5% of global GDP, putting total gains from liberalization of trade in merchandise and services at 4% of global GDP or more.

**Figure 4.1**  
Channels For Expanding Gains From Global Connectedness



Traditional estimates of potential gains from expanding international trade leave out more than they include. Applying the ADDING Value scorecard and considering flows beyond trade point the way to gains that could exceed 8% of world GDP.

Then, look at potential gains from flows other than trade, such as people, capital, and information. Completely eliminating restrictions on migration could double global GDP, but that's obviously not in the cards.<sup>8</sup> More realistic, limited increases in people and other non-trade flows could expand GDP at least 4%, bringing the economic gains to 8% or more. And complementarities among the different types of flows push this estimate up even farther. Evidence on diasporas, for example, suggests that people flows contribute to trade flows. One does not have to pin things down further to note that this line of analysis also indicates that trillions of dollars are at stake.

Finally, and more subjectively, consider non-economic benefits. Culturally, globalization expands the range of choices available to individuals wherever they live even if in some cases it blurs distinctions at national borders.<sup>9</sup> Politically, cross-border flows (especially information flows) tend to strengthen government accountability and transparency.<sup>10</sup> And trade ties also seem to improve international security. The parts of the world that are isolated economically experience far more military intervention by outsiders.<sup>11</sup>

To summarize (see **Figure 4.1**), the benefits of expanding merchandise trade are much larger than traditional models indicate, and to those one needs to add gains from services trade to have a complete picture of the benefits of increased trade flows. Then, on top of trade, other kinds of cross-bor-

der flows double the estimated economic benefits to at least 8% of global GDP. And beyond that there are complementarities and non-economic benefits that seem compelling but are harder to quantify in GDP terms.

### Policies to Promote Global Connectedness

In light of the evidence described above on the benefits of deeper global connectedness, what policies can countries employ to capture more of those benefits? Cross-country regression analysis of the type that identified the structural influences on connectedness mentioned in Chapter 2 can also provide powerful evidence relating particular types of policies to the depth of countries' global connectedness. (**Table B.4** in Appendix B provides details of a regression based on structural factors only that parallels the policy regressions, and **Table B.5** shows a regression incorporating structural and policy factors.)

The policy metrics identified below were all shown in regression analysis to be significant contributors to the depth of connectedness, even after the following structural factors were taken into account: population size, GDP per capita, remoteness, landlockedness, and linguistic commonality. In other words, the policies highlighted here are restricted to those that add to the explanatory power of the analysis even when structural factors also included – a high bar for inclusion because many structural and policy factors are correlated.



Consider policies to promote connectedness pillar-by-pillar, beginning with the trade pillar. While attention has rightly shifted from focusing purely on tariffs to also considering non-tariff barriers to trade, there continues to be a significant negative relationship between the weighted mean average tariffs that countries apply to their imports and depth.<sup>12</sup> This highlights the importance of continuing traditional tariff-reduction efforts alongside work on reducing non-tariff barriers to trade.

The World Bank's Logistics Performance Index is also a significant predictor of depth scores on the trade pillar (and overall). This index encompasses six aspects of logistics performance that suggest a very broad array of policies that could be pursued in this area: (1) efficiency of border and customs clearance, (2) infrastructure quality (ports, railroads, roads, information technology), (3) ease of arranging competitively priced shipments, (4) competence and quality of logistics services, (5) ability to track and trace consignments, and (6) timeliness of shipments in reaching destinations.

An even broader set of policy levers to spur trade integration is provided by the World Economic Forum's Enabling Trade Index (ETI), which was also a significant predictor of trade depth, though not quite as strong as the combination of tariffs and the logistics performance index. The ETI encompasses 47 specific indicators covering market access, border administration, transport and communications infrastructure, and business environment.

Note how both policy areas that directly target trade (such as tariffs and customs clearance) as well as those that affect both domestic and international commerce (such as logistics performance and the business environment sub-index of the ETI) are significant explanatory factors for trade depth. Countries can improve the depth of their connectedness both by improving their domestic environment as well as by directly acting to spur international flows.

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Countries can improve the depth of their connectedness both via policies that directly target trade, such as tariffs and customs clearance, as well as by improving their domestic business environments.

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Turning to the capital pillar, the importance of the domestic business environment to international connectedness is underscored by the fact that the best policy indicator identified for this pillar was Regulatory Quality, as reported in the World Governance Indicators. Regulatory Quality "reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development."<sup>13</sup>

Policies that more directly target capital flows such as the presence or absence of capital controls<sup>14</sup> and the Heritage Foundation's Financial Freedom index (which encompasses various aspects of financial market regulation including openness to foreign competition) are also significant predictors of depth on the capital pillar, though neither matched the explanatory power of the more general Regulatory Quality metric. The practical implication of this pattern is, again, for countries to combine efforts to improve their internal business environments *and* to remove barriers to connectedness. (Note that this analysis excludes short-term debt, where it may actually be beneficial to implement tighter regulation of international flows.)

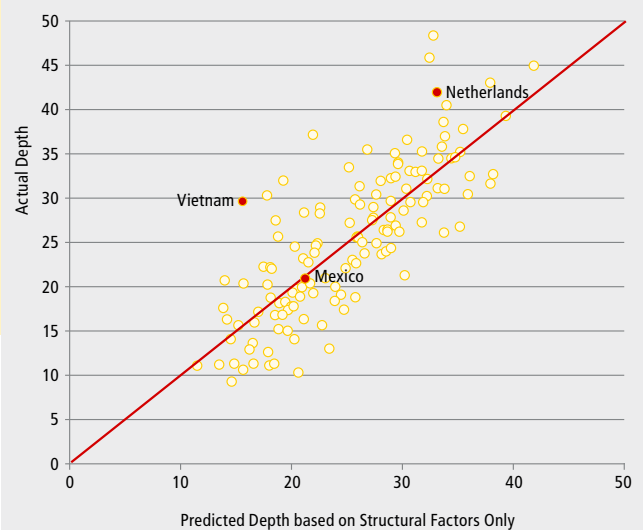
Analysis of policy drivers of the information pillar is hampered by the fact that, in contrast to the wealth of policy ratings and rankings focusing on trade and capital flows, an extensive search failed to uncover any research that has ranked or scored a large sample of countries on policies related to their openness to *international* information flows. However, the Press Freedom index prepared by Reporters Without Borders was significantly and positively associated with depth on the information pillar. This index covers 44 criteria to assess "the degree of freedom that journalists, news media and netizens enjoy in each country and the efforts made by the authorities to respect and ensure respect for this freedom."<sup>15</sup>

On the people pillar, visa policies are the natural ones to turn to in order to explain levels of openness. However, the fact that the number of countries citizens of a particular country can visit without a visa<sup>16</sup> has a very strong correlation (0.8 correlation coefficient) with GDP per capita<sup>17</sup> obscures the independent impact of visa policies on depth in terms of the people pillar: recall that GDP per capita is already included in the analysis as a structural factor. The Heritage Foundation's Labor Freedom index, however, is significantly and positively related to people pillar depth. This index covers "regulations concerning minimum wages, laws inhibiting layoffs, severance requirements, and measurable regulatory burdens on hiring, hours, and so on."<sup>18</sup>

To summarize, the combination of policy and structural variables described in this section together explain 77% of the variation among countries' observed depth scores. Because countries that have more favorable structural conditions for connectedness also tend to implement more favorable policies (the statistical challenge of "multicollinearity"), it is impossible to distinguish precisely the relative impacts of structural versus policy factors on connectedness. It is also important to remember that 77% refers to the proportion of the variation among countries' *observed* depth scores explained by the policy and structural factors. What has not been considered is the common, untapped potential to increase depth scores that exists across *all* countries.

There are two additional reasons that policies can have an even larger influence on connectedness than has been shown via regression analysis. First, the fact that there are less than 200 countries in the world and many of them pursue similar policies means that there is little evidence on the effects of many policies that could potentially be implemented. And second, many policies that countries do implement are not captured in cross-country ratings and rankings, and so they cannot be incorporated into this type of statistical analysis.<sup>19</sup>

Figure 4.2 Actual Depth Scores vs. Depth Scores Predicted Based On Structural Conditions



Vietnam and the Netherlands are both among the top 10 countries in terms of the excess of their actual depth scores versus what a statistical model indicates would be typical for countries with their structural conditions. Mexico's depth score is about average for a country with its structural conditions.

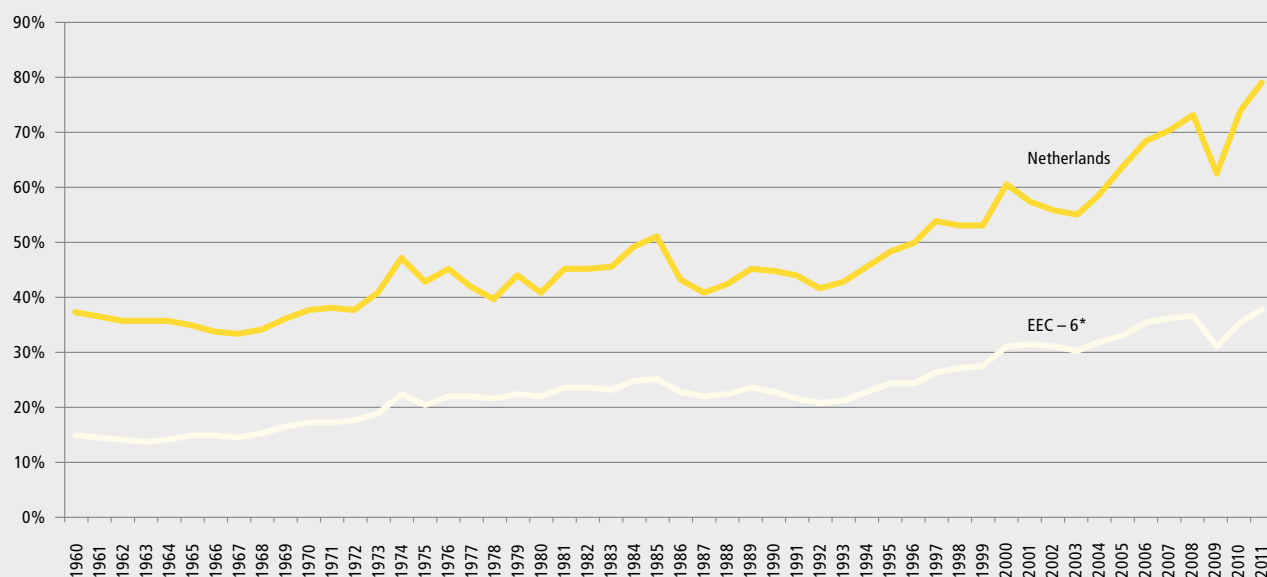
Therefore, to provide more nuanced characterizations of how public policies can influence the depth of global connectedness and the importance of tailoring connectedness strategies closely to countries' structural conditions, the following sections present three brief case examples: the Netherlands, Vietnam, and Mexico. These three examples were selected based on their diversity along various dimensions: In terms of connectedness scores, they range in the rankings from #1 overall and #5 on depth (Netherlands) to #31 overall and #46 on depth (Vietnam) to #84 overall and #93 on depth (Mexico). The Netherlands and Vietnam also stand out among the top 10 countries in terms how much more deeply connected they are than a regression model predicted based on their structural conditions, whereas Mexico's depth score is about average for a country with its structural conditions (see **Figure 4.2**). Geographically, they draw from three distinct regions (Europe, Asia, and Latin America). And in terms of economic development, they include one advanced economy (Netherlands) and two rapidly developing countries (Vietnam and Mexico). The Netherlands' GDP per Capita is 35 times higher than Vietnam's and 5 times higher than Mexico's.

### The Netherlands

The Netherlands has been the top ranked country on the DHL Global Connectedness since 2005, the first year for which the index was calculated. It ranks 5th on depth and 3rd on breadth in this edition of the index. The case of the Netherlands highlights, among other factors, the power of regional integration, in this case via the European Union,



**Figure 4.3**  
Netherlands Merchandise Exports Depth, 1960–2011



The depth of Netherlands' merchandise exports started to take off in 1993 along with merchandise exports depth across the original six members of the European Economic Community (a set that includes the Netherlands). Source: World Bank, World Development Indicators. Note (\*): Due to data limitations, Germany is excluded from these calculations until 1970 and Luxembourg is excluded until 1999.

to enhance connectedness. And more surprisingly, it also reveals the Netherlands' connectedness to be limited in absolute rather than relative terms. The fact that the top ranked country has so much headroom to become more connected implies that other countries have even more untapped possibilities to benefit from more connectedness.

A brief review of the Netherlands' country profile at the back of this report indicates that it ranks in the top 10 countries on three of the four pillars of the DHL Global Connectedness Index – all except for the people pillar, on which it ranks 13th. To see how the Netherlands got to where it is, it is useful to add a historical dimension to the analysis – complementing the cross-country comparisons that were the focus of the previous section. Merchandise trade is the flow with the best historical data, so begin by considering the growth of the Netherlands' merchandise exports depth over the period from 1960 to 2011, as shown on **Figure 4.3**, as a (partial) source of historical insight.

Over the 33 years from 1960 to 1993, the Netherlands' merchandise exports depth rose modestly, from 37% to 43%. Then, over the much shorter (18-year) period from 1993 to 2011, the same metric nearly doubled – increasing from 43% to 79%. Why was 1993 such a pivotal year? Two facts point to European integration as the main driver of the Netherlands' rising merchandise exports depth: First, merchandise exports depth rose not only in the Netherlands but across all of the original six members of the

European Economic Community (EEC-6: Belgium, France, (West) Germany, Luxembourg, Netherlands, and Italy). And second, roughly 80% of the Netherlands' exports went to other European countries.

### Regional Integration and National Policies

December 31, 1992 was the deadline set under the Single European Act for the creation of a single market across the countries of the EEC. While a customs union already existed among the member countries, 279 additional legislative measures were identified to address de facto barriers to market integration. And 1993 was also the year that the European Union itself was born as the Treaty on European Union came into effect – the treaty that is more commonly referred to as the Maastricht Treaty because it was signed the prior year in Maastricht, Netherlands. The Maastricht Treaty also set in motion the process of creating a common currency in Europe. While introduction of the Euro took roughly a decade, the immediate effect of the Maastricht Treaty on trade reminds us – as do the Eurozone's present circumstances – of the importance of expectations about future levels of policy integration themselves as drivers of rising (or falling) connectedness.

The broader importance of the EU to European countries' global connectedness can be summarized by noting how the EU's famous "four freedoms" touch three of the four pillars of the DHL Global Connectedness Index: free movement of goods and services (trade), free movement of

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Policy choices must be tailored to a country's structural conditions. The Netherlands' unique location, combined with its world-class physical and institutional infrastructure, underpin its status as the world's most globally connected country.

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capital, and free movement of people. The remaining pillar, information, is included in the EU's Copenhagen Criteria for accession to the Union, based on which "the EU makes press freedom one of the main criteria for accession."<sup>20</sup>

Regional integration in Europe, of course, is only part of the Dutch story. Note that, as shown on Figure 4.3, the Netherlands has roughly twice the merchandise exports depth of the EEC-6 as a whole. And while European countries hold 9 of the top 10 positions in this year's DHL Global Connectedness Index, EU members also hold positions as low as 66th overall (Romania) and 91st on depth (Greece).

Recognition must also be given to the Netherlands' favorable geography, which contributed over centuries to its development as one of the world's great trading nations: its location at the estuary of navigable rivers connecting it to Europe's industrial heartland. But it is the combination of natural geography and infrastructural investment that position Rotterdam as Europe's largest port. In the latest edition of the World Economic Forum's Global Competitiveness Report, the Netherlands overtook Singapore as the top-ranked country on Quality of Port Infrastructure.<sup>21</sup> Netherlands also complemented geography with policy leadership in civil aviation, signing the first open skies agreement with the United States in 1992.

Tax policies are another area where the Netherlands has sought to make itself an attractive place for foreign companies to do business. Rather than focus on levels and types of taxation – where critics of globalization fear the possibility of a "race to the bottom" – consider how the Netherlands turns clarity in tax administration into an advantage. According to a report by the accounting firm Deloitte, "Perhaps the most significant incentive in the Netherlands for international firms is the willingness of Dutch tax authorities to provide advance tax rulings on

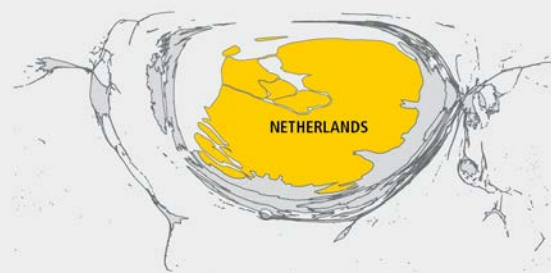
proposed transactions. These rulings attract international investors by providing certainty on tax structures and allowing companies to negotiate multi-year rulings with the tax authorities."<sup>22</sup>

The material discussed already has touched on the administrative and geographic legs of the CAGE framework – and the economic component is usually excluded from policy analysis because economic results are viewed as the outcomes policy is meant to influence rather than policy choices themselves. But what about cultural factors? In the 2011 IMD World Competitiveness Yearbook, the Netherlands ranked fifth out of 37 countries (and second in Europe) on Cultural Openness. And culture also includes more practical considerations such as foreign language proficiency – another area where the Netherlands is a leader. According to a Eurobarometer survey conducted in 2005, 87% of the population of the Netherlands can speak English, 66% can speak German, and 24% can speak French.<sup>23</sup>

This subsection has cited only a small sample of the policies that have let the Netherlands capitalize on the potential of its structural (particularly geographic) conditions to capture the top rank on the DHL Global Connectedness Index. Even this brief list, however, highlights three important lessons:

First, policy choices must be tailored to a country's structural conditions. It was because of the Netherlands' geography that it made sense for that country to prioritize investment in its port facilities. And more broadly, the policy content to which new EU members have to make their laws conform to join the EU – at least 20,000 pages<sup>24</sup> and by some estimates more than 80,000<sup>25</sup> – provides an indication of the range of policies adopted by the Netherlands in part because of its location in Europe. If the Netherlands was in a different region, policy harmonization to promote integration would have required different policies.

Map 4.1 Netherlands Scaled Based On GDP Minus Exports, All Other Countries Scaled Based On Netherlands Exports To Them, 2010<sup>28</sup>



This rooted map provides a stark visualization of the localization and regionalization of the economy of the Netherlands. Most of the country's economic output remains in the country itself and only about 20% of exports are go to countries outside of Europe. Source: Generated based on data from the United Nations and International Monetary Fund

Second, cooperation with neighboring countries significantly expands the possibilities for connectedness. Without openness on the part of Germany and other neighbors, the Netherlands could not have achieved its level of connectedness. Connectedness is pursued most effectively in concert with a country's natural partners based on cultural, administrative, geographic and economic (CAGE) factors.

And third, the most connected countries implement policies that go well beyond the standard ones covered in the statistical analysis in the previous section. There are no cross-country rankings or ratings of countries' willingness to provide advance tax rulings, but sensitivity to the challenges prospective foreign investors face uncovered a possibility to improve upon typical practice. In light of the limited levels of connectedness described in Chapter 1, it is not difficult to identify barriers that could be targeted for policy innovation.

### Surprising Headroom

As one of the pioneers of global trade, located at the heart of the world's most connected continent, it is perhaps unsurprising that the Netherlands is a leader in global connectedness. What is more surprising is how much headroom the Netherlands still has to become more connected.

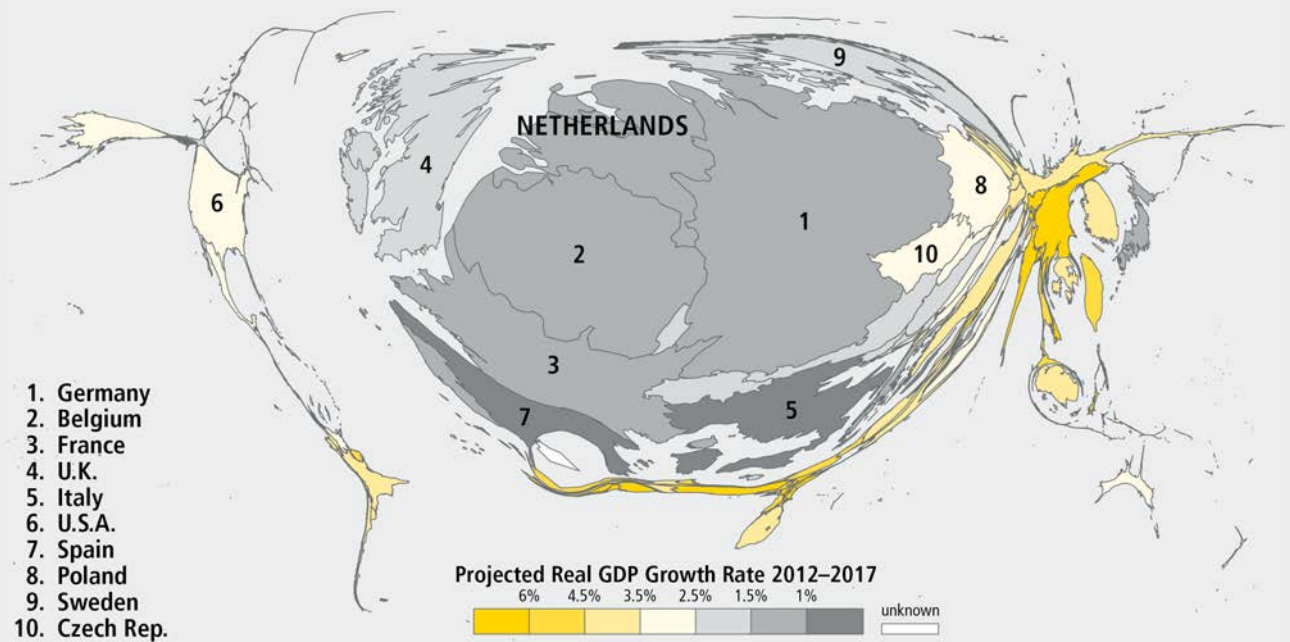
Returning to merchandise exports, while the Netherlands exported goods worth 79% of its GDP in 2011, over half of those exports flowed through the Netherlands, rather than originating in the Netherlands' internal economy.<sup>26</sup> So, from the standpoint of a Dutch manufacturer (rather than a trader), it is better to think of the depth of the Netherlands' merchandise exports as somewhere in the range of 30–40%, rather than close to 80%. And since the Netherlands comprises only about 1% of the world economy (implying that if borders and distance didn't matter at all, it would export 99% of its output), it could increase the intensity of its merchandise exports significantly.

The breadth of the Netherlands' merchandise exports also indicates significant growth potential. In 2010, 80% of the Netherlands' merchandise exports went to destinations within Europe, even though Europe makes up only 30%<sup>27</sup> of the world economy. A useful device to summarize the limited depth and breadth of the Netherlands' trade is a map that scales the Netherlands based on its GDP minus its merchandise and services exports (to approximate the proportion of its output that remains within the country, after adjusting for re-exports), and scales all other countries in proportion to the value of the Netherlands' exports to them, as shown in **Map 4.1**. The Netherlands itself dwarfs even its larger neighbors, and Europe fills nearly the entire map area.

Data for other types of flows also indicate that the Netherlands could substantially increase its global connectedness. Between 2009 and 2011, only 9% of gross fixed capital formation in the Netherlands was accounted for by inflows of foreign direct investment (FDI), and as of 2011, 68% of the Netherlands' stock of inward FDI came from within Europe. With respect to information flows, 76% of the international calling minutes from the Netherlands were to other countries within Europe<sup>29</sup> and 94% of the Netherlands' exports of printed publications were also intra-regional. And considering people flows, 95% of people born in the Netherlands still reside there, and among the 5% who have migrated outside the country, 46% remain in Europe. Regarding incoming tourism and education, 84% of international tourists and 81% of international students come from within Europe.

For the Netherlands and for Western Europe in general, expanding the breadth of its global connectedness takes on particular importance in light of projections for slow growth close to home over the medium to long term.

Map 4.2 Netherlands Rooted Map With Other Countries Sized According to Netherlands Merchandise Exports In 2010 And Colored Based On Their Projected Real GDP Growth Rates, 2012–2017



Nearly all of the Netherlands' merchandise exports are to nearby countries that are projected to grow slowly over the next five years. Companies from the Netherlands will need to stretch their ability to bridge CAGE distances to tap into distant and different high growth markets. Source: Generated based on exports data reported in the UN Comtrade Database and GDP Growth projections from the IMF World Economic Outlook Database, October 2012 revision.

**Map 4.2** is a rooted map with other countries sized according to Netherlands' merchandise exports to them and colored according to their projected real GDP growth rates from 2012–2017. Roughly 87% of the Netherlands' exports in 2010 were to high income countries – only 13% to far-away and fast-growing emerging and developing countries. And longer term, note that the Europe's share of world GDP is projected to decline from 30% in 2010 to 25% in 2030 (and the EU27's share is projected to fall from 26% to 20%).<sup>30</sup>

The Netherlands' imports, however, reflect stronger connections to emerging markets: 28% came from low and middle income countries in 2010. The Netherlands increasingly serves as a gateway for Asian imports into Europe. Similarly, the Netherlands is a major investor in emerging markets but attracts little FDI from them. In 2009, the Netherlands had less than 2% of the EU-15's total inward FDI stock from BRIC countries.<sup>31</sup> Companies from the Netherlands will need to stretch their ability to bridge CAGE distances to tap more effectively into emerging markets, expanding breadth and depth in tandem. Extending the Netherlands' language competencies into key Asian languages would also help.

There are also large untapped integration opportunities at the EU level, where progress on removing barriers to integration would help deepen the Netherlands' connected-

ness. To cite just one example, while one of the EU's four freedoms promises a unified market for services, there remain large barriers to services market integration – one reason that the Netherlands' services exports depth is only 1/5th as high as its merchandise exports depth even though services generate 3/4th of Netherlands' GDP.

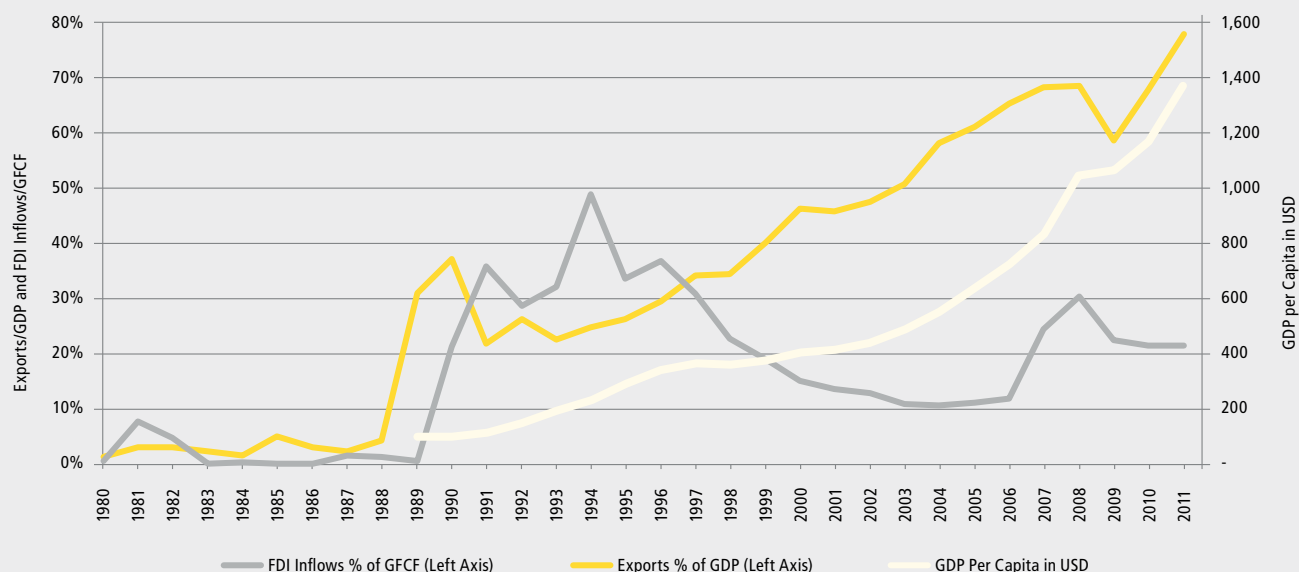
To summarize, the Netherlands illustrates the power of intra-regional integration to spur gains in connectedness as well as the untapped potential that all countries have to become more connected. And while the latest Dutch elections were read by many as a boost for European integration, the continuing prominence in that country of political movements that favor reducing connectedness provides a reminder that even in the world's most connected country, openness still needs to be nurtured in both the cultural and the economic domains.

### Vietnam

Vietnam in the 1980s could scarcely have presented a starker contrast with the Netherlands. Its 1989 GDP per capita of \$97 ranked it as the poorest country in the world (Somalia was the second poorest with \$166).<sup>32</sup> And its economy was almost entirely closed. From that very bleak starting point, Vietnam's economic transformation since it launched its Doi Moi ("renovation") reform process in 1986 has been remarkable.



**Figure 4.4**  
Vietnam Merchandise Exports Depth, FDI Inflows Depth, and GDP per Capita, 1980–2011



Since Vietnam opened up to international trade and investment flows in 1986, its rising trade and investment depth has been accompanied by a tremendous increase in its GDP per capita from less than \$100 in 1989 to nearly \$1400 in 2011. Sources: World Bank World Development Indicators (WDI), UN Conference on Trade and Development (UNCTAD), and IMF World Economy Outlook. Note: GDP per capita is not shown before 1989 because prior to that year Vietnam had multiple exchange rates making its GDP per capita in U.S. dollars not directly comparable with the same metric in subsequent years. The abbreviation GFCF refers to gross fixed capital formation.

By 2011, Vietnam's GDP per capita had risen to nearly \$1400 (ranking 134th out of 177 countries). Vietnam opened up to the extent that it now ranks 31st globally on the DHL Global Connectedness Index (46th on depth and 36th on breadth). It achieved the 5th largest connectedness score increase from 2005 to 2011, and in 2011, only Hong Kong and Malaysia beat Vietnam in terms of how much higher their depth scores were than what a regression model predicted based on countries' structural characteristics (Figure 4.2).

As the details in Vietnam's country profile at the back of this report reveal, Vietnam's high connectedness score is driven almost entirely by its merchandise trade flows (both imports and exports) and by its inward capital flows (FDI and portfolio equity investment). Vietnam is in the bottom 10% of countries on people pillar depth and the bottom 30% on information pillar depth. Therefore, to highlight how connectedness contributed to Vietnam's growth, the material that follows will focus on the trade and capital pillars. Nonetheless, Vietnam's low rankings on the people and information pillars provide another example of the pattern that even countries that do well in terms of overall connectedness tend to have substantial headroom for improvement along at least some dimensions.

**Figure 4.4** plots the depth of Vietnam's merchandise exports and FDI inflows from 1980 to the present and juxtaposes those two connectedness metrics against the country's GDP

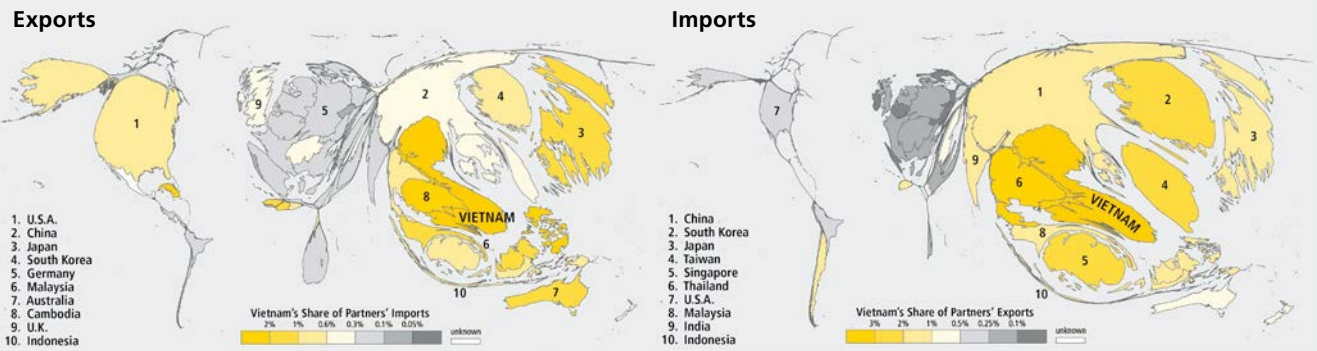
per capita in U.S. dollars. The figure shows how Vietnam's connectedness and prosperity surged in tandem since the country began opening up in 1986. The following subsections will review, in turn, Vietnam's trade and FDI policies and how Vietnam's participation in international trade and capital flows contributed to its economic development.

### Merchandise Trade

Vietnam's initial Doi Moi reforms, spurred by economic pressures associated with declining Soviet support during the early 1980s, simultaneously scaled back restrictions on private enterprise and opened up the economy to foreign participation.<sup>33</sup> Prior to 1988, only a small set of state-owned international trading companies were permitted to import or export. These companies operated a "planned import/export regime" under which import volumes were set according to anticipated shortfalls of domestic production versus demand and exports targets were set based on requirements to fund imports.<sup>34</sup>

In 1988, Vietnam's new Import and Export Duties Law officially ended the planned trade regime, but specific trade policies were liberalized more gradually. In 1989, multiple official exchange rates were phased out and the Vietnamese dong was devalued from 607 dong per U.S. dollar in 1988 to roughly 10,000 in 1991.<sup>35</sup> In 1990, private enterprises were permitted to conduct international trade, but a complex licensing process limited the number of private firms

Map 4.3  
Vietnam's Merchandise Exports and Imports, 2011



Vietnam has one of the world's broadest export patterns, ranking 5th on merchandise exports breadth. However, its imports come from a much narrower set of countries within Asia. Its exports rely on imported inputs from more advanced economies in the region. Sources: IMF Direction of Trade Statistics and UN Comtrade

that actually did trade themselves. Tariffs were also reduced, an import duty drawback system was introduced to facilitate exports, and export processing zones were set up. In 1999, licensing requirements were scaled back so that all private enterprises could participate in international trade. In 2001, restrictions on the commodities that particular firms could export were lifted. By 2004, almost all import quotas had been eliminated. Customs administration was also overhauled in the early 2000s.

The expansion of Vietnam's merchandise trade was also spurred by its entry into a series of multilateral and bilateral trade accords. In 1995, Vietnam joined ASEAN (the Association of Southeast Asian Nations), and in 2001, Vietnam entered into a bilateral trade agreement with the United States. The U.S. and other bilateral accords paved the way for Vietnam's eventual entry into the WTO (World Trade Organization) as a full member in 2007. In 2008, Vietnam and Japan signed a broad "economic partnership pact." Carrying this trajectory forward, Vietnam presently has multiple free trade agreements under negotiation.

Vietnam's exports became more diversified as they expanded. Alongside primary exports such as crude oil and agricultural products (after struggling to feed itself before initiating reforms, Vietnam is now the world's second largest rice exporter), Vietnam has become one of the world's leading apparel and footwear exporters. More recently, Vietnam's fastest growing export sectors include mobile phones and other consumer electronics. In 2010, Vietnam classified "light industry and handicraft goods" as its largest export category, accounting for 46% of total merchandise exports.<sup>36</sup>

Vietnam also diversified its export destinations to the extent that it ranked fifth worldwide on merchandise exports

breadth in 2011 (see left side of Map 4.3). Its imports, however, came from a much narrower set of sources (right side of Map 4.3), ranking only 60th on merchandise imports breadth. This pattern reflected its exports' reliance on imported inputs from more advanced economies in East Asia, a phenomenon to which the final subsection of this example will return.

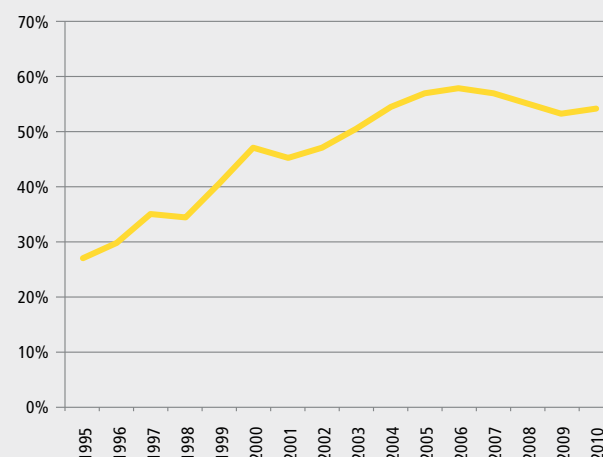
A 2012 World Bank report summarized the economic and political benefits Vietnam reaped by opening up to international trade since Doi Moi as follows: "Trade liberalization has had a huge positive impact on Vietnam's economy. Some of the visible benefits of trade liberalization include a significant boost to foreign direct investment, a resilient export sector, lower prices, and improved quality of goods and services. Bilateral trade agreements and WTO commitments have led Vietnam to introduce important modifications in its institutional and administrative systems. For example, as part of its WTO commitments, Vietnam publishes an official journal of all the laws, regulations, and administrative procedures of general application before enforcing them. Moreover, the full texts of the legal acts are posted on a government website at least 60 days prior to approval so agencies, organizations, and individuals can submit comments."<sup>37</sup>

As this World Bank evaluation described, one of the major benefits to Vietnam of opening up to international trade involved rising foreign direct investment inflows. As the material that follows will describe, rather than trade simply spurring FDI, both were mutually reinforcing contributors to Vietnam's economic development.

### Foreign Direct Investment

Foreign direct investment, alongside merchandise trade, was a crucial part of Vietnam's spectacular rise from poverty to middle-income status. As one analyst put it,

Figure 4.5 Share of Vietnam's Merchandise Exports Generated by Foreign Invested Sector, 1995–2010



Since 2003, more than half of Vietnam's merchandise exports were generated by foreign invested enterprises. Foreign investment was a crucial enabler of Vietnam's rapid export growth. Source: General Statistics Office of Vietnam

"It is hard to envisage 'Doi Moi' without the presence of FDI activity; an imported 'private sector' for a country that only had a fledgling private sector of its own at the beginning of the 1990s. By the end of the 1990s, although foreign-invested companies employed less than 1% of the total workforce in Vietnam, they cumulatively accounted for around 27% of the country's (non-oil) exports, 35% of the country's total industrial output, they constituted almost 13% of Vietnam's GDP, and contributed around 25% of total tax revenues."<sup>38</sup>

Vietnam's inward FDI spiked in the early 1990s, with FDI rising to nearly 50% of Vietnam's gross fixed capital formation in 1994. This initial surge of inward FDI was enabled by 1987 reforms that opened most sectors to FDI as well as subsequent policy adjustments in 1990 and 1992. Foreign governments' cancellation of embargoes on their nationals' investing in Vietnam over the same time frame led to "home country waves" of pent-up investment as companies from new countries rushed into Vietnam. Companies seeking an early-mover advantage in what looked like a promising market raced to enter as soon as the necessary reforms were enacted.<sup>39</sup>

FDI into Vietnam slowed sharply in 1997 with the onset of the Asian financial crisis. Subsequent reforms were enacted to further streamline approval processes and improve operating conditions for foreign invested enterprises. While FDI as a percentage of gross fixed capital formation never regained the lofty levels of the early 1990s, substantial inflows were sustained and the depth of Vietnam's FDI inflows began rising again in the last few years.

Foreign direct investment was an important enabler of Vietnam's expanding merchandise exports. **Figure 4.5** tracks the proportion of Vietnam's merchandise exports that were generated by foreign invested enterprises from 1995 to 2010. This proportion soared over the late 1990s and early 2000s, and has exceeded 50% every year since 2003. In 2010, 54% of Vietnam's merchandise exports came from foreign invested

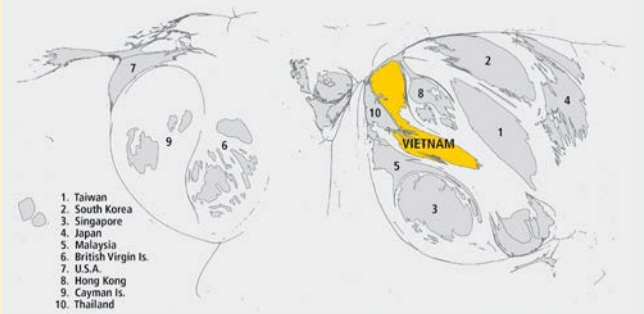
firms. One analysis found that "on average, US\$2.5 of FDI in Vietnam is associated with US\$1 of exports."<sup>40</sup>

The geography of Vietnam's inward FDI also bears a close resemblance to its merchandise imports, reflecting how foreign investors imported inputs for their products as well as capital equipment from their home countries. From 1990 to 2010, 45% of Vietnam's inward FDI based on registered capital came from Taiwan (China), Korea, Singapore, and Japan<sup>41</sup> – the origins of 36% of Vietnam's 2011 merchandise imports (See **Map 4.4**). Research based on FDI that was actually disbursed (rather than registered capital) indicates Japan was actually the largest source followed by Singapore<sup>42</sup> – adjusting somewhat the pattern shown on the map – but nonetheless under this method the same four countries remain Vietnam's largest foreign investors.

Before turning to the implications of this pattern for Vietnam's challenges and opportunities moving forward, it is useful to note how Vietnam's inward FDI is reflective of its geography and history. Vietnam's location in Southeast Asia and long coastline positioned it to take advantage of the development of multi-country production chains in East and South-East Asia that coincided historically with its economic reforms. An African or Latin American country would not have had the same opportunities that were available for Asian countries connecting to Japan, Korea, Taiwan (China), and Singapore over this time period.

Vietnam's history also shaped its integration in other ways. Vietnam was controlled by various Chinese dynasties from 111 B.C. until the 10th century resulting in cultural ties and

Map 4.4 Vietnam's Inward FDI, 1990 – 2010  
(based on registered capital)



45% of Vietnam's inward FDI came from the same sources as 36% of its 2011 imports: Taiwan (China), Korea, Singapore, and Japan. Source: Generated based on data reported on Vietpartners website (<http://www.vietpartners.com/statistic-fdi.htm>)

shares a similar political system with China, but the Sino-Vietnamese relationship in recent decades has been marked by substantial friction. The Sino-Vietnamese War of 1979 remains a fresh memory and territorial disputes in the South China Sea remain an active source of conflict. One study found that, even after controlling for various factors, mainland Chinese firms were late movers investing in Vietnam. On the other hand, firms with Chinese cultural but not political linkages (from Taiwan and Hong Kong) were early movers. Vietnam's colonial history and political system were also reflected in French firms and firms from socialist countries being early investors in Vietnam.<sup>43</sup>

### Challenges and Opportunities

Vietnam's trade and FDI patterns as described in the previous two subsections reflect its focus on labor-intensive manufacturing (e.g., apparel and footwear) and assembly (e.g. electronics), along with crude oil and agricultural products. 75% of Vietnam's exports in 2008 were either low-tech or resource based (compared to only 42% of China's exports in the same year).<sup>44</sup>

The economic development challenge associated with such low-tech manufacturing and assembly is the limited value-added Vietnam contributes to its exports. Recall that assembly accounted for only 4% of the cost of producing an iPhone and an even smaller fraction of its selling price. Moving forward, Vietnam will have to follow other countries that have pursued similar development models up the value chain, growing its productivity to reduce its reliance on low labor costs as a basis for attracting investment.

Wage levels in Vietnam in early 2012 were less than half those prevailing in China: unskilled laborers in Vietnam made only \$100–150 per month, versus \$300 in southern China's major manufacturing zones.<sup>45</sup> Vietnam's cost advantage, however, was offset by lower productivity. One study put Vietnam's labor productivity at only 53% of

China's (and 40% of Thailand's), classifying Vietnam as a "low productivity country."<sup>46</sup>

Macroeconomic instability, rapid wage inflation, strikes, skill shortages, infrastructure bottlenecks, and other complaints caused many analysts and investors to scale back their exuberance about Vietnam's prospects in 2011 and 2012. Headlines such as The Economist's "Vietnam: A Tiger at Bay" and Forbes Asia's "Vietnam Loses its Luster" began to appear. Vietnam's present growth model had not yet run out of steam, but there were clear signs that more reforms would be required to sustain the country's growth. The IMF's July 2012 staff report provided the following guardedly optimistic assessment of Vietnam's medium term prospects: "Growth prospects remain good as Vietnam transitions to middle-income status, if macroeconomic stability is restored and sustained and structural reforms, notably in the financial and SOE [state-owned enterprise] sectors, are implemented."<sup>47</sup>

Broader studies of Vietnam's economy offered a wide range of reforms that could help Vietnam sustain its growth trajectory – reforms that range from restructuring state-owned enterprises to strengthening its banking system. The unifying thread across the recommendations on offer was a focus on accelerating productivity growth.

Focusing in on measures to deepen its global connectedness, Vietnam, at its current stage of development, could reap large gains simply by improving many of the basic enablers of connectedness that were featured in the policy regressions presented earlier in this chapter. While the policy changes Vietnam has already implemented have been transformational, it still lags on many of the policy metrics covered in the regression analysis.



Vietnam provides a vivid example of how connectedness in terms of both trade and inward FDI can help a country escape from extreme poverty and achieve middle-income status.



Starting on the trade pillar, on the World Economic Forum's 2011 Executive Opinion Survey, the second most problematic factor cited for exporting from Vietnam (after finding customers) was "access to imported inputs at competitive prices." And the most problematic factor for importing was "tariffs and non-tariff barriers."<sup>48</sup> Vietnam's weighted average applied tariffs remain higher than those of its immediate neighbors, indicating at least some basis for respondents' emphasis of tariff reduction. And on the same survey, "burdensome import procedures" was the second most problematic factor for importing.

Turning to the capital pillar, Vietnam also ranks in the bottom half among countries covered in the DHL Global Connectedness Index on the two metrics shown in regressions to be associated with capital pillar depth: regulatory quality and capital account openness. Across the trade and capital pillars, indications that administrative barriers loom even larger than physical infrastructure bottlenecks could be advantageous because they could potentially be addressed more quickly than new infrastructure can be planned and constructed.

To summarize, Vietnam provides a vivid example of how connectedness in terms of both trade and inward FDI can help a country escape from extreme poverty and achieve middle-income status. Connectedness contributed to Vietnam's growth directly by providing foreign capital and expertise as well as access to foreign markets, and it also contributed indirectly by spurring improvements in Vietnam's internal business environment.

### Mexico

Mexico is classified as an upper middle income country by the World Bank: its GDP per capita in 2011 was seven times higher than Vietnam's, but still only one-fifth as high as the Netherlands'. In terms of global connectedness, Mexico trailed both of those countries, ranking 84th overall (93rd

on depth and 68th on breadth). Its depth score was similar to that of other countries with comparable structural conditions.

Mexico is a particularly interesting country to focus on this year because of investors' rising expectations about its future performance. Slowing growth and rising costs in the BRIC countries are shifting attention to what Jim O'Neill of Goldman Sachs dubbed the MIST countries of Mexico, Indonesia, South Korea, and Turkey. And among those, O'Neill had identified Mexico and Turkey as the most attractive at the moment.<sup>49</sup>

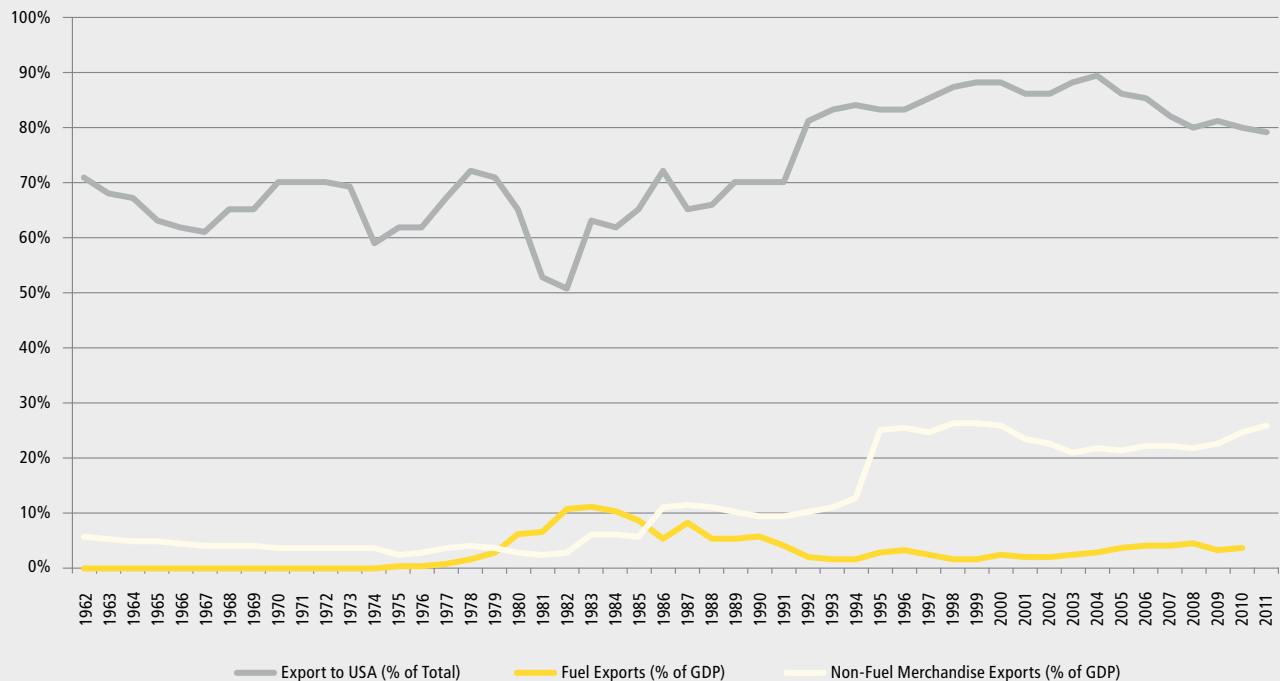
**Figure 4.6** tracks the intensity of Mexico's merchandise exports (split into fuel exports and non-fuel exports) as well as the proportion of Mexico's exports destined for the United States over the period from 1962 to the present. While the Netherlands and Vietnam grew their merchandise exports depth almost continuously year after year over the past two to three decades, Mexico's depth has expanded in fits and starts – stalling over extended periods. The last decade-and-a-half represent such a period: Mexico's non-fuel exports reached 25% of GDP in 1995 (one year after the launch of the North American Free Trade Agreement), fell in the early 2000s and after recovering over the last few years were still only 26% of GDP in 2011.

To dig into the reasons for the pattern shown in Figure 4.6, the next section describes the policy initiatives that have shaped Mexico's trade integration. Then, the following section turns to what Mexico's breadth (particularly its focus on exporting to the United States) implies for opportunities to increase its depth and identifies specific policy implications.

### Deepening Trade Integration

Mexico's trade policy from the 1930s until the early 1980s was characterized by high levels of protection, reflecting a strategy of "import substitution industrialization" that was

**Figure 4.6**  
Mexico's Fuel and Non-Fuel Merchandise Exports Depth and U.S. Share of Mexican Exports, 1962–2011



After decades of focusing inward, Mexico's non-fuel exports depth rose significantly from 1982 to 1986, and then again surged in the first half of the 1990s as the NAFTA agreement was negotiated, signed, and came into effect. Almost 80% of Mexico's merchandise exports go to the United States, though this ratio has decline from a peak of 89% in 2004. Sources: UN Comtrade Database and World Development Indicators

formalized in the 1950s.<sup>50</sup> This economic model, popular among developing countries in Latin America and elsewhere over this historical period, combined high barriers to international trade and investment with substantial state intervention designed to accelerate industrial development. Levels of protection in Mexico, at their peak, subjected imports of nearly all types of goods that Mexico produced domestically to import license requirements and set tariffs as high as 100%.

One important early exception to Mexico's inward focus was the "Border Industrialization Program" that was launched in 1965 and created the industry known as the "maquiladoras." This program provided special allowances and incentives to permit foreign (nearly all U.S.-based) companies to import materials into Mexico to be assembled or otherwise worked on and then re-exported. The program started slowly, employing only 62,000 workers in 1975.<sup>51</sup> Initially, it required factories to be located close to the U.S.-Mexico border but that and other restrictions were later relaxed.

The maquiladoras and Mexico's non-fuel exports began a first wave of rapid growth in the early 1980s, as Mexico opened up in response to a severe balance-of-payments crisis brought on by falling oil prices. Among the key reforms that stimulated the growth of the maquiladoras

was relaxation of restrictions on inbound FDI, another reminder of the complementarities between trade and capital openness.<sup>52</sup> The crisis also prompted a devaluation of the Mexican peso which reduced the cost of Mexico's exports. In 1983, Mexico began relaxing its system of import license requirements and tariffs, and 1986 saw its accession to the General Agreement on Tariffs and Trade (GATT), committing it to further liberalization. By 1990, there were nearly 2000 maquiladora plants that employed nearly half a million people.<sup>53</sup>

The next major acceleration of Mexico's trade integration came in 1994, the year that the North American Free Trade Agreement (NAFTA) was implemented. NAFTA was Mexico's second free trade agreement, following an accord reached with Chile in 1992. In 1994, Mexico also entered the Organization for Economic Cooperation and Development (OECD). December of 1994, however, also brought another economic crisis – the "tequila crisis" – that caused the peso to lose nearly half its value in six months and real wages to fall by 20%.<sup>54</sup> Again, administrative integration and a sharp drop in the cost of Mexico's exports prompted its depth score to rise, with the maquiladoras at the center of the action. Before their growth stalled around the turn of the millennium, the number of maquiladora plants would reach nearly 4000 and employ 1.3 million people.<sup>55</sup>

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Having made great strides in opening up its international policies, Mexico should focus on improving its domestic business environment.

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After NAFTA, Mexico continued negotiating and signing free trade agreements, ultimately reaching free trade accords covering more trade partners than any other country. In the decade after NAFTA, Mexico signed free trade agreements with various countries across Latin America. It also signed a free trade agreement with the European Union in 1997 (which came into force in 2000) and another with Japan in 2004 (implemented in 2005). The Japanese agreement was particularly groundbreaking as Mexico was only the second country to sign a free trade agreement with Japan, after Singapore. As of 2012, Mexico had free trade agreements in force with 44 countries.<sup>56</sup>

### Expanding Breadth to Increase Depth

Despite Mexico's expanding set of free trade accords since NAFTA, its merchandise exports depth has not increased significantly since the mid-1990s. Competition from China is a widely cited factor – and one that will be revisited in the conclusion to this case example. However, less attention has been paid to insufficient breadth as a barrier to increasing Mexico's exports depth.

Between 2007 and 2011 (a timespan chosen to smooth out the impact of the financial crisis), 81% of Mexico's merchandise exports went to the U.S. It is natural that the U.S. should be Mexico's top export partner, but should the U.S. share of Mexico's exports be quite so high? As the first section of this chapter explained, case-by-case analysis is required to determine whether a country's breadth is too high or too low.

The results of one such analysis are summarized in **Figure 4.7**. The pie chart on the left side depicts Mexico's actual exports, and the pie chart on the right shows the export pattern that is predicted by a gravity model that takes into account nine cultural, administrative, geographic, and economic (CAGE) factors, whose effects were estimated on the basis of a cross-country regression. The model implies

that Mexico has substantial scope to broaden its export distribution.

The model estimates that the proportion of Mexico's exports destined for the U.S. should be closer to 70% than 80%. This, however, does not imply that Mexico should reduce its exports to the U.S.! Rather, Mexico should increase its exports to the rest of the world. The model also provides an indication of which markets remain underexploited: Europe and Asia.

Mexico's limited exports to Europe and Asia (only 9% of the total) are surprising in light of the fact that Mexico, as described above, has free trade agreements with the EU and Japan. The sticking point is that Mexico's reliance on imported (particularly U.S. but increasingly also Asian<sup>57</sup>) inputs in its manufacturing means that many products produced in Mexico don't count as Mexican under the rules of Mexico's trade agreements. In 2006, Mexican content accounted for only 34% of the value of Mexico's manufacturing exports (as compared to 51% for China).<sup>58</sup>

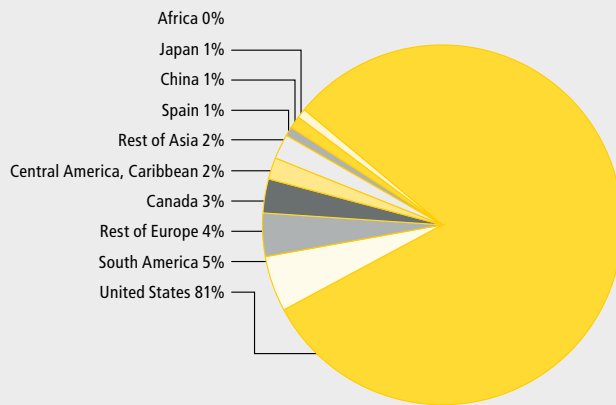
In addition to restricting Mexico's exports breadth, its heavy reliance on imported inputs also means that Mexico benefits less from its depth than other countries do. According to an analysis by Jaime Serra, who was Mexico's lead negotiator on the North American Free Trade Agreement (NAFTA), each dollar of Mexican exports generates only \$1.80 of economic activity in Mexico, versus comparable figures of \$2.30 for Brazilian exports and \$3.30 for U.S. exports.<sup>59</sup>

The clear implication for Mexico is to strengthen its domestic supply base in order to increase its domestic value added and reduce its reliance on imported inputs, without resorting to protectionism. How? The analysis at the beginning of this chapter highlighted how both international and domestic policies can spur connectedness. Having

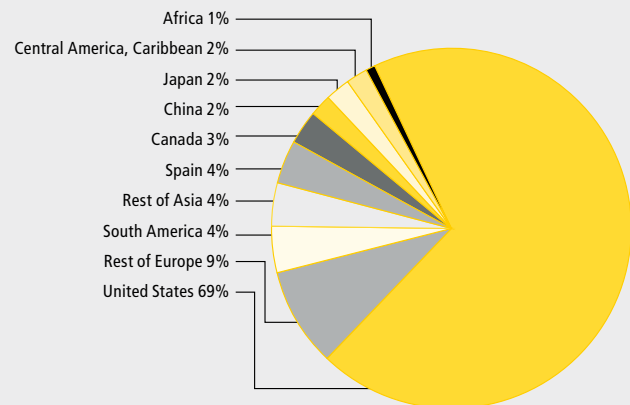
Figure 4.7

## Mexico Exports Breadth Analysis: Actual Exports Versus CAGE Based Gravity Model Prediction

## Actual Exports (2007–2011)



## CAGE Model Prediction



A CAGE based gravity model indicates that the U.S. share of Mexico's merchandise exports would naturally tend toward closer to 70% than its current level of roughly 80%. It also indicates that Mexico likely has untapped export opportunities specifically in Europe and Asia. Source: Actual exports from UN Comtrade Database. CAGE Model prediction is based on the gravity model analysis underlying the CAGE Comparator™. For more details, refer to [www.ghemawat.com/cage](http://www.ghemawat.com/cage).

made great strides in opening up its international policies, Mexico should focus on improving its domestic business environment.

Increasing the intensity of competition in the domestic market to reduce the cost of inputs would help. Mexico ranks 100th out of 132 countries on the Domestic Competition component of the World Economic Forum's 2012 Enabling Trade Index. Increasing competition in the domestic market by opening up to more foreign competition is a way that connectedness itself could contribute to improving this aspect of the business environment.

Improving physical security is also an obvious priority. Physical Security is Mexico's weakest pillar on the Enabling Trade Index, ranking 126th out of 132 countries.<sup>60</sup> Other priorities to improve Mexico's domestic business environment include long-stalled labor, education and energy sector reforms.

The importance of building up Mexico's domestic supply base also highlights the role of the private sector in improving a country's connectedness. As Mexico's government implements the necessary reforms, managers at export-oriented factories and their suppliers, along with domestically focused businesses and entrepreneurs, will need to identify specific opportunities, invest, and guide the development of Mexico's supply base.

### A Window of Opportunity

Competition from China for low-cost manufacturing and assembly was cited above as one of Mexico's principal

challenges over the past decade. Barclays estimates that competition from China slowed Mexico's GDP growth by 0.6% per year between 2002 and 2006.<sup>61</sup> But rising production costs in China as well as high fuel prices impacting transportation costs support the optimistic expectations about Mexico's prospects mentioned at the opening of this section.

Mexico's wages are now only 29% higher than China's, as compared to nearly 400% a decade ago.<sup>62</sup> For serving the North American market, this reduced labor cost gap combines with transport savings and delivery time advantages to have improved Mexico's competitiveness as a manufacturing exporter. Surface shipments from Mexico to the U.S. take a few days, versus "between 20 days and two months" from China.<sup>63</sup> Mexico's demographics and macroeconomic fundamentals are also favorable.

Some recent movement as of this writing on anti-monopoly and labor market reforms provide encouraging signals that Mexico may enact the policy changes that are necessary to take advantage of this window of opportunity – although such signals have, in the past, failed to culminate in real changes. If this time turns out to be different, complementarities between increasing depth and breadth could power a new wave of gains from connectedness. As Mexico exports more to North America, it can attain the scale economies required to build a local supply base in more industries, which in turn would enable it to fulfill the promise embodied in the breadth of its trade agreements.



## Conclusion

This chapter opened by presenting evidence that the potential gains from deepening global connectedness add up to trillions of dollars. It then identified a set of policies that cross-country regression analysis has shown to be significant contributors to the depth of global connectedness. And three case examples – the Netherlands, Vietnam, and Mexico – were presented to highlight the importance of customizing connectedness strategies to individual countries' conditions. The 8 points that follow summarize implications for thinking through a country's global connectedness strategy:

1. *Remap the world from your country's perspective.* Use "rooted maps" like those presented in this report to visualize your country's connectedness pattern. By re-sizing countries based on their trade, capital, information, and people flows but otherwise maintaining their familiar geographic shapes and positions, rooted maps help reveal drivers of connectedness. Geography was a central factor in all three case examples: Netherlands as a gateway to Europe, Vietnam connecting into Asian production networks and Mexico with its focus on exports to the United States.
2. *Account for other structural and historical factors.* A properly customized connectedness strategy must also account for other structural factors. Look, for example, at which other countries share your country's language, have similar legal and political systems, and so on. And don't forget about history, one indication of the importance of which is provided by the fact that colonial ties dismantled decades and in some cases centuries ago still have large impacts on trade flows. If two countries share a historical colonial linkage, they will typically trade almost three times more than two otherwise similar countries that don't share colonial ties. Spain's prominence on Mexico's export map (in Mexico's country profile at the back of this report) exemplifies how rooted maps can also highlight such non-geographic similarities.
3. *Increase depth via policies that target international flows.* Every country, even the Netherlands, has much to gain by increasing the depth of its connections with other countries. The regression analysis highlighted the impacts of tariffs, border administration, capital account openness and other policy areas that directly target international flows. And note that the regression analysis also associated specific policy measures with each of the four pillars of the DHL Global Connectedness Index, facilitating the development of strategies to improve connectedness at the pillar level.
4. *Increase depth through domestic policy as well.* The regression analysis also revealed that improving a country's domestic business environment can contribute powerfully to deepening its global connectedness. Regulatory quality, for example, was an even better predictor of capital pillar depth than capital account openness. Without deep roots in and understanding of a particular country, foreign firms may be even more sensitive than domestic firms to its business environment.<sup>64</sup> In light of the strides Mexico has already made on policies that directly target international flows, it makes sense for Mexico to focus now on domestic policy levers to deepen its connectedness.



5. *Analyze breadth to find untapped markets.* Some countries focus too much on only a few trading partners, whereas others miss out on nearby opportunities. Gravity models, as the Mexico example demonstrated, can help figure out whether a country should increase or decrease its breadth and even specify where to target development efforts. And while working on the rebalancing that such models indicate, don't treat global connectedness as a zero-sum game; expand your connections rather than just shifting shares from one country to another.

6. *Focus on value, not on volume.* That was how Pascal Lamy, director-general of the WTO, summarized the implications of the ADDING Value scorecard, pointing out how trade professionals still often think mainly about increasing trade volumes rather than the value generated via trade.<sup>65</sup> Vietnam and Mexico can both tap into large gains from increasing the share of domestic value-added in their exports at the same time as they continue growing their trade volumes.

7. *Recognize the importance of imports.* Don't mistake an export-only development strategy for a true global connectedness strategy. Recall the emphasis Vietnam's exporters placed on challenges associated with the cost of imports. Imports of capital goods – machinery, equipment, and infrastructure-related products – boost productivity by facilitating the adoption of new technologies. New evidence suggests that imports might be associated with even more domestic innovation than exports. Importing is also usually the first step in the internationalization of small and medium-sized businesses that later go on to export.

8. *Recognize the long-term shift in world demand.* It can take years, if not generations, to build robust international connections; they are often based on factors that, like the proportion of a country's population that speaks a particular foreign language, evolve slowly over time. Given these adjustment lags, it is important for every country to think through and anticipate the effects of the eastward shift in the world's economic center of gravity. To participate in the world's fastest-growing markets, most Western countries – both advanced economies such as the Netherlands and emerging markets like Mexico – will need to increase their breadth by dealing more effectively with cross-country differences and distances. Vietnam, on the other hand, may naturally find the breadth of its exports decline as it finds more demand closer to home.

## 5. DHL Global Connectedness Index Methodology



This chapter explains how the DHL Global Connectedness Index was constructed and describes the rationale for key methodological decisions. The methodology remains almost unchanged versus the previous edition of the index, but the data have been completely updated both to extend the results up to 2011 as well as to incorporate revised source data for prior years. Please refer to Appendix B for a complete list of data sources and related technical notes.

This explanation proceeds in five parts. First, it describes the selection of a set of specific aspects of the broad phenomena of global connectedness that are covered in the Index. Second, it defines quantitative metrics for the measurement of each of these aspects of connectedness. Third, it identifies gaps in the availability of the data required to calculate those metrics, and discusses how such gaps were addressed. Fourth, it describes how these diverse metrics were made comparable before they were combined into the index ("normalization"). Fifth, it explains the aggregation and weighting mechanisms via which the metrics were finally combined into the index.

Throughout this chapter, the example of the Netherlands (the top ranked country in the 2012 DHL Global Connectedness Index) will be used to illustrate the calculations that were performed to generate the index.

## 1. Selecting Aspects of Connectedness to Measure

Global connectedness is a multifaceted phenomenon incorporating many types of connections, so its measurement necessarily requires one to proceed from a specific definition of the phenomenon to the selection of a set of underlying metrics that will be included in its assessment.

For the purpose of constructing the DHL Global Connectedness Index, the starting point is the definition of global connectedness articulated in Chapter 1 of this report: Global Connectedness refers to the *depth* and *breadth* of a country's integration with the rest of the world, as manifest by its participation in international flows of *products and services, capital, information, and people*.

As this definition implies, connectedness is measured here based on actual flows that take place between and among countries. The focus on actual flows is motivated by the sense that while connectivity or the technical potential for connectedness has improved a great deal thanks to changes in transportation and communications technologies, actual levels of flows significantly lag that potential. This focus also allows the index to be generated based solely on hard data, which makes it ideal for dispelling myths about globalization ("globaloney").

Furthermore, by focusing the index itself on actual flows, enablers of connectedness (such as the political variables covering tariffs, embassies, and so on, included in many other globalization indexes) may be analyzed separately in relation to the index (since they are not mixed into the index along with the actual flows). This is intended to make the index more useful for policymakers seeking insight into how to foster the aspects of connectedness that they deem most constructive for their countries.

The definition of global connectedness used here also identifies four specific categories of flows that are covered as the



**Table 5.1**  
**Pillars and Components**

Pillars	Components
1. Trade	1.1 Merchandise Trade
	1.2 Services Trade
2. Capital	2.1. Foreign Direct Investment (FDI) Stocks
	2.2. Foreign Direct Investment (FDI) Flows
	2.3. Foreign Portfolio Equity Stocks
	2.4. Foreign Portfolio Equity Flows
3. Information	3.1. International Internet Bandwidth
	3.2. International Telephone Call Minutes
	3.3. Trade in Printed Publications
4. People	4.1. Migrants (foreign born population)
	4.2. International Tourists (departures and arrivals)
	4.3. International Students

four pillars of the index. These are: trade flows (products and services), investment flows (capital), information flows, and people flows. While the selection of these categories of flows was ultimately a subjective choice, they seem to encompass broadly the aspects of international connectedness that have maximum relevance for business people, policymakers, and ordinary citizens concerned with the impact of globalization on their life opportunities.

Within these four pillars, individual types of flows become the component building blocks from which the index is built up. These were selected via an extensive search for data on actual flows within each of the four pillars followed by the choice of a small set of flows within each based on their importance to the overall phenomena of connectedness as well as the availability of hard data on which they could be measured. The twelve components that were ultimately selected across the four pillars are shown in **Table 5.1**.

A few points merit elaboration regarding the selection of aspects of connectedness for measurement. First, two departures from the focus on actual flows are noteworthy. In the capital pillar, flows are paired with stocks. Foreign investment stocks (the result of flows accumulated over time) are an important broader indicator of enduring connections between countries that have ongoing effects via corporate governance, and in the case of FDI, through managerial control. Investment stocks also help balance out the high year-to-year volatility of capital flows.

The second departure from the standard focus on flows is the inclusion of international internet bandwidth, which is used as a proxy for international internet traffic, because of lack of available data on the latter.

Additionally, it is worth noting that some aspects of connectedness were excluded due to normative considerations. Because the policy component of this analysis is intended to help countries identify and pursue opportunities to capture more of the potential benefits of connectedness, flows that are generally viewed as primarily harmful (especially on a global net basis) are not covered in the index. For example, an index focused on harms might include international transmission of diseases and cross-border environmental pollution, but these are not covered here.

Somewhat more controversially, the coverage of capital flows in this index is restricted to equity capital, and excludes cross-border debt. This reflects both academic research demonstrating the more favorable impacts of international equity investment (especially foreign direct investment but also portfolio equity) relative to debt investment, as well as the obvious harm caused by the debt crisis unfolding at the time of this writing.

## 2. Defining Metrics

Having identified the set of component flows based on which global connectedness will be measured, the next step is to identify appropriate metrics to quantify each of these flows. Building on the definition of global connectedness shown above, these metrics must capture each flow's depth as well as its breadth. Consider each of these aspects in turn.

*Depth* refers to the size of a country's international flows as compared to a relevant measure of the size of its domestic economy. It reflects in simple terms how important or

**Table 5.2**  
**Depth Metrics by Component**

Pillar	Component	Domestic Comparison for Depth
1. Trade	1.1 Merchandise Trade	GDP
	1.2 Services Trade (Commercial Services Only)	GDP
2. Capital	2.1. Foreign Direct Investment (FDI) Stocks	GDP
	2.2. Foreign Direct Investment (FDI) Flows (moving average of last 3 years)	Gross Fixed Capital Formation (GFCF)
	2.3. Foreign Portfolio Equity Stocks	GDP
	2.4. Foreign Portfolio Equity Flows (moving average of last 3 years)	GDP
3. Information	3.1. International Internet Bandwidth	Internet Users
	3.2. International Telephone Call Minutes	Population
	3.3. Trade in Printed Publications (H.S. Code 49 covering printed books, newspapers, pictures, etc.)	Population
4. People	4.1. Migrants (foreign born population)	Population
	4.2. International Tourists (departures and arrivals of overnight tourists)	Population
	4.3. International Students	Tertiary Education Enrollment

pervasive interactions with the rest of the world are in the context of business or life in a particular country.

For the merchandise trade component, depth is measured by comparing each country's merchandise exports and imports to its GDP, yielding the metrics merchandise exports as percent of GDP and merchandise imports as percent of GDP. Thus, in 2011, the Netherlands' merchandise exports accounted for 79% of its GDP and merchandise imports accounted for 71%.

A comparison of the Netherlands versus the United States illustrates the importance of scaling depth metrics based on the size of each country's national economy. U.S. exports were more than twice as large as Netherlands' exports in 2011, but the U.S. economy was roughly eighteen times larger. Thus, even though the U.S. was a much larger exporter, Netherlands was far more connected than the U.S. internationally with respect to merchandise exports, as reflected by its exports as percent of GDP ratio

of 79% versus the U.S.'s only 10%. As tends to be the case, the vast majority of economic activity in a large country such as the U.S. takes place within the country's borders, whereas small countries tend to have a much higher proportion of their business activity involving foreign buyers or sellers.

To implement these depth measures, a relevant measure of a country's domestic economy must be selected as the basis of comparison for each type of flow. Such measures are identified in **Table 5.2**, which also provides additional details about the flow metrics used for assessing depth.

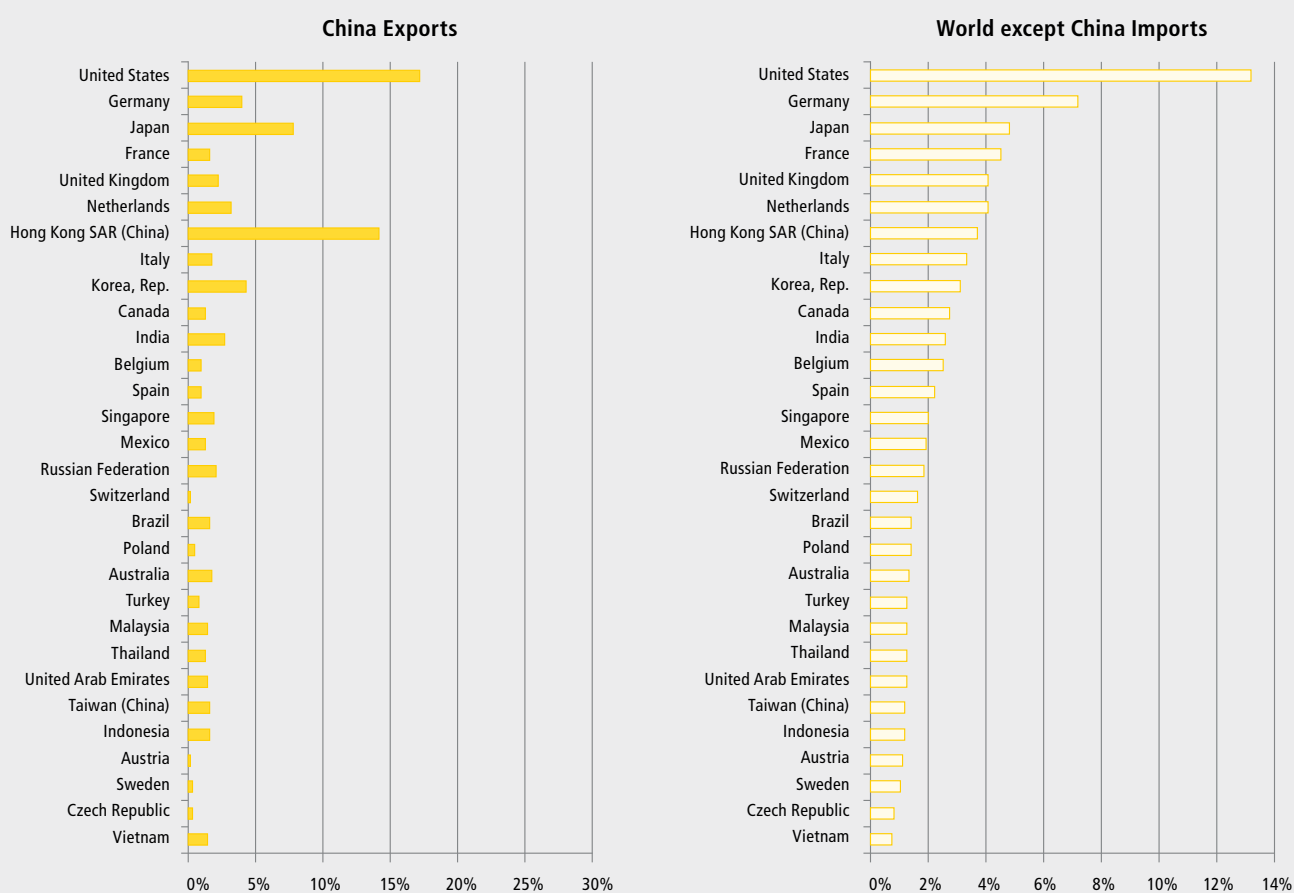
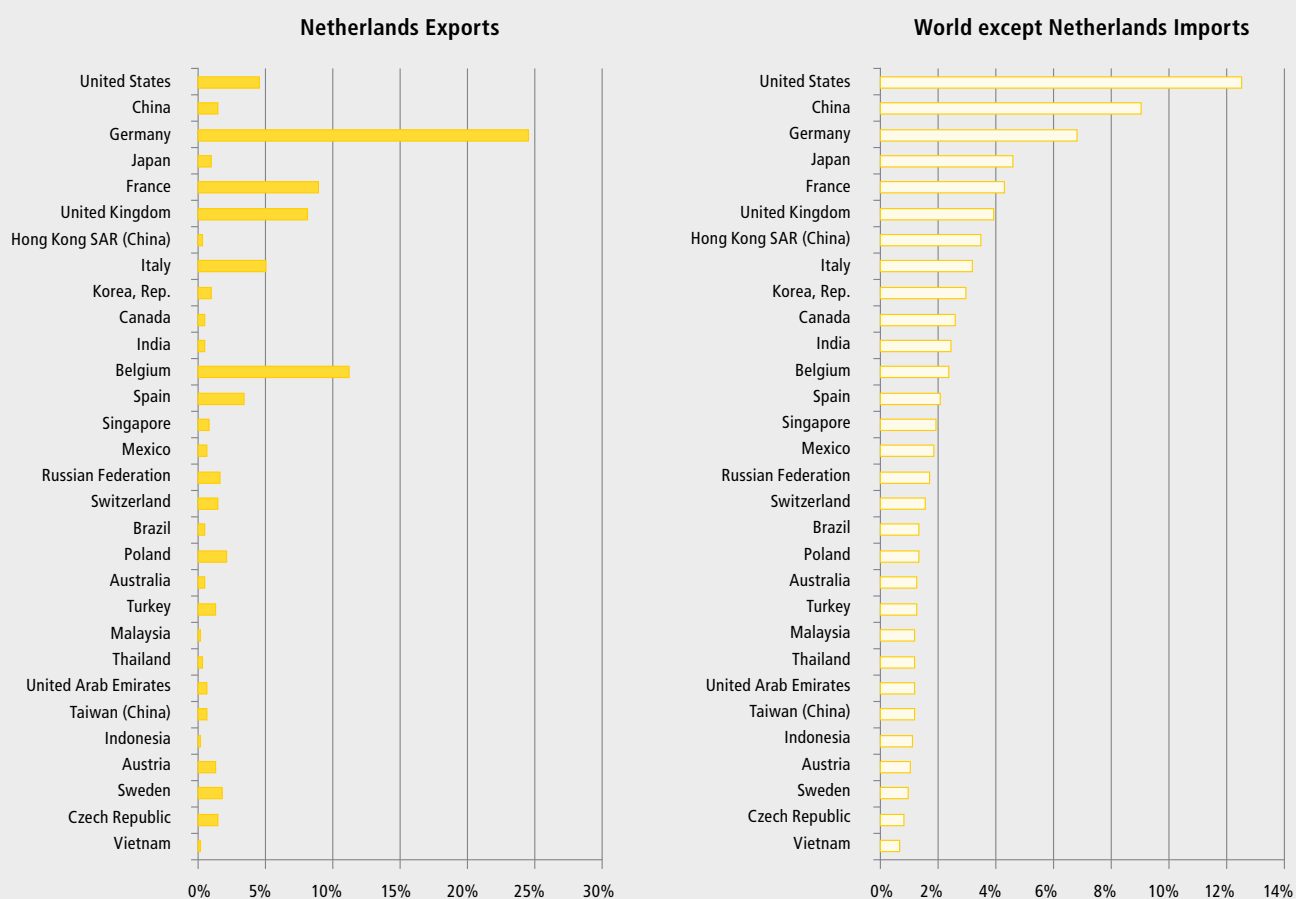
Foreign direct investment (FDI) flows are compared with gross fixed capital formation. This measure is a more precise domestic match for FDI flows than GDP, allowing the metric to characterize the percentage of a country's fixed capital investment that takes place within versus across international borders.

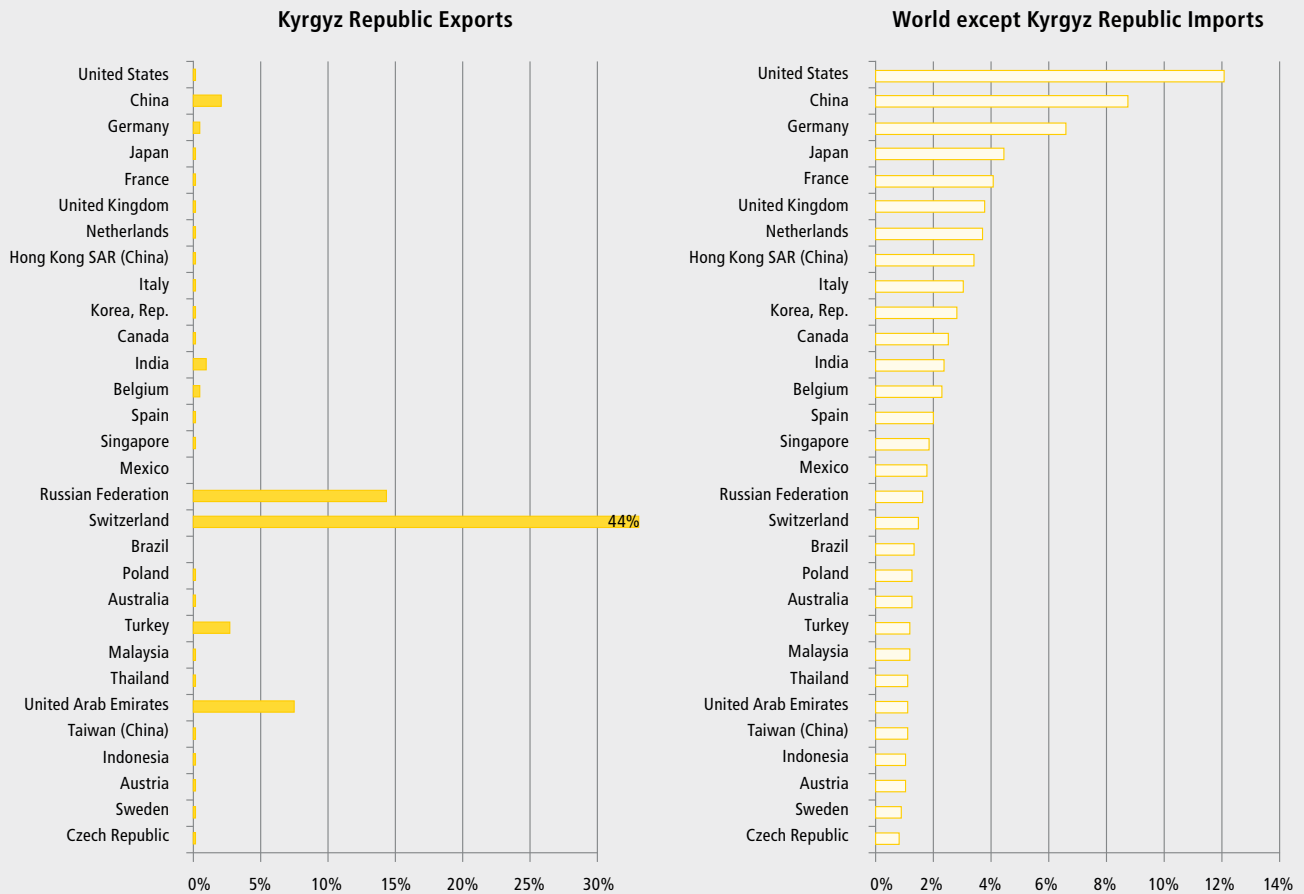
FDI and portfolio equity flows are measured using a three year moving average because these flows tend to be especially volatile. Year-to-year fluctuations in such metrics tend to reflect macroeconomic conditions and merger waves more than long-lived changes in levels of connectedness.

For the measurement of the depth of services trade, only commercial services are included; government services are excluded.

*Breadth* measures how closely a country's distribution of international flows across its partner countries matches the global distribution of the same flows in the opposite direction. The breadth of a country's merchandise exports, for example, is measured based on the difference between the distribution of its exports across destination countries versus the rest of the world's distribution of merchandise imports.

Figure 5.1  
Country Exports vs. Rest of World Imports (%), Top 30 Importing Countries Only





As the focus in breadth is on the geographical distribution of the flows, the only methodological change introduced this year is to consider the absolute value of FDI flows when calculating breadth, instead of the directional (positive or negative) flows. This change does not have a significant impact on country ranks or broad patterns of connectedness, but eliminates the possibility of there being anomalous results in some country profiles, for example due to a large negative value caused by a repatriation of flows, which is better captured in depth than breadth.

To elaborate how this metric works, compare the breadth of the Netherlands' merchandise exports versus those of China and Kyrgyz Republic. Netherlands ranks 35th globally on this metric, and China and Kyrgyz Republic are the top and bottom ranked countries on this metric respectively. **Figure 5.1** juxtaposes each of these countries' distributions of merchandise exports by destination against the distribution of the rest of the world's merchandise imports. To make the charts easier to read, only the top 30 importers are shown in each pair. Notice how China's exports most closely resemble world imports, Netherlands' bear fairly close resemblance, and Kyrgyz Republic's bear almost no resemblance at all (more than 40 % of Kyrgyz Republic's

exports go to Switzerland alone, even though Switzerland accounts for less than 2% of world imports). Thus, China's exports have the most breadth, Netherlands' are close behind, and Kyrgyz Republic's have very low breadth.

To convert the graphical pattern exhibited on these charts into a numerical metric, the absolute value of the difference between each bar on the right and left charts in each set (exports minus world except focal country imports) is computed, and then these values are summed vertically across all of the bars (partner countries). The scores are then re-scaled between 0 and 1 and subtracted from the number 1 in order to reverse the order, so that the country with the highest breadth score (lowest sum of the absolute values) is the country whose exports best match world imports and the country with the lowest score (highest sum of the absolute values) has the least close match between its exports and world imports.

To summarize mathematically, breadth is calculated for a Country A by finding the Sum across all partner countries of [Absolute Value of (Partner Country's % Share of Country A's Exports minus Partner Country's % Share of World Imports Excluding Country A's Imports)]. Then, these



**Table 5.3**  
**Breadth Coverage by Component**

Pillar	Component	Covered in Breadth?
<b>1. Trade</b>	1.1 Merchandise Trade	Yes
	1.2 Services Trade	No
<b>2. Capital</b>	2.1. Foreign Direct Investment (FDI) Stocks	Yes
	2.2. Foreign Direct Investment (FDI) Flows (average of last 3 years)	Yes
	2.3. Foreign Portfolio Equity Stocks	Yes (Outward Only)
	2.4. Foreign Portfolio Equity Flows (average of last 3 years)	No
<b>3. Information</b>	3.1. International Internet Bandwidth	No
	3.2. International Telephone Call Minutes	Yes
	3.3. Trade in Printed Publications (H.S. Code 49 covering printed books, newspapers, pictures, etc.)	Yes
<b>4. People</b>	4.1. Migrants (foreign born population)	Yes
	4.2. International Tourists (departures and arrivals of overnight tourists)	Yes (Inbound Only)
	4.3. International Students	Yes (Inbound Only)

results are re-scaled between 0 and 1 and then subtracted from the number 1.

### 3. Addressing Data Gaps

Given the very large data requirements of an analysis such as the DHL Global Connectedness Index (more than one million data points were used to produce the index over a seven year period), there are many cases where the targeted data are unavailable. Data availability constraints are especially severe for breadth and for smaller and less developed countries. Therefore, three methods are employed to generate the index in spite of missing data: exclusion of some components from the breadth analysis, adjusting weights to account for missing countries for specific components, and filling gaps via interpolation and repetition.

First, it is not possible to cover all of the same component flows in breadth as in depth, because for many countries data are only available on the total magnitude of the flows in question, not how they are distributed by origin and destination. Therefore, some components that are

included in depth are excluded from breadth, as shown in **Table 5.3**.

Second, there are also situations where the data required to calculate metrics for both depth and breadth are available for some but not all of the target countries. In such cases the weights for calculating a country's pillar and index scores are adjusted so that the weight that would normally be applied to a missing component is redistributed proportionally across the remaining available components.

If many of the components for a particular country are unavailable, a country's score at the pillar or the overall index level may be deemed to be based on inadequate data and thus not displayed. To address such cases the following rules<sup>1</sup> are applied:

- At the pillar level, if more than 30% of the depth components (by weight) or if more than 50% of the breadth components (by weight) are missing, then the pillar score is not displayed.
- For the overall index, if more than 33% of the depth components (by weight) or if more than 50% of the breadth components (by weight) are missing, the overall index is not computed, and the country is dropped from the analysis.

Why the stricter rules for depth than for breadth and the acceptance of only a subset of components for the latter? This reflects both the challenge entailed with producing breadth measures (which require hundreds of data points per country covered for each component versus only two for depth) and their importance and novelty.

Furthermore, the differences in coverage may also be justified in part by the fact that the unavailable data are unlikely to be distributed randomly. The countries that are missing data, especially in the capital pillar, where the data con-

Table 5.4 Missing Components in Depth  
(Data Missing for Full Component in at Least One Year)

Component	Data Gap	Remedy
<b>3.2 Telephone Call Minutes</b>	No 2011 Data	2010 data repeated in 2011
<b>4.1. Migrants</b>	Outbound: Most recent available data are from 2000–2002	2000–2002 data repeated in all years
	Inbound: Data available only for 2005 and 2010	Linear interpolation employed for 2006–2009, 2010 data repeated in 2011
<b>4.2. Tourists</b>	Outbound (Departures): No 2011 Data	2010 data repeated in 2011
<b>4.3. Students</b>	No 2011 Data	2010 data repeated in 2011

straints are most severe, tend to have more limited levels of capital market integration (lower depth). When a country has a very low level of depth on a given component, its score on breadth for that component is less relevant for the assessment of its overall level of global connectedness.

Third, for both depth and breadth, there are cases where the required data for one or more countries are available in some but not all of the years for which the index is to be calculated. The 2012 DHL Global Connectedness Index is based primarily on 2011 data, but where 2011 data are unavailable, the most recent available data are used.

When there are gaps in the available data in the middle of a data series (e.g. data are available for 2007 and 2009 but not 2008), linear interpolation is used to fill the gaps. When data gaps lie before or after all of the available data, they are filled by repeating the values for the closest available year. So, for example, if the latest data available are from 2010 (no data are available for 2011), the 2010 value will be repeated in 2011. This method was selected instead of linear extrapolation because the trend directions on many international flows shifted in recent years due to the economic crisis, making linear extrapolation particularly prone to large errors.

In most cases, data gaps affect only a subset of the countries on any given component in any given year. However, there are some components where all countries have missing data for at least one year. Those cases and the remedies employed are described in **Tables 5.4 and 5.5**. Note that the data gaps are especially severe in 2011 for breadth, owing to much more limited and slower reporting of flows by partner as compared to aggregate flows.

Table 5.5 Missing Components in Breadth  
(Data Missing for Full Component in at Least One Year)

Component	Data Gap	Remedy
<b>2.1. FDI Stocks</b>	No 2011 Data	2010 data repeated in 2011
<b>2.2. FDI Flows</b>	No 2011 Data	2010 data repeated in 2011
<b>2.3. Portfolio Equity Stocks</b>	No 2011 Data	2010 data repeated in 2011
<b>3.2. Telephone Call Minutes</b>	No 2011 Data	2010 data repeated in 2011
<b>4.1. Migrants</b>	Most recent available data are from 2000–2002	2000–2002 data repeated in all years
<b>4.2. Tourists</b>	No 2011 Data	2010 data repeated in 2011
<b>4.3. Students</b>	No 2011 Data	2010 data repeated in 2011

Finally, the data available to calculate the breadth of telephone call minutes only covers a sample of each country's partners, and the size of that sample varies across countries and years. The sample coverage is deemed adequate for calculating breadth only where it covers 70 percent or more of a country's total international calling minutes in a given year.

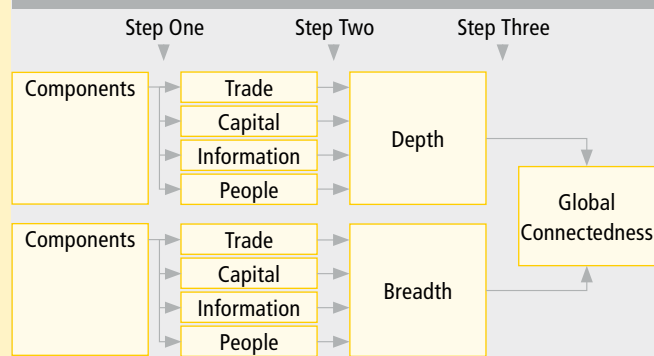
#### 4. Making Metrics Comparable (Normalization)

After computing the metrics and filling in the data gaps as described above, the results must be made comparable or "normalized" before they can be combined into the index. This is necessary because the various metrics have different units, distributions, etc.

The simple method employed in the DHL Global Connectedness Index to make all of the diverse metrics comparable is to convert each distribution into its corresponding percentile ranks, over the period from 2005 to 2011. Thus, rather than comparing the different metrics directly, instead, each country's rank position on each of the metrics' distributions is compared.

For example the Netherlands' merchandise exports as percentage of GDP ratio (the metric employed to measure the depth of its merchandise exports), was 79% in 2011. 96% of the scores across all countries on this metric over the period from 2005 to 2011 were lower than 79%. Thus, Netherlands' raw score of 79% converts to a normalized score of .96. The United States' score of 10% converts to a normalized score of .07, because only 7% of the all of the scores observed on that metric were less than 10%.

**Figure 5.2**  
Aggregation Structure



Note that the normalization calculations are performed over the period 2005 to 2011 rather than year-by-year. This method, called “panel normalization,” was selected because it permits the comparison of global connectedness scores across this period to spot trends in levels of connectedness. Because this method requires re-normalizing data each time the index is updated, scores should only be compared across years within a single edition of the index. Readers should, for example, assess changes from 2010 to 2011 by comparing 2010 versus 2011 scores in this edition of the index rather than by comparing 2011 scores from this edition with 2010 scores from the prior edition.<sup>2</sup>

## 5. Aggregation and Weights

The overall index is built up from its constituent components via three steps, as illustrated in **Figure 5.2**. First, the individual components are aggregated into pillars, resulting in the computation of distinct pillars of the same type for depth and breadth. Then, overall depth and breadth scores are computed. Finally, these two dimensions of the analysis are combined to produce the DHL Global Connectedness Index.

At each stage of the aggregation process, the constituent components are added together as weighted sums, according to the weights shown in **Table 5.6**. These weights reflect the authors’ judgment of the relative importance and value of each pillar and component to the overall evaluation of global connectedness, based on the rationales described below.

The trade and capital pillars are each assigned higher weights (35% each) than the information and people flow pillars (15% each). This reflects the fact that trade and capital flows are significantly more integrated on a global basis as indicated by depth measures at the global level, described in Chapter 1. While the specific levels vary based on the flows covered and the definitions used, there is a clear step change between the trade and capital metrics and

**Table 5.6**  
Weights

Pillar (Weight % of Total)	Depth Component (Weight % of Pillar)	Breadth Component (Weight % of Pillar)
<b>1. Trade (35%)</b>	1.1 Merchandise Trade (75%)	1.1 Merchandise Trade (100%)
	1.2 Services Trade (25%)	-
<b>2. Capital (35%)</b>	2.1. FDI Stocks (25%)	2.1. FDI Stocks (25%)
	2.2. FDI Flows (25%)	2.2. FDI Flows (25%)
	2.3. Portfolio Equity Stocks (25%)	2.3. Portfolio Equity Stocks (50%)
	2.4. Portfolio Equity Flows (25%)	-
<b>3. Information (15%)</b>	3.1. Internet Bandwidth (40%)	-
	3.2. Telephone Call Minutes (40%)	3.2. Telephone Call Minutes (67%)
	3.3. Trade in Printed Publications (20%)	3.3. Trade in Printed Publications (33%)
<b>4. People (15%)</b>	4.1. Migrants (33%)	4.1. Migrants (33%)
	4.2. Tourism (33%)	4.2. Tourism (33%)
	4.3. International Students (33%)	4.3. International Students (33%)

the people and information metrics, a pattern that generally bears out across metrics, though finer analyses do tend to indicate a higher level of intensity of information flows relative to people flows.

Within the trade pillar, 75% of the weight is assigned to merchandise trade and 25% is assigned to services trade. Over the past decade, merchandise trade on average has been four times larger than services trade. However, the growth rate of services trade was higher. Thus, in 2009, merchandise trade was only 3.5 times larger than services trade. Reflecting this long term trend, we assign 3 times higher weight to merchandise versus services trade. Note that since 2009, faster merchandise exports growth than services exports growth has pushed the ratio of merchandise to services exports back up to 4.2x in 2011. However, for consistency with the first edition of the index, weights have not been adjusted.

In the capital pillar, equal weights are assigned to FDI and portfolio equity. The relative magnitudes of FDI versus portfolio equity investment stocks vary year-to-year, without one consistently far outstripping the other, as was the case in the trade pillar. Furthermore, within FDI, equal weights are assigned to both stocks and flows because they

both measure distinct and important aspects of connectedness: flows indicating a country's current participation in cross-border investment activity and stocks indicating its participation in another country's economy via the exercise of its rights as a shareholder (and manager in the case of FDI).

Among the information components, telephone calls and internet bandwidth are both assigned 40% each, double the weight assigned to trade in books and other printed publications (20%). This reflects the imperfection of the latter indicator (publications are often printed in multiple locations rather than traded across borders in physical form) and the trend toward more information flows taking place in digital form rather than via physical trade in printed publications.

Within the people pillar, equal weights are assigned to migration, tourism, and student mobility. Each of these components reflects a distinct aspect of connectedness and spawns distinct effects that span across the other components (e.g. students serving as conduits of information and migrants promoting trade). Without a logical basis for assigning different weights, they are treated as having equal importance.

Thus, in Step 1, Netherlands' trade pillar score for depth is computed as follows. Netherlands' normalized scores for each of the trade components are: merchandise exports .96, merchandise imports, .93, services exports .84, and services imports .84. Within each type of flow, the weights are divided equally among the directional flows. Thus, the 75% weight assigned to merchandise trade becomes 37.5% each for merchandise exports and merchandise imports, and the 25% weight assigned to services trade becomes 12.5% each for services exports and services imports. Multiplying the normalized scores times the corresponding weights and then adding up the products, Netherlands receives a score of .92 for the trade pillar for depth.

Step 2 proceeds in the same fashion as Step 1, but includes all of the components across the four pillars to generate overall results for the depth and breadth dimensions. Even if the rules for dealing with missing data outlined above do not allow a given pillar for a particular country to be displayed, the available components from that pillar are still used to generate the depth and breadth results, if missing data rules allow those aggregate results to be shown.

Finally in Step 3, the depth and breadth scores are combined, applying equal weights to both. However, to ensure that the different shapes of their distributions do not interfere with equal weighting at this step, and to make the results more intuitively understandable for readers, both depth and breadth scores are re-scaled on a scale of 0 to 50. Then, they are simply added together, producing the final Global Connectedness Index, with possible scores ranging from 0 to 100.

Thus, the Netherlands' original depth and breadth scores of .84 and .81 respectively were rescaled to become 42.2 and 45.8. The sum of these scores, 88, is Netherlands' overall score in the 2012 DHL Global Connectedness Index.



## Unique Features of the DHL Global Connectedness Index

The DHL Global Connectedness Index is not the first or only publication to rank countries based on their levels of international integration. One of the earliest treatments of this topic to receive widespread attention was the A.T. Kearney/Foreign Policy Globalization Index, but this has not been updated since its 2007 edition.<sup>3</sup> Perhaps the most systematic and up-to-date index to receive significant attention is the KOF Index of Globalization, which recently released its 2012 edition.<sup>4</sup> The Ernst & Young Globalization Index, generated in cooperation with the Economist Intelligence Unit (EIU), is another related treatment that has recently been updated, now in its 2011 edition.<sup>5</sup> The points below highlight the unique features that distinguish the DHL Global Connectedness Index from prior research in this area:

### **Breadth**

Prior indexes have all focused on what is termed here depth rather than breadth. Thus, they really measure only the intensity of a country's international connections without taking into account whether those connections are distributed globally or are more narrowly concentrated with a particular set of partner countries. Thus, for example, Belgium was the top ranked country on the 2012 edition of the KOF Index of Globalization, even though Belgium's international connections are quite regionally focused on Europe (79% of Belgium's merchandise exports were destined to other European countries in 2010). By introducing a unique measure of breadth, the DHL Global Connectedness Index distinguishes countries that are globally connected from those that only have strong international rather than global connections.

### **Directionality**

The DHL Global Connectedness Index provides, wherever data are sufficient, parallel treatment of outward and inward flows between countries, enabling meaningful comparisons of the directionality of each country's global connectedness. This permits the distinction between a country such as Cambodia that does project significant outward flows but has quite limited inward connectedness from a country such as Jordan, where the opposite phenomenon is observed. Prior treatments typically build up from bi-directional flows, precluding such comparisons.

### **Focus on Actual Flows**

Other globalization indexes generally include both actual flows (such as trade) and enablers of or barriers to flows (such as tariffs). By focusing clearly on actual flows, the DHL Global Connectedness Index both provides a clearer picture of connectedness (versus connectivity) and supports analysis of the impact of specific structural and policy enablers on connectedness (because they are not intermingled in the calculation of the index). This is intended to make the DHL Global Connectedness Index a more useful reference for policymakers seeking to increase connectedness.

### **Hard Data Only**

The DHL Global Connectedness Index is calculated exclusively based on hard data inputs, whereas most other indexes, particularly where they incorporate enablers of connectedness, add in qualitative inputs from surveys. The focus on hard data is particularly useful given the prevalence of significant misperceptions about levels of globalization among the general public as well as among business executives, as discussed in Chapter 1.

### **Importance Based Weighting Scheme**

Among the more academically oriented indexes such as KOF, statistical methods such as Principal Component Analysis are used to assign weights to pillars and components to capture as much of the information content in the component variables as possible in the composite index. For the DHL Global Connectedness Index, this method was rejected because the results of such statistical methods do not necessarily reflect the relative importance of the various components for the users of the index. For example, within its treatment of Economic Globalization – Actual Flows, the 2012 KOF index assigned a higher weight to Income Payments to Foreign Nationals (27%) than to Trade (21%), even though trade flows are much larger and figure far more prominently in the general discourse about globalization. The Ernst & Young/EIU index does assign weights according to the relative importance of its components, but does so based on a survey of executives which as noted above introduces the problem of public misperceptions about globalization. The DHL Global Connectedness Index, rather, uses weights assigned based on the authors' judgment about the relative importance of the pillars and components, as described in this chapter. While this method is necessarily subjective, it does overcome the concerns raised here about the methods used in prior indexes.

### **Recent Data**

While 2011 data were not available for all of the components in the DHL Global Connectedness index, the majority of components are updated to 2011, whereas the 2012 edition of the KOF index relies primarily on 2009 data.



## II. Country Profiles









# NETHERLANDS

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	1/140	1/140	0	88/100	88/100	0
<b>Depth</b>	5/140	6/140	1	42/50	42/50	0
<b>Breadth</b>	3/140	3/140	0	46/50	46/50	0
<b>Trade Pillar</b>	1/140	1/140	0	90/100	90/100	0
<b>Capital Pillar</b>	4/66	4/66	0	88/100	88/100	0
<b>Information Pillar</b>	2/101	2/101	0	89/100	88/100	1
<b>People Pillar</b>	13/106	13/106	0	78/100	78/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	5/140		—	
Merchandise Trade (% of GDP)	10/140	17/140	79%	71%
Services Trade (% of GDP)	24/139	26/139	15%	14%
<b>Capital</b>	6/122		—	
FDI Stock (% of GDP)	8/132	22/140	112%	70%
FDI Flows (% of GFCF)	11/133	89/140	26%	9%
Portfolio Equity Stock (% of GDP)	7/102	7/97	69%	49%
Portfolio Equity Flows (% of GDP)	15/129	7/126	2%	1%
<b>Information</b>	10/140		—	
Internet Bandwidth (Bits per Second per Internet User)	7/140		162,532	
International Phone Calls (Minutes per Capita)	25/140	24/140	236	233
Printed Publications Trade (USD per Capita)	10/135	14/135	\$86	\$61
<b>People</b>	38/116			
Migrants (% of Population)	71/139	36/140	5%	11%
Tourists Dep./Arr. Per Capita	11/93	39/136	1.1	0.7
International Students (% of Tertiary Education Enrollment)	97/130	38/104	2%	4%

## Summary

The Netherlands is the top ranked country on the DHL Globa the first year for which the index has been calculated. It earn scores on both depth and breadth. The Netherlands ranks in cept for people, on which it holds the 13<sup>th</sup> position, behind 1 of the Netherlands' connectedness profile is its larger outwa the Netherlands ranks 11<sup>th</sup> on outward FDI flows, but ranks o

# HOW TO READ THE COUNTRY PROFILES

## Key Scores and Trends

The upper left corner of each profile summarizes the profiled country's overall global connectedness score as well as its scores by dimension (depth vs. breadth) and its pillar scores (trade, capital, information, and people). 2010 and 2011 scores and ranks are shown along with changes in each of the scores and ranks from 2010 to 2011. Changes in scores indicate shifts in absolute levels of connectedness. Changes in ranks provide comparisons of a country's relative standing among the countries covered in the index.

## Connectedness Score Trend

Below the scores summary, each profile contains a line chart showing the country's overall scores for each year from 2005 to 2011. Please note that the vertical axis in the connectedness score trend graph is calibrated in accordance with each country's individual level of connectedness in order to allow for maximum granularity. The progression of the graph thus needs to be understood in relation to the individual scaling of the axis.

## Depth

The depth section provides each country's outward and inward depth scores and ranks at the pillar and component levels.

**Outward/Inward:** Results are reported separately by direction. Outward trade flows refer to exports, inward trade flows refer to imports, and so on.

**Ranks:** Each of the ranks is followed by a slash (/) and the number of countries for which data are available for that metric. For example, the Netherlands' rank of 8/132 for Outward FDI Stock (% of GDP) means that the Netherlands has the 8th highest score on that component, out of 132 countries for which data are available. For details on the minimum data requirements for displaying pillar level results, please refer to Chapter 5.

**Levels:** Depth levels are reported using measures that compare international flows and stocks to relevant indicators of the size of a country's domestic economy, as described in Chapter 5. The units depend on the domestic comparison employed, and are described in parentheses after each component's name. Thus, for example, Merchandise Trade is displayed as a percent, because the domestic comparison is "(% of GDP)".

For a list of data sources, please refer to Appendix B.

## Summary

A brief textual summary is provided for each country, describing selected highlights of the country's connectedness profile. The material covered varies from country to country, but typical content in the country profile summaries includes: the country's overall connectedness rank and how it has changed over time, aspects of connectedness where the country's ranks are particularly high or low, and comparisons versus other countries in the same region.

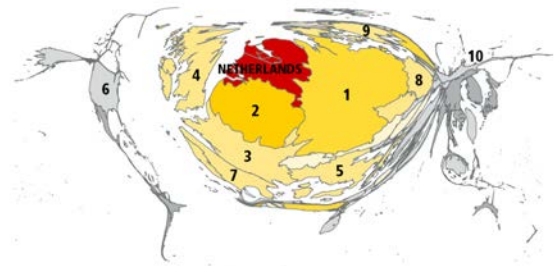
## Rooted Map

The upper right corner of each profile contains a map where all other countries are sized in proportion to their share of the profiled country's merchandise exports, and are colored based on the profiled country's share of their imports. The profiled country's proportion of the map area is held constant across all of these maps to make them more directly comparable. Thus, these maps do not show differences in the share of exports in the profiled countries' economic output. Furthermore, these maps show gross exports; no adjustments are made to remove double-counting of re-exported goods. These maps were generated based on data from the United Nations Commodity Trade Database (Comtrade) and the International Monetary Fund's Direction of Trade Statistics Database.

For additional context, a list of major export products is also provided for each country. The source for these lists is the CIA World Factbook.

## Rooted Map

Netherlands's Merchandise Exports, 2010



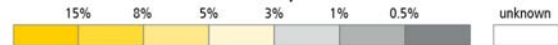
### Top Export Destinations

1. Germany (24%)
2. Belgium (11%)
3. France (9%)
4. U.K. (8%)
5. Italy (5%)
6. U.S.A. (5%)
7. Spain (3%)
8. Poland (2%)
9. Sweden (2%)
10. Russia (2%)

### Major Export Products

Machinery and equipment, chemicals, fuels; foodstuffs

### Netherlands's Share of Partners' Imports



## Breadth

The breadth section parallels the depth section described to the left. However, rather than showing raw breadth scores (which do not have meaningful units), the intra-regional share of each country's flows is shown. In some cases, these ratios were computed based on only a sample of a country's flows for which partner-by-partner data were available, which could be corrected for more adequately in terms of breadth scores than in terms of intra-regional shares. Thus, these shares should be treated as approximate, especially for the telephone calls component, where such data limitations were most severe.

For a list of data sources, please refer to Appendix B.

## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	13/140		—	
Merchandise Trade	35/140	4/140	80%	57%

<b>Capital</b>	3/67		—	
FDI Stock	3/41	3/46	68%	68%
FDI Flows	10/38	9/41	71%	62%
Portfolio Equity Stock	4/66	—	45%	—

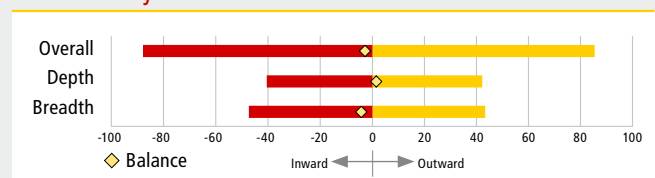
<b>Information</b>	4/101		—	
International Phone Calls	12/101	31/101	76%	75%
Printed Publications Trade	12/135	5/135	94%	74%

<b>People</b>	7/124		—	
Migrants	17/139	20/139	46%	23%
Tourists Departures/Arrivals	—	3/107	—	84%
International Students	—	26/93	—	81%

## Directionality

The directionality chart shows the profiled country's outward and inward overall, depth, and breadth scores. A diamond is used to mark the directional balance, calculated as the difference of the outward minus inward scores.

## Directionality



## Legend

The "—" symbol for Not Applicable is used in the depth and breadth sections to identify cells in the tables that are not filled in for any country. Levels can only be calculated at the component level, so this symbol always appears in the level columns of the pillar rows. In breadth, this symbol also appears in the cells that refer to components that are excluded from breadth (but covered in depth), typically due to data constraints. The "—" symbol indicates that a particular cell could not be filled in for the profiled country due to limitations in the available data for that specific country.

global Connectedness Index, a position it has held since 2005, earns its position based on a balanced combination of high scores in the top 5 countries on all of the pillars of the index except 11 other European countries. One of the notable aspects is outward rather than inward FDI flows. As a major foreign investor, the Netherlands ranks only 89<sup>th</sup> on inward FDI flows.

Albania.....	99	Guatemala .....	149	Paraguay .....	199
Angola .....	100	Guinea .....	150	Peru .....	200
Argentina .....	101	Guyana.....	151	Philippines.....	201
Armenia .....	102	Honduras.....	152	Poland.....	202
Australia.....	103	Hong Kong SAR (China).....	153	Portugal .....	203
Austria .....	104	Hungary .....	154	Qatar.....	204
Azerbaijan.....	105	Iceland .....	155	Romania.....	205
Bahamas, The.....	106	India.....	156	Russian Federation.....	206
Bahrain .....	107	Indonesia .....	157	Rwanda.....	207
Bangladesh .....	108	Iran, Islamic Republic .....	158	Saudi Arabia.....	208
Barbados.....	109	Ireland.....	159	Senegal .....	209
Belarus .....	110	Israel .....	160	Serbia.....	210
Belgium.....	111	Italy.....	161	Singapore.....	211
Benin.....	112	Jamaica .....	162	Slovak Republic.....	212
Bolivia .....	113	Japan .....	163	Slovenia.....	213
Bosnia & Herzegovina .....	114	Jordan .....	164	South Africa .....	214
Botswana .....	115	Kazakhstan .....	165	Spain.....	215
Brazil.....	116	Kenya .....	166	Sri Lanka .....	216
Brunei Darussalam .....	117	Korea, Republic .....	167	Sweden .....	217
Bulgaria.....	118	Kuwait.....	168	Switzerland .....	218
Burkina Faso .....	119	Kyrgyz Republic.....	169	Syrian Arab Republic .....	219
Burundi .....	120	Lao PDR .....	170	Taiwan (China) .....	220
Cambodia.....	121	Latvia .....	171	Tajikistan.....	221
Cameroon .....	122	Lebanon .....	172	Thailand .....	222
Canada.....	123	Lithuania .....	173	Togo.....	223
Central African Republic.....	124	Luxembourg .....	174	Trinidad and Tobago.....	224
Chad.....	125	Macedonia, FYR.....	175	Tunisia.....	225
Chile.....	126	Madagascar .....	176	Turkey .....	226
China.....	127	Malawi .....	177	Uganda .....	227
Colombia.....	128	Malaysia.....	178	Ukraine .....	228
Costa Rica .....	129	Mali.....	179	United Arab Emirates .....	229
Côte d'Ivoire.....	130	Malta .....	180	United Kingdom .....	230
Croatia .....	131	Mauritius.....	181	United States.....	231
Cyprus.....	132	Mexico .....	182	Uruguay .....	232
Czech Republic.....	133	Moldova.....	183	Uzbekistan .....	233
Denmark .....	134	Mongolia.....	184	Venezuela, RB .....	234
Dominican Republic .....	135	Morocco.....	185	Vietnam .....	235
Ecuador .....	136	Mozambique .....	186	Yemen, Republic.....	236
Egypt, Arab Republic.....	137	Myanmar.....	187	Zambia .....	237
El Salvador .....	138	Namibia .....	188	Zimbabwe .....	238
Estonia .....	139	Nepal .....	189		
Ethiopia.....	140	Netherlands .....	190		
Fiji .....	141	New Zealand .....	191		
Finland .....	142	Nicaragua.....	192		
France .....	143	Niger.....	193		
Gabon .....	144	Nigeria .....	194		
Georgia .....	145	Norway .....	195		
Germany .....	146	Oman .....	196		
Ghana .....	147	Pakistan .....	197		
Greece.....	148	Panama.....	198		

# ALBANIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	112/140	111/140	-1	29/100	30/100	-1
<b>Depth</b>	65/140	73/140	8	23/50	21/50	2
<b>Breadth</b>	133/140	125/140	-8	6/50	9/50	-3
<b>Trade Pillar</b>	127/140	121/140	-6	30/100	31/100	-1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	72/101	77/101	5	47/100	44/100	3
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

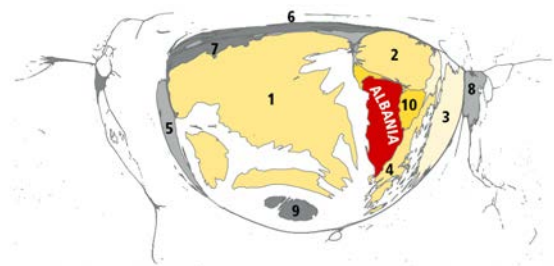
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	59/140		—	
Merchandise Trade (% of GDP)	121/140	52/140	15%	42%
Services Trade (% of GDP)	18/139	11/139	18%	18%
<b>Capital</b>	80/122		—	
FDI Stock (% of GDP)	92/132	63/140	2%	37%
FDI Flows (% of GFCF)	83/133	30/140	1%	29%
Portfolio Equity Stock (% of GDP)	100/102	77/97	0%	1%
Portfolio Equity Flows (% of GDP)	60/129	67/126	0%	0%
<b>Information</b>	60/140		—	
Internet Bandwidth (Bits per Second per Internet User)	61/140		19,038	
International Phone Calls (Minutes per Capita)	66/140	29/140	38	221
Printed Publications Trade (USD per Capita)	70/135	88/135	\$2	\$4
<b>People</b>	31/116		—	
Migrants (% of Population)	6/139	81/140	21%	3%
Tourists Dep./Arr. Per Capita	12/93	32/136	1.1	0.7
International Students (% of Tertiary Education Enrollment)	8/130	104/104	25%	0%

## Summary

Albania's connectedness has increased steadily since 2005 and ranks 112<sup>th</sup> out of 140 countries worldwide on this year's DHL Global Connectedness Index. However, it still holds the next-to-last rank among European countries. Albania's connectedness is higher on depth (65<sup>th</sup> out of 140) than breadth (133<sup>rd</sup> out of 140). Its highest position is on depth in the people pillar, where it holds the 31<sup>st</sup> position out of 116 countries. Albania has high outward people flows across all three types studied: 6<sup>th</sup> on migration, 12<sup>th</sup> on tourism and 8<sup>th</sup> on international education. Albania's high depth ranks on services trade are also noteworthy: 18<sup>th</sup> on services exports and 11<sup>th</sup> on services imports.

## Rooted Map

Albania's Merchandise Exports, 2011



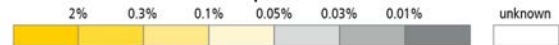
### Top Export Destinations

1. Italy (53%)
2. Serbia (9%)
3. Turkey (7%)
4. Greece (5%)
5. Spain (4%)
6. Germany (3%)
7. Switzerland (3%)
8. China (2%)
9. Malta (2%)
10. Macedonia (2%)

### Major Export Products

Textiles and footwear; asphalt, metals and metallic ores, crude oil; vegetables, fruits, tobacco

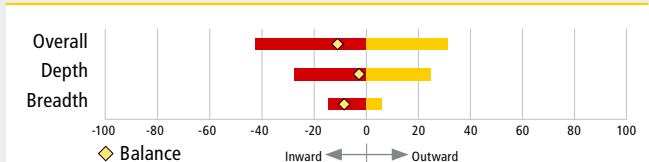
### Albania's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	138/140		—	
Merchandise Trade	136/140	123/140	88%	78%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	81/101		—	
International Phone Calls	59/101	99/101	83%	95%
Printed Publications Trade	106/135	68/135	100%	81%
<b>People</b>	.		—	
Migrants	121/139	35/139	87%	86%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

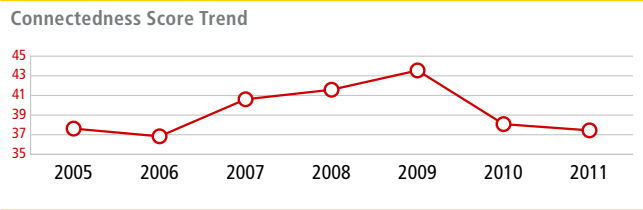




# ANGOLA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	90/140	87/140	-3	37/100	38/100	-1
Depth	99/140	92/140	-7	16/50	17/50	-1
Breadth	71/140	76/140	5	22/50	21/50	1
Trade Pillar	59/140	56/140	-3	54/100	53/100	1
Capital Pillar	-	-	-	-	-	-
Information Pillar	99/101	99/101	0	19/100	19/100	0
People Pillar	97/106	97/106	0	27/100	27/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	64/140		-	
Merchandise Trade (% of GDP)	21/140	123/140	65%	21%
Services Trade (% of GDP)	136/139	18/139	1%	16%

Capital	77/122		-	
FDI Stock (% of GDP)	61/132	133/140	6%	6%
FDI Flows (% of GFCF)	25/133	140/140	14%	-28%
Portfolio Equity Stock (% of GDP)	41/102	-	7%	-
Portfolio Equity Flows (% of GDP)	34/129	75/126	0%	0%

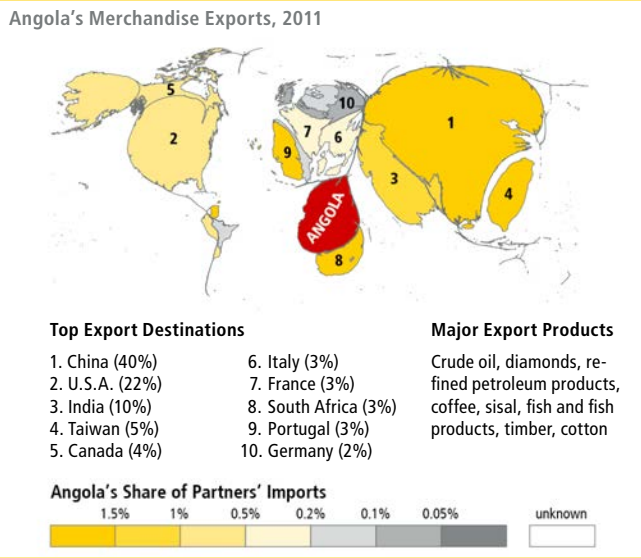
Information	135/140		-	
Internet Bandwidth (Bits per Second per Internet User)	134/140		517	
International Phone Calls (Minutes per Capita)	130/140	127/140	2	7
Printed Publications Trade (USD per Capita)	-	-	-	-

People	89/116			
Migrants (% of Population)	61/139	128/140	6%	0%
Tourists Dep./Arr. Per Capita	-	118/136	-	0.0
International Students (% of Tertiary Education Enrollment)	23/130	93/104	11%	0%

## Summary

Angola holds the 90<sup>th</sup> rank out of 140 countries globally and ranks 9<sup>th</sup> out of the 29 countries that were analyzed within the Sub-Saharan Africa region. Angola’s connectedness is highest on the trade pillar, on which it ranks 6<sup>th</sup> within its region and 59<sup>th</sup> worldwide. Angola ranks 21<sup>st</sup> worldwide on merchandise exports depth, reflecting its large oil exports. 97% of Angola’s merchandise exports in 2011 were destined for countries outside of Sub-Saharan Africa. Angola also ranks 18<sup>th</sup> on services imports depth. Angola’s connectedness rose from 2006 to 2009 before declining almost back to its 2006 level by 2011.

## Rooted Map



## Breadth

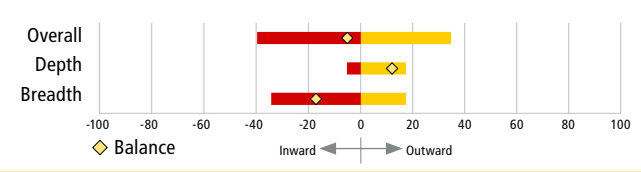
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	55/140		-	
Merchandise Trade	70/140	43/140	3%	7%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	85/101		-	
International Phone Calls	83/101	64/101	27%	8%
Printed Publications Trade	-	-	-	-

People	113/124		-	
Migrants	123/139	42/139	66%	70%
Tourists Departures/Arrivals	-	79/107	-	15%
International Students	-	92/93	-	100%

## Directionality

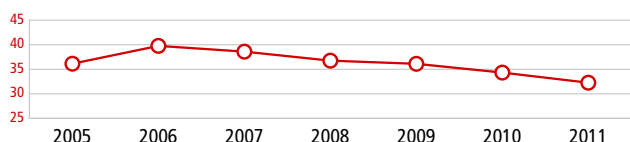


# ARGENTINA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	106/140	102/140	-4	32/100	34/100	-2
<b>Depth</b>	126/140	123/140	-3	8/50	9/50	-1
<b>Breadth</b>	64/140	57/140	-7	24/50	26/50	-2
<b>Trade Pillar</b>	100/140	89/140	-11	40/100	43/100	-3
<b>Capital Pillar</b>	65/66	64/66	-1	17/100	18/100	-1
<b>Information Pillar</b>	63/101	57/101	-6	53/100	54/100	-1
<b>People Pillar</b>	46/106	46/106	0	54/100	54/100	0

### Connectedness Score Trend



## Depth

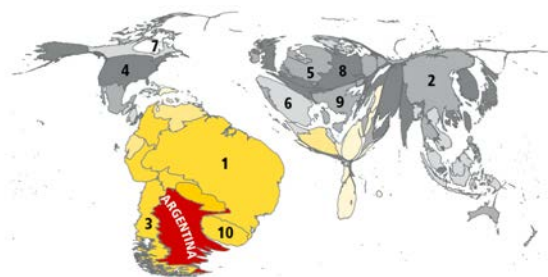
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	132/140		—	
Merchandise Trade (% of GDP)	107/140	130/140	19%	17%
Services Trade (% of GDP)	104/139	124/139	3%	4%
<b>Capital</b>	103/122		—	
FDI Stock (% of GDP)	59/132	98/140	7%	21%
FDI Flows (% of GFCF)	79/133	101/140	1%	7%
Portfolio Equity Stock (% of GDP)	97/102	66/97	0%	1%
Portfolio Equity Flows (% of GDP)	83/129	108/126	0%	0%
<b>Information</b>	77/140		—	
Internet Bandwidth (Bits per Second per Internet User)	49/140		25,712	
International Phone Calls (Minutes per Capita)	78/140	102/140	26	27
Printed Publications Trade (USD per Capita)	72/135	84/135	\$2	\$5
<b>People</b>	95/116		—	
Migrants (% of Population)	116/139	71/140	2%	4%
Tourists Dep./Arr. Per Capita	61/93	85/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	129/130	·	0%	·

## Summary

Argentina ranks 106<sup>th</sup> out of the 140 countries covered on this year's DHL Global Connectedness Index and 16<sup>th</sup> among the 22 countries analyzed in South & Central America & the Caribbean. Its connectedness has gradually been declining since 2006. Argentina has much higher breadth (ranking 64<sup>th</sup> globally) than depth (126<sup>th</sup>), which is typical of the pattern observed among large countries. Argentina's global connectedness is strongest on the people pillar, on which it ranks 46<sup>th</sup> out of 106 countries and 2<sup>nd</sup> out of 11 countries in South America. Argentina ranks 2<sup>nd</sup> worldwide on the breadth of its inbound tourist arrivals.

## Rooted Map

### Argentina's Merchandise Exports, 2011



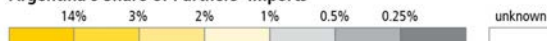
#### Top Export Destinations

1. Brazil (22%)
2. China (8%)
3. Chile (6%)
4. U.S.A. (6%)
5. Netherlands (3%)
6. Spain (3%)
7. Canada (3%)
8. Germany (3%)
9. Italy (3%)
10. Uruguay (2%)

#### Major Export Products

Soybeans and derivatives, petroleum and gas, vehicles, corn, wheat

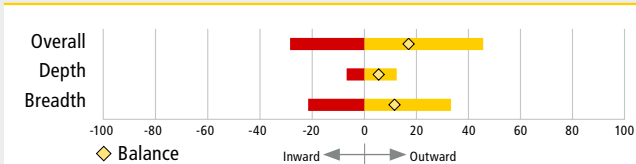
#### Argentina's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	43/140		—	
Merchandise Trade	38/140	49/140	41%	40%
<b>Capital</b>	59/67		—	
FDI Stock	·	36/46	·	19%
FDI Flows	·	·	·	·
Portfolio Equity Stock	58/66	—	2%	—
<b>Information</b>	59/101		—	
International Phone Calls	77/101	16/101	64%	20%
Printed Publications Trade	96/135	79/135	85%	40%
<b>People</b>	18/124		—	
Migrants	22/139	107/139	34%	67%
Tourists Departures/Arrivals	—	2/107	—	100%
International Students	—	·	—	·

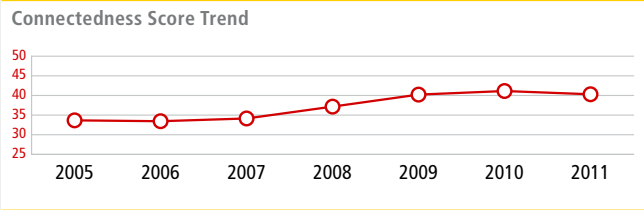
## Directionality



# ARMENIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	81/140	78/140	-3	40/100	41/100	-1
Depth	86/140	84/140	-2	19/50	18/50	1
Breadth	73/140	69/140	-4	21/50	23/50	-2
Trade Pillar	77/140	69/140	-8	47/100	48/100	-1
Capital Pillar	-	-	-	-	-	-
Information Pillar	88/101	85/101	-3	38/100	40/100	-2
People Pillar	48/106	48/106	0	53/100	53/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	79/140		-	
Merchandise Trade (% of GDP)	125/140	54/140	13%	41%
Services Trade (% of GDP)	62/139	34/139	8%	11%

Capital	89/122		-	
FDI Stock (% of GDP)	93/132	43/140	2%	49%
FDI Flows (% of GFCF)	73/133	44/140	2%	21%
Portfolio Equity Stock (% of GDP)	89/102	92/97	0%	0%
Portfolio Equity Flows (% of GDP)	102/129	69/126	0%	0%

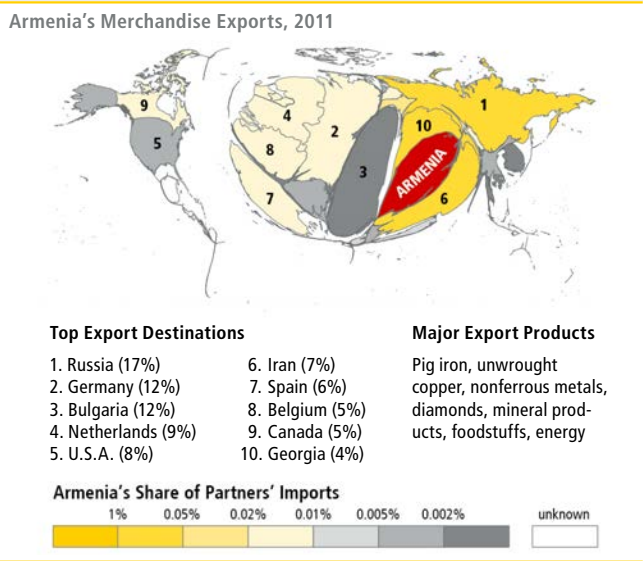
Information	88/140		-	
Internet Bandwidth (Bits per Second per Internet User)	95/140		6,907	
International Phone Calls (Minutes per Capita)	75/140	40/140	29	151
Printed Publications Trade (USD per Capita)	112/135	99/135	\$0	\$3

People	44/116			
Migrants (% of Population)	7/139	38/140	20%	10%
Tourists Dep./Arr. Per Capita	54/93	69/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	72/130	48/104	4%	3%

## Summary

Armenia ranks 81<sup>st</sup> out of 140 countries on this year’s DHL Global Connectedness Index and 34<sup>th</sup> among 40 countries in the European region. Armenia’s highest connectedness is on the people pillar, where it ranks the 48<sup>th</sup> out of 106 countries, and especially on the depth of its outward migration on which it holds the 7<sup>th</sup> rank globally (out of 139 countries). Armenia’s diaspora is as large as 20% of its population. Armenia’s connectedness grew significantly from 2007 to 2009 and has since that year remained basically stable.

## Rooted Map



## Breadth

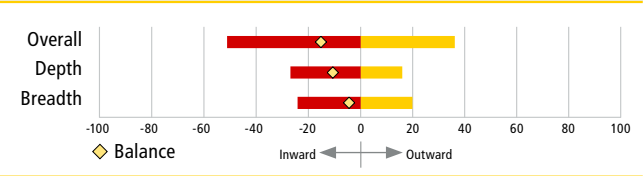
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	66/140		-	
Merchandise Trade	87/140	46/140	68%	59%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	86/101		-	
International Phone Calls	96/101	98/101	88%	87%
Printed Publications Trade	38/135	57/135	51%	86%

People	71/124		-	
Migrants	66/139	103/139	78%	14%
Tourists Departures/Arrivals	-	42/107	-	24%
International Students	-	70/93	-	39%

## Directionality

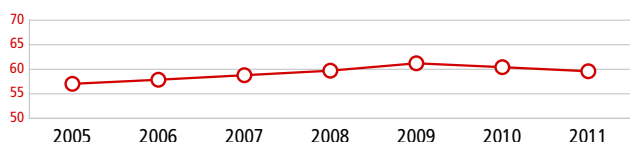


# AUSTRALIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	30/140	28/140	-2	60/100	60/100	0
<b>Depth</b>	74/140	68/140	-6	22/50	22/50	0
<b>Breadth</b>	13/140	14/140	1	38/50	38/50	0
<b>Trade Pillar</b>	85/140	85/140	0	44/100	44/100	0
<b>Capital Pillar</b>	15/66	13/66	-2	67/100	70/100	-3
<b>Information Pillar</b>	4/101	4/101	0	84/100	83/100	1
<b>People Pillar</b>	18/106	18/106	0	75/100	75/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	133/140		—	
Merchandise Trade (% of GDP)	108/140	131/140	18%	16%
Services Trade (% of GDP)	101/139	117/139	3%	4%

<b>Capital</b>	18/122		—	
FDI Stock (% of GDP)	29/132	72/140	25%	33%
FDI Flows (% of GFCF)	45/133	87/140	5%	10%
Portfolio Equity Stock (% of GDP)	24/102	19/97	18%	21%
Portfolio Equity Flows (% of GDP)	14/129	16/126	2%	1%

<b>Information</b>	23/140		—	
Internet Bandwidth (Bits per Second per Internet User)	31/140		50,396	
International Phone Calls (Minutes per Capita)	30/140	35/140	181	178
Printed Publications Trade (USD per Capita)	39/135	24/135	\$11	\$44

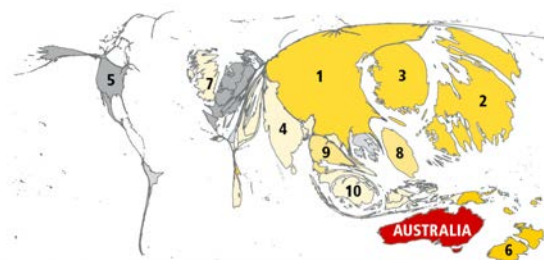
<b>People</b>	58/116		—	
Migrants (% of Population)	112/139	15/140	2%	21%
Tourists Dep./Arr. Per Capita	41/93	68/136	0.3	0.2
International Students (% of Tertiary Education Enrollment)	122/130	8/104	1%	20%

## Summary

Australia ranks 30<sup>th</sup> on this year's DHL Global Connectedness Index and 7<sup>th</sup> within the East Asia & Pacific region. Australia has higher breadth (13<sup>th</sup> globally) than depth (74<sup>th</sup>), and ranks among the top 20 countries on all of the pillars except trade, including the 4<sup>th</sup> rank worldwide on the information pillar. On the trade pillar, however, Australia ranks only 85<sup>th</sup> overall and 133<sup>rd</sup> on depth, with low ranks uniformly across both merchandise and services trade depth. Australia's connectedness scores rose steadily from 2005 to 2009 before declining modestly over the past two years. From 2010 to 2011, the decline in Australia's connectedness was driven by the capital pillar.

## Rooted Map

### Australia's Merchandise Exports, 2011



#### Top Export Destinations

1. China (28%)
2. Japan (20%)
3. South Korea (9%)
4. India (6%)
5. U.S.A. (4%)
6. New Zealand (3%)
7. U.K. (3%)
8. Taiwan (3%)
9. Thailand (3%)
10. Singapore (2%)

#### Major Export Products

Coal, iron ore, gold, meat, wool, alumina, wheat, machinery and transport equipment

#### Australia's Share of Partners' Imports



## Breadth

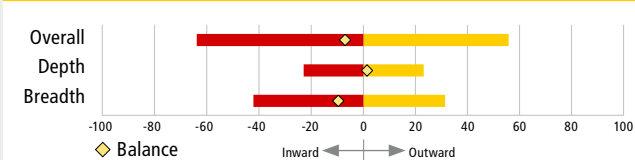
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	33/140		—	
Merchandise Trade	56/140	12/140	75%	57%

<b>Capital</b>	18/67		—	
FDI Stock	21/41	18/46	24%	26%
FDI Flows	25/38	15/41	20%	35%
Portfolio Equity Stock	17/66	—	17%	—

<b>Information</b>	5/101		—	
International Phone Calls	2/101	28/101	43%	39%
Printed Publications Trade	41/135	19/135	79%	43%

<b>People</b>	3/124		—	
Migrants	12/139	18/139	23%	31%
Tourists Departures/Arrivals	—	—	—	—
International Students	—	9/93	—	66%

## Directionality

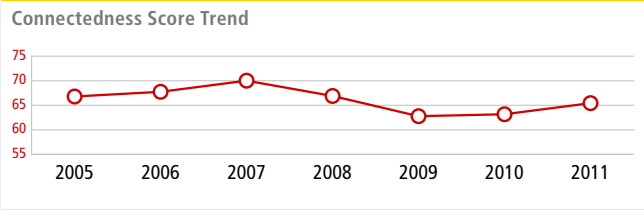




# AUSTRIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	19/140	25/140	6	65/100	63/100	2
Depth	11/140	16/140	5	36/50	34/50	2
Breadth	44/140	45/140	1	29/50	29/50	0
Trade Pillar	30/140	33/140	3	62/100	60/100	2
Capital Pillar	24/66	27/66	3	61/100	57/100	4
Information Pillar	25/101	24/101	-1	69/100	69/100	0
People Pillar	8/106	8/106	0	81/100	81/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	29/140		—	
Merchandise Trade (% of GDP)	42/140	44/140	43%	46%
Services Trade (% of GDP)	29/139	35/139	14%	11%

Capital	24/122		—	
FDI Stock (% of GDP)	15/132	68/140	48%	36%
FDI Flows (% of GFCF)	19/133	81/140	19%	11%
Portfolio Equity Stock (% of GDP)	28/102	32/97	18%	11%
Portfolio Equity Flows (% of GDP)	19/129	62/126	1%	0%

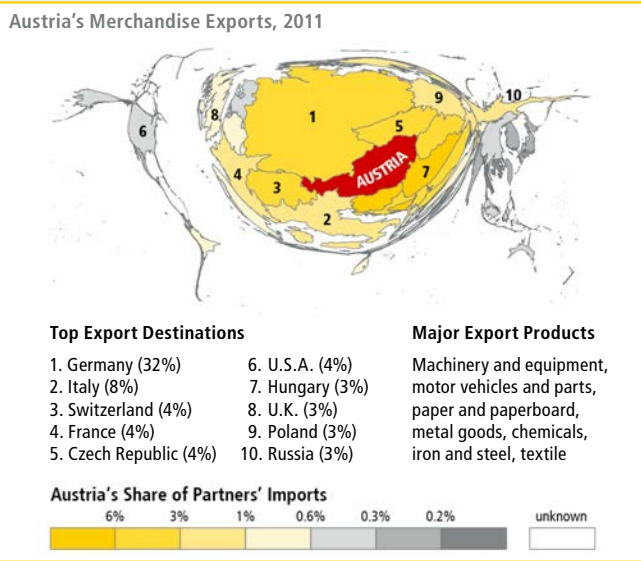
Information	12/140		—	
Internet Bandwidth (Bits per Second per Internet User)	17/140		81,919	
International Phone Calls (Minutes per Capita)	19/140	23/140	268	236
Printed Publications Trade (USD per Capita)	14/135	5/135	\$68	\$138

People	12/116			
Migrants (% of Population)	61/139	22/140	6%	16%
Tourists Dep./Arr. Per Capita	9/93	6/136	1.2	2.6
International Students (% of Tertiary Education Enrollment)	73/130	9/104	4%	17%

## Summary

Austria ranks 19<sup>th</sup> on this year’s DHL Global Connectedness Index, up 6 places versus last year’s ranking. Austria’s connectedness score has begun to recover from a sharp decline that took place between 2007 and 2009. It ranks higher on depth (11<sup>th</sup>) than breadth (44<sup>th</sup>). Austria has relatively high scores across all four pillars, with its highest pillar rank on the people pillar, where it ranks 8<sup>th</sup> worldwide (12<sup>th</sup> on depth and 16<sup>th</sup> on breadth). Most of its international flows are with other countries within Europe, a pattern that is particularly notable on the information pillar, where more than 90% of its flows are intra-regional. In contrast, closer to 60% of Austria’s inward and outward migration is intra-regional.

## Rooted Map



## Breadth

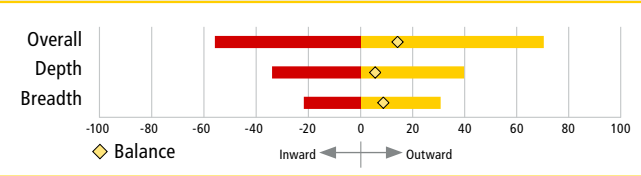
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	69/140		—	
Merchandise Trade	43/140	91/140	83%	88%

Capital	25/67		—	
FDI Stock	32/41	26/46	89%	79%
FDI Flows	21/38	26/41	72%	83%
Portfolio Equity Stock	20/66	—	80%	—

Information	60/101		—	
International Phone Calls	48/101	66/101	91%	94%
Printed Publications Trade	26/135	99/135	93%	97%

People	16/124		—	
Migrants	11/139	53/139	62%	63%
Tourists Departures/Arrivals	—	18/107	—	93%
International Students	—	27/93	—	80%

## Directionality



# AZERBAIJAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	92/140	82/140	-10	37/100	40/100	-3
<b>Depth</b>	84/140	85/140	1	19/50	18/50	1
<b>Breadth</b>	91/140	75/140	-16	18/50	21/50	-3
<b>Trade Pillar</b>	98/140	92/140	-6	41/100	43/100	-2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	57/101	55/101	-2	57/100	55/100	2
<b>People Pillar</b>	68/106	68/106	0	43/100	44/100	-1

Connectedness Score Trend



## Depth

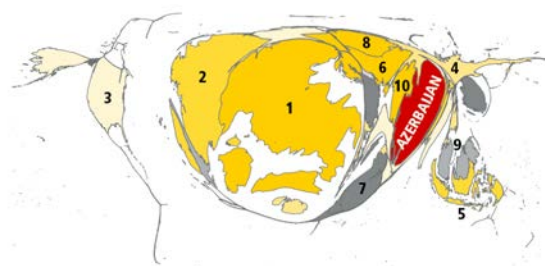
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	80/140		—	
Merchandise Trade (% of GDP)	25/140	132/140	57%	16%
Services Trade (% of GDP)	94/139	51/139	4%	9%
<b>Capital</b>	86/122		—	
FDI Stock (% of GDP)	48/132	117/140	10%	14%
FDI Flows (% of GFCF)	50/133	100/140	4%	8%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	106/129	74/126	0%	0%
<b>Information</b>	84/140		—	
Internet Bandwidth (Bits per Second per Internet User)	60/140		19,102	
International Phone Calls (Minutes per Capita)	91/140	70/140	18	76
Printed Publications Trade (USD per Capita)	115/135	90/135	\$0	\$4
<b>People</b>	51/116		—	
Migrants (% of Population)	18/139	79/140	14%	3%
Tourists Dep./Arr. Per Capita	50/93	83/136	0.2	0.1
International Students (% of Tertiary Education Enrollment)	44/130	45/104	6%	3%

## Summary

Azerbaijan ranks 92<sup>nd</sup> out of the 140 countries covered on this year's DHL Global Connectedness Index and 7<sup>th</sup> among 12 countries in South & Central Asia. Azerbaijan's connectedness peaked in 2008 and has been on a declining trend since then. From 2010 to 2011 the main factor behind its declining connectedness score was a large drop in its breadth. Among the more noteworthy aspects of Azerbaijan's connectedness profile are its merchandise exports depth and its outward migration depth. Azerbaijan ranks 25<sup>th</sup> globally on merchandise exports depth, with its merchandise exports adding up to 57% of its GDP. It also ranks 18<sup>th</sup> on outward migration depth, with emigrants equaling 14% of its population.

## Rooted Map

Azerbaijan's Merchandise Exports, 2011



Top Export Destinations

1. Italy (35%)
2. France (15%)
3. U.S.A. (9%)
4. Russia (4%)
5. Indonesia (3%)
6. Ukraine (3%)
7. Israel (3%)
8. Belarus (3%)
9. Malaysia (3%)
10. Georgia (2%)

Major Export Products

Oil and gas (90%), machinery, cotton, foodstuffs

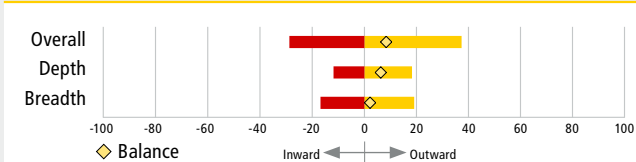
Azerbaijan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	90/140		—	
Merchandise Trade	100/140	81/140	6%	25%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	43/101		—	
International Phone Calls	7/101	25/101	25%	3%
Printed Publications Trade	122/135	131/135	89%	25%
<b>People</b>	105/124		—	
Migrants	107/139	111/139	7%	17%
Tourists Departures/Arrivals	—	76/107	—	35%
International Students	—	65/93	—	69%

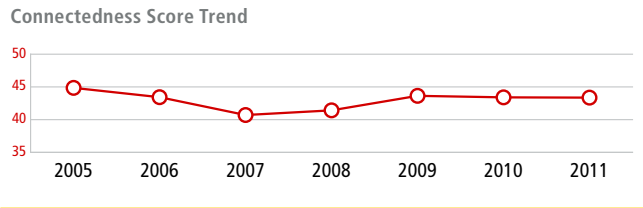
## Directionality



BAHAMAS, THE

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	70/140	69/140	-1	43/100	43/100	0
Depth	35/140	33/140	-2	30/50	29/50	1
Breadth	107/140	110/140	3	14/50	14/50	0
Trade Pillar	129/140	124/140	-5	29/100	30/100	-1
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	.	.	.	.	.	.



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	81/140		—	
Merchandise Trade (% of GDP)	134/140	69/140	9%	35%
Services Trade (% of GDP)	9/139	20/139	31%	15%

Capital	.	.	.	.
FDI Stock (% of GDP)	22/132	7/140	38%	185%
FDI Flows (% of GFCF)	24/133	10/140	14%	52%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	51/129	.	0%	.

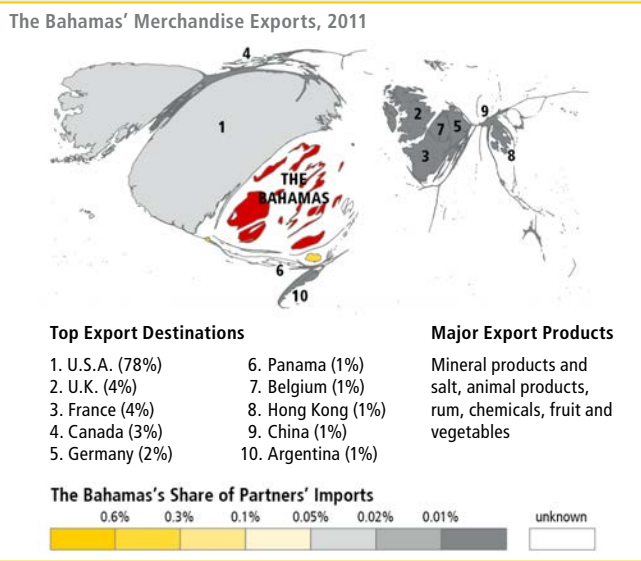
Information	53/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	108/140	.	.	4,431
International Phone Calls (Minutes per Capita)	13/140	6/140	402	555
Printed Publications Trade (USD per Capita)	95/135	15/135	\$1	\$60

People	.	.	.	.
Migrants (% of Population)	33/139	44/140	11%	10%
Tourists Dep./Arr. Per Capita	.	1/136	.	4.0
International Students (% of Tertiary Education Enrollment)	.	.	.	.

Summary

The Bahamas ranks 70<sup>th</sup> out of 140 countries on the DHL Global Connectedness Index. It has higher depth (35<sup>th</sup>) than breadth (107<sup>th</sup>), which is typical among small countries. The Bahamas’ connectedness profile reflects the importance of inbound tourism in its economy. It ranks 1<sup>st</sup> among the countries studied on the depth of its tourist arrivals, 6<sup>th</sup> on inward depth of telephone calls, 7<sup>th</sup> on inward depth of FDI stocks and 9<sup>th</sup> on depth of services exports. In contrast, the Bahamas ranks only 134<sup>th</sup> on merchandise exports depth. The Bahamas’ low breadth reflects the large majority of its flows being to and from its large neighbor, the United States (see map).

Rooted Map



Breadth

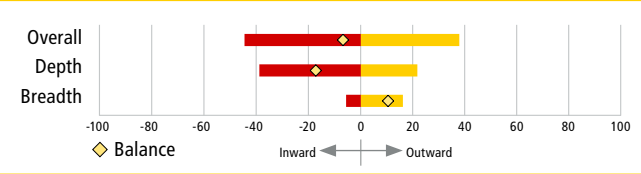
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	126/140	.	.	.
Merchandise Trade	113/140	128/140	4%	13%

Capital	29/67	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	34/66	—	46%	—

Information	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	77/135	115/135	17%	1%

People	108/124	.	.	.
Migrants	64/139	119/139	1%	74%
Tourists Departures/Arrivals	—	88/107	—	3%
International Students	—	.	—	.

Directionality



# BAHRAIN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	27/140	26/140	-1	62/100	61/100	1
<b>Depth</b>	15/140	14/140	-1	34/50	35/50	-1
<b>Breadth</b>	52/140	54/140	2	27/50	26/50	1
<b>Trade Pillar</b>	15/140	14/140	-1	70/100	70/100	0
<b>Capital Pillar</b>	38/66	37/66	-1	45/100	46/100	-1
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	23/106	23/106	0	70/100	70/100	0

### Connectedness Score Trend



## Depth

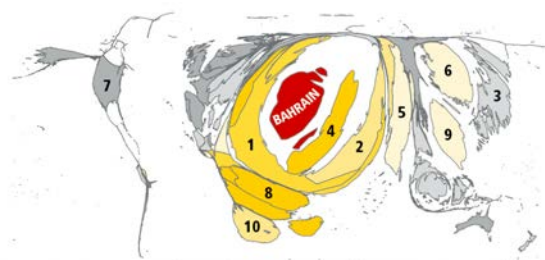
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	27/140		—	
Merchandise Trade (% of GDP)	15/140	51/140	71%	42%
Services Trade (% of GDP)	22/139	73/139	16%	7%
<b>Capital</b>	40/122		—	
FDI Stock (% of GDP)	23/132	32/140	33%	60%
FDI Flows (% of GFCF)	131/133	106/140	-5%	7%
Portfolio Equity Stock (% of GDP)	14/102	21/97	40%	19%
Portfolio Equity Flows (% of GDP)	129/129	5/126	-8%	3%
<b>Information</b>	33/140		—	
Internet Bandwidth (Bits per Second per Internet User)	70/140		14,719	
International Phone Calls (Minutes per Capita)	4/140	14/140	820	291
Printed Publications Trade (USD per Capita)	82/135	40/135	\$1	\$20
<b>People</b>	2/116		—	
Migrants (% of Population)	15/139	12/140	16%	25%
Tourists Dep./Arr. Per Capita	.	2/136	.	3.9
International Students (% of Tertiary Education Enrollment)	22/130	6/104	11%	24%

## Summary

Bahrain ranks 27<sup>th</sup> out of 140 countries worldwide on overall global connectedness and 3<sup>rd</sup> out of the 15 countries covered in the Middle East & North Africa. It also holds the 2<sup>nd</sup> or 3<sup>rd</sup> rank on all four of the pillars of global connectedness among countries in its region. Bahrain's connectedness is strongest on the people pillar – it ranks 2<sup>nd</sup> worldwide on people pillar depth. Bahrain's connectedness declined markedly from 2005 (the first year for which the DHL Global Connectedness Index was computed) to 2010. However, its score has remained basically stable from 2010 to 2011 with a small decline in its depth having been offset by a small increase in its breadth.

## Rooted Map

### Bahrain's Merchandise Exports, 2011



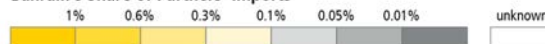
### Top Export Destinations

1. Saudi Arabia (11%)
2. U.A.E. (7%)
3. Japan (7%)
4. Qatar (6%)
5. India (6%)
6. South Korea (6%)
7. U.S.A. (5%)
8. Kenya (5%)
9. Taiwan (4%)
10. South Africa (3%)

### Major Export Products

Petroleum and petroleum products, aluminum, textiles

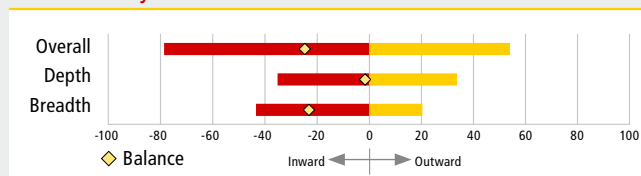
### Bahrain's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	47/140		—	
Merchandise Trade	61/140	35/140	33%	35%
<b>Capital</b>	42/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	42/66	—	36%	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	98/135	48/135	89%	29%
<b>People</b>	74/124		—	
Migrants	127/139	14/139	57%	11%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	64/93	—	86%

## Directionality

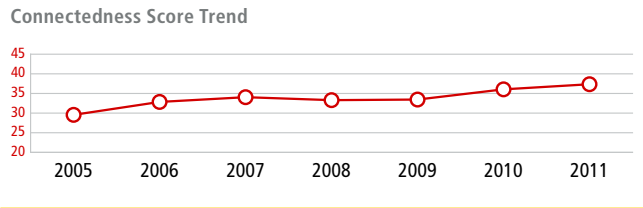




# BANGLADESH

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	91/140	97/140	6	37/100	36/100	1
Depth	134/140	138/140	4	5/50	3/50	2
Breadth	33/140	31/140	-2	32/50	33/50	-1
Trade Pillar	63/140	71/140	8	51/100	47/100	4
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	104/106	104/106	0	20/100	20/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	112/140		—	
Merchandise Trade (% of GDP)	98/140	79/140	22%	32%
Services Trade (% of GDP)	134/139	122/139	1%	4%

Capital	118/122		—	
FDI Stock (% of GDP)	122/132	136/140	0%	6%
FDI Flows (% of GFCF)	112/133	123/140	0%	4%
Portfolio Equity Stock (% of GDP)	88/102	73/97	0%	1%
Portfolio Equity Flows (% of GDP)	65/129	109/126	0%	0%

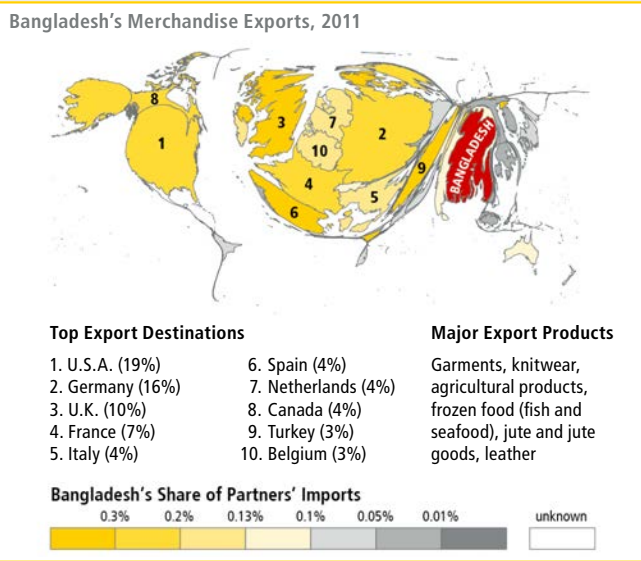
Information	125/140		—	
Internet Bandwidth (Bits per Second per Internet User)	115/140		2,924	
International Phone Calls (Minutes per Capita)	135/140	120/140	1	13
Printed Publications Trade (USD per Capita)	99/135	133/135	\$0	\$0

People	111/116			
Migrants (% of Population)	75/139	115/140	5%	1%
Tourists Dep./Arr. Per Capita	90/93	136/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	108/130	97/104	1%	0%

## Summary

Bangladesh ranks 91<sup>st</sup> out of 140 countries on this year’s DHL Global Connectedness Index. It ranks 6<sup>th</sup> out of 12 countries in South & Central Asia. Bangladesh ranks higher on breadth (33<sup>rd</sup> out of 140 countries) than on depth (134<sup>th</sup>), which is reflective in part of limited intra-regional integration within its region. Bangladesh’s connectedness is highest on the trade pillar, where it ranks 63<sup>rd</sup> globally and 3<sup>rd</sup> within its region. Bangladesh’s connectedness has risen steadily over the period from 2005 to 2011, with most of its increase over the past year coming from depth on the trade pillar.

## Rooted Map



## Breadth

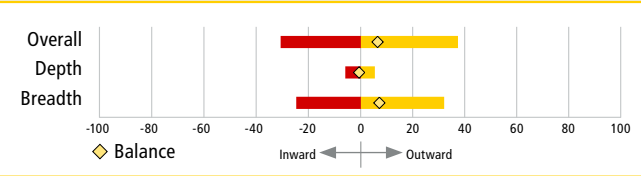
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	34/140		—	
Merchandise Trade	19/140	54/140	6%	19%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	89/135	71/135	.	.

People	104/124		—	
Migrants	120/139	126/139	81%	99%
Tourists Departures/Arrivals	—	58/107	—	36%
International Students	—	.	—	.

## Directionality

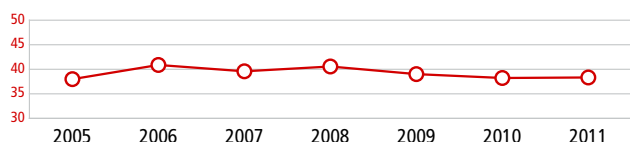


# BARBADOS

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	85/140	86/140	1	38/100	38/100	0
<b>Depth</b>	40/140	36/140	-4	28/50	29/50	-1
<b>Breadth</b>	122/140	123/140	1	10/50	9/50	1
<b>Trade Pillar</b>	126/140	126/140	0	30/100	27/100	3
<b>Capital Pillar</b>	48/66	43/66	-5	39/100	43/100	-4
<b>Information Pillar</b>	27/101	29/101	2	69/100	67/100	2
<b>People Pillar</b>	34/106	34/106	0	61/100	61/100	0

### Connectedness Score Trend



## Depth

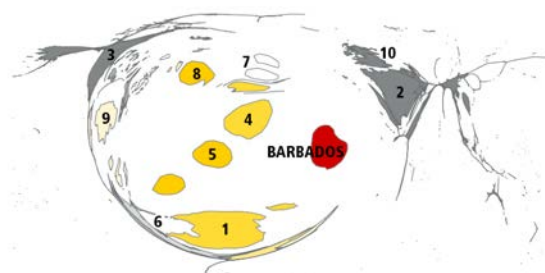
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	68/140		—	
Merchandise Trade (% of GDP)	130/140	53/140	10%	41%
Services Trade (% of GDP)	7/139	21/139	34%	15%
<b>Capital</b>	46/122		—	
FDI Stock (% of GDP)	114/132	35/140	0%	57%
FDI Flows (% of GFCF)	133/133	24/140	-5%	33%
Portfolio Equity Stock (% of GDP)	11/102	25/97	45%	15%
Portfolio Equity Flows (% of GDP)	27/129	115/126	1%	0%
<b>Information</b>	16/140		—	
Internet Bandwidth (Bits per Second per Internet User)	38/140		38,177	
International Phone Calls (Minutes per Capita)	12/140	4/140	416	632
Printed Publications Trade (USD per Capita)	50/135	21/135	\$7	\$47
<b>People</b>	6/116		—	
Migrants (% of Population)	2/139	41/140	30%	10%
Tourists Dep./Arr. Per Capita	·	9/136	·	1.9
International Students (% of Tertiary Education Enrollment)	28/130	14/104	10%	13%

## Summary

Barbados ranks 85<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, down one place versus last year. Barbados also ranks 8<sup>th</sup> out of the 22 countries in the South & Central America & Caribbean region. Its strongest pillars are the information pillar (27<sup>th</sup> out of 101 countries worldwide and 2<sup>nd</sup> out of 16 countries in its region) and the people pillar (34<sup>th</sup> out of 106 countries and 1<sup>st</sup> out of 12 countries in its region). These positions in the people and information pillars are earned with higher depth than breadth scores. For example, Barbados ranks 2<sup>nd</sup> globally on depth of outward migration but only 51<sup>st</sup> on breadth on this component.

## Rooted Map

### Barbados's Merchandise Exports, 2011



### Top Export Destinations

1. Trin. & Tob. (19%)
2. France (11%)
3. U.S.A. (10%)
4. St. Lucia (9%)
5. St. Vinc. & Gren. (5%)
6. Venezuela (5%)
7. Antigua & Barb. (4%)
8. St. Kitts & Nevis (4%)
9. Jamaica (4%)
10. U.K. (3%)

### Major Export Products

Manufactures, sugar and molasses, rum, other foods and beverages, chemicals, electrical components

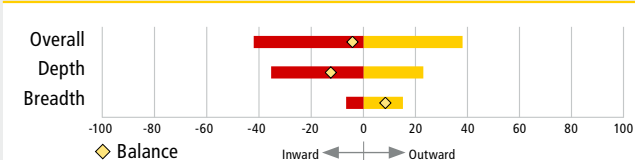
### Barbados's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	133/140		—	
Merchandise Trade	126/140	120/140	65%	33%
<b>Capital</b>	46/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	·	·	·
Portfolio Equity Stock	45/66	—	9%	—
<b>Information</b>	58/101		—	
International Phone Calls	57/101	33/101	53%	39%
Printed Publications Trade	105/135	76/135	89%	13%
<b>People</b>	102/124		—	
Migrants	51/139	114/139	4%	68%
Tourists Departures/Arrivals	—	70/107	—	19%
International Students	—	80/93	—	95%

## Directionality

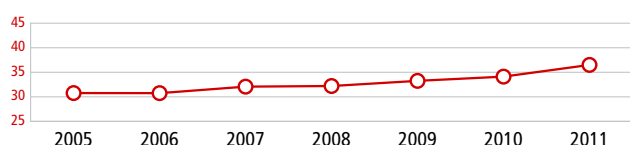


# BELARUS

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	94/140	103/140	9	37/100	34/100	3
<b>Depth</b>	58/140	71/140	13	25/50	22/50	3
<b>Breadth</b>	117/140	115/140	-2	12/50	13/50	-1
<b>Trade Pillar</b>	75/140	88/140	13	48/100	44/100	4
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	24/101	27/101	3	71/100	69/100	2
<b>People Pillar</b>	74/106	75/106	1	41/100	41/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	19/140		-	
Merchandise Trade (% of GDP)	14/140	5/140	73%	82%
Services Trade (% of GDP)	55/139	95/139	9%	6%

<b>Capital</b>	111/122		-	
FDI Stock (% of GDP)	111/132	93/140	1%	24%
FDI Flows (% of GFCF)	98/133	78/140	0%	12%
Portfolio Equity Stock (% of GDP)	94/102	96/97	0%	0%
Portfolio Equity Flows (% of GDP)	80/129	71/126	0%	0%

<b>Information</b>	58/140		-	
Internet Bandwidth (Bits per Second per Internet User)	30/140		52,833	
International Phone Calls (Minutes per Capita)	62/140	83/140	44	54
Printed Publications Trade (USD per Capita)	59/135	62/135	\$4	\$9

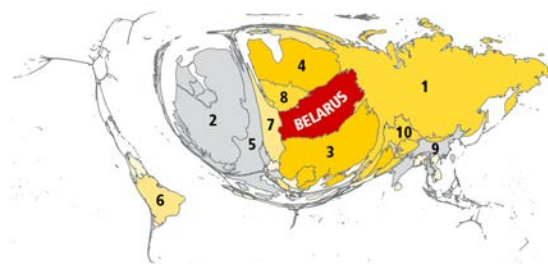
<b>People</b>	62/116			
Migrants (% of Population)	16/139	32/140	15%	11%
Tourists Dep./Arr. Per Capita	80/93	123/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	55/130	65/104	5%	1%

## Summary

Belarus ranks 94<sup>th</sup> out of the 140 countries covered on this year's DHL Global Connectedness Index. It is the 36<sup>th</sup> ranked country among the 40 European countries that were analyzed. Belarus has higher depth (58<sup>th</sup> rank globally) than breadth (117<sup>th</sup>). Belarus has high merchandise trade depth, ranking 14<sup>th</sup> on merchandise exports depth and 5<sup>th</sup> on merchandise imports depth. More than 80% of Belarus's merchandise trade is with other countries within Europe. Belarus's connectedness scores have grown consistently since 2005, with a particularly large increase from 2010 to 2011. Its increase over the past year was driven primarily by depth on the trade pillar.

## Rooted Map

Belarus's Merchandise Exports, 2011



### Top Export Destinations

1. Russia (34%)
2. Netherlands (15%)
3. Ukraine (10%)
4. Latvia (8%)
5. Germany (5%)
6. Brazil (3%)
7. Poland (3%)
8. Lithuania (2%)
9. China (2%)
10. Kazakhstan (2%)

### Major Export Products

Machinery and equipment, mineral products, chemicals, metals, textiles, foodstuffs

### Belarus's Share of Partners' Imports



## Breadth

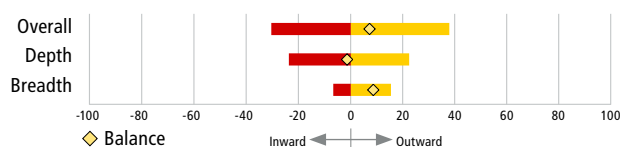
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	130/140		-	
Merchandise Trade	124/140	121/140	85%	83%

<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	18/101		-	
International Phone Calls	4/101	8/101	96%	97%
Printed Publications Trade	76/135	122/135	84%	98%

<b>People</b>	91/124		-	
Migrants	106/139	112/139	87%	99%
Tourists Departures/Arrivals	-	99/107	-	93%
International Students	-	30/93	-	37%

## Directionality



# BELGIUM

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	7/140	6/140	-1	76/100	79/100	-3
<b>Depth</b>	6/140	5/140	-1	40/50	42/50	-2
<b>Breadth</b>	19/140	17/140	-2	36/50	37/50	-1
<b>Trade Pillar</b>	3/140	3/140	0	87/100	88/100	-1
<b>Capital Pillar</b>	20/66	14/66	-6	63/100	69/100	-6
<b>Information Pillar</b>	10/101	10/101	0	80/100	78/100	2
<b>People Pillar</b>	17/106	17/106	0	76/100	76/100	0

Connectedness Score Trend



## Depth

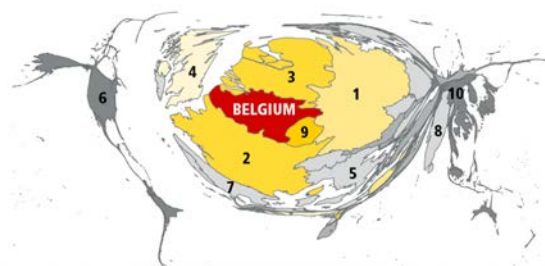
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	3/140		—	
Merchandise Trade (% of GDP)	3/140	3/140	93%	90%
Services Trade (% of GDP)	21/139	17/139	17%	16%
<b>Capital</b>	16/122		—	
FDI Stock (% of GDP)	4/132	5/140	184%	187%
FDI Flows (% of GFCF)	5/133	6/140	45%	77%
Portfolio Equity Stock (% of GDP)	10/102	31/97	47%	12%
Portfolio Equity Flows (% of GDP)	120/129	123/126	0%	0%
<b>Information</b>	6/140		—	
Internet Bandwidth (Bits per Second per Internet User)	11/140		131,137	
International Phone Calls (Minutes per Capita)	17/140	25/140	311	232
Printed Publications Trade (USD per Capita)	5/135	6/135	\$147	\$130
<b>People</b>	33/116		—	
Migrants (% of Population)	77/139	45/140	4%	9%
Tourists Dep./Arr. Per Capita	16/93	38/136	0.9	0.7
International Students (% of Tertiary Education Enrollment)	87/130	19/104	2%	8%

## Summary

Belgium ranks 7<sup>th</sup> globally on this year's DHL Global Connectedness Index, despite a declining trend in its connectedness levels since 2007. It is among the top 20 countries on all four pillars, and ranks 3<sup>rd</sup> worldwide on the trade pillar. Belgium's high rank on the trade pillar is driven primarily by the depth of its merchandise trade, with merchandise exports accounting for 93% of its GDP and imports 90%. Belgium is also a leading country in terms of FDI depth, ranking in the top 10 on FDI flows and stocks in both the inward and outward directions. The decline in Belgium's connectedness score from 2010 to 2011 originated in the capital pillar, on which Belgium's rank fell from 14<sup>th</sup> to 20<sup>th</sup>.

## Rooted Map

Belgium's Merchandise Exports, 2011



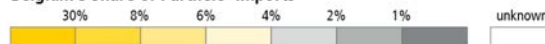
### Top Export Destinations

- Germany (19%)
- France (17%)
- Netherlands (13%)
- U.K. (7%)
- Italy (5%)

### Major Export Products

- U.S.A. (5%)
  - Spain (3%)
  - India (2%)
  - Luxembourg (2%)
  - China (2%)
- Machinery and equipment, chemicals, finished diamonds, metals and metal products, foodstuffs

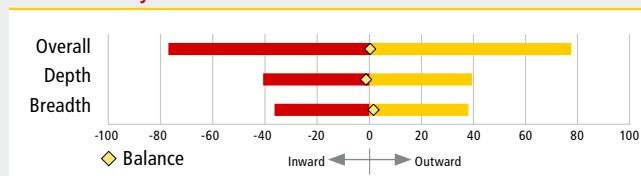
### Belgium's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	23/140		—	
Merchandise Trade	33/140	30/140	79%	74%
<b>Capital</b>	24/67		—	
FDI Stock	7/41	21/46	82%	92%
FDI Flows	17/38	21/41	62%	89%
Portfolio Equity Stock	35/66	—	89%	—
<b>Information</b>	30/101		—	
International Phone Calls	28/101	45/101	87%	89%
Printed Publications Trade	23/135	59/135	96%	91%
<b>People</b>	14/124		—	
Migrants	37/139	27/139	74%	59%
Tourists Departures/Arrivals	—	13/107	—	88%
International Students	—	23/93	—	74%

## Directionality





BENIN

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	130/140	129/140	-1	23/100	21/100	2
Depth	109/140	114/140	5	13/50	12/50	1
Breadth	123/140	124/140	1	9/50	9/50	0
Trade Pillar	108/140	117/140	9	37/100	34/100	3
Capital Pillar	.	.	.	.	.	.
Information Pillar	97/101	97/101	0	23/100	22/100	1
People Pillar	.	.	.	.	.	.

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	78/140		—	
Merchandise Trade (% of GDP)	86/140	66/140	25%	37%
Services Trade (% of GDP)	98/139	68/139	4%	8%

Capital	99/122		—	
FDI Stock (% of GDP)	113/132	118/140	1%	13%
FDI Flows (% of GFCF)	105/133	83/140	0%	10%
Portfolio Equity Stock (% of GDP)	75/102	84/97	0%	0%
Portfolio Equity Flows (% of GDP)	61/129	53/126	0%	0%

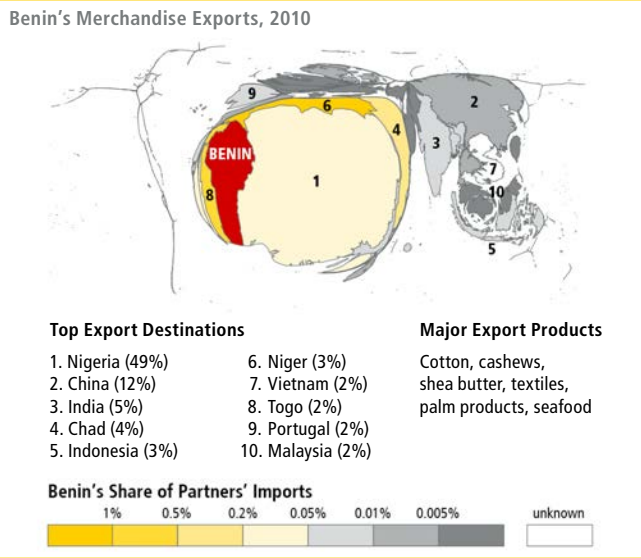
Information	121/140		—	
Internet Bandwidth (Bits per Second per Internet User)	114/140		3,407	
International Phone Calls (Minutes per Capita)	116/140	130/140	8	6
Printed Publications Trade (USD per Capita)	118/135	130/135	\$0	\$0

People	.		.	
Migrants (% of Population)	50/139	83/140	8%	3%
Tourists Dep./Arr. Per Capita	.	116/136	.	0.0
International Students (% of Tertiary Education Enrollment)	64/130	.	4%	.

Summary

Benin holds the 130<sup>th</sup> rank globally and the 24<sup>th</sup> within Sub-Saharan Africa. Benin’s highest position is on the depth of its outward migration, on which it ranks 50<sup>th</sup> out of 139 countries worldwide, with 8% of its population residing abroad. 91% of emigrants from Benin reside within the Sub-Saharan Africa region. Benin’s merchandise exports breadth is particularly low (132<sup>nd</sup> out of 140 countries), with nearly half of its exports going to its large neighbor, Nigeria. Benin’s connectedness score rose sharply in 2007 and since that year has been on a more gradual rising trend.

Rooted Map



Breadth

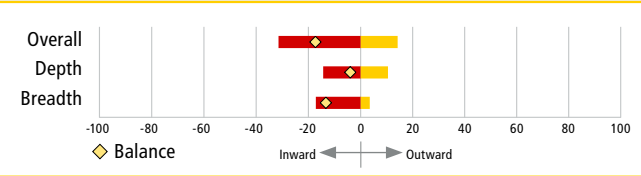
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	103/140		—	
Merchandise Trade	132/140	68/140	62%	6%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	88/101		—	
International Phone Calls	98/101	55/101	89%	45%
Printed Publications Trade	94/135	121/135	52%	18%

People	124/124		—	
Migrants	136/139	128/139	91%	98%
Tourists Departures/Arrivals	—	103/107	—	79%
International Students	—	.	—	.

Directionality



# BOLIVIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	125/140	126/140	1	25/100	22/100	3
<b>Depth</b>	116/140	117/140	1	12/50	11/50	1
<b>Breadth</b>	111/140	120/140	9	13/50	11/50	2
<b>Trade Pillar</b>	122/140	125/140	3	32/100	28/100	4
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	90/106	90/106	0	32/100	32/100	0

### Connectedness Score Trend



## Depth

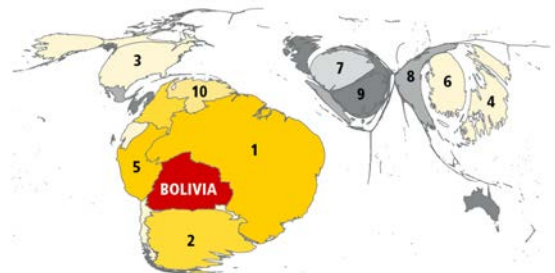
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	89/140		—	
Merchandise Trade (% of GDP)	57/140	85/140	34%	31%
Services Trade (% of GDP)	120/139	113/139	2%	5%
<b>Capital</b>	112/122		—	
FDI Stock (% of GDP)	127/132	77/140	0%	32%
FDI Flows (% of GFCF)	126/133	55/140	-1%	18%
Portfolio Equity Stock (% of GDP)	.	88/97	.	0%
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%
<b>Information</b>	105/140		—	
Internet Bandwidth (Bits per Second per Internet User)	111/140		4,162	
International Phone Calls (Minutes per Capita)	103/140	82/140	12	56
Printed Publications Trade (USD per Capita)	124/135	95/135	\$0	\$3
<b>People</b>	90/116		—	
Migrants (% of Population)	79/139	107/140	4%	1%
Tourists Dep./Arr. Per Capita	67/93	91/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	79/130	.	3%	.

## Summary

Bolivia ranks 125<sup>th</sup> worldwide on this year's DHL Global Connectedness Index and 19<sup>th</sup> out of 22 countries in South & Central America & the Caribbean. Its connectedness has generally been rising since 2006, reversing a steep drop that was recorded from 2005 to 2006. It has similar ranks on both depth (116<sup>th</sup> out of 140 countries) and breadth (111<sup>th</sup>). Its ranks also display relatively little variation among pillars. Its highest depth ranks at the component level are on merchandise exports (57<sup>th</sup>) and FDI inflows (55<sup>th</sup>). In 2011, merchandise exports accounted for 34% of Bolivia's GDP, and over the period from 2008 to 2011, FDI inflows contributed 32% of its gross fixed capital formation.

## Rooted Map

### Bolivia's Merchandise Exports, 2011



#### Top Export Destinations

1. Brazil (33%)
2. Argentina (12%)
3. U.S.A. (10%)
4. Japan (6%)
5. Peru (5%)
6. South Korea (5%)
7. Belgium (4%)
8. China (4%)
9. Switzerland (3%)
10. Venezuela (3%)

#### Major Export Products

Natural gas, soybeans and soy products, crude petroleum, zinc ore, tin

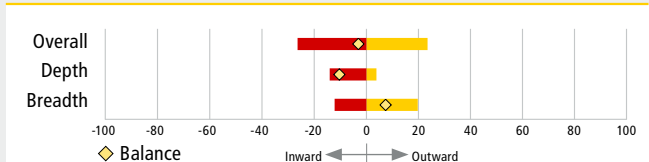
#### Bolivia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	108/140		—	
Merchandise Trade	84/140	126/140	59%	69%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	84/135	120/135	70%	67%
<b>People</b>	94/124		—	
Migrants	88/139	68/139	70%	72%
Tourists Departures/Arrivals	—	86/107	—	71%
International Students	—	.	—	.

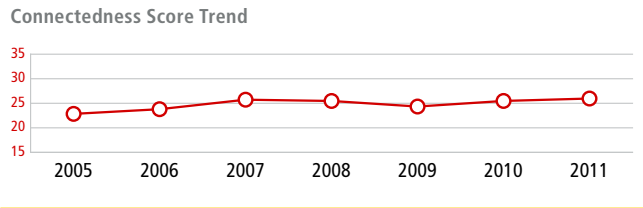
## Directionality



# BOSNIA & HERZEGOVINA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	121/140	120/140	-1	26/100	25/100	1
Depth	78/140	77/140	-1	21/50	20/50	1
Breadth	138/140	134/140	-4	5/50	5/50	0
Trade Pillar	114/140	118/140	4	35/100	33/100	2
Capital Pillar	.	.	.	.	.	.
Information Pillar	77/101	72/101	-5	46/100	45/100	1
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	44/140		-	
Merchandise Trade (% of GDP)	64/140	26/140	33%	61%
Services Trade (% of GDP)	67/139	129/139	7%	3%

Capital	110/122		-	
FDI Stock (% of GDP)	102/132	62/140	1%	37%
FDI Flows (% of GFCF)	88/133	95/140	1%	8%
Portfolio Equity Stock (% of GDP)	99/102	79/97	0%	1%
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

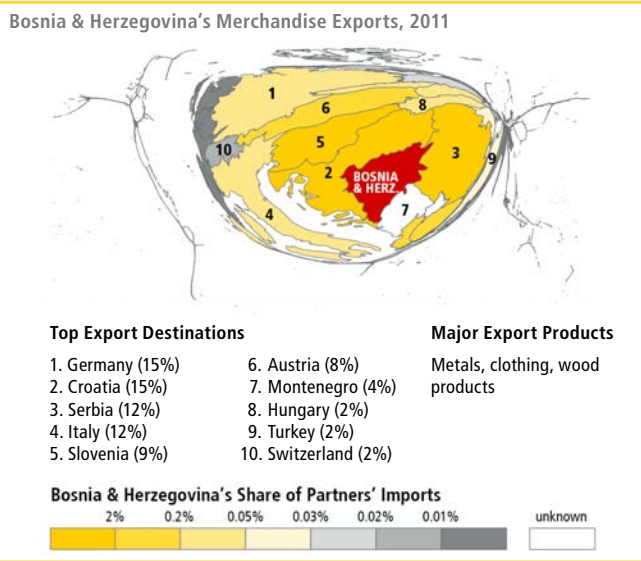
Information	46/140		-	
Internet Bandwidth (Bits per Second per Internet User)	65/140		17,767	
International Phone Calls (Minutes per Capita)	48/140	37/140	97	177
Printed Publications Trade (USD per Capita)	71/135	55/135	\$2	\$13

People	.		.	
Migrants (% of Population)	4/139	114/140	25%	1%
Tourists Dep./Arr. Per Capita	.	88/136	.	0.1
International Students (% of Tertiary Education Enrollment)	19/130	.	12%	.

## Summary

Bosnia and Herzegovina’s overall connectedness ranks 121<sup>st</sup> globally (out of 140 countries), and it holds the lowest rank among the European countries that were covered in this year’s DHL Global Connectedness Index. It has higher depth (78<sup>th</sup>) than breadth (138<sup>th</sup>). It ranks 4<sup>th</sup> worldwide on outward migration depth with emigrants equal to 25% of its population. It also has particularly high merchandise imports depth (26<sup>th</sup> globally), but its services imports depth is much lower (129<sup>th</sup>). Bosnia and Herzegovina’s connectedness has remained fairly steady since 2005, increasing slowly over the past two years.

## Rooted Map



## Breadth

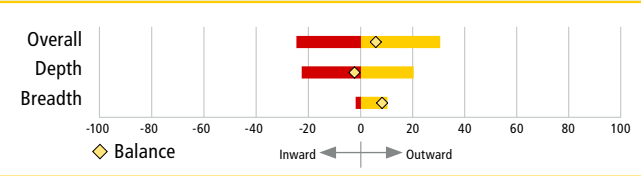
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	135/140		-	
Merchandise Trade	125/140	131/140	95%	95%

Capital	.		-	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	-	.	-

Information	91/101		-	
International Phone Calls	87/101	83/101	96%	93%
Printed Publications Trade	79/135	101/135	98%	96%

People	114/124		-	
Migrants	85/139	139/139	82%	36%
Tourists Departures/Arrivals	-	81/107	-	75%
International Students	-	.	-	.

## Directionality



# BOTSWANA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	134/140	135/140	1	20/100	18/100	2
<b>Depth</b>	82/140	86/140	4	20/50	18/50	2
<b>Breadth</b>	140/140	140/140	0	0/50	0/50	0
<b>Trade Pillar</b>	133/140	133/140	0	25/100	24/100	1
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	90/101	90/101	0	34/100	33/100	1
<b>People Pillar</b>	80/106	80/106	0	38/100	38/100	0

### Connectedness Score Trend



## Depth

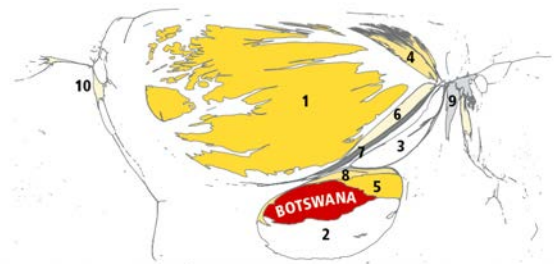
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	71/140		-	
Merchandise Trade (% of GDP)	62/140	56/140	33%	41%
Services Trade (% of GDP)	118/139	108/139	2%	5%
<b>Capital</b>	94/122		-	
FDI Stock (% of GDP)	84/132	134/140	2%	6%
FDI Flows (% of GFCF)	90/133	47/140	1%	20%
Portfolio Equity Stock (% of GDP)	29/102	82/97	16%	0%
Portfolio Equity Flows (% of GDP)	127/129	49/126	-2%	0%
<b>Information</b>	75/140		-	
Internet Bandwidth (Bits per Second per Internet User)	88/140		8,442	
International Phone Calls (Minutes per Capita)	49/140	85/140	93	54
Printed Publications Trade (USD per Capita)	76/135	51/135	\$2	\$14
<b>People</b>	34/116		-	
Migrants (% of Population)	126/139	57/140	1%	6%
Tourists Dep./Arr. Per Capita	-	21/136	-	1.1
International Students (% of Tertiary Education Enrollment)	4/130	34/104	53%	4%

## Summary

Botswana ranks 134<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, up one place versus last year. It has much higher depth (82<sup>nd</sup>) than breadth (140<sup>th</sup>). This pattern is particularly notable on the trade pillar, where the very low breadth of Botswana's merchandise exports can be seen on the rooted map shown on this page. More than half of Botswana's merchandise exports go to the United Kingdom, which is reflective of the importance of diamonds in Botswana's export profile. With respect to its pillar level depth scores, Botswana's connectedness is deepest on the people pillar, on which it ranks 34<sup>th</sup> out of 116 countries globally, and within that pillar it ranks 4<sup>th</sup> worldwide on the depth of its outward international students.

## Rooted Map

### Botswana's Merchandise Exports, 2011



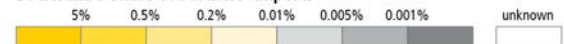
### Top Export Destinations

1. U.K. (62%)
2. South Africa (13%)
3. Israel (5%)
4. Norway (5%)
5. Zimbabwe (3%)
6. Belgium (3%)
7. Switzerland (2%)
8. Zambia (1%)
9. India (1%)
10. U.S.A. (1%)

### Major Export Products

Diamonds, copper, nickel, soda ash, meat, textiles

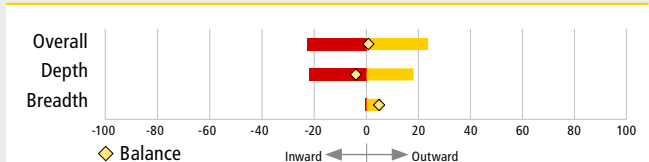
### Botswana's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	140/140		-	
Merchandise Trade	139/140	138/140	19%	68%
<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-
<b>Information</b>	99/101		-	
International Phone Calls	97/101	92/101	86%	72%
Printed Publications Trade	110/135	119/135	95%	72%
<b>People</b>	122/124		-	
Migrants	78/139	137/139	60%	99%
Tourists Departures/Arrivals	-	106/107	-	93%
International Students	-	-	-	-

## Directionality

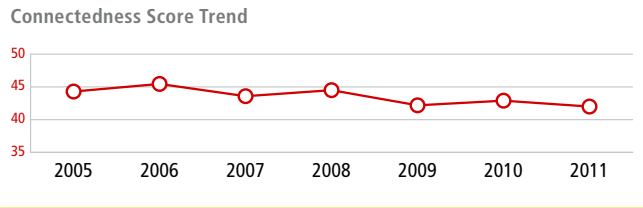




# BRAZIL

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	77/140	72/140	-5	42/100	43/100	-1
Depth	130/140	128/140	-2	7/50	8/50	-1
Breadth	22/140	23/140	1	35/50	35/50	0
Trade Pillar	71/140	66/140	-5	49/100	49/100	0
Capital Pillar	52/66	49/66	-3	34/100	38/100	-4
Information Pillar	36/101	41/101	5	66/100	62/100	4
People Pillar	84/106	84/106	0	36/100	36/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	140/140		—	
Merchandise Trade (% of GDP)	131/140	140/140	10%	10%
Services Trade (% of GDP)	129/139	130/139	1%	3%

Capital	71/122		—	
FDI Stock (% of GDP)	54/132	85/140	8%	28%
FDI Flows (% of GFCF)	123/133	73/140	0%	12%
Portfolio Equity Stock (% of GDP)	61/102	28/97	1%	14%
Portfolio Equity Flows (% of GDP)	121/129	11/126	0%	1%

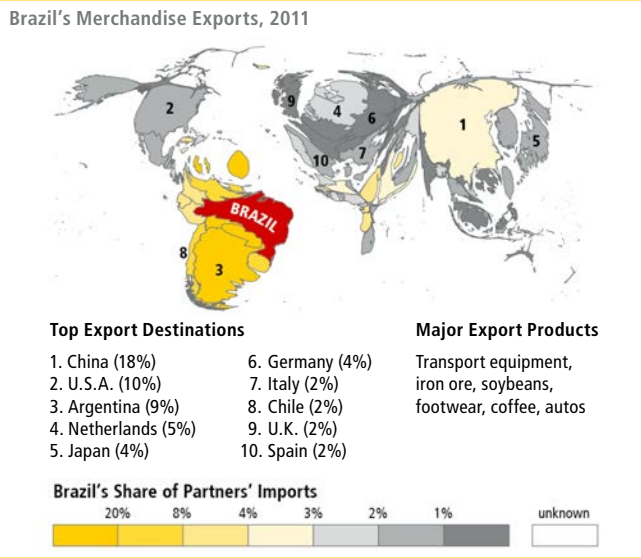
Information	98/140		—	
Internet Bandwidth (Bits per Second per Internet User)	45/140		29,041	
International Phone Calls (Minutes per Capita)	125/140	118/140	5	14
Printed Publications Trade (USD per Capita)	100/135	112/135	\$0	\$1

People	113/116			
Migrants (% of Population)	136/139	127/140	1%	0%
Tourists Dep./Arr. Per Capita	86/93	115/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	128/130	91/104	0%	0%

## Summary

Brazil ranks 77<sup>th</sup> out of 140 countries on this year’s DHL Global Connectedness Index, down 5 places versus last year. Brazil has much higher breadth (22<sup>nd</sup>) than depth (130<sup>th</sup>). While higher breadth than depth is typical among large economies, Brazil presents an extreme case, particularly with respect to the trade pillar. Brazil ranks 3<sup>rd</sup> on trade breadth but last (140<sup>th</sup>) on trade depth. Merchandise exports and imports both account for only 10% of Brazil’s GDP. Brazil’s overall connectedness is also the lowest among the world’s 10 largest economies. Nonetheless, Brazil’s depth ranks are higher on particular components. Brazil ranks 11<sup>th</sup> and 28<sup>th</sup> respectively on the depth of its inward portfolio equity flows and stocks.

## Rooted Map



## Breadth

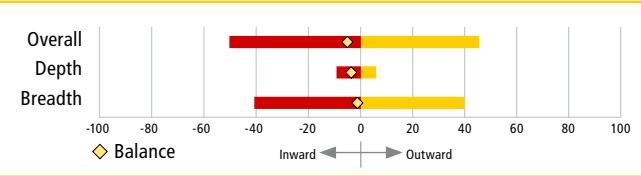
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	3/140		—	
Merchandise Trade	6/140	5/140	21%	14%

Capital	47/67		—	
FDI Stock	28/41	.	43%	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	48/66	—	24%	—

Information	3/101		—	
International Phone Calls	21/101	10/101	20%	5%
Printed Publications Trade	49/135	6/135	54%	13%

People	33/124		—	
Migrants	26/139	54/139	19%	21%
Tourists Departures/Arrivals	—	41/107	—	48%
International Students	—	36/93	—	33%

## Directionality



# BRUNEI DARUSSALAM

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	80/140	74/140	-6	41/100	42/100	-1
<b>Depth</b>	37/140	34/140	-3	29/50	29/50	0
<b>Breadth</b>	119/140	111/140	-8	11/50	13/50	-2
<b>Trade Pillar</b>	109/140	105/140	-4	37/100	39/100	-2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	40/106	41/106	1	57/100	57/100	0

### Connectedness Score Trend



## Depth

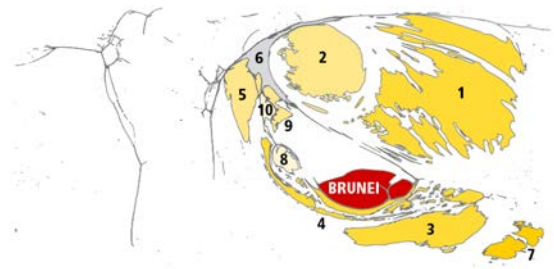
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	53/140		—	
Merchandise Trade (% of GDP)	9/140	120/140	79%	21%
Services Trade (% of GDP)	63/139	38/139	8%	10%
<b>Capital</b>	.		—	
FDI Stock (% of GDP)	71/132	18/140	4%	76%
FDI Flows (% of GFCF)	91/133	20/140	0%	35%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	124/129	.	-1%	.
<b>Information</b>	30/140		—	
Internet Bandwidth (Bits per Second per Internet User)	56/140		21,995	
International Phone Calls (Minutes per Capita)	9/140	33/140	666	206
Printed Publications Trade (USD per Capita)	87/135	28/135	\$1	\$37
<b>People</b>	15/116		—	
Migrants (% of Population)	69/139	8/140	5%	37%
Tourists Dep./Arr. Per Capita	.	44/136	.	0.5
International Students (% of Tertiary Education Enrollment)	3/130	35/104	56%	4%

## Summary

Brunei Darussalam ranks 80<sup>th</sup> out of the 140 countries included in this year's DHL Global Connectedness Index and 15<sup>th</sup> out of 19 countries in the East Asia & Pacific region. Brunei has stronger depth (37<sup>th</sup> out of 140 countries) than breadth (119<sup>th</sup>). The most notable aspect of Brunei's connectedness is that it holds the 40<sup>th</sup> rank out of 106 countries worldwide on the people pillar and the 4<sup>th</sup> among the countries within its region. Brunei ranks 8<sup>th</sup> worldwide on the depth of its inward migration and 3<sup>rd</sup> on outbound international students depth. Brunei's connectedness grew strongly from 2008 to 2010 before declining slightly over the past year.

## Rooted Map

### Brunei's Merchandise Exports, 2011



#### Top Export Destinations

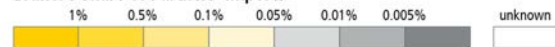
1. Japan (46%)
2. South Korea (16%)
3. Australia (11%)
4. Indonesia (8%)
5. India (6%)

6. China (4%)
7. New Zealand (3%)
8. Singapore (2%)
9. Vietnam (2%)
10. Thailand (1%)

#### Major Export Products

Crude oil, natural gas, garments

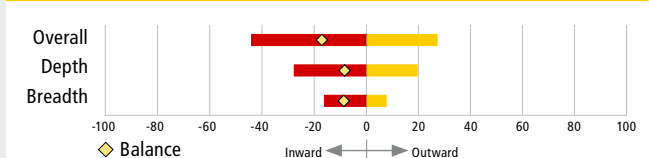
#### Brunei's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	118/140		—	
Merchandise Trade	135/140	94/140	94%	68%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	52/135	70/135	.	.
<b>People</b>	89/124		—	
Migrants	102/139	98/139	35%	85%
Tourists Departures/Arrivals	—	84/107	—	81%
International Students	—	49/93	—	68%

## Directionality



# BULGARIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	40/140	38/140	-2	54/100	55/100	-1
<b>Depth</b>	34/140	28/140	-6	30/50	30/50	0
<b>Breadth</b>	66/140	61/140	-5	24/50	24/50	0
<b>Trade Pillar</b>	36/140	35/140	-1	60/100	59/100	1
<b>Capital Pillar</b>	31/66	30/66	-1	51/100	54/100	-3
<b>Information Pillar</b>	29/101	25/101	-4	68/100	69/100	-1
<b>People Pillar</b>	56/106	56/106	0	49/100	49/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	25/140		—	
Merchandise Trade (% of GDP)	30/140	28/140	52%	60%
Services Trade (% of GDP)	28/139	65/139	14%	8%

<b>Capital</b>	58/122		—	
FDI Stock (% of GDP)	74/132	12/140	3%	89%
FDI Flows (% of GFCF)	81/133	46/140	1%	21%
Portfolio Equity Stock (% of GDP)	56/102	78/97	1%	1%
Portfolio Equity Flows (% of GDP)	44/129	103/126	0%	0%

<b>Information</b>	51/140		—	
Internet Bandwidth (Bits per Second per Internet User)	24/140		65,832	
International Phone Calls (Minutes per Capita)	67/140	67/140	37	80
Printed Publications Trade (USD per Capita)	65/135	73/135	\$3	\$6

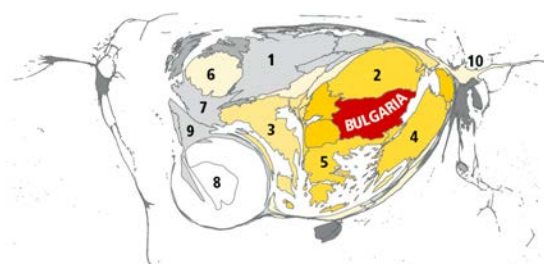
<b>People</b>	36/116			
Migrants (% of Population)	35/139	108/140	11%	1%
Tourists Dep./Arr. Per Capita	31/93	28/136	0.5	0.8
International Students (% of Tertiary Education Enrollment)	36/130	39/104	8%	4%

## Summary

Bulgaria's connectedness rose sharply in 2005, and then has remained fairly stable since 2006, declining slightly over the past year. It ranks 40<sup>th</sup> globally and 23<sup>rd</sup> within Europe. Bulgaria has its highest pillar rank on the information pillar, where it holds the 29<sup>th</sup> position out of 140 countries, ranking 18<sup>th</sup> among European countries. Although Bulgaria ranks 31<sup>st</sup> out of 66 countries on the capital pillar, the depth of its inward FDI stocks is particularly notable. It ranks 12<sup>th</sup> globally on inward FDI stock depth.

## Rooted Map

Bulgaria's Merchandise Exports, 2011



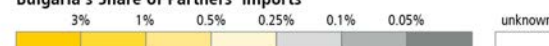
### Top Export Destinations

1. Germany (12%)
2. Romania (10%)
3. Italy (9%)
4. Turkey (8%)
5. Greece (7%)
6. Belgium (5%)
7. France (4%)
8. Gibraltar (3%)
9. Spain (3%)
10. Russia (3%)

### Major Export Products

Clothing, footwear, iron and steel, machinery and equipment, fuels

### Bulgaria's Share of Partners' Imports



## Breadth

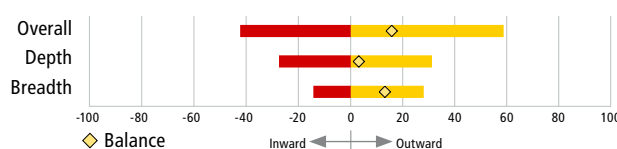
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	84/140		—	
Merchandise Trade	66/140	97/140	79%	85%

<b>Capital</b>	23/67		—	
FDI Stock	·	24/46	·	92%
FDI Flows	·	·	·	·
Portfolio Equity Stock	28/66	—	75%	—

<b>Information</b>	28/101		—	
International Phone Calls	14/101	53/101	81%	77%
Printed Publications Trade	48/135	44/135	96%	92%

<b>People</b>	98/124		—	
Migrants	99/139	125/139	24%	3%
Tourists Departures/Arrivals	—	·	—	·
International Students	—	54/93	—	44%

## Directionality



# BURKINA FASO

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	136/140	136/140	0	18/100	16/100	2
<b>Depth</b>	131/140	135/140	4	5/50	4/50	1
<b>Breadth</b>	112/140	118/140	6	13/50	11/50	2
<b>Trade Pillar</b>	135/140	136/140	1	24/100	19/100	5
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	76/106	73/106	-3	40/100	41/100	-1

### Connectedness Score Trend



## Depth

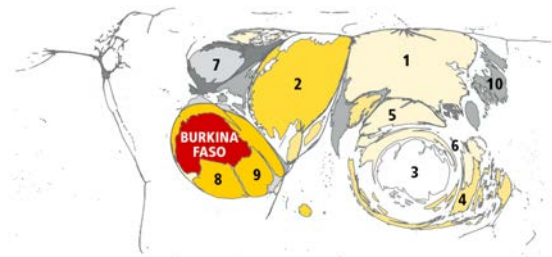
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	122/140		—	
Merchandise Trade (% of GDP)	109/140	104/140	18%	26%
Services Trade (% of GDP)	126/139	86/139	2%	7%
<b>Capital</b>	122/122		—	
FDI Stock (% of GDP)	121/132	138/140	0%	4%
FDI Flows (% of GFCF)	108/133	131/140	0%	3%
Portfolio Equity Stock (% of GDP)	84/102	95/97	0%	0%
Portfolio Equity Flows (% of GDP)	109/129	96/126	0%	0%
<b>Information</b>	127/140		—	
Internet Bandwidth (Bits per Second per Internet User)	120/140		2,183	
International Phone Calls (Minutes per Capita)	119/140	126/140	7	8
Printed Publications Trade (USD per Capita)	129/135	118/135	\$0	\$1
<b>People</b>	60/116		—	
Migrants (% of Population)	37/139	54/140	10%	6%
Tourists Dep./Arr. Per Capita	.	122/136	.	0.0
International Students (% of Tertiary Education Enrollment)	53/130	62/104	5%	1%

## Summary

Burkina Faso ranks 136<sup>th</sup> globally on this year's DHL Global Connectedness Index (out of 140 countries) and 26<sup>th</sup> among the 29 countries covered in Sub-Saharan Africa. Its global rank is unchanged versus last year. Its connectedness is deepest on the people pillar. Its people pillar depth ranks 60<sup>th</sup> out of 116 countries. This is driven by migration and international education. Burkina Faso's highest depth score, 37<sup>th</sup> out of 139 countries, is on the depth of its outward migration. Nearly all emigration from Burkina Faso is intra-regional, with 94% of its emigrants remaining within Sub-Saharan Africa.

## Rooted Map

### Burkina Faso's Merchandise Exports, 2011



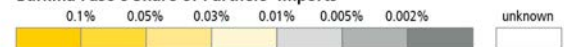
#### Top Export Destinations

1. China (22%)
2. Turkey (17%)
3. Singapore (9%)
4. Indonesia (7%)
5. Thailand (5%)
6. Malaysia (4%)
7. Belgium (4%)
8. Ghana (4%)
9. Benin (3%)
10. Japan (3%)

#### Major Export Products

Gold, cotton, livestock

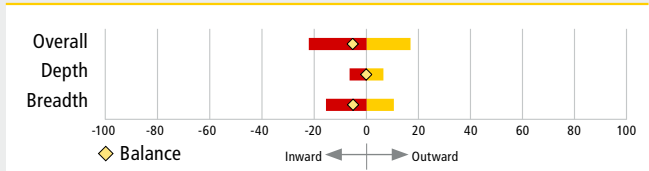
#### Burkina Faso's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	106/140		—	
Merchandise Trade	104/140	107/140	13%	38%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	92/135	109/135	73%	6%
<b>People</b>	101/124		—	
Migrants	139/139	79/139	94%	87%
Tourists Departures/Arrivals	—	64/107	—	47%
International Students	—	.	—	.

## Directionality

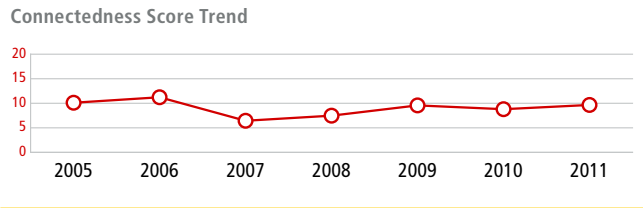




# BURUNDI

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	140/140	140/140	0	10/100	9/100	1
Depth	140/140	140/140	0	3/50	1/50	2
Breadth	131/140	128/140	-3	7/50	7/50	0
Trade Pillar	138/140	139/140	1	14/100	13/100	1
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	94/106	94/106	0	30/100	29/100	1



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	131/140		—	
Merchandise Trade (% of GDP)	139/140	94/140	6%	30%
Services Trade (% of GDP)	139/139	84/139	0%	7%

Capital	120/122		—	
FDI Stock (% of GDP)	124/132	140/140	0%	0%
FDI Flows (% of GFCF)	99/133	137/140	0%	0%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

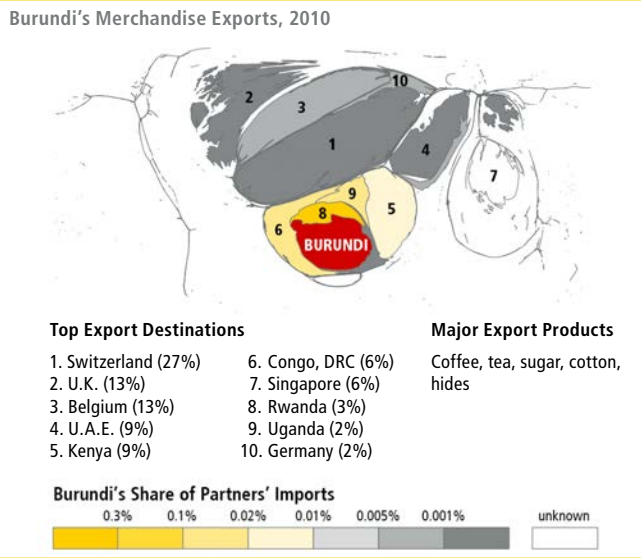
Information	138/140		—	
Internet Bandwidth (Bits per Second per Internet User)	130/140		693	
International Phone Calls (Minutes per Capita)	139/140	140/140	1	1
Printed Publications Trade (USD per Capita)	128/135	125/135	\$0	\$1

People	72/116			
Migrants (% of Population)	63/139	116/140	5%	1%
Tourists Dep./Arr. Per Capita	.	121/136	.	0.0
International Students (% of Tertiary Education Enrollment)	66/130	24/104	4%	6%

## Summary

Burundi holds the lowest rank on this year’s DHL Global Connectedness Index, with its rank unchanged versus last year. Burundi’s low connectedness reflects, in part, challenging structural conditions: it is a landlocked country and has one of the world’s lowest levels of GDP per capita. Among Burundi’s pillar level depth scores, Burundi’s connectedness is deepest on the people pillar, owing to its high outward migration (63<sup>rd</sup> out of 139 countries) and high inward and outward mobility of university students (24<sup>th</sup> out of 104 countries inward and 66<sup>th</sup> out of 130 countries outward).

## Rooted Map



## Breadth

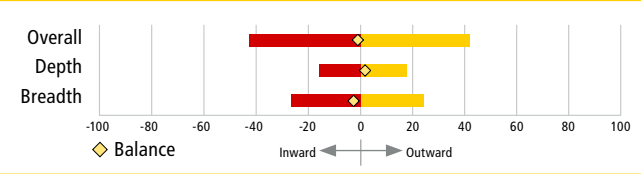
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	134/140		—	
Merchandise Trade	138/140	109/140	23%	29%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	45/135	118/135	4%	21%

People	117/124		—	
Migrants	135/139	50/139	90%	81%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	91/93	—	100%

## Directionality

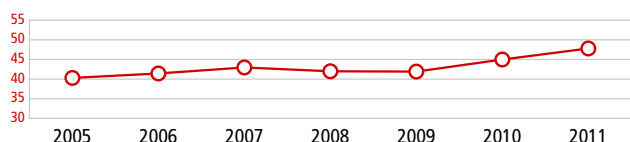


# CAMBODIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	60/140	65/140	5	48/100	45/100	3
<b>Depth</b>	42/140	45/140	3	28/50	27/50	1
<b>Breadth</b>	81/140	94/140	13	20/50	18/50	2
<b>Trade Pillar</b>	28/140	38/140	10	64/100	58/100	6
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	95/106	96/106	1	29/100	29/100	0

### Connectedness Score Trend



## Depth

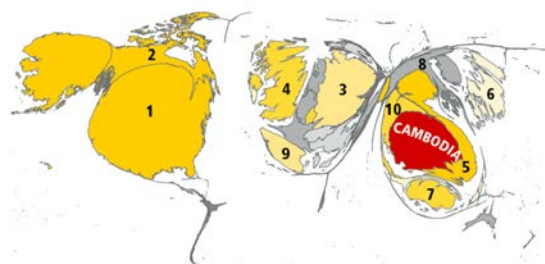
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	12/140		—	
Merchandise Trade (% of GDP)	29/140	13/140	54%	72%
Services Trade (% of GDP)	20/139	33/139	17%	11%
<b>Capital</b>	44/122		—	
FDI Stock (% of GDP)	78/132	38/140	3%	53%
FDI Flows (% of GFCF)	82/133	21/140	1%	35%
Portfolio Equity Stock (% of GDP)	51/102	.	3%	.
Portfolio Equity Flows (% of GDP)	58/129	75/126	0%	0%
<b>Information</b>	91/140		—	
Internet Bandwidth (Bits per Second per Internet User)	71/140		13,530	
International Phone Calls (Minutes per Capita)	117/140	111/140	8	18
Printed Publications Trade (USD per Capita)	7/135	104/135	\$126	\$2
<b>People</b>	100/116		—	
Migrants (% of Population)	109/139	89/140	2%	2%
Tourists Dep./Arr. Per Capita	84/93	79/136	0.0	0.2
International Students (% of Tertiary Education Enrollment)	77/130	101/104	3%	0%

## Summary

Cambodia's connectedness began increasing strongly in 2009, reaching the 60<sup>th</sup> rank globally in 2011. Cambodia also ranks 11<sup>th</sup> out of 19 countries in East Asia & Pacific and has much higher outward connectedness (26<sup>th</sup> out of 137 countries) than inward connectedness (109<sup>th</sup> out of 140), a difference that is driven by breadth rather than depth. As is typical among countries in its region, Cambodia's highest depth ranks are in the trade pillar and specifically on merchandise trade. It ranks 13<sup>th</sup> worldwide on merchandise imports depth. Its connectedness increase from 2010 to 2011 was also driven by the trade pillar.

## Rooted Map

### Cambodia's Merchandise Exports, 2011



#### Top Export Destinations

1. U.S.A. (40%)
2. Canada (8%)
3. Germany (8%)
4. U.K. (8%)
5. Vietnam (6%)
6. Japan (4%)
7. Singapore (3%)
8. China (3%)
9. Spain (2%)
10. Thailand (2%)

#### Major Export Products

Clothing, timber, rubber, rice, fish, tobacco, footwear

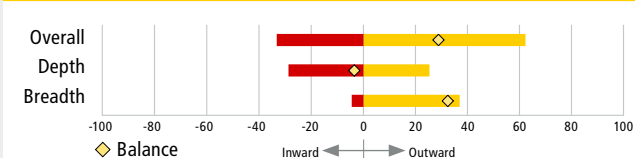
#### Cambodia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	85/140		—	
Merchandise Trade	37/140	129/140	22%	95%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	67/135	130/135	100%	86%
<b>People</b>	87/124		—	
Migrants	33/139	127/139	19%	98%
Tourists Departures/Arrivals	—	48/107	—	70%
International Students	—	89/93	—	97%

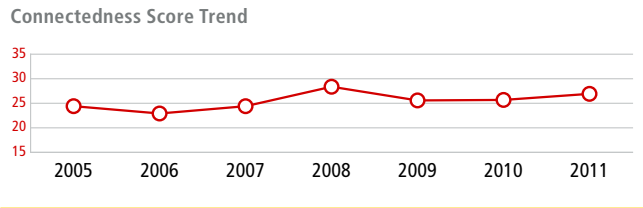
## Directionality



# CAMEROON

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	117/140	118/140	1	27/100	26/100	1
Depth	133/140	136/140	3	5/50	4/50	1
Breadth	72/140	72/140	0	22/50	22/50	0
Trade Pillar	103/140	103/140	0	40/100	39/100	1
Capital Pillar	-	-	-	-	-	-
Information Pillar	100/101	100/101	0	18/100	19/100	-1
People Pillar	85/106	86/106	1	36/100	36/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	118/140		-	
Merchandise Trade (% of GDP)	110/140	107/140	18%	25%
Services Trade (% of GDP)	90/139	83/139	4%	7%

Capital	114/122		-	
FDI Stock (% of GDP)	132/132	107/140	0%	17%
FDI Flows (% of GFCF)	128/133	76/140	-2%	12%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	75/129	97/126	0%	0%

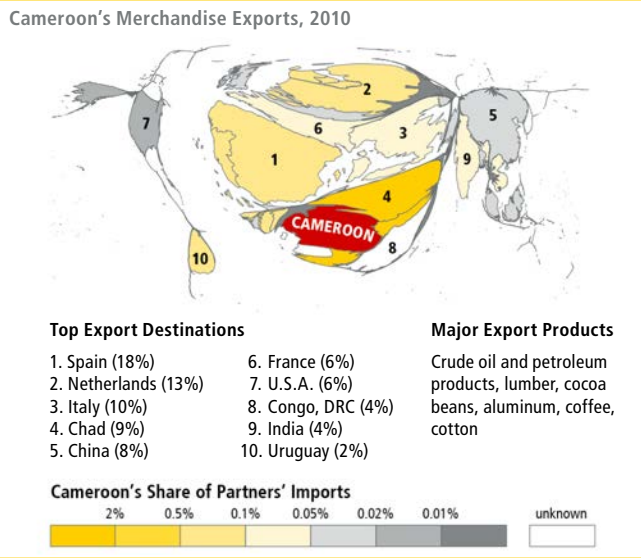
Information	137/140		-	
Internet Bandwidth (Bits per Second per Internet User)	137/140		322	
International Phone Calls (Minutes per Capita)	132/140	123/140	2	10
Printed Publications Trade (USD per Capita)	121/135	116/135	\$0	\$1

People	92/116			
Migrants (% of Population)	124/139	113/140	1%	1%
Tourists Dep./Arr. Per Capita	-	111/136	-	0.0
International Students (% of Tertiary Education Enrollment)	32/130	74/104	9%	1%

## Summary

Cameroon ranks 117<sup>th</sup> out of 140 countries on the overall connectedness index and 20<sup>th</sup> among the 29 Sub-Saharan African countries that were analyzed. It has higher breadth (72<sup>nd</sup> out of 140 countries) than depth (133<sup>rd</sup> out of 140). While Cameroon's connectedness has fluctuated somewhat, it is only slightly higher in 2011 than it was in 2005. Cameroon's global connectedness is highest connectedness on the people pillar, where it ranks the 85<sup>th</sup> out of 106 countries.

## Rooted Map



## Breadth

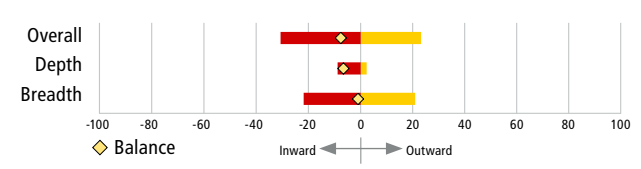
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	57/140		-	
Merchandise Trade	71/140	51/140	20%	18%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	82/101		-	
International Phone Calls	80/101	54/101	53%	19%
Printed Publications Trade	131/135	91/135	99%	2%

People	72/124		-	
Migrants	67/139	121/139	48%	93%
Tourists Departures/Arrivals	-	15/107	-	0%
International Students	-	87/93	-	100%

## Directionality



# CANADA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	29/140	29/140	0	60/100	60/100	0
<b>Depth</b>	47/140	46/140	-1	27/50	27/50	0
<b>Breadth</b>	30/140	32/140	2	33/50	33/50	0
<b>Trade Pillar</b>	102/140	104/140	2	40/100	39/100	1
<b>Capital Pillar</b>	11/66	12/66	1	73/100	73/100	0
<b>Information Pillar</b>	11/101	12/101	1	79/100	78/100	1
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

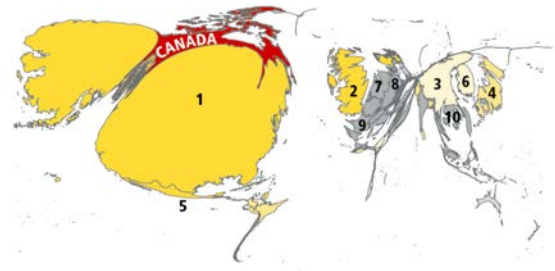
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	105/140		—	
Merchandise Trade (% of GDP)	81/140	102/140	26%	27%
Services Trade (% of GDP)	91/139	93/139	4%	6%
<b>Capital</b>	22/122		—	
FDI Stock (% of GDP)	20/132	70/140	39%	34%
FDI Flows (% of GFCF)	27/133	97/140	13%	8%
Portfolio Equity Stock (% of GDP)	30/102	39/97	16%	7%
Portfolio Equity Flows (% of GDP)	22/129	10/126	1%	1%
<b>Information</b>	7/140		—	
Internet Bandwidth (Bits per Second per Internet User)	21/140		70,150	
International Phone Calls (Minutes per Capita)	14/140	12/140	375	327
Printed Publications Trade (USD per Capita)	29/135	8/135	\$30	\$95
<b>People</b>	.		.	
Migrants (% of Population)	84/139	16/140	4%	21%
Tourists Dep./Arr. Per Capita	19/93	47/136	0.8	0.5
International Students (% of Tertiary Education Enrollment)	.	.	.	.

## Summary

Canada's overall connectedness has gradually increased since 2005 defying the pattern of crisis-induced declines that most other countries experienced. Canada ranks 29<sup>th</sup> worldwide this year, with its rank unchanged versus last year. Canada ranks 11<sup>th</sup> on both the capital and the information pillars but only 102<sup>nd</sup> on the trade pillar. Canada's scores within the trade pillar are uniformly low across both depth and breadth and within depth on both merchandise and services trade. Canada's top ranked position on the breadth of its FDI flows may seem odd in light of more than three quarters of those flows being to or from the United States, but this simply reflects the U.S.'s large share of FDI flows on a global basis.

## Rooted Map

### Canada's Merchandise Exports, 2011



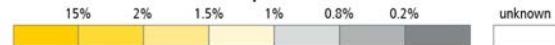
### Top Export Destinations

- U.S.A. (74%)
- U.K. (4%)
- China (4%)
- Japan (2%)
- Mexico (1%)
- South Korea (1%)
- Netherlands (1%)
- Germany (1%)
- France (1%)
- Hong Kong (1%)

### Major Export Products

Motor vehicles and parts, industrial machinery, aircraft, telecommunications equipment; chemicals, plastics, fertilizers

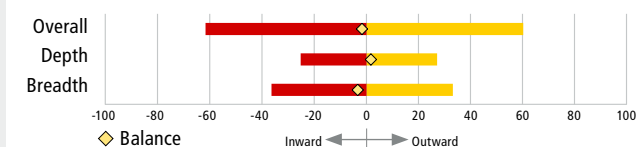
### Canada's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	78/140		—	
Merchandise Trade	81/140	61/140	75%	56%
<b>Capital</b>	10/67		—	
FDI Stock	17/41	23/46	44%	56%
FDI Flows	1/38	1/41	75%	81%
Portfolio Equity Stock	15/66	—	52%	—
<b>Information</b>	31/101		—	
International Phone Calls	39/101	29/101	69%	79%
Printed Publications Trade	37/135	61/135	78%	78%
<b>People</b>	22/124		—	
Migrants	32/139	3/139	73%	6%
Tourists Departures/Arrivals	—	65/107	—	74%
International Students	—	3/93	—	12%

## Directionality

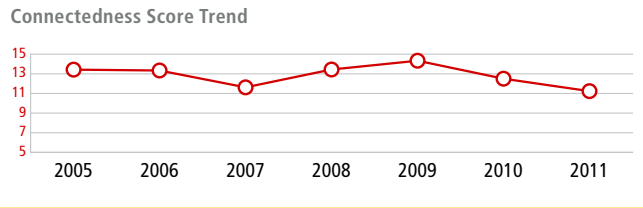




# CENTRAL AFRICAN REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	139/140	138/140	-1	11/100	13/100	-2
Depth	135/140	134/140	-1	5/50	5/50	0
Breadth	132/140	126/140	-6	6/50	8/50	-2
Trade Pillar	140/140	138/140	-2	11/100	13/100	-2
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	101/106	101/106	0	24/100	24/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	137/140		-	
Merchandise Trade (% of GDP)	136/140	127/140	7%	18%
Services Trade (% of GDP)	131/139	75/139	1%	7%

Capital	.	.	.	.
FDI Stock (% of GDP)	87/132	89/140	2%	25%
FDI Flows (% of GFCF)	.	14/140	.	43%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

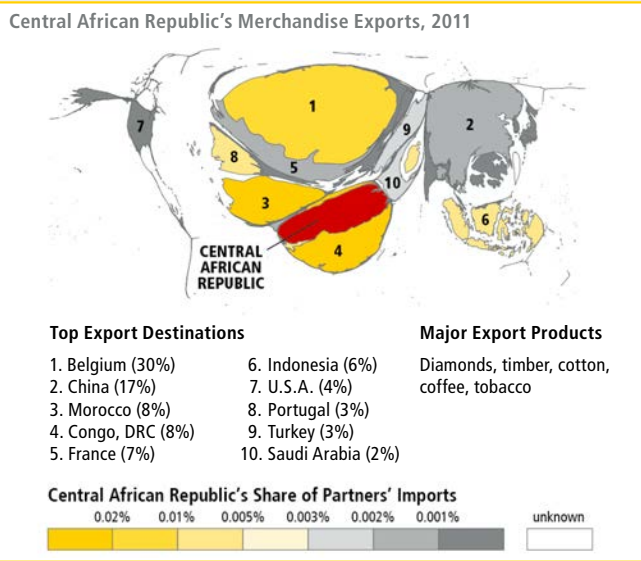
Information	139/140		-	
Internet Bandwidth (Bits per Second per Internet User)	140/140		203	
International Phone Calls (Minutes per Capita)	118/140	139/140	7	2
Printed Publications Trade (USD per Capita)	134/135	128/135	\$0	\$0

People	87/116			
Migrants (% of Population)	103/139	100/140	3%	2%
Tourists Dep./Arr. Per Capita	93/93	124/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	29/130	30/104	10%	4%

## Summary

The Central African Republic ranks 139<sup>th</sup> out of 140 countries on this year’s DHL Global Connectedness Index, down one place in the rankings versus last year. While its overall level of global connectedness is among the lowest, it does have high scores on selected components. Particularly notable are its inward FDI flows over the past three years, which earned the Central African Republic the 14<sup>th</sup> rank worldwide on inward FDI flows depth. Inflows of FDI added up to 43% of the Central African Republic’s gross fixed capital formation. The Central African Republic also ranks high on international students depth: 29<sup>th</sup> outward and 30<sup>th</sup> inward.

## Rooted Map



## Breadth

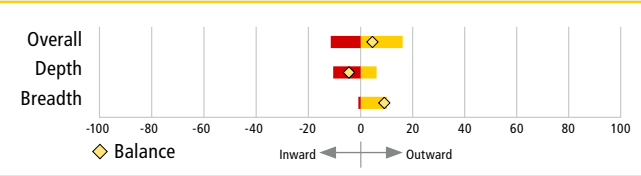
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	123/140		-	
Merchandise Trade	103/140	140/140	9%	10%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	-	.	-

Information	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	135/135	82/135	.	.

People	121/124		-	
Migrants	133/139	134/139	83%	96%
Tourists Departures/Arrivals	-	66/107	-	48%
International Students	-	90/93	-	100%

## Directionality

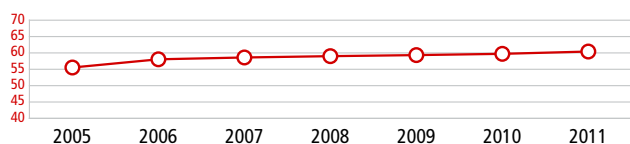


# CHAD

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	104/140	89/140	-15	33/100	38/100	-5
<b>Depth</b>	88/140	88/140	0	18/50	18/50	0
<b>Breadth</b>	102/140	82/140	-20	15/50	20/50	-5
<b>Trade Pillar</b>	116/140	99/140	-17	34/100	40/100	-6
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	61/106	61/106	0	47/100	47/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	63/140		—	
Merchandise Trade (% of GDP)	31/140	116/140	50%	22%
Services Trade (% of GDP)	111/139	9/139	2%	20%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	104/132	14/140	1%	81%
FDI Flows (% of GFCF)	.	5/140	.	80%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

<b>Information</b>	140/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	138/140	.	.	228
International Phone Calls (Minutes per Capita)	140/140	138/140	1	2
Printed Publications Trade (USD per Capita)	.	.	.	.

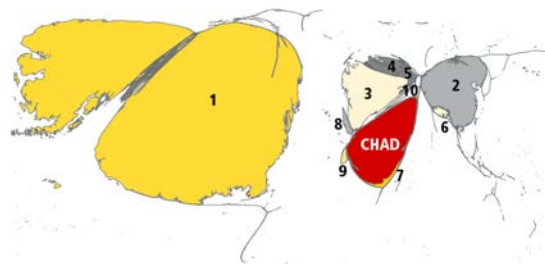
<b>People</b>	81/116	.	.	.
Migrants (% of Population)	96/139	73/140	3%	3%
Tourists Dep./Arr. Per Capita	.	129/136	.	0.0
International Students (% of Tertiary Education Enrollment)	13/130	85/104	15%	0%

## Summary

Chad's overall connectedness ranks 104<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index and 12<sup>th</sup> out of the 29 countries analyzed in Sub-Saharan Africa. Chad ranks last on depth on the information pillar, which indicates that may be an area to focus on for improving its connectedness. Chad's depth scores are much higher on inward FDI and on services imports. It ranks 5<sup>th</sup> worldwide on the depth of its inward FDI flows, with inward FDI flows over the past three years accounting for 80% of its gross fixed capital formation. Chad also ranks 9<sup>th</sup> globally on the depth of its services imports, which equaled 20% of its GDP over the past year.

## Rooted Map

### Chad's Merchandise Exports, 2011



#### Top Export Destinations

1. U.S.A. (84%)
2. China (7%)
3. France (6%)
4. Netherlands (1%)
5. Germany (< 1%)
6. Bangladesh (< 1%)
7. Cent. Afr. Rep. (< 1%)
8. Portugal (< 1%)
9. Côte d'Ivoire (< 1%)
10. Italy (< 1%)

#### Major Export Products

Oil, cattle, cotton, gum arabic

#### Chad's Share of Partners' Imports



## Breadth

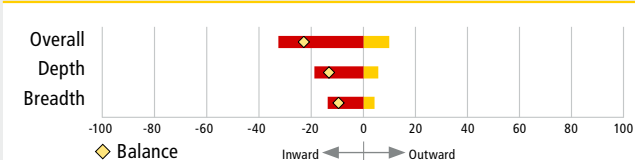
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	116/140		—	
Merchandise Trade	131/140	102/140	0%	25%

<b>Capital</b>	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	.	.	.	.

<b>People</b>	48/124	.	.	.
Migrants	131/139	117/139	90%	90%
Tourists Departures/Arrivals	—	52/107	—	0%
International Students	—	1/93	—	0%

## Directionality

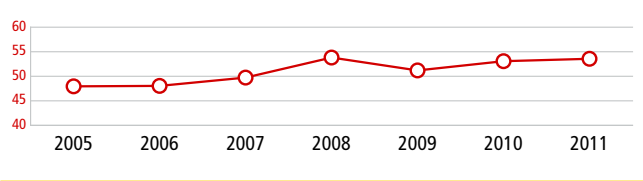


CHILE

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	41/140	41/140	0	54/100	53/100	1
Depth	55/140	57/140	2	26/50	25/50	1
Breadth	48/140	49/140	1	28/50	28/50	0
Trade Pillar	39/140	40/140	1	59/100	58/100	1
Capital Pillar	19/66	19/66	0	63/100	64/100	-1
Information Pillar	48/101	50/101	2	59/100	57/100	2
People Pillar	92/106	92/106	0	32/100	32/100	0

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	86/140		—	
Merchandise Trade (% of GDP)	65/140	92/140	32%	30%
Services Trade (% of GDP)	83/139	98/139	5%	6%

Capital	7/122		—	
FDI Stock (% of GDP)	26/132	24/140	29%	68%
FDI Flows (% of GFCF)	15/133	22/140	21%	34%
Portfolio Equity Stock (% of GDP)	17/102	36/97	31%	8%
Portfolio Equity Flows (% of GDP)	10/129	18/126	4%	1%

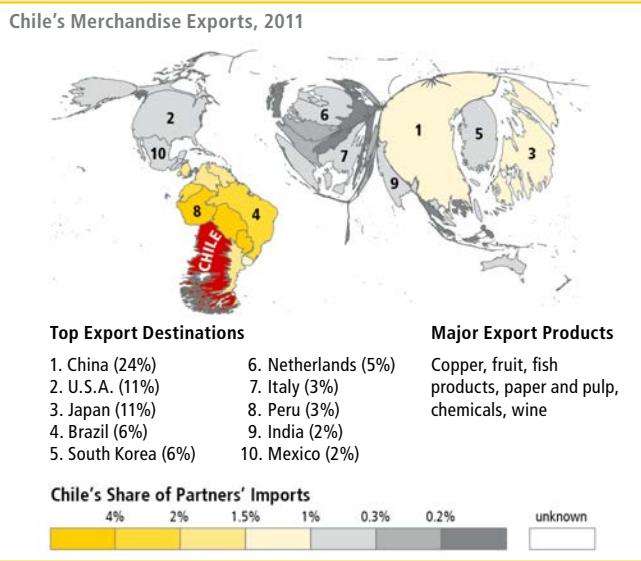
Information	79/140		—	
Internet Bandwidth (Bits per Second per Internet User)	57/140		20,414	
International Phone Calls (Minutes per Capita)	93/140	94/140	16	36
Printed Publications Trade (USD per Capita)	60/135	67/135	\$3	\$8

People	94/116			
Migrants (% of Population)	93/139	98/140	3%	2%
Tourists Dep./Arr. Per Capita	51/93	81/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	118/130	89/104	1%	0%

Summary

Chile is the top ranked Latin American country on the DHL Global Connectedness Index and holds the 41<sup>st</sup> rank world-wide. Chile is a leading country globally with respect to capital market integration, ranking 7<sup>th</sup> worldwide on capital pillar depth. It also ranks 1<sup>st</sup> within its region on the trade and capital pillars. While Chile’s connectedness score declined from 2008 to 2009 at the height of the global financial crisis, it has since nearly recovered its pre-crisis peak. Its modest increase from 2010 to 2011 was driven by the information and trade pillars. Chile’s limited intra-regional flows are also noteworthy. While it is a major investor within its region, only 16% of its merchandise exports are intra-regional.

Rooted Map



Breadth

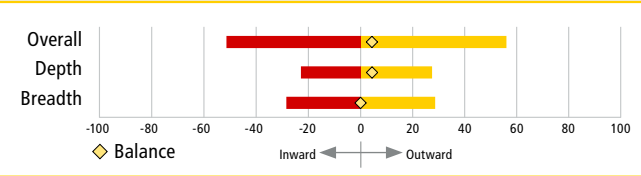
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	28/140		—	
Merchandise Trade	22/140	42/140	16%	26%

Capital	35/67		—	
FDI Stock	30/41	33/46	68%	18%
FDI Flows	33/38	23/41	67%	15%
Portfolio Equity Stock	29/66	—	10%	—

Information	37/101		—	
International Phone Calls	46/101	19/101	55%	29%
Printed Publications Trade	102/135	38/135	82%	21%

People	84/124		—	
Migrants	35/139	58/139	49%	71%
Tourists Departures/Arrivals	—	89/107	—	74%
International Students	—	72/93	—	91%

Directionality

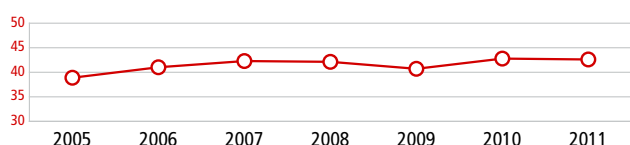


# CHINA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	74/140	73/140	-1	43/100	43/100	0
<b>Depth</b>	122/140	119/140	-3	10/50	11/50	-1
<b>Breadth</b>	35/140	35/140	0	32/50	32/50	0
<b>Trade Pillar</b>	40/140	34/140	-6	59/100	59/100	0
<b>Capital Pillar</b>	60/66	59/66	-1	23/100	24/100	-1
<b>Information Pillar</b>	75/101	74/101	-1	46/100	45/100	1
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

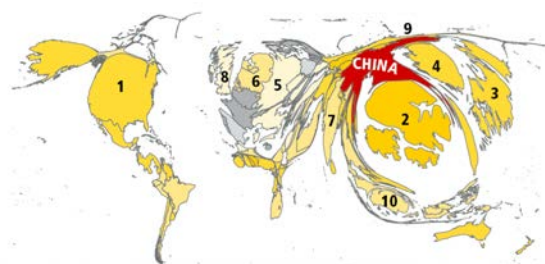
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	117/140		—	
Merchandise Trade (% of GDP)	82/140	111/140	26%	24%
Services Trade (% of GDP)	112/139	128/139	2%	3%
<b>Capital</b>	73/122		—	
FDI Stock (% of GDP)	65/132	127/140	5%	10%
FDI Flows (% of GFCF)	64/133	120/140	2%	4%
Portfolio Equity Stock (% of GDP)	58/102	53/97	1%	3%
Portfolio Equity Flows (% of GDP)	43/129	35/126	0%	0%
<b>Information</b>	116/140		—	
Internet Bandwidth (Bits per Second per Internet User)	117/140		2,692	
International Phone Calls (Minutes per Capita)	113/140	121/140	8	12
Printed Publications Trade (USD per Capita)	69/135	115/135	\$2	\$1
<b>People</b>	112/116		—	
Migrants (% of Population)	136/139	139/140	1%	0%
Tourists Dep./Arr. Per Capita	81/93	104/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	99/130	90/104	2%	0%

## Summary

China holds the 74<sup>th</sup> rank on this year's DHL Global Connectedness Index and ranks 14<sup>th</sup> within the East Asia & Pacific region. China has much higher breadth (35<sup>th</sup>) than depth (122<sup>nd</sup>), which is as expected given its very large domestic economy. China ranked 1<sup>st</sup> worldwide on the breadth of its merchandise exports, but only 82<sup>nd</sup> on merchandise exports depth. Only 39% of China's merchandise exports went to other countries in the East Asia & Pacific region. Merchandise exports added up to 26% of China's GDP. China's global connectedness has increased modestly over the period from 2005 to 2011, declining in 2009 in line with global trade flows and then recovering in 2010.

## Rooted Map

China's Merchandise Exports, 2011



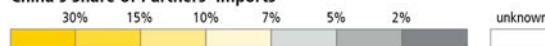
### Top Export Destinations

1. U.S.A. (17%)
2. Hong Kong (14%)
3. Japan (8%)
4. South Korea (4%)
5. Germany (4%)
6. Netherlands (3%)
7. India (3%)
8. U.K. (2%)
9. Russia (2%)
10. Singapore (2%)

### Major Export Products

Electrical and other machinery, including data processing equipment, apparel, textiles, iron and steel, optical & medical equipment

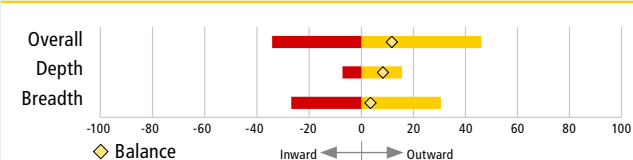
### China's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	4/140		—	
Merchandise Trade	1/140	19/140	39%	49%
<b>Capital</b>	62/67		—	
FDI Stock	36/41	42/46	78%	70%
FDI Flows	34/38	40/41	77%	81%
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	35/101		—	
International Phone Calls	68/101	41/101	80%	62%
Printed Publications Trade	2/135	21/135	35%	46%
<b>People</b>	.		—	
Migrants	39/139	26/139	64%	61%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

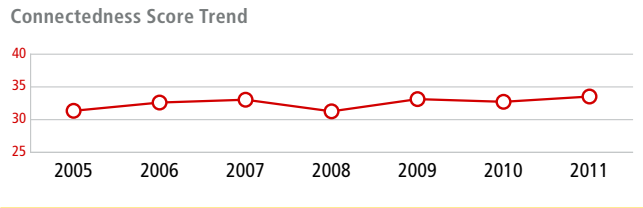




# COLOMBIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	103/140	108/140	5	34/100	33/100	1
Depth	118/140	122/140	4	11/50	9/50	2
Breadth	69/140	63/140	-6	22/50	23/50	-1
Trade Pillar	115/140	115/140	0	35/100	34/100	1
Capital Pillar	53/66	57/66	4	33/100	32/100	1
Information Pillar	50/101	47/101	-3	59/100	58/100	1
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	135/140		-	
Merchandise Trade (% of GDP)	116/140	129/140	17%	17%
Services Trade (% of GDP)	128/139	131/139	2%	3%

Capital	50/122		-	
FDI Stock (% of GDP)	53/132	83/140	9%	29%
FDI Flows (% of GFCF)	33/133	65/140	9%	13%
Portfolio Equity Stock (% of GDP)	.	63/97	.	2%
Portfolio Equity Flows (% of GDP)	83/129	32/126	0%	0%

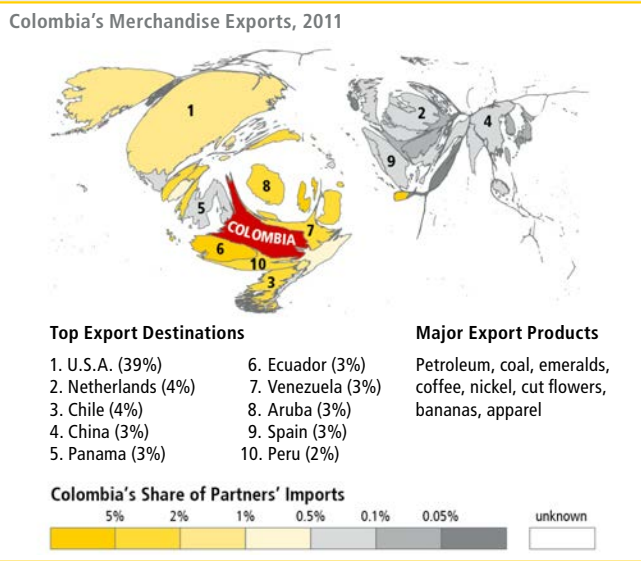
Information	82/140		-	
Internet Bandwidth (Bits per Second per Internet User)	67/140		16,796	
International Phone Calls (Minutes per Capita)	110/140	59/140	9	93
Printed Publications Trade (USD per Capita)	63/135	94/135	\$3	\$3

People	105/116			
Migrants (% of Population)	87/139	133/140	4%	0%
Tourists Dep./Arr. Per Capita	78/93	101/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	107/130	.	1%	.

## Summary

Colombia ranks 103<sup>rd</sup> on this year’s DHL Global Connectedness Index, up from 108<sup>th</sup> last year. It is the 7<sup>th</sup> ranked country in South America, and has higher breadth (69<sup>th</sup> worldwide out of 140 countries) than depth (118<sup>th</sup>). It has balanced connectedness between the inward and outward directions, and has generally maintained stable connectedness levels since 2005. Colombia has much stronger connectedness on the capital (53<sup>rd</sup> rank globally) and information (50<sup>th</sup>) pillars than on the trade pillar (115<sup>th</sup>). The depth of Colombia’s trade flows is particularly low (135<sup>th</sup> out of 140 countries), which may represent an untapped opportunity.

## Rooted Map



## Breadth

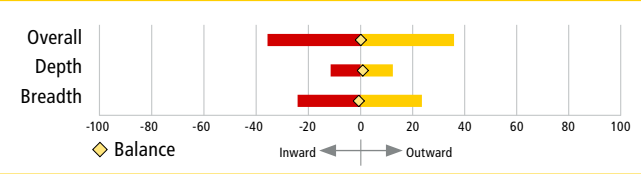
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	52/140		-	
Merchandise Trade	65/140	44/140	30%	17%

Capital	50/67		-	
FDI Stock	.	.	.	.
FDI Flows	36/38	39/41	2%	49%
Portfolio Equity Stock	47/66	-	18%	-

Information	36/101		-	
International Phone Calls	35/101	32/101	33%	8%
Printed Publications Trade	83/135	62/135	68%	32%

People	.		-	
Migrants	50/139	64/139	43%	65%
Tourists Departures/Arrivals	-	.	-	.
International Students	-	.	-	.

## Directionality



# COSTA RICA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	87/140	88/140	1	38/100	38/100	0
<b>Depth</b>	73/140	72/140	-1	22/50	21/50	1
<b>Breadth</b>	97/140	96/140	-1	16/50	17/50	-1
<b>Trade Pillar</b>	88/140	86/140	-2	44/100	44/100	0
<b>Capital Pillar</b>	59/66	58/66	-1	24/100	25/100	-1
<b>Information Pillar</b>	38/101	42/101	4	64/100	61/100	3
<b>People Pillar</b>	66/106	66/106	0	44/100	44/100	0

Connectedness Score Trend



## Depth

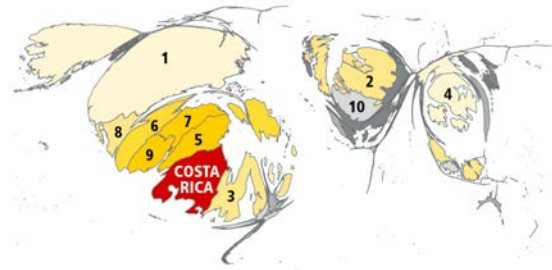
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	67/140		—	
Merchandise Trade (% of GDP)	84/140	62/140	25%	40%
Services Trade (% of GDP)	41/139	112/139	11%	5%
<b>Capital</b>	78/122		—	
FDI Stock (% of GDP)	88/132	57/140	2%	40%
FDI Flows (% of GFCF)	94/133	41/140	0%	23%
Portfolio Equity Stock (% of GDP)	59/102	·	1%	·
Portfolio Equity Flows (% of GDP)	82/129	75/126	0%	0%
<b>Information</b>	40/140		—	
Internet Bandwidth (Bits per Second per Internet User)	39/140		36,216	
International Phone Calls (Minutes per Capita)	56/140	49/140	56	124
Printed Publications Trade (USD per Capita)	58/135	38/135	\$4	\$21
<b>People</b>	68/116		—	
Migrants (% of Population)	106/139	37/140	3%	11%
Tourists Dep./Arr. Per Capita	60/93	52/136	0.1	0.5
International Students (% of Tertiary Education Enrollment)	96/130	68/104	2%	1%

## Summary

Costa Rica ranks 87<sup>th</sup> out of 140 countries on the DHL Global Connectedness Index and 10<sup>th</sup> among the 22 countries included in the South & Central America & Caribbean region. Costa Rica's strongest pillar is the information pillar on which it ranks 38<sup>th</sup> globally and 2<sup>nd</sup> within Central America. Among the noteworthy aspects of Costa Rica's connectedness profile is its high inward migration depth, on which it ranks 37<sup>th</sup> worldwide. Immigrants make up 11% of Costa Rica's population. Outward migration from Costa Rica is much smaller, with Costa Rica ranking only 106<sup>th</sup> on outward migration depth. Costa Rica also has strong international internet connectivity, ranking 39<sup>th</sup> on internet bandwidth depth.

## Rooted Map

Costa Rica's Merchandise Exports, 2011



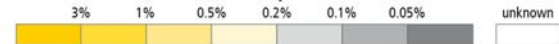
### Top Export Destinations

1. U.S.A. (38%)
2. Netherlands (7%)
3. Panama (5%)
4. Hong Kong (5%)
5. Nicaragua (4%)
6. Guatemala (4%)
7. Honduras (3%)
8. Mexico (3%)
9. El Salvador (3%)
10. Belgium (3%)

### Major Export Products

Bananas, pineapples, coffee, melons, ornamental plants, sugar; beef; seafood; electronic components, medical equipment

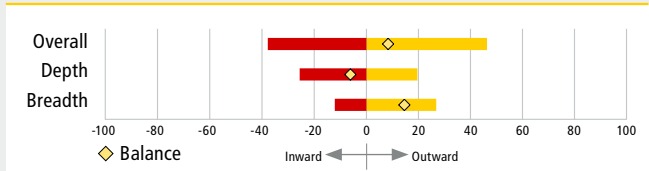
### Costa Rica's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	88/140		—	
Merchandise Trade	68/140	104/140	27%	17%
<b>Capital</b>	60/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	·	·	·
Portfolio Equity Stock	57/66	—	1%	—
<b>Information</b>	51/101		—	
International Phone Calls	49/101	30/101	49%	12%
Printed Publications Trade	71/135	83/135	84%	25%
<b>People</b>	68/124		—	
Migrants	59/139	102/139	15%	91%
Tourists Departures/Arrivals	—	63/107	—	37%
International Students	—	51/93	—	69%

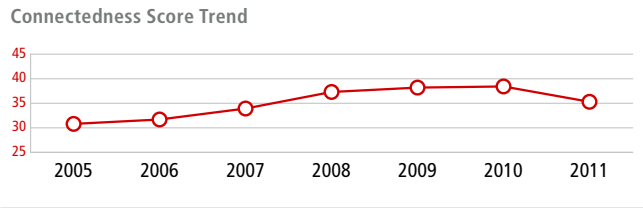
## Directionality



# CÔTE D'IVOIRE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	97/140	84/140	-13	35/100	38/100	-3
Depth	90/140	81/140	-9	18/50	19/50	-1
Breadth	94/140	89/140	-5	17/50	19/50	-2
Trade Pillar	74/140	48/140	-26	48/100	55/100	-7
Capital Pillar	.	.	.	.	.	.
Information Pillar	92/101	93/101	1	31/100	26/100	5
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	62/140		—	
Merchandise Trade (% of GDP)	36/140	99/140	46%	28%
Services Trade (% of GDP)	106/139	49/139	3%	9%

Capital	93/122		—	
FDI Stock (% of GDP)	116/132	87/140	0%	27%
FDI Flows (% of GFCF)	96/133	57/140	0%	16%
Portfolio Equity Stock (% of GDP)	68/102	.	0%	.
Portfolio Equity Flows (% of GDP)	49/129	105/126	0%	0%

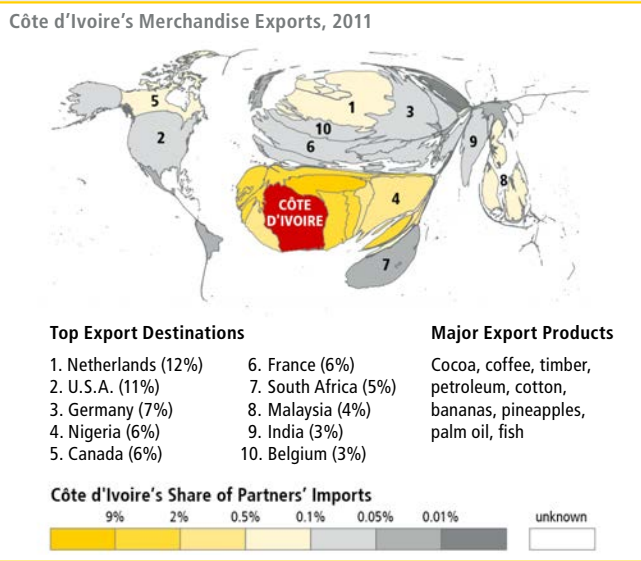
Information	99/140		—	
Internet Bandwidth (Bits per Second per Internet User)	63/140		18,044	
International Phone Calls (Minutes per Capita)	102/140	110/140	13	19
Printed Publications Trade (USD per Capita)	116/135	114/135	\$0	\$1

People	.		—	
Migrants (% of Population)	124/139	30/140	1%	12%
Tourists Dep./Arr. Per Capita	.	.	.	.
International Students (% of Tertiary Education Enrollment)	70/130	.	4%	.

## Summary

Côte d'Ivoire's connectedness rose strongly from 2005 to 2010 before declining in 2011. Its global rank fell from 84<sup>th</sup> in 2010 to 97<sup>th</sup> in 2011. Côte d'Ivoire ranks 10<sup>th</sup> out of the 29 countries analyzed in Sub-Saharan Africa. Côte d'Ivoire has similar ranks on depth and breadth. Its decline over the past year was driven by the trade pillar on which its global pillar rank fell 26 positions from 48<sup>th</sup> to 74<sup>th</sup>. Côte d'Ivoire's score on the information pillar improved notably over the past year, but as other countries also increased their scores on this pillar, Côte d'Ivoire's rank on this pillar rose by only one position, from 93<sup>rd</sup> to 92<sup>nd</sup>.

## Rooted Map



## Breadth

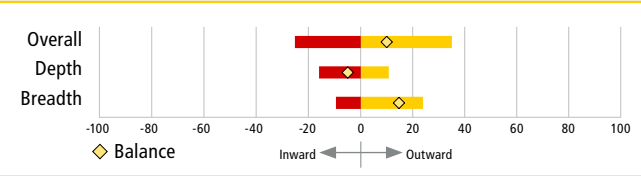
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	79/140		—	
Merchandise Trade	40/140	108/140	30%	42%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	94/101		—	
International Phone Calls	93/101	73/101	68%	12%
Printed Publications Trade	111/135	114/135	93%	4%

People	.		—	
Migrants	98/139	116/139	47%	94%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality



# CROATIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	57/140	55/140	-2	49/100	48/100	1
<b>Depth</b>	60/140	55/140	-5	24/50	26/50	-2
<b>Breadth</b>	61/140	65/140	4	24/50	23/50	1
<b>Trade Pillar</b>	89/140	93/140	4	43/100	42/100	1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	42/106	42/106	0	56/100	56/100	0

### Connectedness Score Trend



## Depth

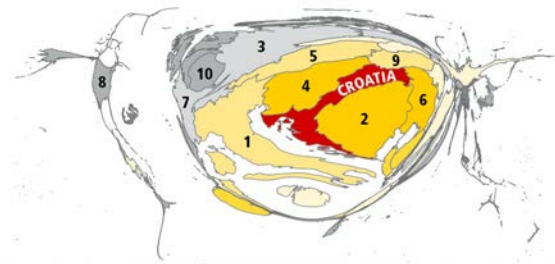
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	93/140		—	
Merchandise Trade (% of GDP)	106/140	80/140	19%	32%
Services Trade (% of GDP)	15/139	102/139	20%	5%
<b>Capital</b>	41/122		—	
FDI Stock (% of GDP)	58/132	44/140	7%	48%
FDI Flows (% of GFCF)	65/133	75/140	2%	12%
Portfolio Equity Stock (% of GDP)	52/102	65/97	2%	1%
Portfolio Equity Flows (% of GDP)	29/129	45/126	1%	0%
<b>Information</b>	39/140		—	
Internet Bandwidth (Bits per Second per Internet User)	58/140		19,948	
International Phone Calls (Minutes per Capita)	43/140	34/140	121	191
Printed Publications Trade (USD per Capita)	36/135	43/135	\$15	\$16
<b>People</b>	26/116		—	
Migrants (% of Population)	27/139	21/140	12%	16%
Tourists Dep./Arr. Per Capita	37/93	7/136	0.4	2.1
International Students (% of Tertiary Education Enrollment)	56/130	82/104	5%	1%

## Summary

Croatia ranks 57<sup>th</sup> out of the 140 countries covered on this year's DHL Global Connectedness Index and 29<sup>th</sup> out of 40 European countries. Its connectedness peaked in 2007, declined from 2007 to 2010, and then remained stable over the past year. Croatia has similar levels of depth and breadth. It has particularly high depth ranks within the people pillar, ranking 26<sup>th</sup> globally on people pillar depth and 7<sup>th</sup> on tourist arrivals per capita. The breadth of Croatia's tourist arrivals is more limited, with 94% coming from within Europe.

## Rooted Map

### Croatia's Merchandise Exports, 2011



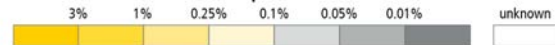
#### Top Export Destinations

1. Italy (16%)
2. Bos. & Herz. (12%)
3. Germany (10%)
4. Slovenia (8%)
5. Austria (6%)
6. Serbia (4%)
7. France (3%)
8. U.S.A. (3%)
9. Hungary (3%)
10. Luxembourg (2%)

#### Major Export Products

Transport equipment, machinery, textiles, chemicals, foodstuffs, fuels

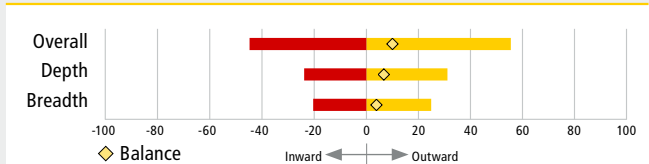
#### Croatia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	76/140		—	
Merchandise Trade	80/140	62/140	84%	77%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	36/135	49/135	94%	90%
<b>People</b>	75/124		—	
Migrants	69/139	133/139	71%	85%
Tourists Departures/Arrivals	—	27/107	—	94%
International Students	—	75/93	—	90%

## Directionality

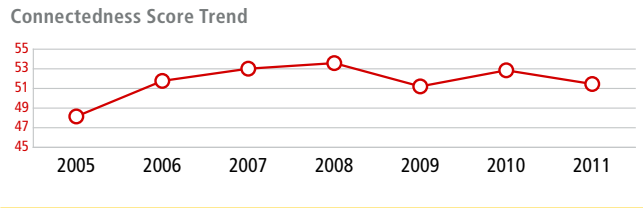




# CYPRUS

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	45/140	42/140	-3	51/100	53/100	-2
Depth	19/140	15/140	-4	33/50	34/50	-1
Breadth	90/140	92/140	2	18/50	18/50	0
Trade Pillar	84/140	75/140	-9	44/100	46/100	-2
Capital Pillar	44/66	42/66	-2	41/100	43/100	-2
Information Pillar	49/101	51/101	2	59/100	56/100	3
People Pillar	12/106	12/106	0	78/100	78/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	87/140		—	
Merchandise Trade (% of GDP)	137/140	71/140	7%	34%
Services Trade (% of GDP)	8/139	25/139	32%	14%

Capital	9/122		—	
FDI Stock (% of GDP)	24/132	27/140	31%	66%
FDI Flows (% of GFCF)	14/133	26/140	22%	32%
Portfolio Equity Stock (% of GDP)	38/102	49/97	9%	4%
Portfolio Equity Flows (% of GDP)	3/129	23/126	15%	1%

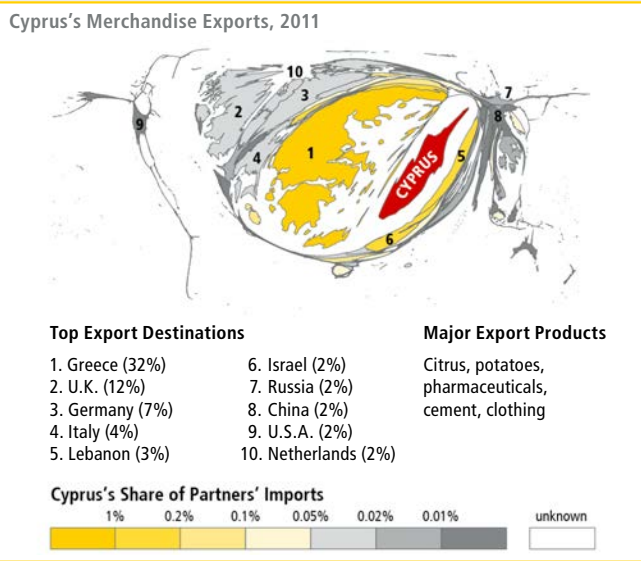
Information	15/140		—	
Internet Bandwidth (Bits per Second per Internet User)	29/140		53,569	
International Phone Calls (Minutes per Capita)	6/140	17/140	773	271
Printed Publications Trade (USD per Capita)	49/135	26/135	\$7	\$42

People	1/116			
Migrants (% of Population)	11/139	24/140	18%	14%
Tourists Dep./Arr. Per Capita	14/93	8/136	1.0	2.0
International Students (% of Tertiary Education Enrollment)	2/130	4/104	79%	31%

## Summary

Cyprus ranks 45<sup>th</sup> out of 140 countries and 25<sup>th</sup> among the 40 European countries covered on this year’s DHL Global Connectedness Index. It ranks higher on depth (19<sup>th</sup>) than on breadth (90<sup>th</sup>) which is not unusual for a small country. Cyprus ranks 1<sup>st</sup> worldwide on people pillar depth, reflecting strong people flows across all of the categories measured but especially with respect to international education. Cyprus ranks 2<sup>nd</sup> worldwide on outbound international students depth and 4<sup>th</sup> worldwide on inbound international students depth. It is also noteworthy that more than 80% of the foreign university students reported to be studying in Cyprus come from outside Europe.

## Rooted Map



## Breadth

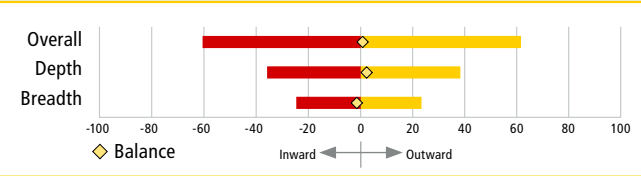
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	75/140		—	
Merchandise Trade	60/140	87/140	74%	73%

Capital	65/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	64/66	—	80%	—

Information	79/101		—	
International Phone Calls	66/101	74/101	76%	82%
Printed Publications Trade	101/135	100/135	98%	95%

People	45/124		—	
Migrants	91/139	23/139	67%	58%
Tourists Departures/Arrivals	—	71/107	—	93%
International Students	—	22/93	—	17%

## Directionality



# CZECH REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	32/140	31/140	-1	59/100	59/100	0
<b>Depth</b>	26/140	22/140	-4	31/50	31/50	0
<b>Breadth</b>	51/140	51/140	0	28/50	27/50	1
<b>Trade Pillar</b>	12/140	12/140	0	72/100	71/100	1
<b>Capital Pillar</b>	45/66	47/66	2	40/100	41/100	-1
<b>Information Pillar</b>	34/101	33/101	-1	66/100	65/100	1
<b>People Pillar</b>	25/106	25/106	0	69/100	69/100	0

Connectedness Score Trend



## Depth

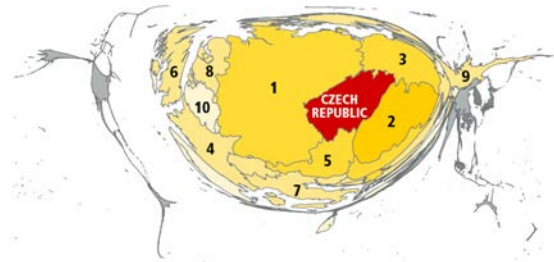
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	14/140		—	
Merchandise Trade (% of GDP)	13/140	19/140	75%	70%
Services Trade (% of GDP)	46/139	57/139	10%	8%
<b>Capital</b>	72/122		—	
FDI Stock (% of GDP)	57/132	34/140	7%	58%
FDI Flows (% of GFCF)	63/133	82/140	2%	11%
Portfolio Equity Stock (% of GDP)	47/102	47/97	4%	4%
Portfolio Equity Flows (% of GDP)	119/129	112/126	0%	0%
<b>Information</b>	28/140		—	
Internet Bandwidth (Bits per Second per Internet User)	15/140		91,064	
International Phone Calls (Minutes per Capita)	51/140	76/140	72	62
Printed Publications Trade (USD per Capita)	6/135	11/135	\$126	\$80
<b>People</b>	47/116		—	
Migrants (% of Population)	92/139	60/140	4%	4%
Tourists Dep./Arr. Per Capita	24/93	29/136	0.6	0.8
International Students (% of Tertiary Education Enrollment)	82/130	21/104	3%	7%

## Summary

Czech Republic ranks 32<sup>nd</sup> on this year's DHL Global Connectedness index, down one position from last year. Among European countries, Czech Republic ranks 19<sup>th</sup>. Its strongest pillar is the trade pillar on which it ranks 12<sup>th</sup> globally and 5<sup>th</sup> in Europe. Czech Republic's merchandise exports add up to 75% of its GDP and its merchandise imports, 70%. Its trade pattern is very heavily regionalized with 91% of its exports remaining within Europe. The pillar on which Czech Republic holds the lowest position is the capital pillar, where it ranks 45<sup>th</sup> out of 66 countries globally and 25<sup>th</sup> out of 32 European countries. With minor fluctuations, Czech Republic's connectedness has remained stable since 2005.

## Rooted Map

Czech Republic's Merchandise Exports, 2011



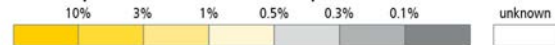
### Top Export Destinations

1. Germany (32%)
2. Slovakia (9%)
3. Poland (6%)
4. France (6%)
5. Austria (5%)
6. U.K. (5%)
7. Italy (4%)
8. Netherlands (4%)
9. Russia (3%)
10. Belgium (2%)

### Major Export Products

Machinery and transport equipment, raw materials and fuel, chemicals

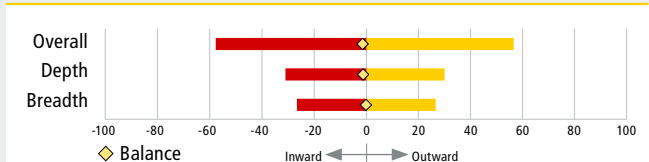
### Czech Republic's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	54/140		—	
Merchandise Trade	54/140	58/140	91%	82%
<b>Capital</b>	38/67		—	
FDI Stock	35/41	22/46	98%	94%
FDI Flows	28/38	24/41	87%	90%
Portfolio Equity Stock	39/66	—	85%	—
<b>Information</b>	54/101		—	
International Phone Calls	36/101	80/101	95%	91%
Printed Publications Trade	19/135	65/135	99%	93%
<b>People</b>	24/124		—	
Migrants	25/139	76/139	66%	93%
Tourists Departures/Arrivals	—	5/107	—	84%
International Students	—	45/93	—	87%

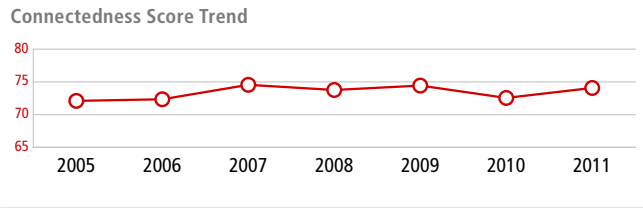
## Directionality



# DENMARK

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	9/140	9/140	0	74/100	73/100	1
Depth	16/140	20/140	4	34/50	32/50	2
Breadth	10/140	10/140	0	40/50	40/50	0
Trade Pillar	24/140	22/140	-2	65/100	63/100	2
Capital Pillar	7/66	9/66	2	80/100	77/100	3
Information Pillar	15/101	16/101	1	76/100	75/100	1
People Pillar	10/106	10/106	0	79/100	79/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	48/140		—	
Merchandise Trade (% of GDP)	56/140	95/140	34%	29%
Services Trade (% of GDP)	16/139	14/139	20%	17%

Capital	11/122		—	
FDI Stock (% of GDP)	11/132	46/140	70%	46%
FDI Flows (% of GFCF)	17/133	109/140	19%	6%
Portfolio Equity Stock (% of GDP)	15/102	16/97	37%	24%
Portfolio Equity Flows (% of GDP)	16/129	9/126	1%	1%

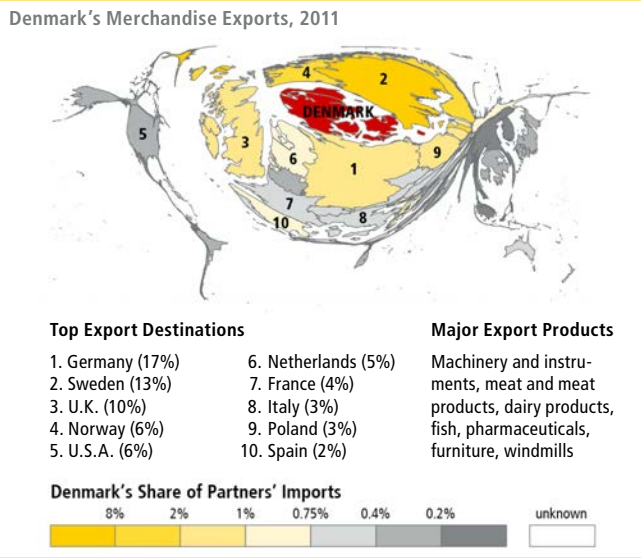
Information	9/140		—	
Internet Bandwidth (Bits per Second per Internet User)	8/140		159,511	
International Phone Calls (Minutes per Capita)	18/140	27/140	271	226
Printed Publications Trade (USD per Capita)	17/135	10/135	\$54	\$88

People	30/116			
Migrants (% of Population)	79/139	46/140	4%	9%
Tourists Dep./Arr. Per Capita	10/93	12/136	1.1	1.6
International Students (% of Tertiary Education Enrollment)	90/130	28/104	2%	5%

## Summary

Denmark holds the 9<sup>th</sup> rank overall and the 8<sup>th</sup> among European countries, reflecting balanced strength across both depth and breadth. Denmark also ranks among the top 15 countries in Europe on all four of the pillars. Denmark’s highest pillar rank is on the capital pillar, on which it ranks 7<sup>th</sup> worldwide. It has higher outward than inward capital depth, particularly with respect to its FDI flows over the past 3 years, on which it ranked 17<sup>th</sup> in the outward direction and 109<sup>th</sup> in the inward direction. Denmark’s connectedness has increased modestly from 2005 to 2011, with a notable gain from 2010 to 2011.

## Rooted Map



## Breadth

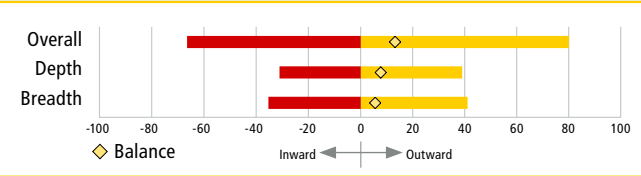
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	38/140		—	
Merchandise Trade	27/140	48/140	78%	81%

Capital	8/67		—	
FDI Stock	11/41	16/46	70%	82%
FDI Flows	8/38	16/41	66%	85%
Portfolio Equity Stock	5/66	—	49%	—

Information	40/101		—	
International Phone Calls	32/101	68/101	87%	91%
Printed Publications Trade	28/135	34/135	92%	93%

People	9/124		—	
Migrants	14/139	13/139	63%	42%
Tourists Departures/Arrivals	—	16/107	—	92%
International Students	—	21/93	—	76%

## Directionality



# DOMINICAN REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	115/140	112/140	-3	28/100	29/100	-1
<b>Depth</b>	103/140	98/140	-5	15/50	15/50	0
<b>Breadth</b>	108/140	108/140	0	14/50	14/50	0
<b>Trade Pillar</b>	134/140	131/140	-3	25/100	24/100	1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	43/101	43/101	0	62/100	60/100	2
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

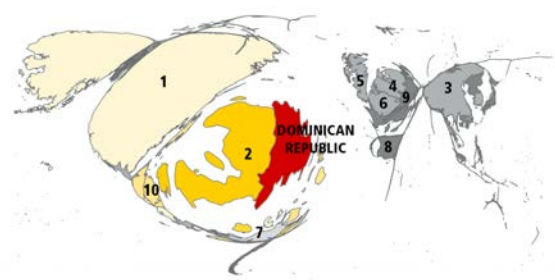
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	113/140		—	
Merchandise Trade (% of GDP)	122/140	87/140	15%	31%
Services Trade (% of GDP)	57/139	119/139	9%	4%
<b>Capital</b>	102/122		—	
FDI Stock (% of GDP)	.	81/140	.	30%
FDI Flows (% of GFCF)	124/133	35/140	0%	27%
Portfolio Equity Stock (% of GDP)	96/102	.	0%	.
Portfolio Equity Flows (% of GDP)	107/129	75/126	0%	0%
<b>Information</b>	62/140		—	
Internet Bandwidth (Bits per Second per Internet User)	80/140		11,205	
International Phone Calls (Minutes per Capita)	61/140	10/140	44	424
Printed Publications Trade (USD per Capita)	94/135	81/135	\$1	\$5
<b>People</b>	.		—	
Migrants (% of Population)	40/139	59/140	9%	4%
Tourists Dep./Arr. Per Capita	82/93	55/136	0.0	0.4
International Students (% of Tertiary Education Enrollment)	.	.	.	.

## Summary

The Dominican Republic ranks 115<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, down 3 places versus last year. Its highest position is on the information pillar on which it ranks 43<sup>rd</sup> out of 101 countries. The Dominican Republic is classified as having a medium level of human development by the United Nations Development Program. Among similar countries, the Dominican Republic ranks 21<sup>st</sup> on overall connectedness (out of 31 countries) and 2<sup>nd</sup> on the information pillar. Within the information pillar, The Dominican Republic ranks 10<sup>th</sup> worldwide on inbound international telephone call minutes per capita. It also has relatively high FDI inflows, ranking 35<sup>th</sup> on the depth of its inward FDI flows.

## Rooted Map

### Dominican Republic's Merchandise Exports, 2011



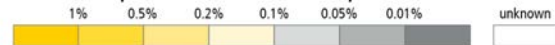
#### Top Export Destinations

1. U.S.A. (54%)
2. Haiti (17%)
3. China (5%)
4. Netherlands (2%)
5. U.K. (2%)
6. Belgium (1%)
7. Venezuela (1%)
8. Nigeria (1%)
9. Germany (1%)
10. Honduras (1%)

#### Major Export Products

Ferromanganese, sugar, gold, silver, coffee, cocoa, tobacco, meats, consumer goods

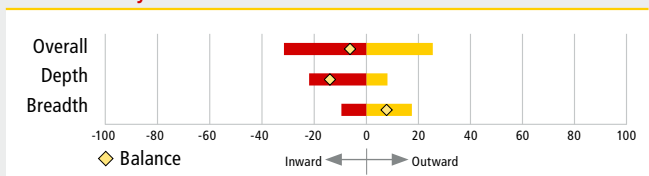
#### Dominican Republic's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	114/140		—	
Merchandise Trade	107/140	117/140	25%	24%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	41/101		—	
International Phone Calls	65/101	14/101	15%	1%
Printed Publications Trade	86/135	41/135	34%	18%
<b>People</b>	42/124		—	
Migrants	71/139	92/139	5%	82%
Tourists Departures/Arrivals	—	26/107	—	13%
International Students	—	.	—	.

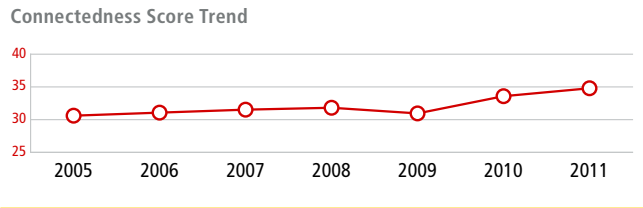
## Directionality



ECUADOR

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	99/140	106/140	7	35/100	34/100	1
Depth	95/140	99/140	4	16/50	15/50	1
Breadth	89/140	91/140	2	19/50	19/50	0
Trade Pillar	94/140	101/140	7	42/100	39/100	3
Capital Pillar	-	-	-	-	-	-
Information Pillar	47/101	54/101	7	59/100	55/100	4
People Pillar	-	-	-	-	-	-



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	76/140		-	
Merchandise Trade (% of GDP)	58/140	67/140	34%	37%
Services Trade (% of GDP)	119/139	110/139	2%	5%

Capital	109/122		-	
FDI Stock (% of GDP)	112/132	102/140	1%	18%
FDI Flows (% of GFCF)	110/133	133/140	0%	2%
Portfolio Equity Stock (% of GDP)	-	91/97	-	0%
Portfolio Equity Flows (% of GDP)	33/129	70/126	0%	0%

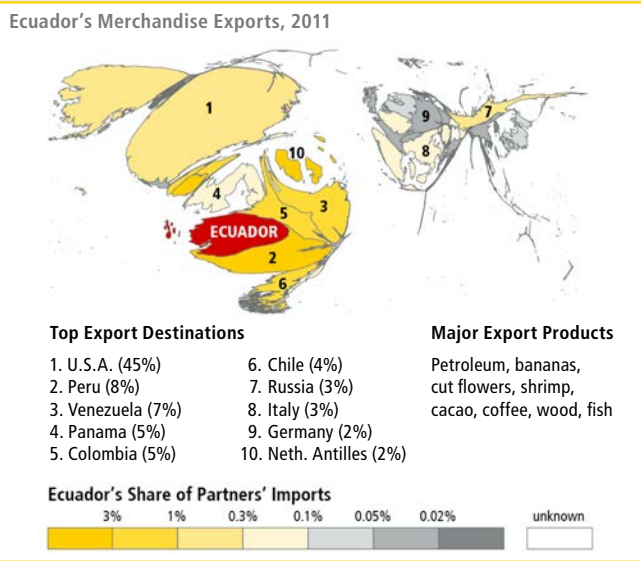
Information	68/140		-	
Internet Bandwidth (Bits per Second per Internet User)	46/140		27,742	
International Phone Calls (Minutes per Capita)	80/140	68/140	25	78
Printed Publications Trade (USD per Capita)	98/135	82/135	\$0	\$5

People	84/116			
Migrants (% of Population)	65/139	82/140	5%	3%
Tourists Dep./Arr. Per Capita	70/93	96/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	98/130	-	2%	-

Summary

Ecuador ranks 99<sup>th</sup> out of 140 countries on this year’s DHL Global Connectedness Index, up 7 positions versus its 106<sup>th</sup> place rank last year. Ecuador holds the 13<sup>th</sup> rank among the 22 countries covered in the South & Central America & Caribbean region. It has balanced connectedness across depth and breadth. Ecuador’s connectedness remained stable from 2005 to 2009 and then has increased strongly since 2009. Its gains over the past year were larger in depth than breadth and split across multiple pillars.

Rooted Map



Breadth

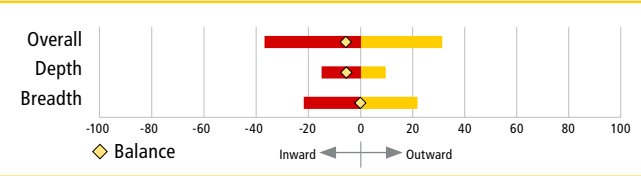
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	89/140		-	
Merchandise Trade	97/140	82/140	32%	33%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	47/101		-	
International Phone Calls	50/101	13/101	37%	7%
Printed Publications Trade	99/135	78/135	82%	46%

People	-		-	
Migrants	47/139	63/139	8%	70%
Tourists Departures/Arrivals	-	-	-	-
International Students	-	-	-	-

Directionality





# EGYPT, ARAB REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	82/140	75/140	-7	40/100	41/100	-1
<b>Depth</b>	114/140	105/140	-9	12/50	14/50	-2
<b>Breadth</b>	50/140	48/140	-2	28/50	28/50	0
<b>Trade Pillar</b>	62/140	58/140	-4	52/100	52/100	0
<b>Capital Pillar</b>	57/66	56/66	-1	30/100	32/100	-2
<b>Information Pillar</b>	81/101	84/101	3	41/100	40/100	1
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

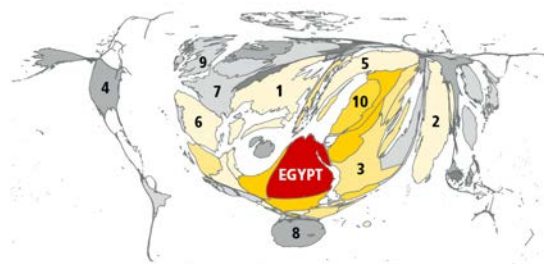
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	123/140		—	
Merchandise Trade (% of GDP)	127/140	108/140	13%	25%
Services Trade (% of GDP)	64/139	100/139	8%	6%
<b>Capital</b>	56/122		—	
FDI Stock (% of GDP)	81/132	78/140	3%	31%
FDI Flows (% of GFCF)	70/133	79/140	2%	11%
Portfolio Equity Stock (% of GDP)	65/102	64/97	1%	1%
Portfolio Equity Flows (% of GDP)	50/129	24/126	0%	1%
<b>Information</b>	102/140		—	
Internet Bandwidth (Bits per Second per Internet User)	96/140		6,754	
International Phone Calls (Minutes per Capita)	112/140	84/140	8	54
Printed Publications Trade (USD per Capita)	104/135	120/135	\$0	\$1
<b>People</b>	103/116		—	
Migrants (% of Population)	101/139	132/140	3%	0%
Tourists Dep./Arr. Per Capita	74/93	78/136	0.1	0.2
International Students (% of Tertiary Education Enrollment)	127/130	69/104	0%	1%

## Summary

Egypt holds the 82<sup>nd</sup> rank on this year's DHL Global Connectedness Index, down 7 places versus last year. While Egypt's connectedness rose strongly from 2005 to 2008, it has since that year been on a moderate declining trend. Egypt ranks 12<sup>th</sup> out of 15 countries in the Middle East & North Africa region. Egypt's connectedness is stronger on breadth (50<sup>th</sup> out of 140) than depth (114<sup>th</sup>). Despite its 123<sup>rd</sup> position on trade depth, with its 20<sup>th</sup> position on trade breadth, trade is the pillar on which Egypt ranks highest, 62<sup>nd</sup> globally and 11<sup>th</sup> within its region.

## Rooted Map

Egypt's Merchandise Exports, 2011



Top Export Destinations

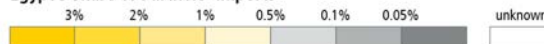
1. Italy (9%)
2. India (7%)
3. Saudi Arabia (6%)
4. U.S.A. (5%)
5. Turkey (5%)

6. Spain (4%)
7. France (4%)
8. South Africa (3%)
9. U.K. (3%)
10. Lebanon (3%)

Major Export Products

Crude oil and petroleum products, cotton, textiles, metal products, chemicals, processed food

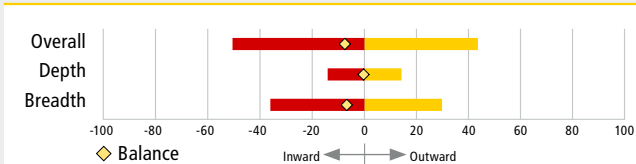
Egypt's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	20/140		—	
Merchandise Trade	46/140	3/140	28%	11%
<b>Capital</b>	56/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	35/41	.	3%
Portfolio Equity Stock	55/66	—	47%	—
<b>Information</b>	71/101		—	
International Phone Calls	61/101	91/101	64%	73%
Printed Publications Trade	56/135	25/135	65%	11%
<b>People</b>	.		—	
Migrants	70/139	31/139	72%	46%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

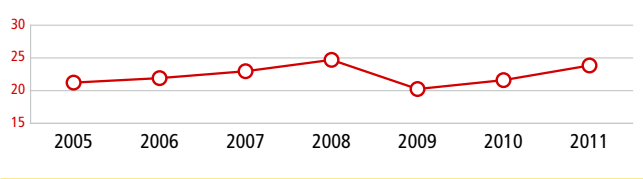


EL SALVADOR

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	129/140	127/140	-2	24/100	22/100	2
Depth	98/140	97/140	-1	16/50	15/50	1
Breadth	126/140	131/140	5	8/50	7/50	1
Trade Pillar	124/140	129/140	5	31/100	26/100	5
Capital Pillar	-	-	-	-	-	-
Information Pillar	59/101	63/101	4	54/100	53/100	1
People Pillar	87/106	87/106	0	33/100	33/100	0

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	77/140		-	
Merchandise Trade (% of GDP)	92/140	47/140	23%	44%
Services Trade (% of GDP)	92/139	111/139	4%	5%

Capital	113/122		-	
FDI Stock (% of GDP)	129/132	66/140	0%	36%
FDI Flows (% of GFCF)	129/133	88/140	-2%	10%
Portfolio Equity Stock (% of GDP)	63/102	-	1%	-
Portfolio Equity Flows (% of GDP)	122/129	75/126	0%	0%

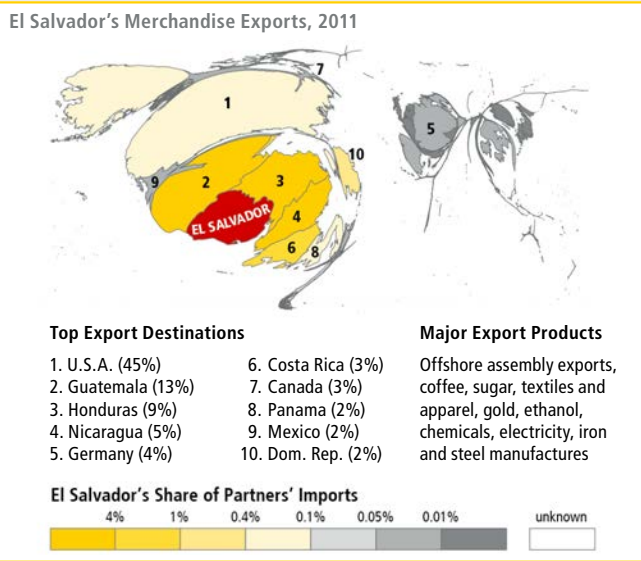
Information	65/140		-	
Internet Bandwidth (Bits per Second per Internet User)	110/140		4,176	
International Phone Calls (Minutes per Capita)	31/140	30/140	179	219
Printed Publications Trade (USD per Capita)	62/135	65/135	\$3	\$8

People	76/116		-	
Migrants (% of Population)	18/139	120/140	14%	1%
Tourists Dep./Arr. Per Capita	56/93	74/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	92/130	83/104	2%	1%

Summary

El Salvador ranks 129<sup>th</sup> out of 140 countries, down 2 places in the rankings versus last year. Its connectedness score peaked in 2008, dropped sharply in 2009, and has since that year recovered steadily, approaching its prior peak in 2011. Its connectedness profile reflects its large outward migration. El Salvador ranks 18<sup>th</sup> worldwide on outward migration depth, with emigrants equal to 14% of its population. Only 5% of emigrants from El Salvador reside in South & Central America and the Caribbean. El Salvador's emigration is also reflected in its high depth scores on international telephone calls, on which it ranks 31<sup>st</sup> on outbound calling minutes and 30<sup>th</sup> on inbound calling minutes.

Rooted Map



Breadth

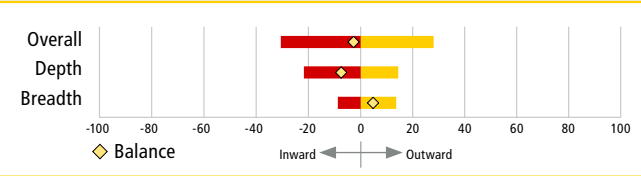
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	122/140		-	
Merchandise Trade	112/140	125/140	37%	32%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	63/101		-	
International Phone Calls	75/101	6/101	17%	14%
Printed Publications Trade	118/135	111/135	92%	37%

People	107/124		-	
Migrants	76/139	86/139	5%	68%
Tourists Departures/Arrivals	-	92/107	-	67%
International Students	-	71/93	-	64%

Directionality



# ESTONIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	43/140	48/140	5	52/100	51/100	1
<b>Depth</b>	8/140	9/140	1	38/50	38/50	0
<b>Breadth</b>	105/140	113/140	8	14/50	13/50	1
<b>Trade Pillar</b>	25/140	39/140	14	64/100	58/100	6
<b>Capital Pillar</b>	49/66	46/66	-3	38/100	41/100	-3
<b>Information Pillar</b>	53/101	56/101	3	57/100	55/100	2
<b>People Pillar</b>	36/106	37/106	1	60/100	60/100	0

### Connectedness Score Trend



## Depth

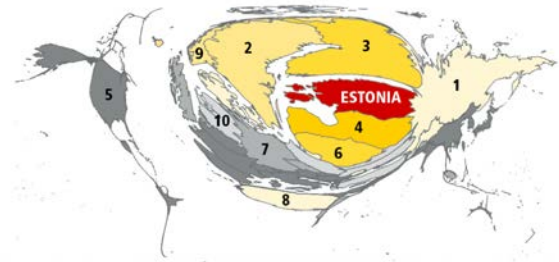
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	4/140		—	
Merchandise Trade (% of GDP)	12/140	7/140	75%	79%
Services Trade (% of GDP)	11/139	15/139	25%	17%
<b>Capital</b>	31/122		—	
FDI Stock (% of GDP)	32/132	20/140	21%	75%
FDI Flows (% of GFCF)	52/133	27/140	3%	31%
Portfolio Equity Stock (% of GDP)	37/102	50/97	9%	4%
Portfolio Equity Flows (% of GDP)	30/129	122/126	0%	0%
<b>Information</b>	32/140		—	
Internet Bandwidth (Bits per Second per Internet User)	50/140		24,378	
International Phone Calls (Minutes per Capita)	28/140	54/140	200	110
Printed Publications Trade (USD per Capita)	8/135	41/135	\$92	\$19
<b>People</b>	16/116		—	
Migrants (% of Population)	26/139	28/140	12%	14%
Tourists Dep./Arr. Per Capita	21/93	11/136	0.7	1.6
International Students (% of Tertiary Education Enrollment)	49/130	58/104	6%	2%

## Summary

Estonia holds the 43<sup>rd</sup> rank out of the 140 countries covered in this year's DHL Global Connectedness Index and ranks 24<sup>th</sup> in Europe. Estonia has very high depth (8<sup>th</sup> worldwide) but low breadth (105<sup>th</sup>). Estonia's high depth rank is driven by its trade pillar depth, on which it ranks 4<sup>th</sup> worldwide. Its merchandise and services exports together add up to 100% of its GDP. Estonia's low breadth is reflective of the very high intra-regional proportion of most of its international flows. Across all type of flows with available data more than 80% of Estonia's international flows are intra-European and many flows are more than 90% intra-European.

## Rooted Map

### Estonia's Merchandise Exports, 2011



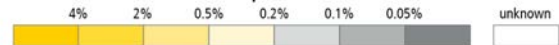
#### Top Export Destinations

1. Russia (16%)
2. Sweden (14%)
3. Finland (14%)
4. Latvia (7%)
5. U.S.A. (7%)
6. Lithuania (4%)
7. Germany (4%)
8. Nigeria (3%)
9. Norway (3%)
10. Netherlands (3%)

#### Major Export Products

Machinery and electrical equipment, wood and wood products, metals, furniture, vehicles and part, food products

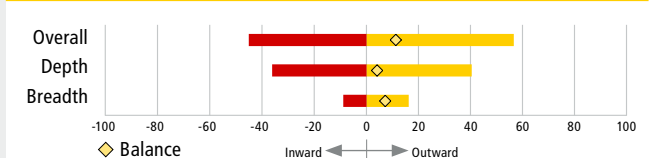
#### Estonia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	97/140		—	
Merchandise Trade	82/140	100/140	82%	91%
<b>Capital</b>	54/67		—	
FDI Stock	39/41	43/46	99%	95%
FDI Flows	38/38	41/41	97%	96%
Portfolio Equity Stock	44/66	—	87%	—
<b>Information</b>	75/101		—	
International Phone Calls	56/101	97/101	88%	86%
Printed Publications Trade	70/135	36/135	100%	83%
<b>People</b>	70/124		—	
Migrants	46/139	99/139	80%	96%
Tourists Departures/Arrivals	—	83/107	—	97%
International Students	—	40/93	—	86%

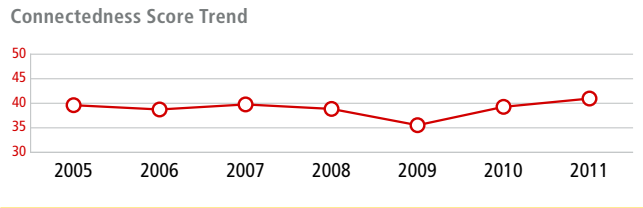
## Directionality



# ETHIOPIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	79/140	83/140	4	41/100	39/100	2
Depth	136/140	133/140	-3	5/50	5/50	0
Breadth	18/140	25/140	7	36/50	34/50	2
Trade Pillar	83/140	84/140	1	46/100	44/100	2
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	119/140		—	
Merchandise Trade (% of GDP)	135/140	97/140	8%	28%
Services Trade (% of GDP)	74/139	62/139	6%	8%

Capital	.	.	.	.
FDI Stock (% of GDP)	.	115/140	.	15%
FDI Flows (% of GFCF)	.	122/140	.	4%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

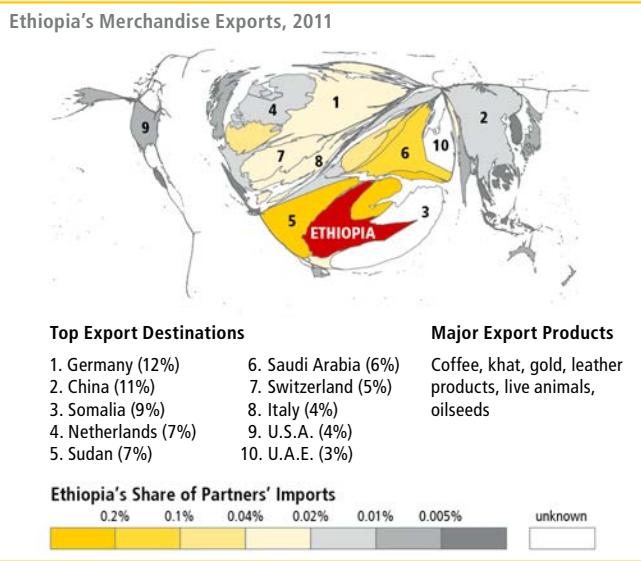
Information	119/140		—	
Internet Bandwidth (Bits per Second per Internet User)	97/140		6,486	
International Phone Calls (Minutes per Capita)	134/140	134/140	2	4
Printed Publications Trade (USD per Capita)	130/135	122/135	\$0	\$1

People	.	.	.	.
Migrants (% of Population)	138/139	119/140	0%	1%
Tourists Dep./Arr. Per Capita	.	130/136	.	0.0
International Students (% of Tertiary Education Enrollment)	112/130	.	1%	.

## Summary

Ethiopia’s rank increased four places over the past year to reach the 79<sup>th</sup> position out of the 140 countries covered on this year’s DHL Global Connectedness Index. This increase was based on Ethiopia’s rising breadth rank which more than offset a small decline in its depth rank. Ethiopia ranks 7<sup>th</sup> out of the 29 countries that were analyzed in Sub-Saharan Africa. Its breadth (18<sup>th</sup> worldwide) is much higher than its depth (136<sup>th</sup>). Ethiopia has the highest breadth score among countries in Sub-Saharan Africa. Despite having dipped in 2009, Ethiopia’s connectedness score is now at the highest level observed over the period from 2005 to 2011.

## Rooted Map



## Breadth

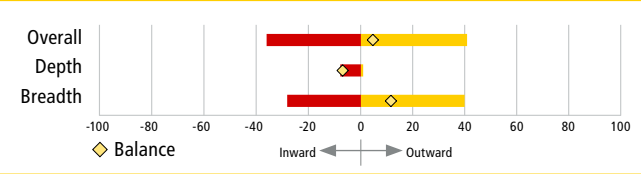
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	44/140		—	
Merchandise Trade	44/140	41/140	17%	4%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	9/135	123/135	20%	1%

People	30/124		—	
Migrants	5/139	124/139	8%	95%
Tourists Departures/Arrivals	—	21/107	—	23%
International Students	—	.	—	.

## Directionality



# FIJI

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	95/140	96/140	1	36/100	36/100	0
<b>Depth</b>	41/140	39/140	-2	28/50	28/50	0
<b>Breadth</b>	127/140	127/140	0	8/50	8/50	0
<b>Trade Pillar</b>	93/140	96/140	3	42/100	42/100	0
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	84/101	88/101	4	40/100	36/100	4
<b>People Pillar</b>	50/106	50/106	0	53/100	53/100	0

### Connectedness Score Trend



## Depth

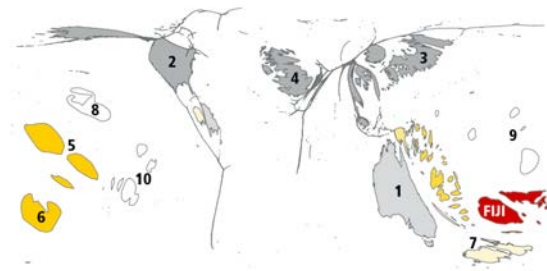
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	35/140		-	
Merchandise Trade (% of GDP)	87/140	24/140	24%	65%
Services Trade (% of GDP)	12/139	24/139	23%	14%
<b>Capital</b>	75/122		-	
FDI Stock (% of GDP)	98/132	26/140	1%	67%
FDI Flows (% of GFCF)	92/133	19/140	0%	35%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	83/129	101/126	0%	0%
<b>Information</b>	72/140		-	
Internet Bandwidth (Bits per Second per Internet User)	91/140		8,020	
International Phone Calls (Minutes per Capita)	77/140	45/140	28	137
Printed Publications Trade (USD per Capita)	74/135	57/135	\$2	\$10
<b>People</b>	19/116		-	
Migrants (% of Population)	17/139	92/140	15%	2%
Tourists Dep./Arr. Per Capita	59/93	31/136	0.1	0.7
International Students (% of Tertiary Education Enrollment)	15/130	1/104	13%	59%

## Summary

Fiji holds the 95<sup>th</sup> rank on this year's DHL Global Connectedness Index, having maintained a fairly stable level of connectedness since 2005. Fiji's highest connectedness scores are on the people pillar, on which it ranks 50<sup>th</sup> overall and 19<sup>th</sup> on depth alone. Fiji's people pillar depth is the 7<sup>th</sup> highest in the East Asia & Pacific region. Fiji also has particularly high services trade depth, ranking 12<sup>th</sup> globally on services exports depth and 24<sup>th</sup> on services imports depth. It also has high ranks on inward FDI: 26<sup>th</sup> on inward FDI stock and 19<sup>th</sup> on inward FDI flows. Fiji's breadth, on the other hand, is low across all pillars, ranking 127<sup>th</sup> out of 140 countries for the breadth dimension overall.

## Rooted Map

### Fiji's Merchandise Exports, 2011



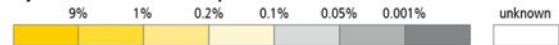
#### Top Export Destinations

1. Australia (19%)
2. U.S.A. (15%)
3. Japan (9%)
4. U.K. (8%)
5. Samoa (8%)
6. Tonga (7%)
7. New Zealand (5%)
8. Kiribati (4%)
9. Tuvalu (4%)
10. Fr. Polynesia (4%)

#### Major Export Products

Sugar, garments, gold, timber, fish, molasses, coconut oil

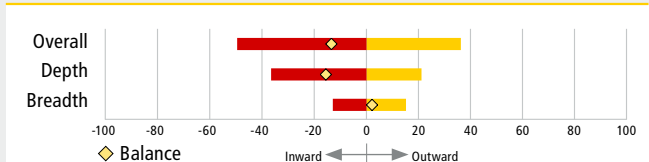
#### Fiji's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	128/140		-	
Merchandise Trade	117/140	127/140	73%	90%
<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-
<b>Information</b>	90/101		-	
International Phone Calls	74/101	77/101	74%	68%
Printed Publications Trade	120/135	116/135	98%	75%
<b>People</b>	100/124		-	
Migrants	52/139	39/139	53%	51%
Tourists Departures/Arrivals	-	87/107	-	80%
International Students	-	88/93	-	99%

## Directionality

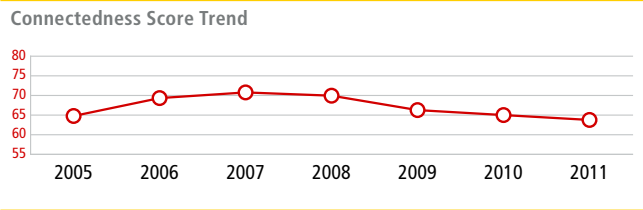




FINLAND

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	24/140	19/140	-5	64/100	65/100	-1
Depth	39/140	32/140	-7	29/50	29/50	0
Breadth	26/140	20/140	-6	35/50	36/50	-1
Trade Pillar	38/140	29/140	-9	59/100	61/100	-2
Capital Pillar	21/66	18/66	-3	63/100	65/100	-2
Information Pillar	40/101	36/101	-4	63/100	64/100	-1
People Pillar	16/106	16/106	0	77/100	77/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	61/140		—	
Merchandise Trade (% of GDP)	71/140	82/140	30%	31%
Services Trade (% of GDP)	50/139	39/139	10%	10%

Capital	26/122		—	
FDI Stock (% of GDP)	13/132	79/140	52%	31%
FDI Flows (% of GFCF)	22/133	115/140	15%	5%
Portfolio Equity Stock (% of GDP)	13/102	12/97	42%	27%
Portfolio Equity Flows (% of GDP)	9/129	117/126	4%	0%

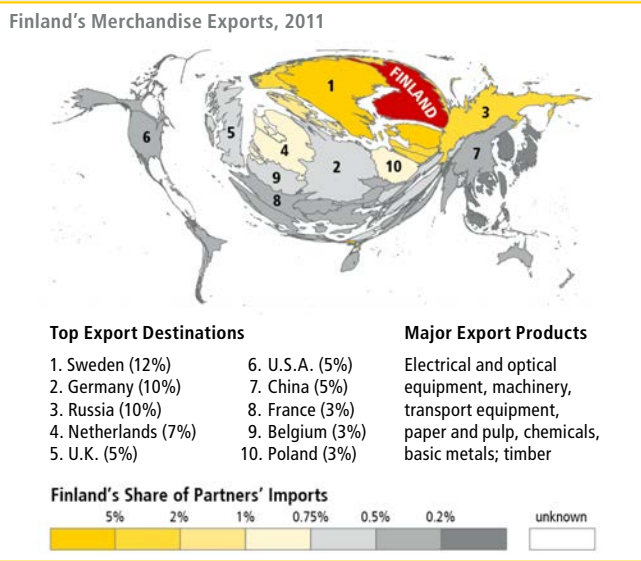
Information	24/140		—	
Internet Bandwidth (Bits per Second per Internet User)	12/140		118,445	
International Phone Calls (Minutes per Capita)	45/140	57/140	115	99
Printed Publications Trade (USD per Capita)	22/135	20/135	\$47	\$48

People	32/116			
Migrants (% of Population)	53/139	61/140	7%	4%
Tourists Dep./Arr. Per Capita	8/93	37/136	1.2	0.7
International Students (% of Tertiary Education Enrollment)	88/130	32/104	2%	4%

Summary

After reaching its maximum connectedness level in 2007, Finland’s connectedness has declined modestly over the past four years. Its rank fell from 19<sup>th</sup> in 2010 to 24<sup>th</sup> in 2011 based primarily on the trade and capital pillars. Finland ranks 15<sup>th</sup> among European countries. Its strongest pillar is the people pillar on which it ranks 16<sup>th</sup> out of 106 countries. Finland’s connectedness is stronger in the outward direction (15<sup>th</sup> out of 137 countries) than in the inward direction (58<sup>th</sup> out of 140). This tendency toward outward over inward connectedness is particularly pronounced in the capital pillar.

Rooted Map



Breadth

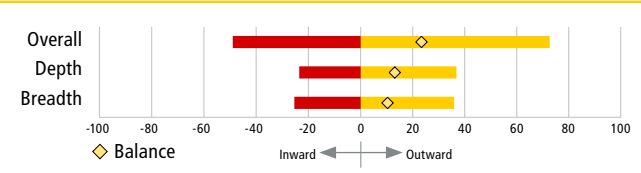
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	41/140		—	
Merchandise Trade	17/140	69/140	72%	84%

Capital	19/67		—	
FDI Stock	18/41	35/46	82%	96%
FDI Flows	14/38	25/41	69%	83%
Portfolio Equity Stock	14/66	—	71%	—

Information	67/101		—	
International Phone Calls	42/101	96/101	94%	87%
Printed Publications Trade	42/135	43/135	95%	88%

People	11/124		—	
Migrants	58/139	17/139	79%	70%
Tourists Departures/Arrivals	—	23/107	—	86%
International Students	—	7/93	—	40%

Directionality

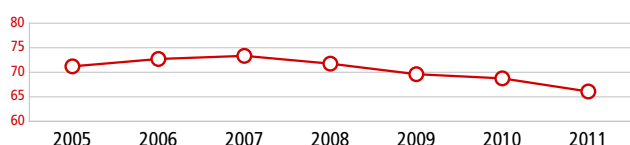


# FRANCE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	17/140	14/140	-3	66/100	69/100	-3
<b>Depth</b>	62/140	50/140	-12	24/50	26/50	-2
<b>Breadth</b>	6/140	5/140	-1	42/50	43/50	-1
<b>Trade Pillar</b>	58/140	57/140	-1	54/100	52/100	2
<b>Capital Pillar</b>	12/66	8/66	-4	73/100	82/100	-9
<b>Information Pillar</b>	9/101	9/101	0	80/100	79/100	1
<b>People Pillar</b>	19/106	19/106	0	73/100	73/100	0

Connectedness Score Trend



## Depth

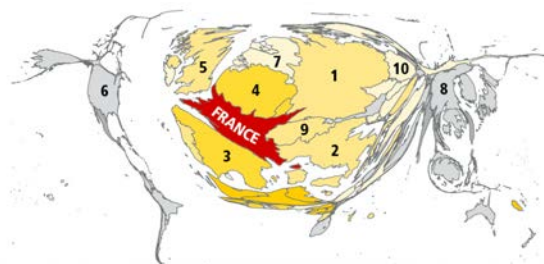
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	114/140		—	
Merchandise Trade (% of GDP)	99/140	105/140	22%	26%
Services Trade (% of GDP)	81/139	106/139	6%	5%
<b>Capital</b>	33/122		—	
FDI Stock (% of GDP)	14/132	69/140	49%	35%
FDI Flows (% of GFCF)	21/133	113/140	16%	6%
Portfolio Equity Stock (% of GDP)	25/102	18/97	18%	23%
Portfolio Equity Flows (% of GDP)	115/129	21/126	0%	1%
<b>Information</b>	21/140		—	
Internet Bandwidth (Bits per Second per Internet User)	18/140		78,590	
International Phone Calls (Minutes per Capita)	35/140	38/140	168	171
Printed Publications Trade (USD per Capita)	26/135	27/135	\$34	\$41
<b>People</b>	43/116		—	
Migrants (% of Population)	101/139	40/140	3%	10%
Tourists Dep./Arr. Per Capita	40/93	17/136	0.3	1.2
International Students (% of Tertiary Education Enrollment)	86/130	16/104	2%	11%

## Summary

France's connectedness score has declined since 2007, ranking 17<sup>th</sup> overall on this year's DHL Global Connectedness Index, down from 14<sup>th</sup> last year. France ranks 12<sup>th</sup> among European countries. France ranks higher on breadth (6<sup>th</sup> worldwide) than on depth (62<sup>nd</sup>), which is typical among countries with large internal economies. One of the most remarkable characteristics of France's connectedness profile is its capital pillar breadth, on which it ranks the 5<sup>th</sup> globally. The decline in France's connectedness score from 2010 to 2011 was driven primarily by depth rather than breadth, most notably on the capital pillar.

## Rooted Map

France's Merchandise Exports, 2011



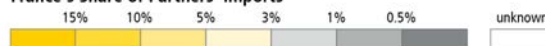
### Top Export Destinations

1. Germany (17%)
2. Italy (8%)
3. Spain (8%)
4. Belgium (7%)
5. U.K. (7%)
6. U.S.A. (5%)
7. Netherlands (4%)
8. China (3%)
9. Switzerland (3%)
10. Poland (2%)

### Major Export Products

Machinery and transportation equipment, aircraft, plastics, chemicals, pharmaceutical products, iron and steel, beverages

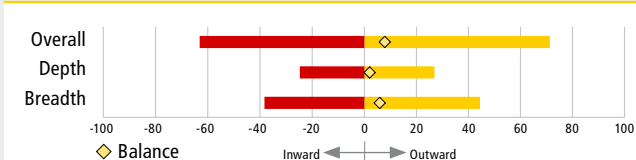
### France's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	22/140		—	
Merchandise Trade	18/140	38/140	68%	75%
<b>Capital</b>	5/67		—	
FDI Stock	6/41	5/46	69%	83%
FDI Flows	7/38	11/41	74%	78%
Portfolio Equity Stock	8/66	—	70%	—
<b>Information</b>	19/101		—	
International Phone Calls	26/101	46/101	60%	80%
Printed Publications Trade	7/135	20/135	68%	84%
<b>People</b>	15/124		—	
Migrants	21/139	41/139	54%	38%
Tourists Departures/Arrivals	—	35/107	—	89%
International Students	—	10/93	—	22%

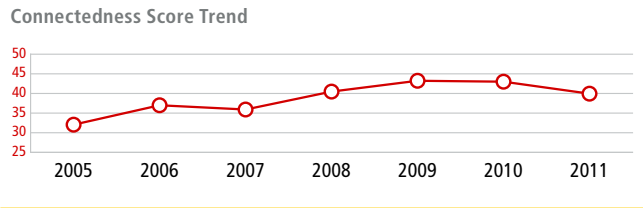
## Directionality



GABON

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	83/140	71/140	-12	40/100	43/100	-3
Depth	79/140	75/140	-4	20/50	20/50	0
Breadth	82/140	66/140	-16	19/50	23/50	-4
Trade Pillar	67/140	54/140	-13	50/100	54/100	-4
Capital Pillar	.	.	.	.	.	.
Information Pillar	60/101	58/101	-2	54/100	54/100	0
People Pillar	.	.	.	.	.	.



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	69/140		—	
Merchandise Trade (% of GDP)	11/140	112/140	77%	23%
Services Trade (% of GDP)	135/139	67/139	1%	8%

Capital	.	.	.	.
FDI Stock (% of GDP)	76/132	124/140	3%	10%
FDI Flows (% of GFCF)	57/133	71/140	3%	12%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	112/129	.	0%	.

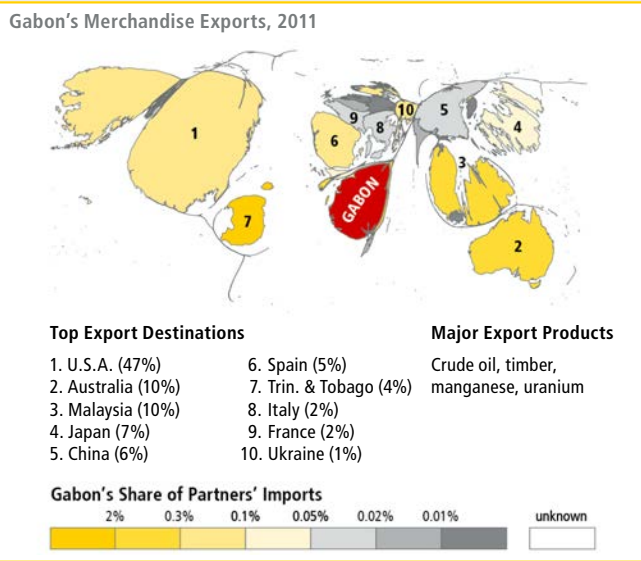
Information	64/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	34/140	.	46,187	.
International Phone Calls (Minutes per Capita)	54/140	100/140	60	29
Printed Publications Trade (USD per Capita)	110/135	60/135	\$0	\$10

People	.	.	.	.
Migrants (% of Population)	79/139	18/140	4%	19%
Tourists Dep./Arr. Per Capita	.	76/136	.	0.2
International Students (% of Tertiary Education Enrollment)	.	.	.	.

Summary

Gabon ranks 83<sup>rd</sup> out of 140 countries globally on this year’s DHL Global Connectedness Index, down 12 places from its 71<sup>st</sup> rank last year. Despite its decline over the past year, however, Gabon’s connectedness grew strongly from 2005 to 2009 and remains close to its peak level. Among the 29 countries covered in Sub-Saharan Africa, Gabon ranks 8<sup>th</sup>. It has similar ranks on both depth (79<sup>th</sup> out of 140 countries) and breadth (82<sup>nd</sup> out of 140 countries). Gabon has particularly high merchandise exports depth, ranking 11<sup>th</sup> worldwide on this component. Gabon’s merchandise exports add up to 77% of its GDP.

Rooted Map



Breadth

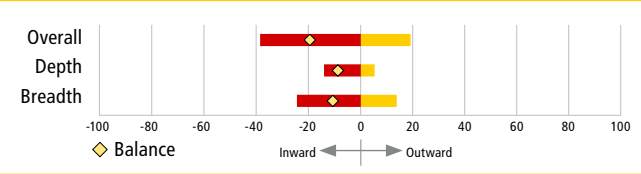
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	67/140		—	
Merchandise Trade	88/140	47/140	2%	9%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	65/101	.	.	.
International Phone Calls	100/101	1/101	58%	2%
Printed Publications Trade	54/135	128/135	.	.

People	.	.	.	.
Migrants	124/139	101/139	69%	90%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

Directionality

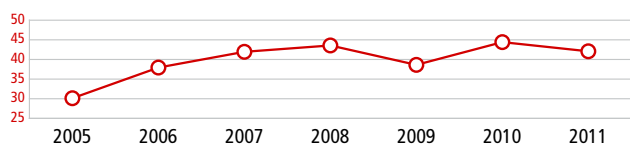


# GEORGIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	76/140	67/140	-9	42/100	44/100	-2
<b>Depth</b>	71/140	61/140	-10	22/50	24/50	-2
<b>Breadth</b>	80/140	78/140	-2	20/50	21/50	-1
<b>Trade Pillar</b>	91/140	90/140	-1	43/100	43/100	0
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	44/101	39/101	-5	62/100	63/100	-1
<b>People Pillar</b>	52/106	52/106	0	51/100	51/100	0

### Connectedness Score Trend



## Depth

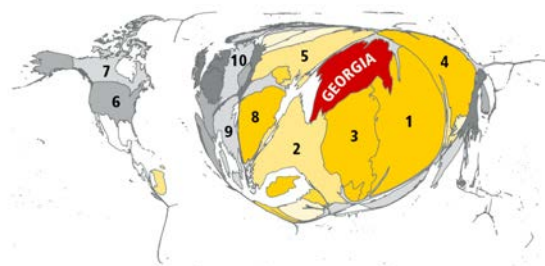
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	66/140		—	
Merchandise Trade (% of GDP)	120/140	38/140	15%	49%
Services Trade (% of GDP)	33/139	60/139	14%	8%
<b>Capital</b>	57/122		—	
FDI Stock (% of GDP)	66/132	28/140	5%	65%
FDI Flows (% of GFCF)	48/133	15/140	4%	41%
Portfolio Equity Stock (% of GDP)	98/102	58/97	0%	2%
Portfolio Equity Flows (% of GDP)	72/129	104/126	0%	0%
<b>Information</b>	91/140		—	
Internet Bandwidth (Bits per Second per Internet User)	68/140		15,796	
International Phone Calls (Minutes per Capita)	94/140	96/140	15	35
Printed Publications Trade (USD per Capita)	105/135	83/135	\$0	\$5
<b>People</b>	42/116		—	
Migrants (% of Population)	12/139	67/140	18%	4%
Tourists Dep./Arr. Per Capita	33/93	50/136	0.5	0.5
International Students (% of Tertiary Education Enrollment)	38/130	77/104	8%	1%

## Summary

Georgia holds the 76<sup>th</sup> rank out of 140 countries on this year's DHL Global Connectedness Index and is the 5<sup>th</sup> ranked country out of 12 in South & Central Asia. Georgia's connectedness is strongest on the information and people pillars, on which it ranks 2<sup>nd</sup> within its region and in the top half of countries globally. Within the people pillar, Georgia ranks 12<sup>th</sup> worldwide on the depth of its outward migration. The number of emigrants from Georgia is equal to 18% of Georgia's population. Georgia's connectedness increased very rapidly from 2005 to 2008, and since then has fluctuated and declined slightly.

## Rooted Map

### Georgia's Merchandise Exports, 2011



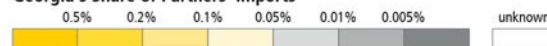
#### Top Export Destinations

1. Azerbaijan (17%)
2. Turkey (11%)
3. Armenia (10%)
4. Kazakhstan (7%)
5. Ukraine (6%)
6. U.S.A. (6%)
7. Canada (5%)
8. Bulgaria (5%)
9. Italy (3%)
10. Germany (2%)

#### Major Export Products

Vehicles, ferro-alloys, fertilizers, nuts, scrap metal, gold, copper ores

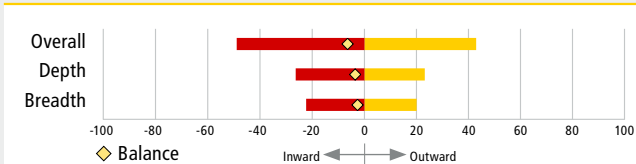
#### Georgia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	92/140		—	
Merchandise Trade	101/140	80/140	38%	29%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	21/101		—	
International Phone Calls	6/101	23/101	9%	3%
Printed Publications Trade	87/135	67/135	33%	23%
<b>People</b>	83/124		—	
Migrants	108/139	59/139	4%	11%
Tourists Departures/Arrivals	—	78/107	—	32%
International Students	—	56/93	—	79%

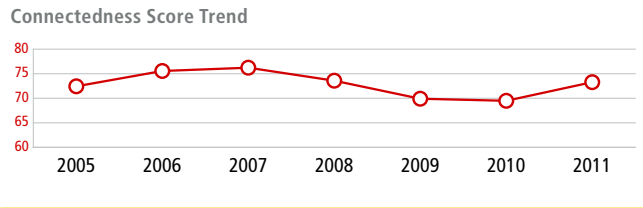
## Directionality



GERMANY

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	10/140	13/140	3	73/100	69/100	4
Depth	30/140	41/140	11	31/50	28/50	3
Breadth	5/140	6/140	1	43/50	42/50	1
Trade Pillar	14/140	15/140	1	71/100	70/100	1
Capital Pillar	13/66	23/66	10	69/100	60/100	9
Information Pillar	6/101	7/101	1	82/100	81/100	1
People Pillar	4/106	4/106	0	86/100	86/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	45/140		—	
Merchandise Trade (% of GDP)	44/140	70/140	41%	35%
Services Trade (% of GDP)	71/139	64/139	7%	8%

Capital	32/122		—	
FDI Stock (% of GDP)	19/132	101/140	40%	20%
FDI Flows (% of GFCF)	26/133	110/140	13%	6%
Portfolio Equity Stock (% of GDP)	26/102	29/97	18%	14%
Portfolio Equity Flows (% of GDP)	37/129	38/126	0%	0%

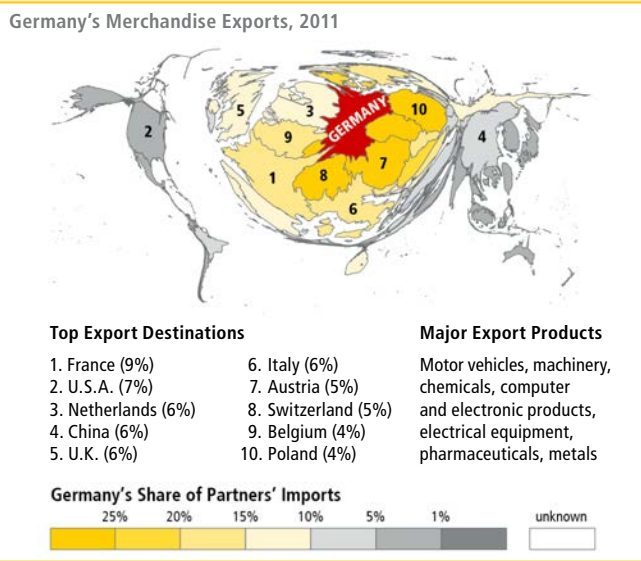
Information	18/140		—	
Internet Bandwidth (Bits per Second per Internet User)	20/140		74,786	
International Phone Calls (Minutes per Capita)	21/140	44/140	250	137
Printed Publications Trade (USD per Capita)	12/135	30/135	\$73	\$35

People	28/116			
Migrants (% of Population)	71/139	29/140	5%	13%
Tourists Dep./Arr. Per Capita	18/93	61/136	0.9	0.3
International Students (% of Tertiary Education Enrollment)	68/130	18/104	4%	8%

Summary

Germany holds the 10<sup>th</sup> rank on the DHL Global Connectedness Index and ranks in the top 10 among European countries on all four pillars of the index. As is typical among large economies, it ranks higher on breadth than depth. Among the world's 10 largest economies, Germany has the 2<sup>nd</sup> highest overall connectedness score and the highest scores on the trade and people pillars. Within the capital pillar, it is noteworthy that Germany has much stronger outward than inward FDI depth, ranking 19<sup>th</sup> on outward FDI stock and 101<sup>st</sup> on inward FDI stock. Germany's strength in manufacturing is also reflected in its significantly higher rank on merchandise exports depth than on services exports depth.

Rooted Map



Breadth

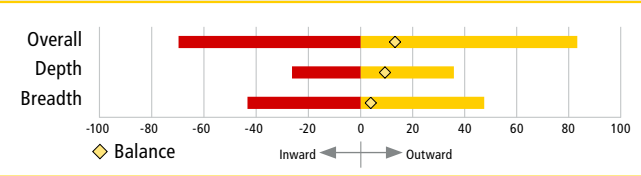
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	18/140		—	
Merchandise Trade	8/140	36/140	69%	75%

Capital	12/67		—	
FDI Stock	5/41	8/46	71%	85%
FDI Flows	2/38	5/41	73%	68%
Portfolio Equity Stock	24/66	—	86%	—

Information	14/101		—	
International Phone Calls	31/101	37/101	69%	76%
Printed Publications Trade	5/135	10/135	86%	81%

People	1/124		—	
Migrants	2/139	2/139	40%	44%
Tourists Departures/Arrivals	—	7/107	—	81%
International Students	—	6/93	—	48%

Directionality



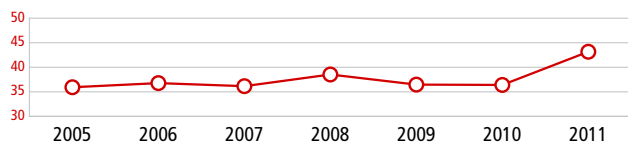


# GHANA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	72/140	94/140	22	43/100	36/100	7
<b>Depth</b>	85/140	104/140	19	19/50	14/50	5
<b>Breadth</b>	62/140	68/140	6	24/50	23/50	1
<b>Trade Pillar</b>	54/140	83/140	29	55/100	44/100	11
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	76/101	76/101	0	46/100	44/100	2
<b>People Pillar</b>	72/106	72/106	0	41/100	42/100	-1

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	54/140		—	
Merchandise Trade (% of GDP)	53/140	58/140	35%	40%
Services Trade (% of GDP)	88/139	69/139	4%	8%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	.	74/140	.	32%
FDI Flows (% of GFCF)	111/133	17/140	0%	38%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

<b>Information</b>	110/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	139/140	.	225	.
International Phone Calls (Minutes per Capita)	82/140	95/140	25	35
Printed Publications Trade (USD per Capita)	38/135	12/135	\$12	\$74

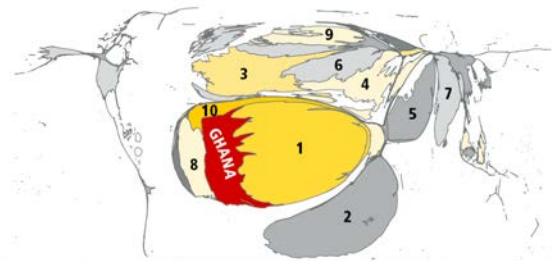
<b>People</b>	79/116	.	.	.
Migrants (% of Population)	75/139	51/140	5%	8%
Tourists Dep./Arr. Per Capita	.	105/136	.	0.0
International Students (% of Tertiary Education Enrollment)	81/130	80/104	3%	1%

## Summary

Ghana achieved one of the world's largest increases in its global connectedness from 2010 to 2011, increasing its rank 22 places from 94<sup>th</sup> to 72<sup>nd</sup>. Its rise was driven by its growing depth on the trade pillar. Ghana's Jubilee oil and gas field began production in December 2010. Following its large increase over the past year, Ghana now ranks 5<sup>th</sup> out of the 29 countries studied in Sub-Saharan Africa in terms of overall global connectedness as well as on each of the four pillars. Ghana's large FDI inflows over the past three years are also noteworthy. Ghana ranks 17<sup>th</sup> worldwide on FDI inflows, with FDI contributing 38% of Ghana's gross fixed capital formation.

## Rooted Map

### Ghana's Merchandise Exports, 2011



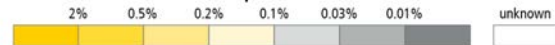
#### Top Export Destinations

1. Togo (25%)
2. South Africa (17%)
3. France (9%)
4. Italy (6%)
5. U.A.E. (5%)
6. Switzerland (5%)
7. India (4%)
8. Côte d'Ivoire (4%)
9. Netherlands (4%)
10. Burkina Faso (3%)

#### Major Export Products

Gold, cocoa, timber, tuna, bauxite, aluminum, manganese ore, diamonds, horticultural products

#### Ghana's Share of Partners' Imports



## Breadth

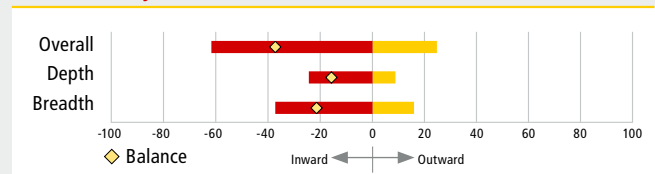
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	59/140		—	
Merchandise Trade	109/140	25/140	52%	19%

<b>Capital</b>	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	49/101	.	.	.
International Phone Calls	38/101	15/101	15%	6%
Printed Publications Trade	93/135	125/135	82%	0%

<b>People</b>	68/124	.	.	.
Migrants	101/139	38/139	75%	72%
Tourists Departures/Arrivals	—	37/107	—	43%
International Students	—	84/93	—	99%

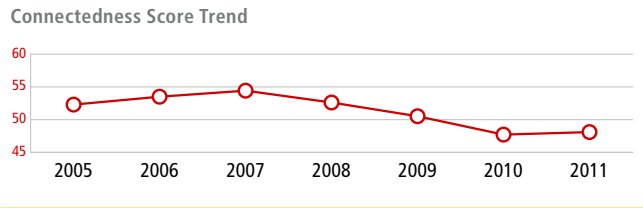
## Directionality



# GREECE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	58/140	57/140	-1	48/100	48/100	0
Depth	91/140	93/140	2	17/50	16/50	1
Breadth	37/140	37/140	0	31/50	32/50	-1
Trade Pillar	81/140	76/140	-5	46/100	46/100	0
Capital Pillar	46/66	50/66	4	39/100	38/100	1
Information Pillar	14/101	13/101	-1	76/100	77/100	-1
People Pillar	22/106	22/106	0	70/100	70/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	128/140		—	
Merchandise Trade (% of GDP)	132/140	125/140	10%	19%
Services Trade (% of GDP)	34/139	88/139	13%	6%

Capital	81/122		—	
FDI Stock (% of GDP)	42/132	129/140	14%	9%
FDI Flows (% of GFCF)	51/133	127/140	3%	3%
Portfolio Equity Stock (% of GDP)	40/102	54/97	8%	2%
Portfolio Equity Flows (% of GDP)	40/129	114/126	0%	0%

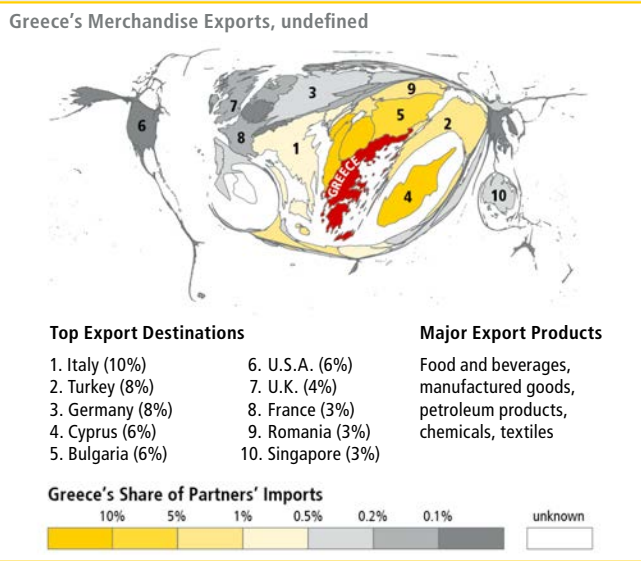
Information	37/140		—	
Internet Bandwidth (Bits per Second per Internet User)	48/140		26,008	
International Phone Calls (Minutes per Capita)	40/140	42/140	127	148
Printed Publications Trade (USD per Capita)	45/135	47/135	\$9	\$15

People	23/116			
Migrants (% of Population)	48/139	42/140	8%	10%
Tourists Dep./Arr. Per Capita	·	15/136	·	1.3
International Students (% of Tertiary Education Enrollment)	58/130	44/104	5%	3%

## Summary

Greece’s global connectedness declined significantly from 2007 to 2010 and then stabilized. It ranks 58<sup>th</sup> out of 140 countries on this year’s DHL Global Connectedness Index and 30<sup>th</sup> out of 40 European countries. Greece has higher breadth (37<sup>th</sup> globally) than depth (91<sup>st</sup>). While Greece’s breadth is similar across pillars, its depth is much higher on the information and people pillars than on capital and trade. Greece ranks only 128<sup>th</sup> out of 140 countries globally on trade depth. One bright spot within this pillar, however, is Greece’s services exports depth, on which it ranks 34<sup>th</sup> worldwide. Services exports account for 13% of Greece’s GDP. Greece also ranks 15<sup>th</sup> worldwide on tourist arrivals per capita.

## Rooted Map



## Breadth

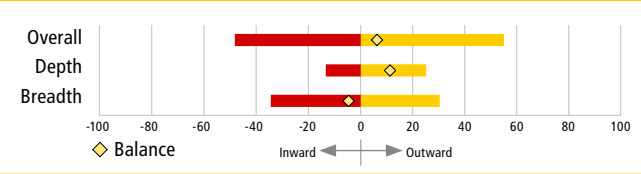
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	35/140		—	
Merchandise Trade	42/140	32/140	66%	66%

Capital	37/67		—	
FDI Stock	34/41	10/46	69%	87%
FDI Flows	30/38	32/41	73%	94%
Portfolio Equity Stock	37/66	—	65%	—

Information	15/101		—	
International Phone Calls	20/101	34/101	89%	80%
Printed Publications Trade	27/135	26/135	76%	76%

People	32/124		—	
Migrants	9/139	32/139	43%	69%
Tourists Departures/Arrivals	—	33/107	—	83%
International Students	—	53/93	—	87%

## Directionality



# GUATEMALA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	120/140	123/140	3	26/100	24/100	2
<b>Depth</b>	102/140	108/140	6	15/50	13/50	2
<b>Breadth</b>	118/140	122/140	4	11/50	10/50	1
<b>Trade Pillar</b>	119/140	123/140	4	33/100	30/100	3
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	64/101	68/101	4	53/100	49/100	4
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	92/140		—	
Merchandise Trade (% of GDP)	96/140	68/140	22%	35%
Services Trade (% of GDP)	86/139	99/139	5%	6%

<b>Capital</b>	100/122		—	
FDI Stock (% of GDP)	101/132	110/140	1%	16%
FDI Flows (% of GFCF)	95/133	68/140	0%	13%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	74/129	75/126	0%	0%

<b>Information</b>	70/140		—	
Internet Bandwidth (Bits per Second per Internet User)	94/140		6,934	
International Phone Calls (Minutes per Capita)	58/140	41/140	50	150
Printed Publications Trade (USD per Capita)	79/135	68/135	\$2	\$7

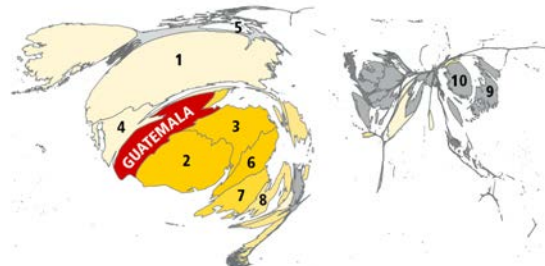
<b>People</b>	101/116		—	
Migrants (% of Population)	69/139	125/140	5%	0%
Tourists Dep./Arr. Per Capita	73/93	90/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	113/130	.	1%	.

## Summary

Guatemala ranks 120<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, up three places versus last year's ranking. After dipping during the financial crisis, Guatemala's connectedness has been rising strongly over the past two years. Some of Guatemala's higher ranks on specific components of connectedness are associated with its outward migration. Guatemala ranks 69<sup>th</sup> on the depth of its outward migration and 41<sup>st</sup> on the depth of its inward international telephone calls per capita. Guatemala's FDI inflows over the past three years are also noteworthy, placing Guatemala 68<sup>th</sup> on FDI inflows depth even though it still ranks only 110<sup>th</sup> on the depth of its inward FDI stock.

## Rooted Map

### Guatemala's Merchandise Exports, 2011



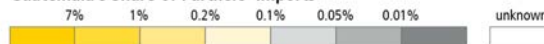
#### Top Export Destinations

1. U.S.A. (39%)
2. El Salvador (11%)
3. Honduras (7%)
4. Mexico (5%)
5. Canada (4%)
6. Nicaragua (4%)
7. Costa Rica (4%)
8. Panama (2%)
9. Japan (2%)
10. South Korea (2%)

#### Major Export Products

Coffee, sugar, petroleum, apparel, bananas, fruits and vegetables, cardamom

#### Guatemala's Share of Partners' Imports



## Breadth

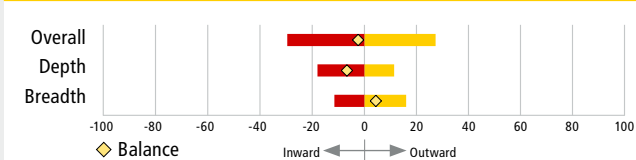
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	104/140		—	
Merchandise Trade	93/140	112/140	35%	21%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	64/101		—	
International Phone Calls	81/101	7/101	20%	4%
Printed Publications Trade	115/135	96/135	92%	29%

<b>People</b>	.		—	
Migrants	84/139	87/139	5%	56%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

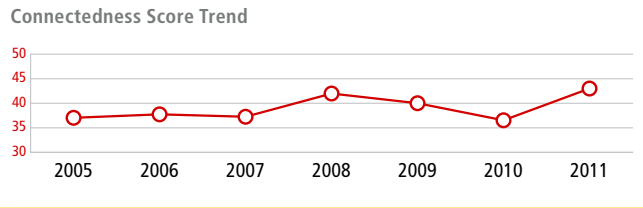
## Directionality



# GUINEA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	73/140	93/140	20	43/100	37/100	6
Depth	87/140	101/140	14	18/50	15/50	3
Breadth	59/140	73/140	14	25/50	22/50	3
Trade Pillar	64/140	97/140	33	51/100	41/100	10
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	82/106	82/106	0	38/100	38/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	65/140		—	
Merchandise Trade (% of GDP)	59/140	63/140	34%	38%
Services Trade (% of GDP)	132/139	72/139	1%	7%

Capital	54/122		—	
FDI Stock (% of GDP)	80/132	33/140	3%	59%
FDI Flows (% of GFCF)	42/133	9/140	5%	59%
Portfolio Equity Stock (% of GDP)	.	75/97	.	1%
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

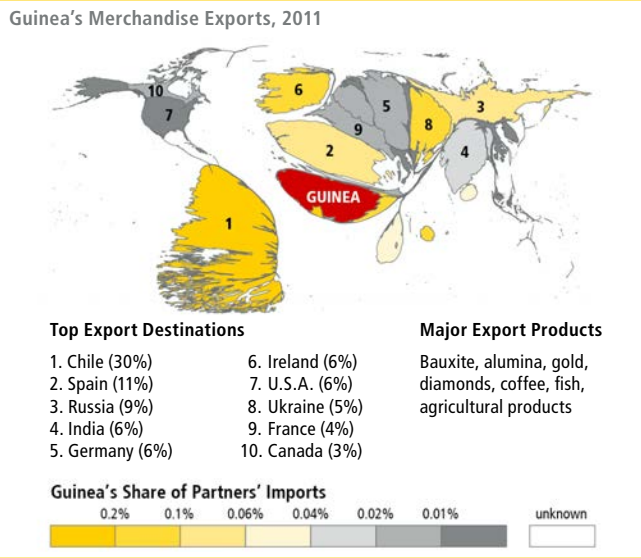
Information	124/140		—	
Internet Bandwidth (Bits per Second per Internet User)	124/140		1,731	
International Phone Calls (Minutes per Capita)	137/140	122/140	1	11
Printed Publications Trade (USD per Capita)	40/135	127/135	\$11	\$0

People	71/116			
Migrants (% of Population)	55/139	65/140	6%	4%
Tourists Dep./Arr. Per Capita	.	134/136	.	0.0
International Students (% of Tertiary Education Enrollment)	40/130	73/104	7%	1%

## Summary

Guinea ranks 73<sup>rd</sup> on the overall index with a higher score on breadth than depth. From 2010 to 2011, Guinea increased its score by 6 points, which was enough to improve its rank by 20 positions. However, even with that improvement, Guinea’s score in 2011 is just slightly higher than in 2008. Focusing on specific components, Guinea’s highest rank is on depth in the capital pillar, where within that pillar Guinea ranks 9<sup>th</sup> out of 140 countries on FDI inflows. Guinea’s lowest rank is on emigration breadth (132<sup>nd</sup> out of 139), which reflects that 90 % of its emigration takes place within Sub-Saharan Africa.

## Rooted Map



## Breadth

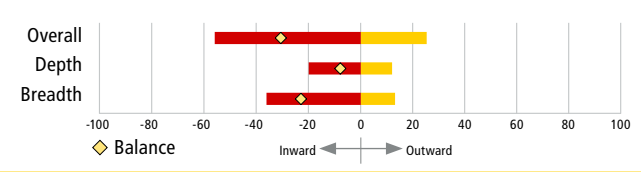
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	62/140		—	
Merchandise Trade	95/140	37/140	4%	9%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	73/135	129/135	.	.

People	90/124		—	
Migrants	132/139	69/139	90%	87%
Tourists Departures/Arrivals	—	67/107	—	32%
International Students	—	.	—	.

## Directionality



# GUYANA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	44/140	49/140	5	52/100	50/100	2
<b>Depth</b>	21/140	27/140	6	33/50	31/50	2
<b>Breadth</b>	85/140	87/140	2	19/50	20/50	-1
<b>Trade Pillar</b>	44/140	46/140	2	58/100	56/100	2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	43/106	43/106	0	56/100	56/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	18/140		—	
Merchandise Trade (% of GDP)	40/140	11/140	46%	73%
Services Trade (% of GDP)	52/139	16/139	10%	16%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	126/132	17/140	0%	76%
FDI Flows (% of GFCF)	113/133	31/140	0%	28%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

<b>Information</b>	55/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	77/140	.	.	.
International Phone Calls (Minutes per Capita)	70/140	13/140	34	307
Printed Publications Trade (USD per Capita)	67/135	52/135	\$3	\$14

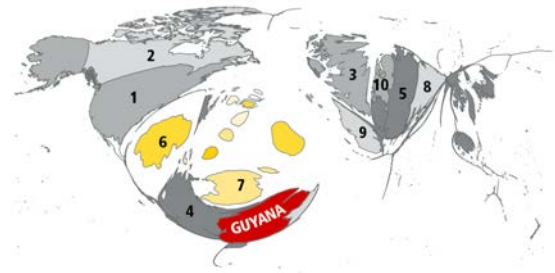
<b>People</b>	55/116	.	.	.
Migrants (% of Population)	1/139	106/140	34%	2%
Tourists Dep./Arr. Per Capita	.	71/136	.	0.2
International Students (% of Tertiary Education Enrollment)	24/130	84/104	10%	1%

## Summary

Guyana's ranks second out of the 22 countries in South & Central America & the Caribbean, and 44<sup>th</sup> globally. It ranks significantly higher on depth (21<sup>st</sup> out of 140) than breadth (85<sup>th</sup> out of 140), which is not unusual for a small country. Guyana also has stronger outward than inward connectedness, especially on the trade and capital pillars. Its overall score reached its lowest level in 2009, and since then has increased from 46 to 52 in 2011. One particularly noteworthy aspect of Guyana's connectedness profile is its top rank worldwide on outward migration depth, with outward migrants adding up 34% of the country's population.

## Rooted Map

### Guyana's Merchandise Exports, 2011



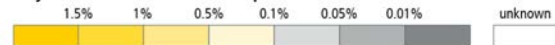
#### Top Export Destinations

1. U.S.A. (23%)
2. Canada (20%)
3. U.K. (9%)
4. Venezuela (8%)
5. Germany (6%)
6. Jamaica (5%)
7. Trin. & Tob. (5%)
8. Ukraine (3%)
9. Portugal (3%)
10. Netherlands (2%)

#### Major Export Products

Sugar, gold, bauxite, alumina, rice, shrimp, molasses, rum, timber

#### Guyana's Share of Partners' Imports



## Breadth

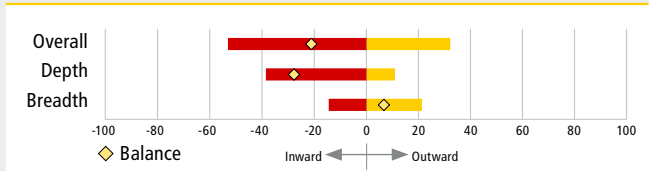
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	100/140		—	
Merchandise Trade	89/140	103/140	25%	37%

<b>Capital</b>	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	90/135	108/135	4%	23%

<b>People</b>	51/124	.	.	.
Migrants	62/139	100/139	8%	74%
Tourists Departures/Arrivals	—	1/107	—	0%
International Students	—	76/93	—	70%

## Directionality

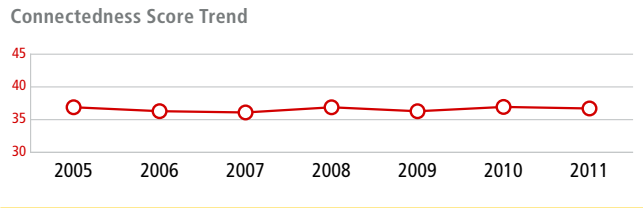




HONDURAS

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	93/140	91/140	-2	37/100	37/100	0
Depth	75/140	69/140	-6	22/50	22/50	0
Breadth	101/140	100/140	-1	15/50	15/50	0
Trade Pillar	65/140	65/140	0	51/100	49/100	2
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	93/106	93/106	0	30/100	30/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	33/140		—	
Merchandise Trade (% of GDP)	45/140	29/140	39%	58%
Services Trade (% of GDP)	75/139	40/139	6%	10%

Capital	101/122		—	
FDI Stock (% of GDP)	117/132	52/140	0%	45%
FDI Flows (% of GFCF)	118/133	48/140	0%	20%
Portfolio Equity Stock (% of GDP)	82/102	.	0%	.
Portfolio Equity Flows (% of GDP)	108/129	75/126	0%	0%

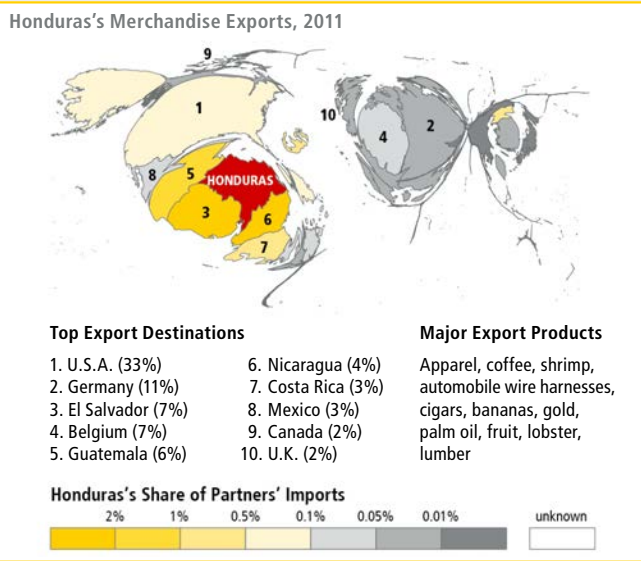
Information	72/140		—	
Internet Bandwidth (Bits per Second per Internet User)	105/140		4,866	
International Phone Calls (Minutes per Capita)	39/140	64/140	140	83
Printed Publications Trade (USD per Capita)	21/135	74/135	\$48	\$6

People	93/116			
Migrants (% of Population)	65/139	129/140	5%	0%
Tourists Dep./Arr. Per Capita	72/93	87/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	95/130	.	2%	.

Summary

Honduras ranks 93<sup>rd</sup> on this year’s DHL Global Connectedness index and 12<sup>th</sup> out of the 22 countries analyzed in Central & South America & the Caribbean. Honduras’s strongest pillar is the trade pillar on which it ranks 65<sup>th</sup> out of 140 countries, 1<sup>st</sup> in Central America and 3<sup>rd</sup> across the full Central & South America & Caribbean region. Honduras’s merchandise exports and imports add up to 39% and 58% of its GDP, respectively, and more than 70% of Honduras’s merchandise trade is with partner countries outside of its region. Honduras’s overall connectedness has remained basically stable since 2005.

Rooted Map



Breadth

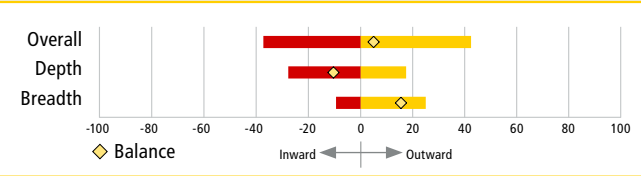
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	101/140		—	
Merchandise Trade	59/140	132/140	25%	32%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	100/135	104/135	.	.

People	97/124		—	
Migrants	86/139	77/139	10%	69%
Tourists Departures/Arrivals	—	82/107	—	49%
International Students	—	.	—	.

Directionality

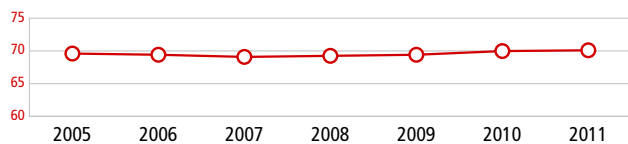


# HONG KONG SAR (CHINA)

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	12/140	12/140	0	70/100	70/100	0
<b>Depth</b>	1/140	1/140	0	50/50	50/50	0
<b>Breadth</b>	78/140	86/140	8	20/50	20/50	0
<b>Trade Pillar</b>	9/140	8/140	-1	80/100	80/100	0
<b>Capital Pillar</b>	25/66	26/66	1	58/100	58/100	0
<b>Information Pillar</b>	23/101	22/101	-1	71/100	71/100	0
<b>People Pillar</b>	24/106	24/106	0	70/100	70/100	0

### Connectedness Score Trend



## Depth

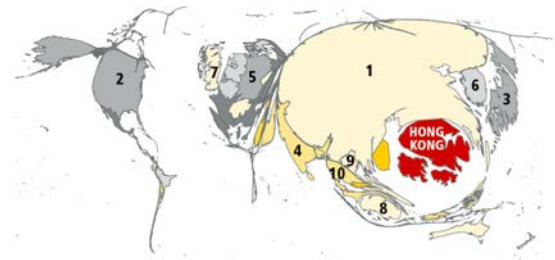
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	1/140		—	
Merchandise Trade (% of GDP)	1/140	1/140	187%	210%
Services Trade (% of GDP)	3/139	6/139	50%	23%
<b>Capital</b>	2/122		—	
FDI Stock (% of GDP)	1/132	1/140	429%	467%
FDI Flows (% of GFCF)	1/133	2/140	162%	138%
Portfolio Equity Stock (% of GDP)	4/102	4/97	193%	137%
Portfolio Equity Flows (% of GDP)	4/129	4/126	15%	5%
<b>Information</b>	2/140		—	
Internet Bandwidth (Bits per Second per Internet User)	1/140		964,616	
International Phone Calls (Minutes per Capita)	2/140	7/140	1093	498
Printed Publications Trade (USD per Capita)	3/135	4/135	\$274	\$192
<b>People</b>	5/116		—	
Migrants (% of Population)	38/139	5/140	10%	39%
Tourists Dep./Arr. Per Capita	1/93	5/136	11.9	2.8
International Students (% of Tertiary Education Enrollment)	17/130	36/104	12%	4%

## Summary

The Hong Kong Special Administrative Region (SAR) of China ranks first worldwide on the depth of its connectedness, but holds only the 78<sup>th</sup> rank on breadth. Overall, combining depth and breadth, this places Hong Kong in the 12<sup>th</sup> position globally on this year's DHL Global Connectedness Index and the 2<sup>nd</sup> position within East Asia & Pacific. Hong Kong's top pillar overall is the trade pillar, reflecting in particular its role as an export gateway for mainland China – note the greater breadth of Hong Kong's merchandise exports than its merchandise imports. Hong Kong also has exceptionally high depth scores on the capital and information pillars, and it ranks first in the world on international internet bandwidth per internet user.

## Rooted Map

### Hong Kong SAR (China)'s Merchandise Exports, 2011



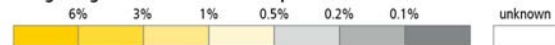
#### Top Export Destinations

1. China (54%)
2. U.S.A. (10%)
3. Japan (4%)
4. India (3%)
5. Germany (3%)
6. South Korea (2%)
7. U.K. (2%)
8. Singapore (2%)
9. Vietnam (1%)
10. Thailand (1%)

#### Major Export Products

Electrical machinery and appliances, textiles, apparel, footwear, watches and clocks, toys, plastics, precious stones, printed material

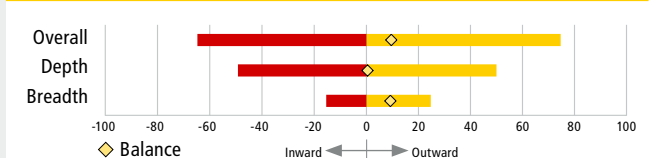
#### Hong Kong's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	53/140		—	
Merchandise Trade	39/140	74/140	69%	78%
<b>Capital</b>	55/67		—	
FDI Stock	38/41	46/46	47%	43%
FDI Flows	35/38	36/41	48%	40%
Portfolio Equity Stock	50/66	—	28%	—
<b>Information</b>	68/101		—	
International Phone Calls	64/101	69/101	86%	75%
Printed Publications Trade	4/135	106/135	25%	90%
<b>People</b>	59/124		—	
Migrants	42/139	83/139	12%	87%
Tourists Departures/Arrivals	—	77/107	—	87%
International Students	—	43/93	—	96%

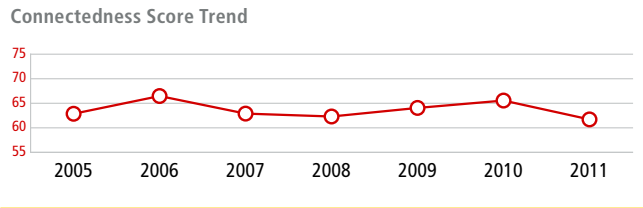
## Directionality



# HUNGARY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	26/140	18/140	-8	62/100	66/100	-4
Depth	17/140	12/140	-5	34/50	36/50	-2
Breadth	49/140	42/140	-7	28/50	30/50	-2
Trade Pillar	10/140	10/140	0	77/100	79/100	-2
Capital Pillar	36/66	29/66	-7	47/100	55/100	-8
Information Pillar	33/101	32/101	-1	66/100	65/100	1
People Pillar	28/106	28/106	0	64/100	64/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	6/140		—	
Merchandise Trade (% of GDP)	6/140	12/140	80%	73%
Services Trade (% of GDP)	25/139	31/139	15%	12%

Capital	38/122		—	
FDI Stock (% of GDP)	37/132	30/140	17%	60%
FDI Flows (% of GFCF)	31/133	72/140	11%	12%
Portfolio Equity Stock (% of GDP)	46/102	40/97	5%	7%
Portfolio Equity Flows (% of GDP)	110/129	59/126	0%	0%

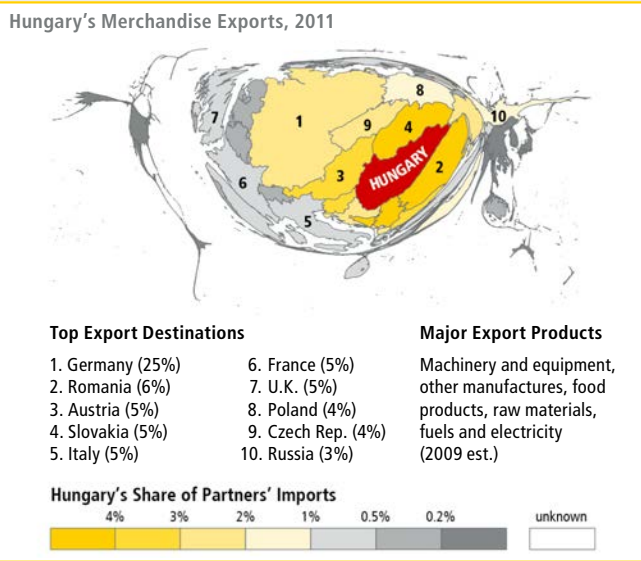
Information	59/140		—	
Internet Bandwidth (Bits per Second per Internet User)	76/140		12,245	
International Phone Calls (Minutes per Capita)	55/140	63/140	57	86
Printed Publications Trade (USD per Capita)	30/135	39/135	\$22	\$21

People	53/116			
Migrants (% of Population)	87/139	70/140	4%	4%
Tourists Dep./Arr. Per Capita	28/93	24/136	0.5	1.0
International Students (% of Tertiary Education Enrollment)	93/130	37/104	2%	4%

## Summary

Hungary ranks 26<sup>th</sup> out of the 140 countries that are covered on this year’s DHL Global Connectedness Index, and holds the 17<sup>th</sup> rank among European countries. Hungary’s strongest position is on the trade pillar, where it ranks 10<sup>th</sup> worldwide and 3<sup>rd</sup> within Europe. This reflects, in particular, Hungary’s high merchandise exports depth. Hungary ranks 6<sup>th</sup> worldwide on this component (behind 3 Asian countries and 2 European countries), with merchandise exports accounting for 80% of its GDP. Hungary suffered one of the largest overall connectedness score declines from 2010 to 2011 among the countries covered in the index. Its decline over the past year was driven primarily by the capital pillar.

## Rooted Map



## Breadth

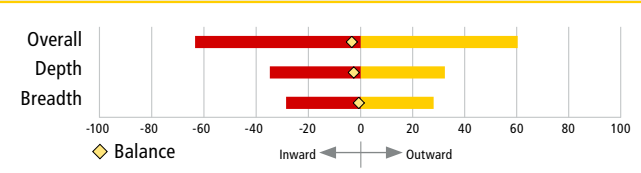
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	50/140		—	
Merchandise Trade	50/140	50/140	86%	81%

Capital	39/67		—	
FDI Stock	31/41	25/46	80%	64%
FDI Flows	32/38	20/41	77%	61%
Portfolio Equity Stock	40/66	—	77%	—

Information	32/101		—	
International Phone Calls	40/101	43/101	93%	86%
Printed Publications Trade	14/135	39/135	93%	87%

People	29/124		—	
Migrants	6/139	71/139	48%	84%
Tourists Departures/Arrivals	—	36/107	—	89%
International Students	—	35/93	—	70%

## Directionality



# ICELAND

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	22/140	24/140	2	64/100	63/100	1
<b>Depth</b>	28/140	31/140	3	31/50	29/50	2
<b>Breadth</b>	29/140	26/140	-3	33/50	34/50	-1
<b>Trade Pillar</b>	26/140	27/140	1	64/100	62/100	2
<b>Capital Pillar</b>	33/66	35/66	2	49/100	48/100	1
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	1/106	1/106	0	89/100	89/100	0

### Connectedness Score Trend



## Depth

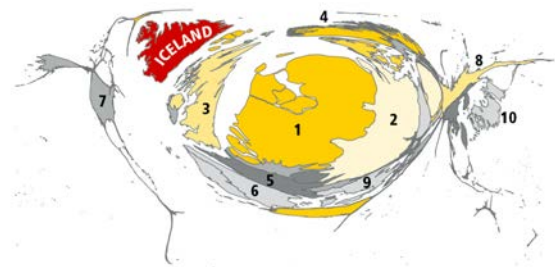
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	39/140		—	
Merchandise Trade (% of GDP)	47/140	72/140	38%	34%
Services Trade (% of GDP)	14/139	13/139	20%	18%
<b>Capital</b>	60/122		—	
FDI Stock (% of GDP)	2/132	2/140	324%	346%
FDI Flows (% of GFCF)	130/133	40/140	-4%	24%
Portfolio Equity Stock (% of GDP)	16/102	76/97	35%	1%
Portfolio Equity Flows (% of GDP)	128/129	121/126	-3%	0%
<b>Information</b>	19/140		—	
Internet Bandwidth (Bits per Second per Internet User)	3/140		287,139	
International Phone Calls (Minutes per Capita)	42/140	21/140	124	239
Printed Publications Trade (USD per Capita)	51/135	16/135	\$6	\$60
<b>People</b>	8/116		—	
Migrants (% of Population)	34/139	31/140	11%	12%
Tourists Dep./Arr. Per Capita	15/93	3/136	0.9	3.8
International Students (% of Tertiary Education Enrollment)	12/130	29/104	16%	5%

## Summary

Iceland ranks 22<sup>nd</sup> out of the 140 countries covered on this year's DHL Global Connectedness Index. From 2010 to 2011, its connectedness score began a modest recovery after having declined from 2006 to 2010. Iceland's rising connectedness from 2010 to 2011 was driven primarily by depth rather than breadth and focused in the trade and capital pillars. The most remarkable aspect of Iceland's connectedness profile is on the people pillar, where it ranks first out of 106 countries. This reflects the high depth and breadth, in particular, of Iceland's tourist arrivals.

## Rooted Map

### Iceland's Merchandise Exports, 2011



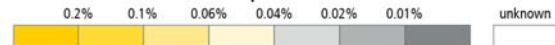
#### Top Export Destinations

1. Netherlands (32%)
2. Germany (15%)
3. U.K. (9%)
4. Norway (4%)
5. France (4%)

#### Major Export Products

6. Spain (4%)
  7. U.S.A. (4%)
  8. Russia (3%)
  9. Italy (3%)
  10. Japan (2%)
- Fish and fish products (40%), aluminum, animal products, ferrosilicon, diatomite

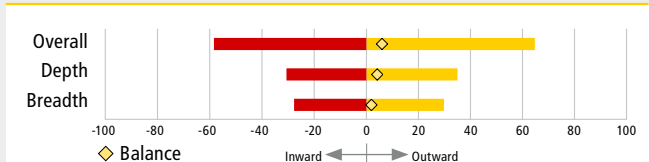
#### Iceland's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	51/140		—	
Merchandise Trade	67/140	39/140	88%	66%
<b>Capital</b>	28/67		—	
FDI Stock	13/41	45/46	82%	98%
FDI Flows	23/38	34/41	87%	69%
Portfolio Equity Stock	18/66	—	64%	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	46/135	15/135	38%	72%
<b>People</b>	8/124		—	
Migrants	27/139	25/139	60%	66%
Tourists Departures/Arrivals	—	4/107	—	89%
International Students	—	24/93	—	78%

## Directionality

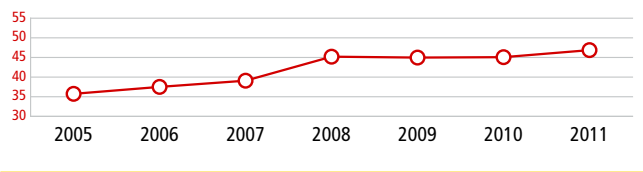


INDIA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	62/140	64/140	2	47/100	45/100	2
Depth	119/140	121/140	2	11/50	9/50	2
Breadth	20/140	21/140	1	36/50	36/50	0
Trade Pillar	33/140	49/140	16	60/100	55/100	5
Capital Pillar	39/66	39/66	0	44/100	45/100	-1
Information Pillar	52/101	48/101	-4	58/100	57/100	1
People Pillar	91/106	91/106	0	32/100	32/100	0

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	106/140		-	
Merchandise Trade (% of GDP)	112/140	101/140	18%	27%
Services Trade (% of GDP)	58/139	66/139	9%	8%

Capital	74/122		-	
FDI Stock (% of GDP)	62/132	126/140	6%	10%
FDI Flows (% of GFCF)	55/133	108/140	3%	6%
Portfolio Equity Stock (% of GDP)	79/102	37/97	0%	8%
Portfolio Equity Flows (% of GDP)	76/129	13/126	0%	1%

Information	112/140		-	
Internet Bandwidth (Bits per Second per Internet User)	102/140		5,423	
International Phone Calls (Minutes per Capita)	120/140	116/140	6	15
Printed Publications Trade (USD per Capita)	102/135	126/135	\$0	\$1

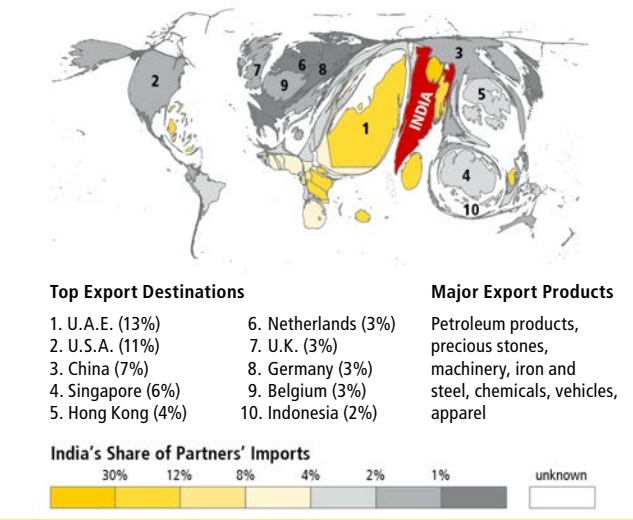
People	115/116			
Migrants (% of Population)	129/139	124/140	1%	0%
Tourists Dep./Arr. Per Capita	91/93	133/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	119/130	100/104	1%	0%

Summary

India’s connectedness has gradually increased since 2005, though most of its gains over this period took place before the onset of the global financial crisis. Ranked 62<sup>nd</sup> overall out of 140 countries and 3<sup>rd</sup> among the 12 countries in South and Central Asia, India’s has much higher breadth (20<sup>th</sup> out of 140) than depth (119<sup>th</sup> out of 140). India’s high breadth score reflects its limited intra-regional connectedness (driven by poor relations with its largest neighbor, Pakistan), forcing India to connect over greater distances than is required in more integrated regions. Among the pillars, India’s strongest position is on trade, where it ranks 33<sup>rd</sup> out of 140 countries globally, first in its region, and 3<sup>rd</sup> out of the world’s ten largest economies.

Rooted Map

India’s Merchandise Exports, 2011



Breadth

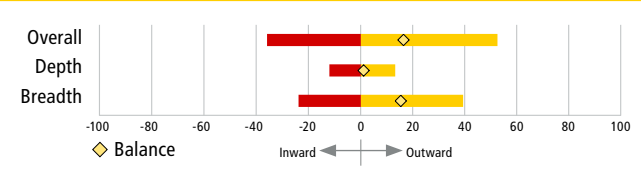
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	9/140		-	
Merchandise Trade	7/140	26/140	6%	1%

Capital	33/67		-	
FDI Stock	-	41/46	-	0%
FDI Flows	24/38	-	0%	-
Portfolio Equity Stock	25/66	-	1%	-

Information	7/101		-	
International Phone Calls	30/101	17/101	21%	0%
Printed Publications Trade	11/135	14/135	11%	1%

People	40/124		-	
Migrants	40/139	122/139	23%	96%
Tourists Departures/Arrivals	-	24/107	-	18%
International Students	-	38/93	-	22%

Directionality





# INDONESIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	105/140	107/140	2	33/100	33/100	0
<b>Depth</b>	125/140	125/140	0	8/50	8/50	0
<b>Breadth</b>	58/140	58/140	0	25/50	25/50	0
<b>Trade Pillar</b>	73/140	68/140	-5	49/100	48/100	1
<b>Capital Pillar</b>	61/66	62/66	1	22/100	22/100	0
<b>Information Pillar</b>	85/101	79/101	-6	40/100	43/100	-3
<b>People Pillar</b>	102/106	102/106	0	24/100	24/100	0

### Connectedness Score Trend



## Depth

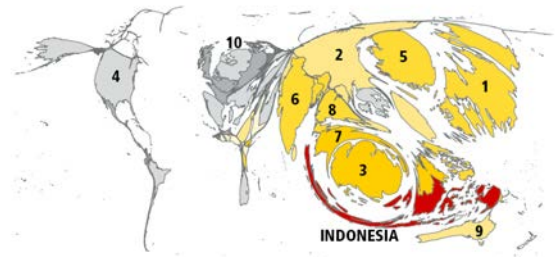
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	124/140		—	
Merchandise Trade (% of GDP)	88/140	122/140	24%	21%
Services Trade (% of GDP)	116/139	118/139	2%	4%
<b>Capital</b>	82/122		—	
FDI Stock (% of GDP)	96/132	100/140	1%	20%
FDI Flows (% of GFCF)	72/133	116/140	2%	5%
Portfolio Equity Stock (% of GDP)	77/102	35/97	0%	11%
Portfolio Equity Flows (% of GDP)	62/129	48/126	0%	0%
<b>Information</b>	113/140		—	
Internet Bandwidth (Bits per Second per Internet User)	93/140		7,196	
International Phone Calls (Minutes per Capita)	128/140	115/140	3	16
Printed Publications Trade (USD per Capita)	106/135	129/135	\$0	\$0
<b>People</b>	114/116		—	
Migrants (% of Population)	126/139	140/140	1%	0%
Tourists Dep./Arr. Per Capita	87/93	112/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	123/130	95/104	1%	0%

## Summary

Indonesia ranks 105<sup>th</sup> on this year's DHL Global Connectedness Index, up 2 places versus last year. Within the East Asia & Pacific region, Indonesia's connectedness ranks 17<sup>th</sup> out of 19 countries. Indonesia has much higher breadth (on which it ranks 58<sup>th</sup> worldwide) than depth (125<sup>th</sup>), which is typical of the pattern observed among very populous countries. Focusing on depth, which has a more direct relationship to economic growth than breadth, Indonesia's strongest pillar is the capital pillar, as exemplified by its 35<sup>th</sup> rank on the depth of its inward portfolio equity stock. Indonesia's trade depth is particularly low (ranking 124<sup>th</sup> out of 140 countries globally), potentially reflecting an untapped opportunity.

## Rooted Map

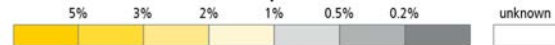
### Indonesia's Merchandise Exports, 2011



### Major Export Products

Oil and gas, electrical appliances, plywood, textiles, rubber

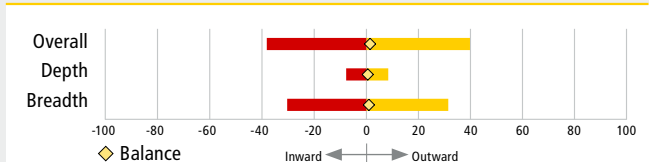
### Indonesia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	30/140		—	
Merchandise Trade	32/140	34/140	64%	69%
<b>Capital</b>	61/67		—	
FDI Stock	·	37/46	·	69%
FDI Flows	·	·	·	·
Portfolio Equity Stock	60/66	—	5%	—
<b>Information</b>	61/101		—	
International Phone Calls	62/101	78/101	78%	88%
Printed Publications Trade	8/135	53/135	29%	67%
<b>People</b>	67/124		—	
Migrants	104/139	33/139	58%	67%
Tourists Departures/Arrivals	—	61/107	—	79%
International Students	—	62/93	—	98%

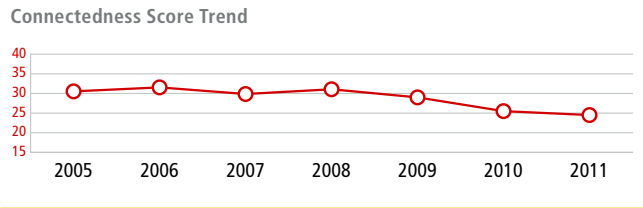
## Directionality



# IRAN, ISLAMIC REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	126/140	119/140	-7	25/100	25/100	0
Depth	138/140	137/140	-1	4/50	3/50	1
Breadth	76/140	71/140	-5	21/50	22/50	-1
Trade Pillar	120/140	111/140	-9	33/100	35/100	-2
Capital Pillar	.	.	.	.	.	.
Information Pillar	86/101	87/101	1	40/100	37/100	3
People Pillar	100/106	100/106	0	25/100	25/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	129/140		-	
Merchandise Trade (% of GDP)	78/140	138/140	27%	14%
Services Trade (% of GDP)	127/139	116/139	2%	4%

Capital	.	.	.	.
FDI Stock (% of GDP)	109/132	132/140	1%	7%
FDI Flows (% of GFCF)	97/133	124/140	0%	4%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

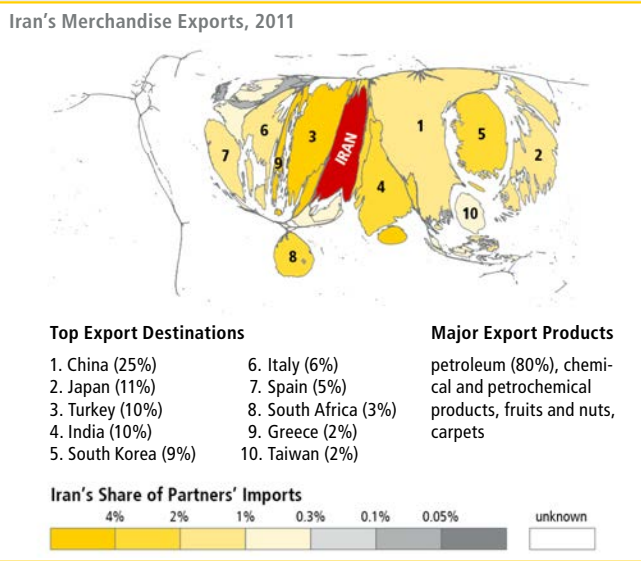
Information	118/140		-	
Internet Bandwidth (Bits per Second per Internet User)	112/140		3,540	
International Phone Calls (Minutes per Capita)	115/140	128/140	8	7
Printed Publications Trade (USD per Capita)	101/135	131/135	\$0	\$0

People	107/116			
Migrants (% of Population)	119/139	80/140	1%	3%
Tourists Dep./Arr. Per Capita	.	114/136	.	0.0
International Students (% of Tertiary Education Enrollment)	117/130	99/104	1%	0%

## Summary

Iran ranks 126<sup>th</sup> on this year’s DHL Global Connectedness Index, down 7 places in the rankings versus last year. Its connectedness was stable from 2005 to 2008 and then began a declining trend. Iran’s overall global connectedness ranks 14<sup>th</sup> out of 15 countries in its region. Its breadth (76<sup>th</sup>) is much higher than its depth (138<sup>th</sup>). Among its component level depth scores, it ranks highest on merchandise exports depth (78<sup>th</sup>) and lowest on merchandise imports depth (138<sup>th</sup>).

## Rooted Map



## Breadth

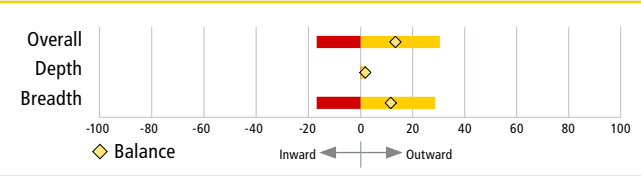
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	77/140		-	
Merchandise Trade	79/140	65/140	4%	33%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	-	.	-

Information	55/101		-	
International Phone Calls	47/101	35/101	39%	25%
Printed Publications Trade	116/135	52/135	85%	27%

People	85/124		-	
Migrants	4/139	138/139	15%	18%
Tourists Departures/Arrivals	-	.	-	.
International Students	-	74/93	-	20%

## Directionality



# IRELAND

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	4/140	4/140	0	81/100	81/100	0
<b>Depth</b>	4/140	4/140	0	44/50	43/50	1
<b>Breadth</b>	15/140	13/140	-2	38/50	38/50	0
<b>Trade Pillar</b>	17/140	17/140	0	69/100	69/100	0
<b>Capital Pillar</b>	2/66	1/66	-1	93/100	93/100	0
<b>Information Pillar</b>	22/101	23/101	1	71/100	70/100	1
<b>People Pillar</b>	3/106	3/106	0	86/100	86/100	0

### Connectedness Score Trend



## Depth

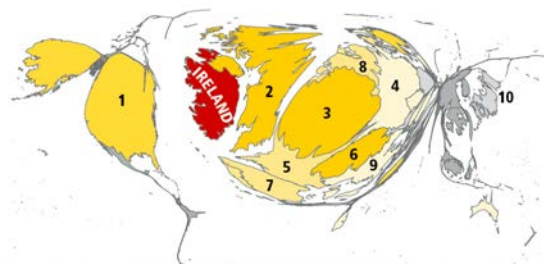
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	30/140		—	
Merchandise Trade (% of GDP)	24/140	90/140	58%	30%
Services Trade (% of GDP)	4/139	2/139	49%	52%
<b>Capital</b>	3/122		—	
FDI Stock (% of GDP)	6/132	8/140	149%	112%
FDI Flows (% of GFCF)	3/133	3/140	48%	83%
Portfolio Equity Stock (% of GDP)	3/102	2/97	260%	681%
Portfolio Equity Flows (% of GDP)	8/129	3/126	6%	41%
<b>Information</b>	5/140		—	
Internet Bandwidth (Bits per Second per Internet User)	22/140		69,031	
International Phone Calls (Minutes per Capita)	10/140	9/140	473	425
Printed Publications Trade (USD per Capita)	19/135	9/135	\$51	\$94
<b>People</b>	4/116		—	
Migrants (% of Population)	9/139	17/140	20%	20%
Tourists Dep./Arr. Per Capita	3/93	14/136	1.6	1.5
International Students (% of Tertiary Education Enrollment)	26/130	23/104	10%	7%

## Summary

Ireland holds the 4<sup>th</sup> rank on overall global connectedness and is among the top 25 countries on all four pillars. Ireland stands out particularly on the capital pillar, where it ranks 2<sup>nd</sup> overall (3<sup>rd</sup> on depth and 6<sup>th</sup> on breadth). This reflects both Ireland's large FDI and portfolio equity flows as well as the broad distribution, in particular, of its inward FDI and outward portfolio equity. Ireland is also a leading country in terms of the depth of its services trade, ranking 4<sup>th</sup> on services exports depth and 2<sup>nd</sup> on services imports depth. Ireland is unusual in having larger services than merchandise trade. Among the 140 countries in the index, only 5 have this characteristic and Ireland is the largest among them.

## Rooted Map

### Ireland's Merchandise Exports, 2011



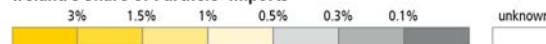
#### Top Export Destinations

1. U.S.A. (22%)
2. U.K. (16%)
3. Belgium (15%)
4. Germany (7%)
5. France (6%)
6. Switzerland (4%)
7. Spain (4%)
8. Netherlands (4%)
9. Italy (3%)
10. Japan (2%)

#### Major Export Products

Machinery and equipment, computers, chemicals, medical devices, pharmaceuticals; food products, animal products

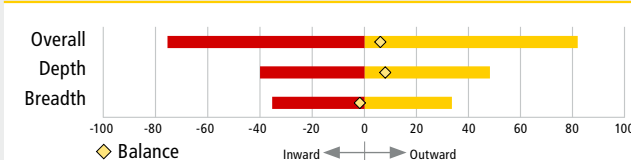
#### Ireland's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	45/140		—	
Merchandise Trade	28/140	64/140	66%	74%
<b>Capital</b>	6/67		—	
FDI Stock	14/41	7/46	59%	66%
FDI Flows	22/38	6/41	45%	58%
Portfolio Equity Stock	3/66	—	49%	—
<b>Information</b>	57/101		—	
International Phone Calls	58/101	58/101	85%	80%
Printed Publications Trade	18/135	86/135	92%	91%
<b>People</b>	20/124		—	
Migrants	44/139	51/139	68%	77%
Tourists Departures/Arrivals	—	29/107	—	84%
International Students	—	13/93	—	39%

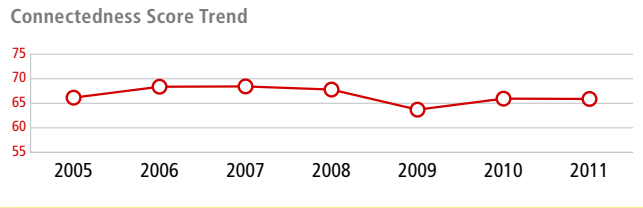
## Directionality



ISRAEL

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	18/140	17/140	-1	66/100	66/100	0
Depth	38/140	35/140	-3	29/50	29/50	0
Breadth	16/140	16/140	0	37/50	37/50	0
Trade Pillar	16/140	18/140	2	70/100	68/100	2
Capital Pillar	27/66	25/66	-2	56/100	58/100	-2
Information Pillar	3/101	5/101	2	84/100	83/100	1
People Pillar	14/106	14/106	0	77/100	77/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	72/140		—	
Merchandise Trade (% of GDP)	76/140	83/140	27%	31%
Services Trade (% of GDP)	45/139	61/139	11%	8%

Capital	15/122		—	
FDI Stock (% of GDP)	27/132	86/140	29%	27%
FDI Flows (% of GFCF)	29/133	52/140	12%	19%
Portfolio Equity Stock (% of GDP)	31/102	14/97	15%	24%
Portfolio Equity Flows (% of GDP)	12/129	47/126	3%	0%

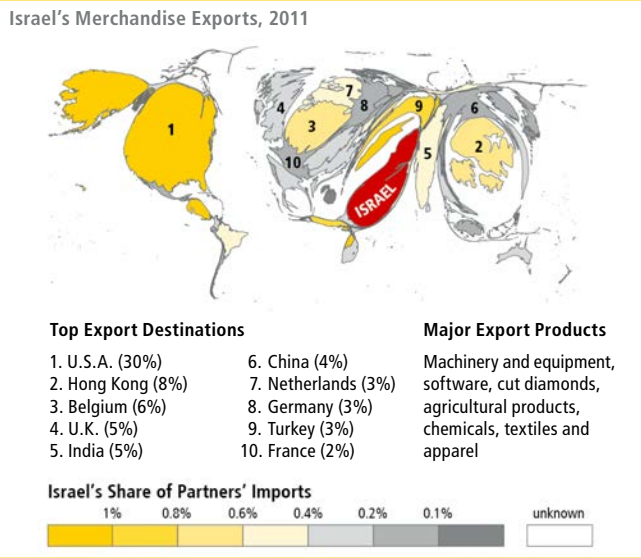
Information	54/140		—	
Internet Bandwidth (Bits per Second per Internet User)	79/140		11,335	
International Phone Calls (Minutes per Capita)	29/140	58/140	195	98
Printed Publications Trade (USD per Capita)	46/135	56/135	\$9	\$11

People	18/116			
Migrants (% of Population)	22/139	7/140	13%	39%
Tourists Dep./Arr. Per Capita	27/93	59/136	0.6	0.4
International Students (% of Tertiary Education Enrollment)	69/130	·	4%	·

Summary

After a drop in 2009, Israel’s connectedness score has risen over the past two years, reaching the 18<sup>th</sup> rank worldwide in 2011. Israel is also the top ranked country within the Middle East & North Africa, and ranks first in its region on the information pillar (on which it ranks 3<sup>rd</sup> globally), 2<sup>nd</sup> on people and capital, and 3<sup>rd</sup> on trade. Israel also has notably higher outward than inward connectedness, with this distinction driven primarily by depth rather than breadth. Is-rael is also noteworthy for its very limited intra-regional integration, with almost all of its international flows taking place with partners located outside of its region.

Rooted Map



Breadth

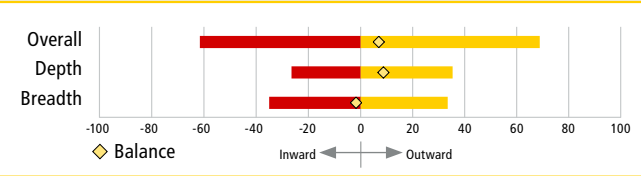
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	5/140		—	
Merchandise Trade	13/140	9/140	1%	1%

Capital	36/67		—	
FDI Stock	25/41	44/46	2%	0%
FDI Flows	26/38	·	0%	·
Portfolio Equity Stock	30/66	—	0%	—

Information	1/101		—	
International Phone Calls	3/101	5/101	0%	0%
Printed Publications Trade	13/135	2/135	0%	0%

People	21/124		—	
Migrants	77/139	15/139	73%	21%
Tourists Departures/Arrivals	—	19/107	—	1%
International Students	—	·	—	·

Directionality



# ITALY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	28/140	35/140	7	61/100	56/100	5
<b>Depth</b>	66/140	83/140	17	23/50	19/50	4
<b>Breadth</b>	14/140	15/140	1	38/50	38/50	0
<b>Trade Pillar</b>	35/140	41/140	6	60/100	57/100	3
<b>Capital Pillar</b>	29/66	40/66	11	53/100	45/100	8
<b>Information Pillar</b>	12/101	11/101	-1	78/100	78/100	0
<b>People Pillar</b>	15/106	15/106	0	77/100	77/100	0

Connectedness Score Trend



## Depth

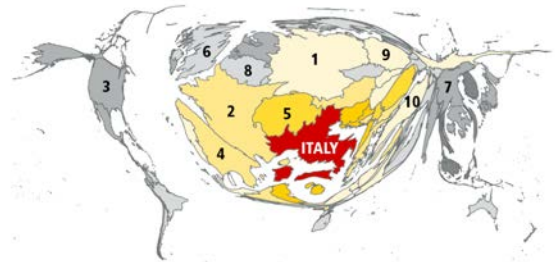
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	110/140		—	
Merchandise Trade (% of GDP)	89/140	106/140	24%	25%
Services Trade (% of GDP)	85/139	105/139	5%	5%
<b>Capital</b>	36/122		—	
FDI Stock (% of GDP)	30/132	112/140	23%	15%
FDI Flows (% of GFCF)	35/133	118/140	8%	5%
Portfolio Equity Stock (% of GDP)	23/102	41/97	19%	7%
Portfolio Equity Flows (% of GDP)	21/129	27/126	1%	0%
<b>Information</b>	27/140		—	
Internet Bandwidth (Bits per Second per Internet User)	26/140		60,820	
International Phone Calls (Minutes per Capita)	33/140	50/140	173	118
Printed Publications Trade (USD per Capita)	28/135	45/135	\$32	\$15
<b>People</b>	49/116		—	
Migrants (% of Population)	63/139	52/140	5%	7%
Tourists Dep./Arr. Per Capita	30/93	34/136	0.5	0.7
International Students (% of Tertiary Education Enrollment)	94/130	43/104	2%	3%

## Summary

Italy's overall connectedness ranks 28<sup>th</sup> worldwide and 18<sup>th</sup> among European countries, with higher breadth (14<sup>th</sup> worldwide) than depth (66<sup>th</sup>). Its stronger pillars are the information pillar (12<sup>th</sup> worldwide) and the people pillar (15<sup>th</sup>). Italy also has stronger outward than inward connectedness, particularly on the capital pillar where it ranks 30<sup>th</sup> on outward FDI stock depth but only 112<sup>th</sup> on inward FDI stock depth. On the people pillar, Italy's breadth score (5<sup>th</sup> worldwide) reflects its attraction as a destination to people from all over the world for tourism, for education, and for migration.

## Rooted Map

Italy's Merchandise Exports, 2011



### Top Export Destinations

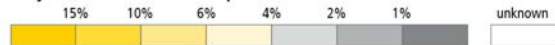
1. Germany (13%)
2. France (12%)
3. U.S.A. (6%)
4. Spain (5%)
5. Switzerland (5%)

6. U.K. (5%)
7. China (3%)
8. Belgium (3%)
9. Poland (3%)
10. Turkey (3%)

### Major Export Products

Engineering products, textiles and clothing, production machinery, motor vehicles, transport equipment, chemicals

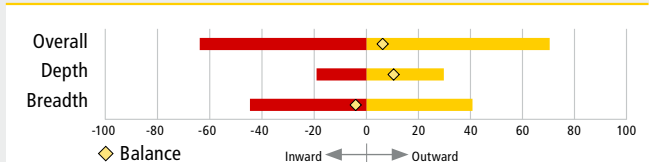
### Italy's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	7/140		—	
Merchandise Trade	14/140	15/140	68%	64%
<b>Capital</b>	31/67		—	
FDI Stock	12/41	11/46	81%	91%
FDI Flows	15/38	8/41	79%	86%
Portfolio Equity Stock	46/66	—	91%	—
<b>Information</b>	16/101		—	
International Phone Calls	33/101	40/101	62%	77%
Printed Publications Trade	6/135	7/135	88%	81%
<b>People</b>	5/124		—	
Migrants	18/139	9/139	50%	37%
Tourists Departures/Arrivals	—	14/107	—	86%
International Students	—	12/93	—	56%

## Directionality

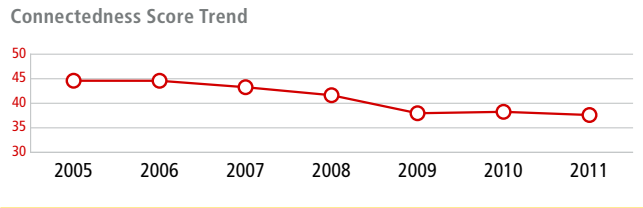




# JAMAICA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	88/140	85/140	-3	38/100	38/100	0
Depth	67/140	63/140	-4	23/50	23/50	0
Breadth	103/140	101/140	-2	14/50	15/50	-1
Trade Pillar	113/140	114/140	1	35/100	34/100	1
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	70/140		—	
Merchandise Trade (% of GDP)	129/140	49/140	11%	43%
Services Trade (% of GDP)	19/139	29/139	18%	13%

Capital	79/122		—	
FDI Stock (% of GDP)	91/132	19/140	2%	75%
FDI Flows (% of GFCF)	69/133	70/140	2%	12%
Portfolio Equity Stock (% of GDP)	66/102	52/97	0%	3%
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

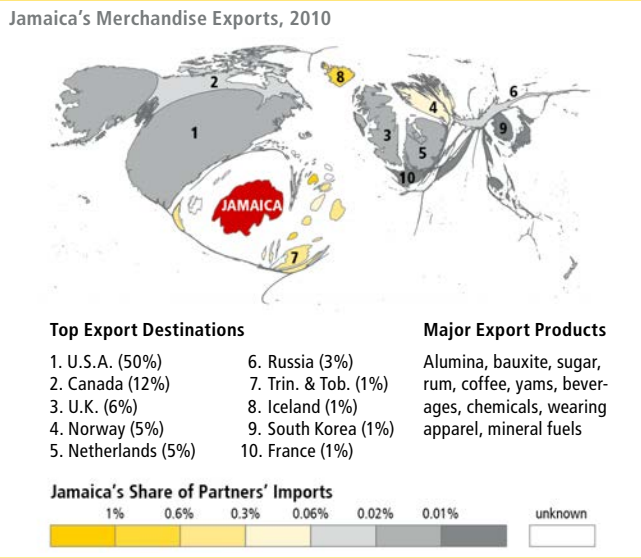
Information	35/140		—	
Internet Bandwidth (Bits per Second per Internet User)	54/140		23,077	
International Phone Calls (Minutes per Capita)	34/140	11/140	171	349
Printed Publications Trade (USD per Capita)	97/135	33/135	\$0	\$30

People	.		.	
Migrants (% of Population)	3/139	110/140	27%	1%
Tourists Dep./Arr. Per Capita	.	35/136	.	0.7
International Students (% of Tertiary Education Enrollment)	39/130	.	8%	.

## Summary

Jamaica ranks 88<sup>th</sup> out of 140 countries globally and second to last in the Caribbean. Its connectedness score declined gradually from 2006 to 2009, but has remained basically stable over the past two years. Jamaica has higher depth (67<sup>th</sup>) than breadth (103<sup>rd</sup>). Jamaica ranks 3<sup>rd</sup> on outward migration depth with its emigrants equal to 27% of its population. Jamaica also has high services exports depth, ranking 19<sup>th</sup> on this component, which is reflective of the importance of tourism and other export services to Jamaica’s economy.

## Rooted Map



## Breadth

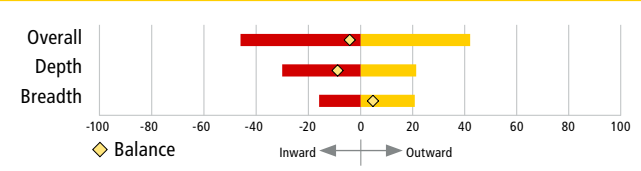
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	112/140		—	
Merchandise Trade	99/140	119/140	7%	40%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	62/135	93/135	61%	5%

People	58/124		—	
Migrants	61/139	47/139	2%	38%
Tourists Departures/Arrivals	—	69/107	—	3%
International Students	—	.	—	.

## Directionality

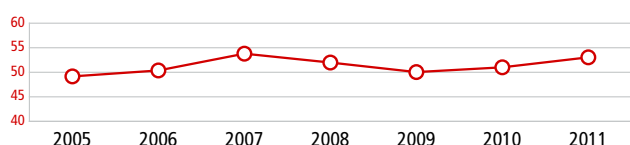


# JAPAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	42/140	46/140	4	53/100	51/100	2
<b>Depth</b>	113/140	118/140	5	13/50	11/50	2
<b>Breadth</b>	7/140	11/140	4	41/50	40/50	1
<b>Trade Pillar</b>	79/140	77/140	-2	47/100	46/100	1
<b>Capital Pillar</b>	23/66	24/66	1	62/100	58/100	4
<b>Information Pillar</b>	35/101	34/101	-1	66/100	65/100	1
<b>People Pillar</b>	53/106	53/106	0	50/100	50/100	0

Connectedness Score Trend



## Depth

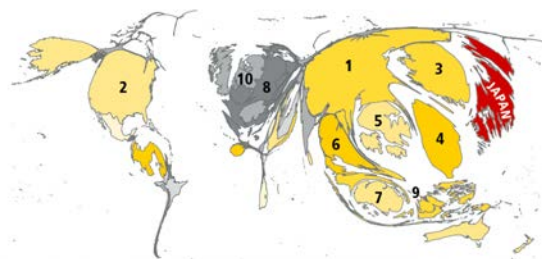
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	138/140		—	
Merchandise Trade (% of GDP)	124/140	136/140	14%	15%
Services Trade (% of GDP)	114/139	132/139	2%	3%
<b>Capital</b>	45/122		—	
FDI Stock (% of GDP)	39/132	137/140	16%	4%
FDI Flows (% of GFCF)	39/133	138/140	7%	0%
Portfolio Equity Stock (% of GDP)	35/102	26/97	11%	14%
Portfolio Equity Flows (% of GDP)	35/129	33/126	0%	0%
<b>Information</b>	69/140		—	
Internet Bandwidth (Bits per Second per Internet User)	53/140		23,111	
International Phone Calls (Minutes per Capita)	63/140	112/140	41	17
Printed Publications Trade (USD per Capita)	53/135	63/135	\$6	\$9
<b>People</b>	96/116		—	
Migrants (% of Population)	132/139	102/140	1%	2%
Tourists Dep./Arr. Per Capita	62/93	98/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	115/130	40/104	1%	3%

## Summary

Japan ranks 42<sup>nd</sup> out of 140 countries in the overall connectedness index (10<sup>th</sup> out of the 19 countries in East Asia & Pacific). Japan has much higher breadth (7<sup>th</sup> worldwide) than depth (113<sup>th</sup>), which is not unusual for a country with a very large internal economy. Japan's trade pillar depth, however, is especially low, ranking 138<sup>th</sup> out of 140 countries. Japan also has higher outward than inward connectedness. The difference between Japan's outward and inward connectedness is greatest in the capital pillar, where Japan is a much larger source of outward FDI than a recipient of inward FDI. Japan's overall global connectedness has increased modestly from 2005 to 2011.

## Rooted Map

Japan's Merchandise Exports, 2011



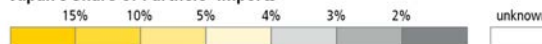
Top Export Destinations

1. China (20%)
2. U.S.A. (16%)
3. South Korea (8%)
4. Taiwan (6%)
5. Hong Kong (5%)
6. Thailand (5%)
7. Singapore (3%)
8. Germany (3%)
9. Malaysia (2%)
10. Netherlands (2%)

Major Export Products

Motor vehicles; semiconductors; iron and steel products; auto parts; plastic materials; power generating machinery

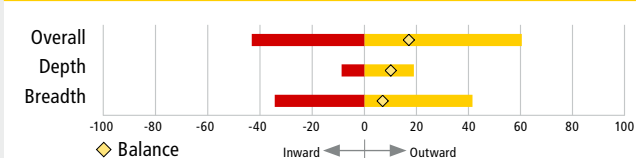
Japan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	12/140		—	
Merchandise Trade	12/140	22/140	57%	51%
<b>Capital</b>	13/67		—	
FDI Stock	9/41	19/46	30%	12%
FDI Flows	16/38	17/41	38%	9%
Portfolio Equity Stock	12/66	—	12%	—
<b>Information</b>	23/101		—	
International Phone Calls	25/101	52/101	63%	66%
Printed Publications Trade	21/135	12/135	78%	30%
<b>People</b>	26/124		—	
Migrants	20/139	90/139	14%	73%
Tourists Departures/Arrivals	—	—	—	—
International Students	—	17/93	—	89%

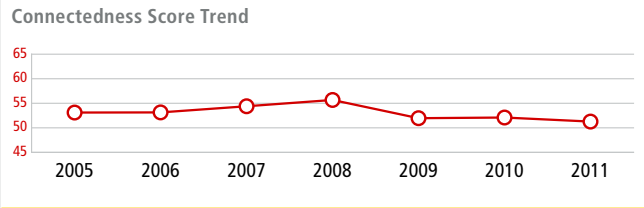
## Directionality



# JORDAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	47/140	44/140	-3	51/100	52/100	-1
Depth	36/140	29/140	-7	29/50	30/50	-1
Breadth	70/140	74/140	4	22/50	22/50	0
Trade Pillar	27/140	23/140	-4	64/100	63/100	1
Capital Pillar	-	-	-	-	-	-
Information Pillar	82/101	80/101	-2	41/100	42/100	-1
People Pillar	35/106	35/106	0	60/100	60/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	34/140		-	
Merchandise Trade (% of GDP)	77/140	25/140	27%	63%
Services Trade (% of GDP)	27/139	19/139	15%	15%

Capital	52/122		-	
FDI Stock (% of GDP)	90/132	16/140	2%	77%
FDI Flows (% of GFCF)	87/133	33/140	1%	28%
Portfolio Equity Stock (% of GDP)	67/102	33/97	0%	11%
Portfolio Equity Flows (% of GDP)	113/129	56/126	0%	0%

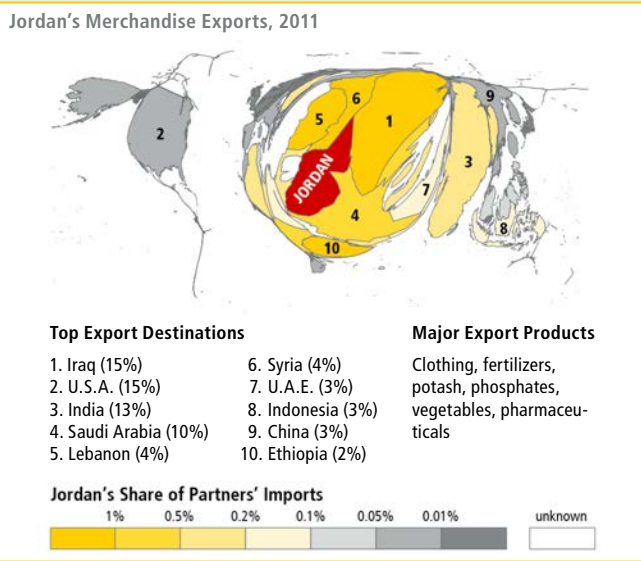
Information	66/140		-	
Internet Bandwidth (Bits per Second per Internet User)	99/140		6,337	
International Phone Calls (Minutes per Capita)	41/140	51/140	124	114
Printed Publications Trade (USD per Capita)	54/135	78/135	\$6	\$6

People	13/116			
Migrants (% of Population)	29/139	3/140	12%	49%
Tourists Dep./Arr. Per Capita	32/93	30/136	0.5	0.8
International Students (% of Tertiary Education Enrollment)	60/130	15/104	4%	11%

## Summary

Jordan ranks 47<sup>th</sup> globally and 7<sup>th</sup> among the 15 countries in the Middle East & North Africa region on this year’s DHL Global Connectedness Index. Jordan has the largest asymmetry between outward and inward connectedness among the countries covered in the index: it has much stronger inward than outward connectedness. This pattern is particularly notable in Jordan’s migration breadth, on which it ranks 5<sup>th</sup> worldwide on inward migration and 113<sup>th</sup> on outward migration. Apart from a large drop from 2008 to 2009, Jordan’s connectedness scores have remained fairly stable since 2005.

## Rooted Map



## Breadth

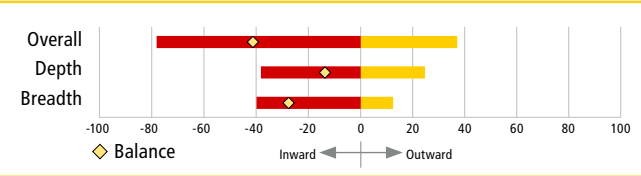
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	56/140		-	
Merchandise Trade	94/140	29/140	49%	38%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	89/101		-	
International Phone Calls	91/101	84/101	85%	75%
Printed Publications Trade	117/135	50/135	96%	30%

People	79/124		-	
Migrants	113/139	5/139	84%	26%
Tourists Departures/Arrivals	-	75/107	-	69%
International Students	-	68/93	-	90%

## Directionality



# KAZAKHSTAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	54/140	59/140	5	49/100	47/100	2
<b>Depth</b>	61/140	67/140	6	24/50	23/50	1
<b>Breadth</b>	57/140	60/140	3	25/50	24/50	1
<b>Trade Pillar</b>	82/140	91/140	9	46/100	43/100	3
<b>Capital Pillar</b>	16/66	20/66	4	66/100	64/100	2
<b>Information Pillar</b>	89/101	91/101	2	35/100	32/100	3
<b>People Pillar</b>	41/106	36/106	-5	56/100	60/100	-4

Connectedness Score Trend



## Depth

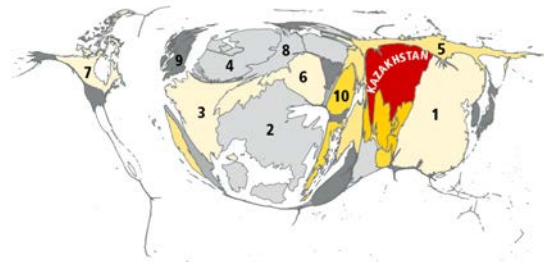
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	91/140		—	
Merchandise Trade (% of GDP)	34/140	119/140	49%	21%
Services Trade (% of GDP)	117/139	91/139	2%	6%
<b>Capital</b>	28/122		—	
FDI Stock (% of GDP)	46/132	40/140	11%	52%
FDI Flows (% of GFCF)	28/133	28/140	12%	30%
Portfolio Equity Stock (% of GDP)	50/102	62/97	3%	2%
Portfolio Equity Flows (% of GDP)	36/129	64/126	0%	0%
<b>Information</b>	86/140		—	
Internet Bandwidth (Bits per Second per Internet User)	52/140		23,590	
International Phone Calls (Minutes per Capita)	89/140	106/140	19	23
Printed Publications Trade (USD per Capita)	108/135	58/135	\$0	\$10
<b>People</b>	25/116		—	
Migrants (% of Population)	10/139	19/140	19%	19%
Tourists Dep./Arr. Per Capita	35/93	70/136	0.4	0.2
International Students (% of Tertiary Education Enrollment)	48/130	57/104	6%	2%

## Summary

Kazakhstan ranks 54<sup>th</sup> in overall global connectedness, and is the top ranked country in South & Central Asia. Its connectedness has increased notably from 43 points in 2005 to 49 points in 2011. Kazakhstan's strongest position is on the capital pillar where it ranks 28<sup>th</sup> (out of 122 countries) on depth and 17<sup>th</sup> (out of 67) on breadth. Kazakhstan also ranks 25<sup>th</sup> (out of 116) on depth in the people pillar, based primarily on its high levels of inward and outward migration (inward and outward migrants both accounting for 19% of its population).

## Rooted Map

Kazakhstan's Merchandise Exports, 2010



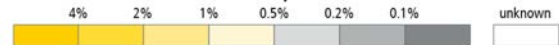
### Top Export Destinations

1. China (18%)
2. Italy (17%)
3. France (8%)
4. Netherlands (7%)
5. Russia (5%)
6. Austria (4%)
7. Canada (4%)
8. Germany (3%)
9. U.K. (2%)
10. Romania (2%)

### Major Export Products

Oil and oil products (59%), ferrous metals, chemicals, machinery, grain, wool, meat, coal

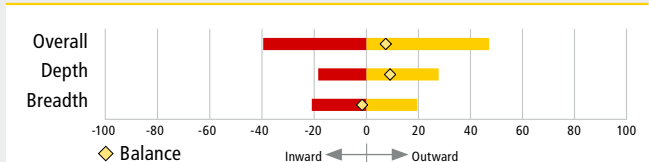
### Kazakhstan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	63/140		—	
Merchandise Trade	58/140	73/140	7%	8%
<b>Capital</b>	17/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	·	·	·
Portfolio Equity Stock	22/66	—	1%	—
<b>Information</b>	95/101		—	
International Phone Calls	99/101	95/101	20%	15%
Printed Publications Trade	66/135	85/135	43%	27%
<b>People</b>	73/124		—	
Migrants	117/139	81/139	9%	9%
Tourists Departures/Arrivals	—	·	—	·
International Students	—	46/93	—	46%

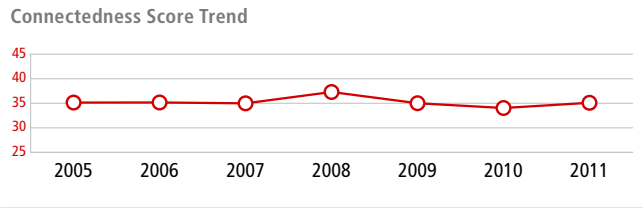
## Directionality



KENYA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	98/140	104/140	6	35/100	34/100	1
Depth	106/140	106/140	0	14/50	13/50	1
Breadth	74/140	77/140	3	21/50	21/50	0
Trade Pillar	92/140	98/140	6	43/100	41/100	2
Capital Pillar	.	.	.	.	.	.
Information Pillar	74/101	73/101	-1	47/100	45/100	2
People Pillar	.	.	.	.	.	.



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	88/140		—	
Merchandise Trade (% of GDP)	118/140	50/140	17%	42%
Services Trade (% of GDP)	61/139	103/139	8%	5%

Capital	96/122		—	
FDI Stock (% of GDP)	56/132	131/140	8%	8%
FDI Flows (% of GFCF)	101/133	128/140	0%	3%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	64/129	57/126	0%	0%

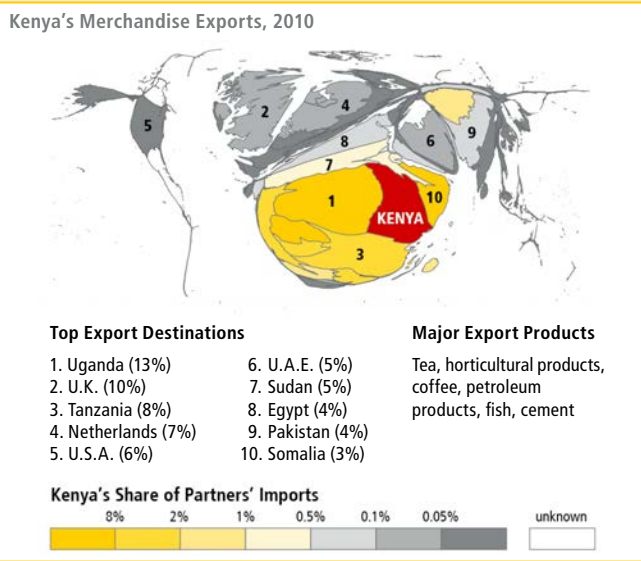
Information	111/140		—	
Internet Bandwidth (Bits per Second per Internet User)	107/140		4,544	
International Phone Calls (Minutes per Capita)	108/140	113/140	9	17
Printed Publications Trade (USD per Capita)	88/135	113/135	\$1	\$1

People	.		.	
Migrants (% of Population)	117/139	93/140	1%	2%
Tourists Dep./Arr. Per Capita	.	107/136	.	0.0
International Students (% of Tertiary Education Enrollment)	37/130	.	8%	.

Summary

Kenya ranks 98<sup>th</sup> on this year’s DHL Global Connectedness Index, up from 104<sup>th</sup> last year. Kenya also ranks 11<sup>th</sup> out of the 29 countries analyzed in Sub-Saharan Africa. Kenya’s connectedness has generally remained fairly stable since 2005. It has moderately higher breadth (74<sup>th</sup> globally) than depth (106<sup>th</sup>). Among the more noteworthy aspects of Kenya’s connectedness profile are the high depth of its inward FDI stock (56<sup>th</sup> out of 132 countries) and the proportion of its tertiary students studying abroad (8%, ranked 37<sup>th</sup> out of 130 countries). Kenya also ranks 4<sup>th</sup> worldwide on the breadth of its inbound international telephone calls.

Rooted Map



Breadth

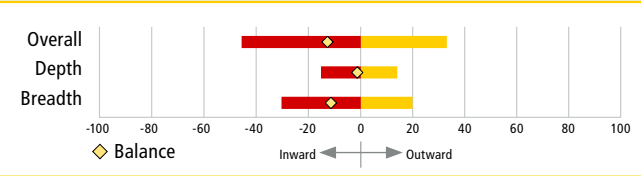
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	80/140		—	
Merchandise Trade	102/140	56/140	42%	10%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	45/101		—	
International Phone Calls	60/101	4/101	58%	9%
Printed Publications Trade	123/135	60/135	87%	5%

People	.		—	
Migrants	55/139	34/139	41%	76%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

Directionality



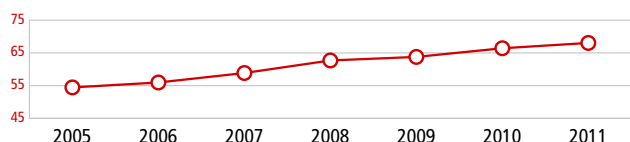


# KOREA, REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	14/140	15/140	1	68/100	66/100	2
<b>Depth</b>	44/140	56/140	12	28/50	25/50	3
<b>Breadth</b>	8/140	8/140	0	40/50	41/50	-1
<b>Trade Pillar</b>	8/140	9/140	1	80/100	80/100	0
<b>Capital Pillar</b>	18/66	22/66	4	64/100	61/100	3
<b>Information Pillar</b>	31/101	35/101	4	67/100	65/100	2
<b>People Pillar</b>	45/106	45/106	0	54/100	54/100	0

### Connectedness Score Trend



## Depth

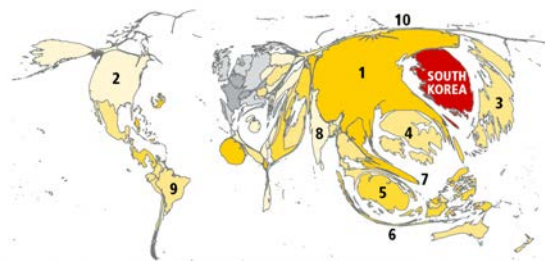
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	32/140		—	
Merchandise Trade (% of GDP)	33/140	43/140	50%	47%
Services Trade (% of GDP)	60/139	53/139	8%	9%
<b>Capital</b>	37/122		—	
FDI Stock (% of GDP)	43/132	122/140	14%	12%
FDI Flows (% of GFCF)	38/133	132/140	7%	3%
Portfolio Equity Stock (% of GDP)	43/102	13/97	6%	25%
Portfolio Equity Flows (% of GDP)	48/129	8/126	0%	1%
<b>Information</b>	67/140		—	
Internet Bandwidth (Bits per Second per Internet User)	66/140		17,170	
International Phone Calls (Minutes per Capita)	57/140	98/140	53	32
Printed Publications Trade (USD per Capita)	52/135	69/135	\$6	\$7
<b>People</b>	77/116		—	
Migrants (% of Population)	98/139	111/140	3%	1%
Tourists Dep./Arr. Per Capita	47/93	75/136	0.3	0.2
International Students (% of Tertiary Education Enrollment)	71/130	60/104	4%	2%

## Summary

The Republic of Korea's global connectedness has risen strongly since 2005, even as other countries have seen their connectedness decline due to the financial crisis. Korea holds the 14<sup>th</sup> rank on this year's DHL Global Connectedness Index and ranks 3<sup>rd</sup> among the 19 countries covered in East Asia & Pacific. Korea's strongest pillar is the trade pillar, on which it ranks 8<sup>th</sup> worldwide. Korea is also a leader within its region on the capital and information pillars, ranking 3<sup>rd</sup> in East Asia & Pacific on the capital pillar and 5<sup>th</sup> on the information pillar. Korea's standing is lower on the people pillar, on account of its limited immigration and emigration. Korea's outward FDI is also much larger than its inward FDI.

## Rooted Map

### South Korea's Merchandise Exports, 2011



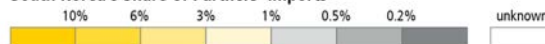
#### Top Export Destinations

1. China (25%)
2. U.S.A. (11%)
3. Japan (7%)
4. Hong Kong (6%)
5. Singapore (4%)
6. Indonesia (3%)
7. Vietnam (3%)
8. India (2%)
9. Brazil (2%)
10. Russia (2%)

#### Major Export Products

Semiconductors, wireless telecommunications equipment, motor vehicles, computers, steel, ships, petrochemicals

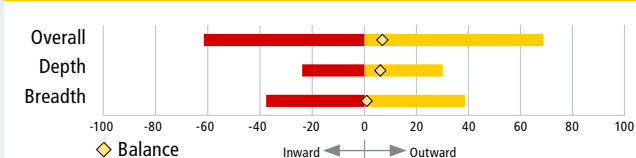
#### South Korea's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	8/140		—	
Merchandise Trade	9/140	20/140	54%	48%
<b>Capital</b>	14/67		—	
FDI Stock	16/41	15/46	45%	33%
FDI Flows	19/38	13/41	43%	35%
Portfolio Equity Stock	11/66	—	30%	—
<b>Information</b>	17/101		—	
International Phone Calls	34/101	38/101	66%	66%
Printed Publications Trade	15/135	11/135	47%	40%
<b>People</b>	31/124		—	
Migrants	41/139	65/139	37%	79%
Tourists Departures/Arrivals	—	—	—	—
International Students	—	28/93	—	91%

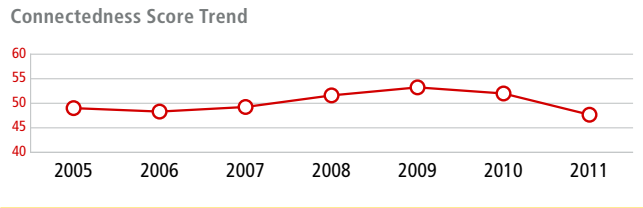
## Directionality



KUWAIT

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	61/140	45/140	-16	48/100	52/100	-4
Depth	68/140	42/140	-26	23/50	28/50	-5
Breadth	60/140	59/140	-1	25/50	24/50	1
Trade Pillar	47/140	31/140	-16	56/100	60/100	-4
Capital Pillar	58/66	54/66	-4	26/100	33/100	-7
Information Pillar	45/101	45/101	0	60/100	59/100	1
People Pillar	.	.	.	.	.	.



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	90/140		-	
Merchandise Trade (% of GDP)	28/140	137/140	56%	14%
Services Trade (% of GDP)	95/139	79/139	4%	7%

Capital	51/122		-	
FDI Stock (% of GDP)	44/132	135/140	12%	6%
FDI Flows (% of GFCF)	6/133	121/140	43%	4%
Portfolio Equity Stock (% of GDP)	33/102	38/97	12%	7%
Portfolio Equity Flows (% of GDP)	18/129	120/126	1%	0%

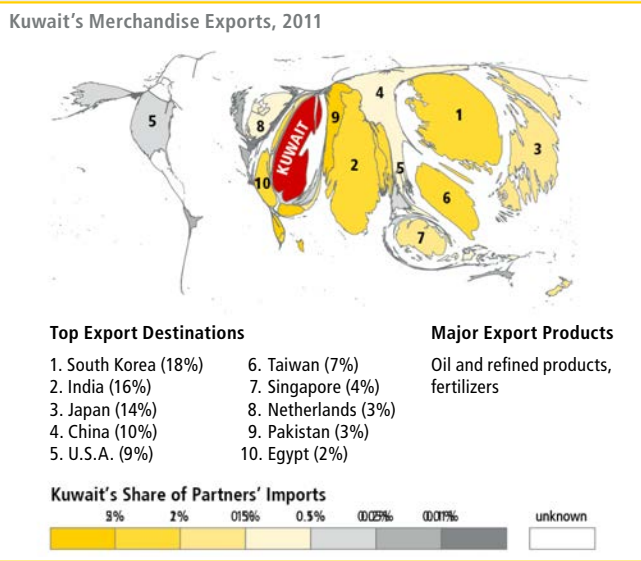
Information	57/140		-	
Internet Bandwidth (Bits per Second per Internet User)	100/140		5,951	
International Phone Calls (Minutes per Capita)	16/140	31/140	340	218
Printed Publications Trade (USD per Capita)	77/135	35/135	\$2	\$27

People	.			
Migrants (% of Population)	13/139	1/140	17%	77%
Tourists Dep./Arr. Per Capita	13/93	93/136	1.0	0.1
International Students (% of Tertiary Education Enrollment)	.	.	.	.

Summary

Kuwait’s overall connectedness, which peaked in 2009, ranks 61<sup>st</sup> out of 140 countries and 10<sup>th</sup> out of the 13 countries in the Middle East & North Africa. The most exceptional aspect of Kuwait’s connectedness profile is its top rank on the depth of its inward migration, with immigrants making up 77% of the country’s population. Kuwait’s lowest pillar rank is on the capital pillar, where it ranks 58<sup>th</sup> out of 66 countries. While Kuwait does have substantial foreign investments (outward capital flows and stocks), inward investment flows from other countries are small in relation to the size of Kuwait’s economy.

Rooted Map



Breadth

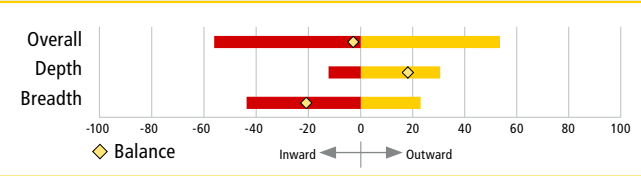
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	36/140		-	
Merchandise Trade	62/140	14/140	6%	23%

Capital	64/67		-	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	63/66	-	57%	-

Information	56/101		-	
International Phone Calls	54/101	63/101	65%	62%
Printed Publications Trade	65/135	13/135	.	.

People	56/124		-	
Migrants	114/139	1/139	85%	6%
Tourists Departures/Arrivals	-	.	-	.
International Students	-	58/93	-	83%

Directionality



# KYRGYZ REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	124/140	121/140	-3	25/100	25/100	0
<b>Depth</b>	83/140	82/140	-1	20/50	19/50	1
<b>Breadth</b>	135/140	132/140	-3	6/50	6/50	0
<b>Trade Pillar</b>	96/140	94/140	-2	41/100	42/100	-1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	80/101	83/101	3	42/100	40/100	2
<b>People Pillar</b>	78/106	79/106	1	39/100	39/100	0

### Connectedness Score Trend



## Depth

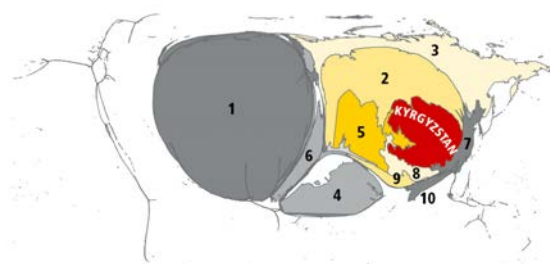
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	21/140		—	
Merchandise Trade (% of GDP)	60/140	14/140	33%	72%
Services Trade (% of GDP)	17/139	10/139	18%	18%
<b>Capital</b>	116/122		—	
FDI Stock (% of GDP)	128/132	96/140	0%	22%
FDI Flows (% of GFCF)	116/133	25/140	0%	32%
Portfolio Equity Stock (% of GDP)	102/102	93/97	-1%	0%
Portfolio Equity Flows (% of GDP)	117/129	110/126	0%	0%
<b>Information</b>	122/140		—	
Internet Bandwidth (Bits per Second per Internet User)	131/140		640	
International Phone Calls (Minutes per Capita)	87/140	103/140	21	25
Printed Publications Trade (USD per Capita)	119/135	97/135	\$0	\$3
<b>People</b>	56/116		—	
Migrants (% of Population)	35/139	64/140	11%	4%
Tourists Dep./Arr. Per Capita	48/93	66/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	104/130	27/104	1%	6%

## Summary

Kyrgyz Republic is the smallest economy in South and Central Asia for which the DHL Global Connectedness Index has been calculated. It ranks 124<sup>th</sup> globally on overall global connectedness and 10<sup>th</sup> among the 12 countries in its region. Kyrgyz Republic has higher depth (83<sup>rd</sup> globally) than breadth (135<sup>th</sup>). The most notable aspect of Kyrgyz Republic's connectedness profile is its high rank on the depth of trade, and especially trade in services, on which it ranks 17<sup>th</sup> globally for services exports depth and 10<sup>th</sup> for services imports depth (each accounting for 18% of its GDP). Kyrgyz Republic ranks 1<sup>st</sup> within its region on both services exports and imports depth.

## Rooted Map

### Kyrgyzstan's Merchandise Exports, 2011



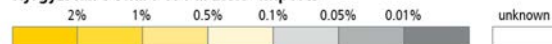
#### Top Export Destinations

1. Switzerland (44%)
2. Kazakhstan (15%)
3. Russia (14%)
4. U.A.E. (8%)
5. Uzbekistan (6%)
6. Turkey (3%)
7. China (2%)
8. Tajikistan (2%)
9. Afghanistan (1%)
10. India (1%)

#### Major Export Products

Gold, cotton, wool, garments, meat, tobacco; mercury, uranium, hydro-power; machinery; shoes

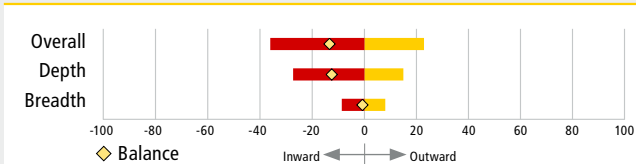
#### Kyrgyzstan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	139/140		—	
Merchandise Trade	140/140	136/140	28%	11%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	39/101		—	
International Phone Calls	24/101	21/101	41%	14%
Printed Publications Trade	109/135	103/135	85%	8%
<b>People</b>	112/124		—	
Migrants	118/139	67/139	5%	52%
Tourists Departures/Arrivals	—	107/107	—	85%
International Students	—	61/93	—	90%

## Directionality



# LAO PDR

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	131/140	131/140	0	22/100	20/100	2
<b>Depth</b>	101/140	107/140	6	15/50	13/50	2
<b>Breadth</b>	129/140	130/140	1	7/50	7/50	0
<b>Trade Pillar</b>	130/140	127/140	-3	28/100	26/100	2
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	94/101	92/101	-2	28/100	28/100	0
<b>People Pillar</b>	88/106	88/106	0	33/100	33/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	83/140		-	
Merchandise Trade (% of GDP)	69/140	74/140	30%	34%
Services Trade (% of GDP)	78/139	127/139	6%	3%

<b>Capital</b>	85/122		-	
FDI Stock (% of GDP)	123/132	75/140	0%	32%
FDI Flows (% of GFCF)	106/133	54/140	0%	19%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	83/129	29/126	0%	0%

<b>Information</b>	117/140		-	
Internet Bandwidth (Bits per Second per Internet User)	121/140		2,048	
International Phone Calls (Minutes per Capita)	104/140	119/140	12	14
Printed Publications Trade (USD per Capita)	-	-	-	-

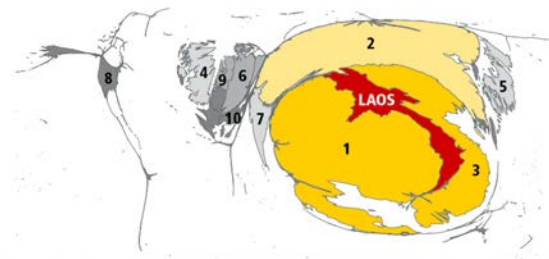
<b>People</b>	85/116			
Migrants (% of Population)	57/139	131/140	6%	0%
Tourists Dep./Arr. Per Capita	-	65/136	-	0.3
International Students (% of Tertiary Education Enrollment)	76/130	87/104	3%	0%

## Summary

Lao PDR ranks 131<sup>st</sup> on this year's DHL Global Connectedness Index, its rank unchanged versus last year. It is the next-to-last ranked country within the East Asia & Pacific region. Its connectedness score has been on an increasing trend since 2009. Among the more notable aspects of Lao PDR's connectedness profile is its 29<sup>nd</sup> rank on inward portfolio equity flows depth. It generally has higher inward than outward depth on the capital pillar and also ranks 54<sup>th</sup> on inward FDI flows depth. The depth of its merchandise trade flows is close to the mid-point among countries that were studied, ranking 69<sup>th</sup> on merchandise exports depth and 74<sup>th</sup> on merchandise imports depth. 85% of its exports and 92% of its imports are intra-regional.

## Rooted Map

Lao's Merchandise Exports, 2011



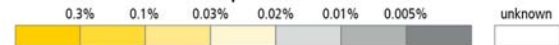
### Top Export Destinations

1. Thailand (38%)
2. China (27%)
3. Vietnam (15%)
4. U.K. (4%)
5. Japan (3%)

### Major Export Products

Wood products, coffee, electricity, tin, copper, gold

### Laos's Share of Partners' Imports



## Breadth

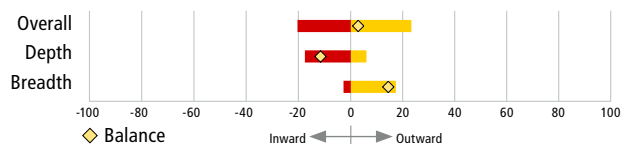
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	130/140		-	
Merchandise Trade	115/140	134/140	85%	92%

<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	83/101		-	
International Phone Calls	79/101	70/101	83%	61%
Printed Publications Trade	-	-	-	-

<b>People</b>	93/124		-	
Migrants	38/139	129/139	16%	99%
Tourists Departures/Arrivals	-	-	-	-
International Students	-	73/93	-	98%

## Directionality



# LATVIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	59/140	68/140	9	48/100	44/100	4
<b>Depth</b>	32/140	49/140	17	30/50	26/50	4
<b>Breadth</b>	93/140	93/140	0	18/50	18/50	0
<b>Trade Pillar</b>	57/140	59/140	2	54/100	52/100	2
<b>Capital Pillar</b>	56/66	61/66	5	31/100	23/100	8
<b>Information Pillar</b>	54/101	53/101	-1	57/100	56/100	1
<b>People Pillar</b>	26/106	26/106	0	67/100	67/100	0

### Connectedness Score Trend



## Depth

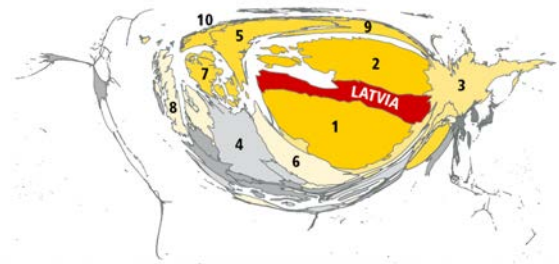
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	26/140		—	
Merchandise Trade (% of GDP)	35/140	32/140	47%	56%
Services Trade (% of GDP)	23/139	46/139	15%	9%
<b>Capital</b>	62/122		—	
FDI Stock (% of GDP)	75/132	53/140	3%	43%
FDI Flows (% of GFCF)	103/133	77/140	0%	12%
Portfolio Equity Stock (% of GDP)	48/102	71/97	4%	1%
Portfolio Equity Flows (% of GDP)	25/129	61/126	1%	0%
<b>Information</b>	45/140		—	
Internet Bandwidth (Bits per Second per Internet User)	35/140		44,779	
International Phone Calls (Minutes per Capita)	79/140	62/140	26	89
Printed Publications Trade (USD per Capita)	24/135	49/135	\$43	\$14
<b>People</b>	27/116		—	
Migrants (% of Population)	40/139	23/140	9%	15%
Tourists Dep./Arr. Per Capita	20/93	41/136	0.7	0.6
International Students (% of Tertiary Education Enrollment)	65/130	59/104	4%	2%

## Summary

After dipping sharply from 2007 to 2009, Latvia's connectedness has recovered to its prior peak level in 2011. It ranks 59<sup>th</sup> out of 140 countries worldwide and 31<sup>st</sup> out of the 40 European countries covered in this year's DHL Global Connectedness Index. Latvia has higher depth (32<sup>nd</sup> worldwide) than breadth (93<sup>rd</sup>), which is a typical pattern among small countries. Latvia's connectedness is highest on the people pillar, where it ranks 26<sup>th</sup> out of 106 countries and 20<sup>th</sup> in Europe. Latvia's large connectedness increase from 2010 to 2011 was driven entirely by depth and concentrated mainly in the trade and capital pillars.

## Rooted Map

### Latvia's Merchandise Exports, 2011



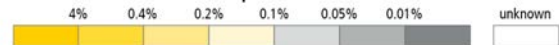
#### Top Export Destinations

1. Lithuania (18%)
2. Estonia (14%)
3. Russia (11%)
4. Germany (8%)
5. Sweden (6%)
6. Poland (6%)
7. Denmark (3%)
8. U.K. (3%)
9. Finland (3%)
10. Norway (2%)

#### Major Export Products

Food products, wood and wood products, metals, machinery and equipment, textiles

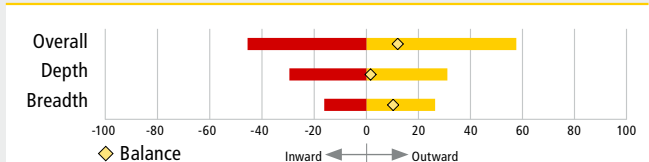
#### Latvia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	102/140		—	
Merchandise Trade	96/140	98/140	89%	93%
<b>Capital</b>	51/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	·	·	·
Portfolio Equity Stock	51/66	—	94%	—
<b>Information</b>	70/101		—	
International Phone Calls	37/101	76/101	89%	73%
Printed Publications Trade	75/135	88/135	100%	95%
<b>People</b>	37/124		—	
Migrants	16/139	70/139	71%	83%
Tourists Departures/Arrivals	—	43/107	—	93%
International Students	—	41/93	—	81%

## Directionality

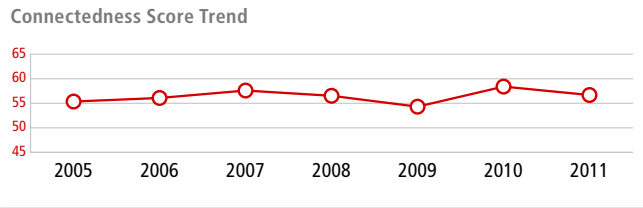




LEBANON

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	35/140	32/140	-3	57/100	58/100	-1
Depth	31/140	24/140	-7	30/50	31/50	-1
Breadth	55/140	52/140	-3	26/50	27/50	-1
Trade Pillar	56/140	45/140	-11	55/100	56/100	-1
Capital Pillar	22/66	16/66	-6	62/100	67/100	-5
Information Pillar	56/101	61/101	5	57/100	53/100	4
People Pillar	9/106	9/106	0	80/100	80/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	47/140		—	
Merchandise Trade (% of GDP)	123/140	33/140	15%	53%
Services Trade (% of GDP)	6/139	4/139	40%	34%

Capital	17/122		—	
FDI Stock (% of GDP)	34/132	10/140	18%	98%
FDI Flows (% of GFCF)	37/133	16/140	8%	39%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	126/129	12/126	-1%	1%

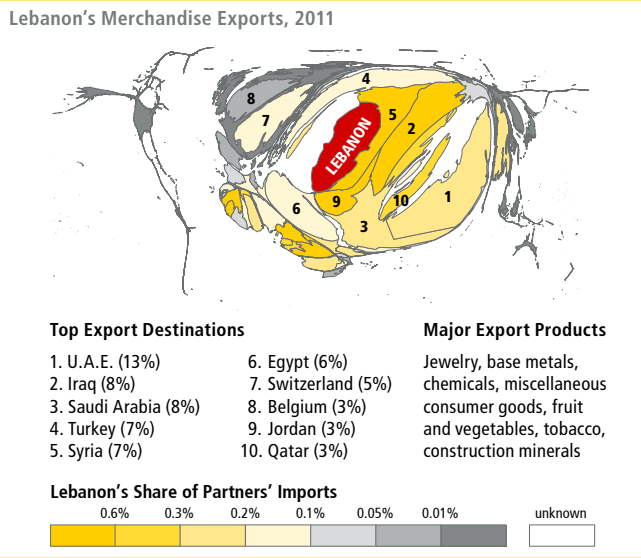
Information	76/140		—	
Internet Bandwidth (Bits per Second per Internet User)	119/140		2,257	
International Phone Calls (Minutes per Capita)	50/140	26/140	84	227
Printed Publications Trade (USD per Capita)	35/135	37/135	\$16	\$22

People	10/116			
Migrants (% of Population)	23/139	20/140	13%	18%
Tourists Dep./Arr. Per Capita	.	46/136	.	0.5
International Students (% of Tertiary Education Enrollment)	45/130	11/104	6%	15%

Summary

With one of the largest asymmetries between inward and outward connectedness, Lebanon holds the 35<sup>th</sup> position out of 140 countries (the 4<sup>th</sup> in the Middle East & North Africa) on the overall connectedness index. While Lebanon is the 2<sup>nd</sup> ranked country worldwide on inward connectedness, it ranks only 58<sup>th</sup> on outward connectedness. Lebanon's highest pillar rank is on the people pillar, where it ranks 9<sup>th</sup> worldwide. The breadth of Lebanon's inward and outward migration are particularly notable: only 20% of emigrants remained within the Middle East & North Africa and only 30% of immigrants came from within the region.

Rooted Map



Breadth

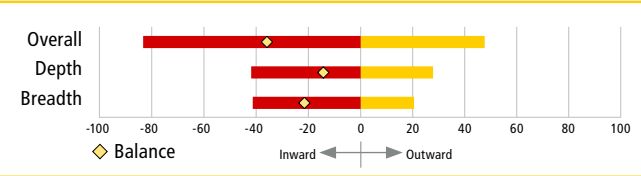
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	68/140		—	
Merchandise Trade	122/140	21/140	53%	15%

Capital	26/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	31/66	—	26%	—

Information	50/101		—	
International Phone Calls	71/101	24/101	69%	41%
Printed Publications Trade	72/135	37/135	75%	35%

People	23/124		—	
Migrants	3/139	11/139	20%	30%
Tourists Departures/Arrivals	—	55/107	—	52%
International Students	—	.	—	.

Directionality



# LITHUANIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	55/140	54/140	-1	49/100	48/100	1
<b>Depth</b>	25/140	25/140	0	32/50	31/50	1
<b>Breadth</b>	92/140	95/140	3	18/50	18/50	0
<b>Trade Pillar</b>	42/140	43/140	1	59/100	56/100	3
<b>Capital Pillar</b>	55/66	55/66	0	31/100	32/100	-1
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	38/106	39/106	1	57/100	57/100	0

### Connectedness Score Trend



## Depth

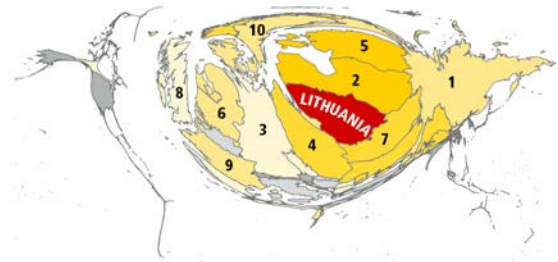
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	15/140		—	
Merchandise Trade (% of GDP)	19/140	10/140	66%	74%
Services Trade (% of GDP)	37/139	63/139	12%	8%
<b>Capital</b>	55/122		—	
FDI Stock (% of GDP)	69/132	73/140	5%	33%
FDI Flows (% of GFCF)	68/133	85/140	2%	10%
Portfolio Equity Stock (% of GDP)	49/102	74/97	3%	1%
Portfolio Equity Flows (% of GDP)	24/129	65/126	1%	0%
<b>Information</b>	43/140		—	
Internet Bandwidth (Bits per Second per Internet User)	27/140		57,571	
International Phone Calls (Minutes per Capita)	69/140	69/140	35	76
Printed Publications Trade (USD per Capita)	27/135	53/135	\$33	\$13
<b>People</b>	50/116		—	
Migrants (% of Population)	44/139	66/140	9%	4%
Tourists Dep./Arr. Per Capita	36/93	49/136	0.4	0.5
International Students (% of Tertiary Education Enrollment)	67/130	61/104	4%	1%

## Summary

Lithuania ranks 55<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, 28<sup>th</sup> out of 40 countries in Europe. It has higher depth (25<sup>th</sup> globally) than breadth (92<sup>nd</sup>), which is typical among small countries. Lithuania's strongest pillars are the trade and people pillars. It ranks 42<sup>nd</sup> globally on the trade pillar and 38<sup>th</sup> on the people pillar. Lithuania's connectedness declined from 2006 until 2009 and despite having started rising again since 2009, it remains slightly below its 2005 level.

## Rooted Map

### Lithuania's Merchandise Exports, 2011



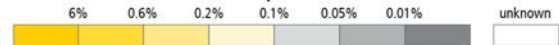
#### Top Export Destinations

1. Russia (17%)
2. Latvia (10%)
3. Germany (9%)
4. Poland (7%)
5. Estonia (7%)
6. Netherlands (6%)
7. Belarus (5%)
8. U.K. (4%)
9. France (4%)
10. Sweden (4%)

#### Major Export Products

Mineral products (22%), machinery and equipment, chemicals, textiles, food-stuffs, plastics

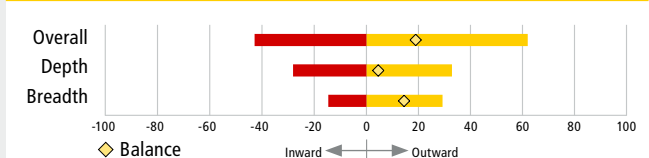
#### Lithuania's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	98/140		—	
Merchandise Trade	74/140	110/140	90%	94%
<b>Capital</b>	53/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	53/66	—	94%	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	43/135	94/135	91%	96%
<b>People</b>	50/124		—	
Migrants	31/139	78/139	76%	93%
Tourists Departures/Arrivals	—	45/107	—	94%
International Students	—	57/93	—	86%

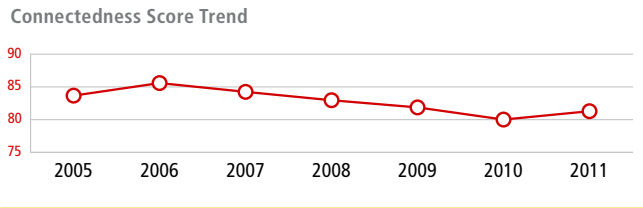
## Directionality



# LUXEMBOURG

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	3/140	5/140	2	81/100	80/100	1
Depth	3/140	3/140	0	46/50	46/50	0
Breadth	21/140	24/140	3	35/50	34/50	1
Trade Pillar	29/140	26/140	-3	64/100	62/100	2
Capital Pillar	1/66	2/66	1	94/100	92/100	2
Information Pillar	.	.	.	.	.	.
People Pillar	6/106	6/106	0	82/100	82/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	24/140		-	
Merchandise Trade (% of GDP)	49/140	37/140	37%	49%
Services Trade (% of GDP)	1/139	1/139	123%	69%

Capital	1/122		-	
FDI Stock (% of GDP)	3/132	4/140	221%	195%
FDI Flows (% of GFCF)	2/133	1/140	122%	174%
Portfolio Equity Stock (% of GDP)	1/102	1/97	1742%	4454%
Portfolio Equity Flows (% of GDP)	2/129	1/126	62%	224%

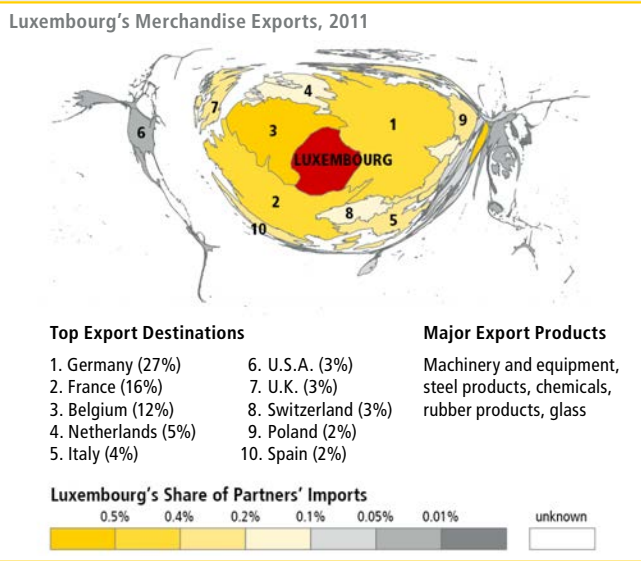
Information	4/140		-	
Internet Bandwidth (Bits per Second per Internet User)	16/140		89,564	
International Phone Calls (Minutes per Capita)	3/140	2/140	937	963
Printed Publications Trade (USD per Capita)	15/135	2/135	\$64	\$261

People	3/116			
Migrants (% of Population)	38/139	9/140	10%	34%
Tourists Dep./Arr. Per Capita	.	13/136	.	1.6
International Students (% of Tertiary Education Enrollment)	1/130	5/104	130%	25%

## Summary

Luxembourg ranks 3<sup>rd</sup> globally and 2<sup>nd</sup> within Europe on overall global connectedness. It earns its position among the most connected countries primarily based on depth (3<sup>rd</sup>) rather than breadth (21<sup>st</sup>), which is typical among small countries. Luxembourg leads the world on the depth of its capital and services connectedness, ranking first on depth on the capital pillar as well as on the depth of its services exports and imports. Luxembourg’s capital flows are broadly distributed around the world (ranking 7<sup>th</sup> on capital pillar breadth), but across the other pillars, the preponderance of Luxembourg’s connections are to neighboring countries within Europe.

## Rooted Map



## Breadth

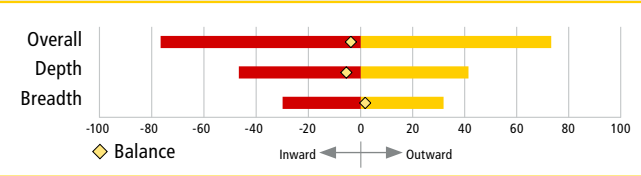
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	72/140		-	
Merchandise Trade	45/140	92/140	85%	83%

Capital	7/67		-	
FDI Stock	22/41	28/46	88%	85%
FDI Flows	6/38	3/41	61%	48%
Portfolio Equity Stock	1/66	-	45%	-

Information	.		-	
International Phone Calls	.	.	.	.
Printed Publications Trade	47/135	84/135	98%	97%

People	35/124		-	
Migrants	79/139	55/139	86%	85%
Tourists Departures/Arrivals	-	25/107	-	98%
International Students	-	37/93	-	84%

## Directionality



# MACEDONIA, FYR

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	89/140	80/140	-9	38/100	40/100	-2
<b>Depth</b>	45/140	53/140	8	27/50	26/50	1
<b>Breadth</b>	121/140	106/140	-15	10/50	15/50	-5
<b>Trade Pillar</b>	69/140	61/140	-8	49/100	51/100	-2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	67/106	67/106	0	44/100	44/100	0

### Connectedness Score Trend



## Depth

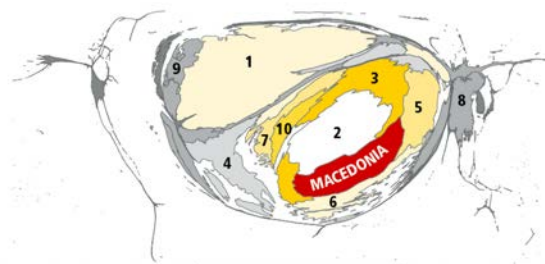
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	22/140		—	
Merchandise Trade (% of GDP)	41/140	21/140	43%	68%
Services Trade (% of GDP)	40/139	43/139	12%	9%
<b>Capital</b>	84/122		—	
FDI Stock (% of GDP)	99/132	45/140	1%	47%
FDI Flows (% of GFCF)	104/133	67/140	0%	13%
Portfolio Equity Stock (% of GDP)	73/102	60/97	0%	2%
Portfolio Equity Flows (% of GDP)	45/129	111/126	0%	0%
<b>Information</b>	63/140		—	
Internet Bandwidth (Bits per Second per Internet User)	64/140		17,945	
International Phone Calls (Minutes per Capita)	65/140	60/140	38	93
Printed Publications Trade (USD per Capita)	78/135	71/135	\$2	\$7
<b>People</b>	45/116		—	
Migrants (% of Population)	31/139	55/140	11%	6%
Tourists Dep./Arr. Per Capita	.	86/136	.	0.1
International Students (% of Tertiary Education Enrollment)	35/130	51/104	8%	2%

## Summary

Macedonia holds the 89<sup>th</sup> rank on this year's DHL Global Connectedness Index, down 9 places versus last year. A large decline in Macedonia's breadth rank was partially offset by a smaller increase in its depth rank. Macedonia has higher depth (45<sup>th</sup>) than breadth (121<sup>st</sup>), which is typical of the pattern observed among small countries. Among the more notable aspects of Macedonia's connectedness profile is its 22<sup>nd</sup> place rank on trade depth. Macedonia's merchandise imports equal 68% of its GDP. Consistent with its low breadth rank, 88% of Macedonia's imports come from other countries within Europe.

## Rooted Map

### Macedonia's Merchandise Exports, 2011



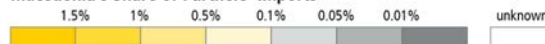
#### Top Export Destinations

1. Germany (28%)
2. Kosovo (12%)
3. Serbia (7%)
4. Italy (7%)
5. Bulgaria (5%)
6. Greece (5%)
7. Croatia (4%)
8. China (3%)
9. Netherlands (2%)
10. Bos. & Herz. (2%)

#### Major Export Products

Food, beverages, tobacco; textiles, miscellaneous manufactures, iron and steel

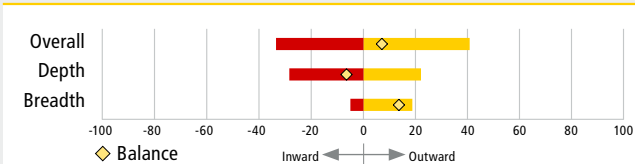
#### Macedonia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	115/140		—	
Merchandise Trade	106/140	124/140	80%	88%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	88/135	56/135	94%	88%
<b>People</b>	110/124		—	
Migrants	56/139	132/139	52%	78%
Tourists Departures/Arrivals	—	74/107	—	71%
International Students	—	82/93	—	30%

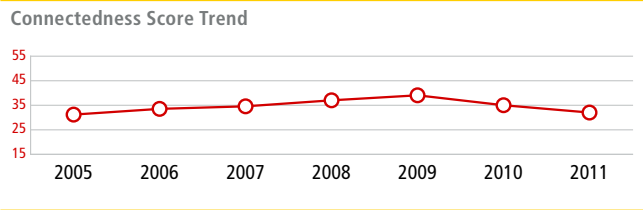
## Directionality



MADAGASCAR

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	107/140	100/140	-7	32/100	35/100	-3
Depth	112/140	111/140	-1	13/50	12/50	1
Breadth	83/140	70/140	-13	19/50	23/50	-4
Trade Pillar	97/140	81/140	-16	41/100	45/100	-4
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	103/106	103/106	0	21/100	21/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	102/140		-	
Merchandise Trade (% of GDP)	119/140	96/140	16%	29%
Services Trade (% of GDP)	49/139	44/139	10%	9%

Capital	.	.	.	.
FDI Stock (% of GDP)	125/132	37/140	0%	54%
FDI Flows (% of GFCF)	125/133	12/140	-1%	48%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

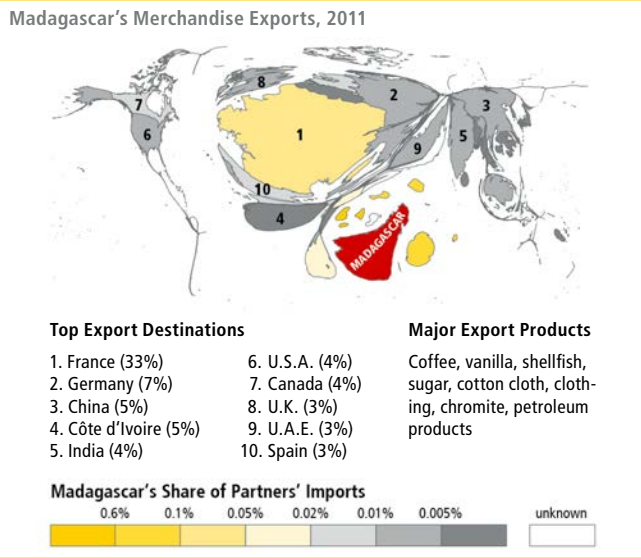
Information	115/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	101/140	.	.	5,679
International Phone Calls (Minutes per Capita)	131/140	132/140	2	6
Printed Publications Trade (USD per Capita)	91/135	105/135	\$1	\$2

People	102/116	.	.	.
Migrants (% of Population)	126/139	135/140	1%	0%
Tourists Dep./Arr. Per Capita	.	127/136	.	0.0
International Students (% of Tertiary Education Enrollment)	50/130	56/104	6%	2%

Summary

Madagascar ranks 107<sup>th</sup> out of 140 countries on the overall connectedness index, down 7 places from last year. It also ranks 13<sup>th</sup> out of 29 countries in Sub-Saharan Africa. Madagascar's connectedness is strongest on the trade pillar, on which it ranks 97<sup>th</sup> globally. Within the components of the trade pillar, Madagascar holds higher positions on services trade than on merchandise trade. It ranks 49<sup>th</sup> worldwide on services exports depth and 44<sup>th</sup> on services imports depth. Services exports and imports account for 10% and 9% respectively of its GDP. Madagascar's connectedness rose gradually from 2005 to 2009, but since 2009 had declined back down to its 2005 level.

Rooted Map



Breadth

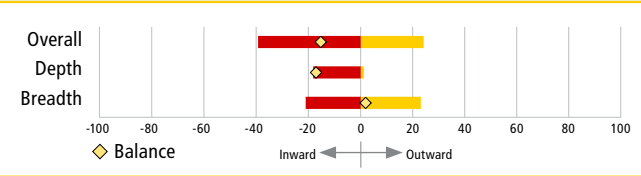
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	74/140	.	.	.
Merchandise Trade	51/140	90/140	13%	14%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	.	.	.

Information	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	112/135	105/135	0%	2%

People	115/124	.	.	.
Migrants	115/139	73/139	15%	20%
Tourists Departures/Arrivals	.	80/107	.	9%
International Students	.	93/93	.	100%

Directionality





# MALAWI

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	114/140	113/140	-1	28/100	28/100	0
<b>Depth</b>	127/140	127/140	0	8/50	8/50	0
<b>Breadth</b>	77/140	84/140	7	20/50	20/50	0
<b>Trade Pillar</b>	112/140	116/140	4	36/100	34/100	2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	64/106	64/106	0	46/100	46/100	0

### Connectedness Score Trend



## Depth

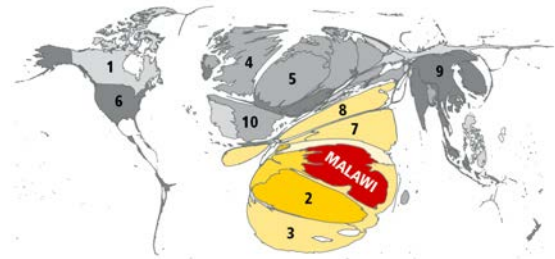
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	97/140		—	
Merchandise Trade (% of GDP)	97/140	59/140	22%	40%
Services Trade (% of GDP)	115/139	136/139	2%	2%
<b>Capital</b>	119/122		—	
FDI Stock (% of GDP)	115/132	109/140	0%	17%
FDI Flows (% of GFCF)	127/133	114/140	-2%	6%
Portfolio Equity Stock (% of GDP)	101/102	90/97	0%	0%
Portfolio Equity Flows (% of GDP)	79/129	98/126	0%	0%
<b>Information</b>	130/140		—	
Internet Bandwidth (Bits per Second per Internet User)	126/140		1,421	
International Phone Calls (Minutes per Capita)	124/140	133/140	5	5
Printed Publications Trade (USD per Capita)	122/135	86/135	\$0	\$5
<b>People</b>	80/116		—	
Migrants (% of Population)	122/139	99/140	1%	2%
Tourists Dep./Arr. Per Capita	.	102/136	.	0.1
International Students (% of Tertiary Education Enrollment)	11/130	71/104	20%	1%

## Summary

Malawi ranks 114<sup>th</sup> out of 140 countries on the overall connectedness index, 127<sup>th</sup> on depth and 77<sup>th</sup> on breadth. Its connectedness has generally remained stable since 2005, with only minor fluctuations. It ranks 64<sup>th</sup> on the people pillar and 112<sup>th</sup> on the trade pillar. Focusing on depth only, Malawi's depth on the information and capital pillars is particularly low. Malawi ranks 119<sup>th</sup> out of 122 countries on capital pillar depth and 130<sup>th</sup> out of 140 countries on information pillar depth. Its highest individual component rank is on the depth of its outbound international students. Malawi ranks 11<sup>th</sup> on this component with university students studying abroad equal to 20% of its total tertiary education enrollment.

## Rooted Map

### Malawi's Merchandise Exports, 2011



#### Top Export Destinations

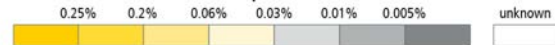
1. Canada (9%)
2. Zimbabwe (9%)
3. South Africa (8%)
4. U.K. (8%)
5. Belgium (7%)

6. U.S.A. (5%)
7. Kenya (5%)
8. Egypt (4%)
9. China (4%)
10. Spain (4%)

#### Major Export Products

tobacco (53%), tea, sugar, cotton, coffee, peanuts, wood products, apparel

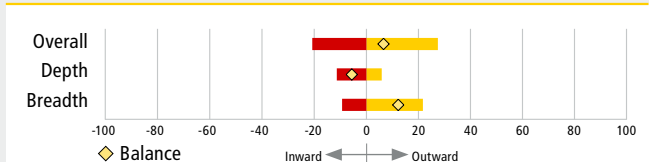
#### Malawi's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	94/140		—	
Merchandise Trade	64/140	115/140	33%	53%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	50/135	124/135	75%	34%
<b>People</b>	52/124		—	
Migrants	128/139	113/139	83%	90%
Tourists Departures/Arrivals	—	10/107	—	100%
International Students	—	.	—	.

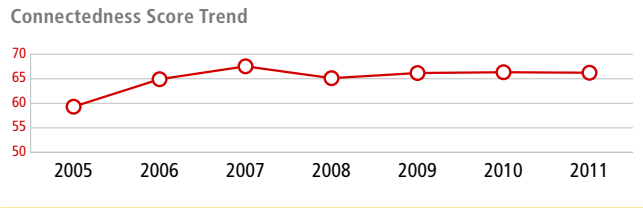
## Directionality



MALAYSIA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	16/140	16/140	0	66/100	66/100	0
Depth	10/140	10/140	0	36/50	37/50	-1
Breadth	41/140	43/140	2	30/50	30/50	0
Trade Pillar	4/140	4/140	0	86/100	86/100	0
Capital Pillar	32/66	32/66	0	50/100	50/100	0
Information Pillar	41/101	40/101	-1	63/100	63/100	0
People Pillar	49/106	49/106	0	53/100	53/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	7/140		—	
Merchandise Trade (% of GDP)	5/140	22/140	81%	67%
Services Trade (% of GDP)	35/139	27/139	13%	13%

Capital	25/122		—	
FDI Stock (% of GDP)	21/132	55/140	38%	41%
FDI Flows (% of GFCF)	13/133	60/140	25%	15%
Portfolio Equity Stock (% of GDP)	39/102	15/97	9%	24%
Portfolio Equity Flows (% of GDP)	17/129	116/126	1%	0%

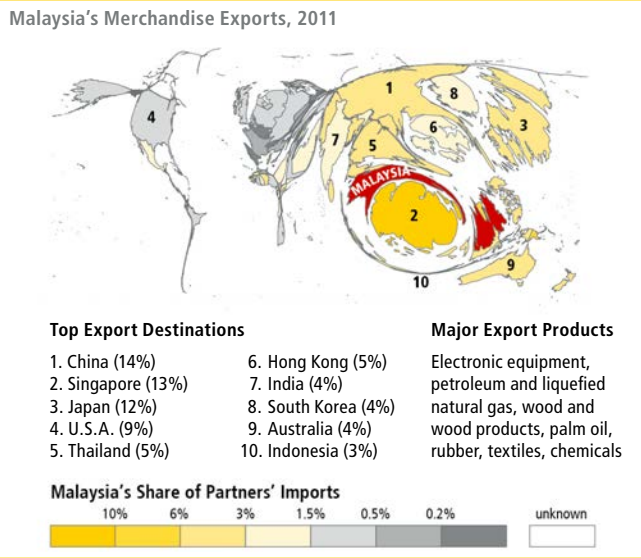
Information	49/140		—	
Internet Bandwidth (Bits per Second per Internet User)	81/140		10,651	
International Phone Calls (Minutes per Capita)	44/140	36/140	116	177
Printed Publications Trade (USD per Capita)	47/135	61/135	\$8	\$10

People	39/116			
Migrants (% of Population)	98/139	49/140	3%	8%
Tourists Dep./Arr. Per Capita	·	27/136	·	0.9
International Students (% of Tertiary Education Enrollment)	52/130	26/104	5%	6%

Summary

Malaysia’s connectedness score increased rapidly from 2005 to 2007 and then stabilized at a level corresponding to the 16<sup>th</sup> place rank in 2011. Malaysia is strongest on the trade pillar, where it ranks 4<sup>th</sup> worldwide and 2<sup>nd</sup> within its region, after Singapore. Malaysia’s high rank on the trade pillar within its region is particularly notable in light of the fact that 7 of the top 10 countries on this pillar are located in East Asia & Pacific. In terms of overall connectedness, Malaysia ranks higher on depth (10<sup>th</sup> worldwide) than breadth (41<sup>st</sup>).

Rooted Map



Breadth

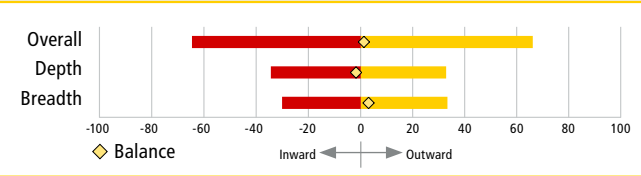
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	21/140		—	
Merchandise Trade	26/140	27/140	64%	66%

Capital	43/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	27/41	·	54%
Portfolio Equity Stock	43/66	—	52%	—

Information	48/101		—	
International Phone Calls	55/101	67/101	69%	81%
Printed Publications Trade	10/135	24/135	42%	52%

People	76/124		—	
Migrants	97/139	88/139	73%	87%
Tourists Departures/Arrivals	—	94/107	—	88%
International Students	—	25/93	—	35%

Directionality



# MALI

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	118/140	116/140	-2	27/100	27/100	0
<b>Depth</b>	115/140	113/140	-2	12/50	12/50	0
<b>Breadth</b>	104/140	98/140	-6	14/50	15/50	-1
<b>Trade Pillar</b>	125/140	122/140	-3	31/100	31/100	0
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

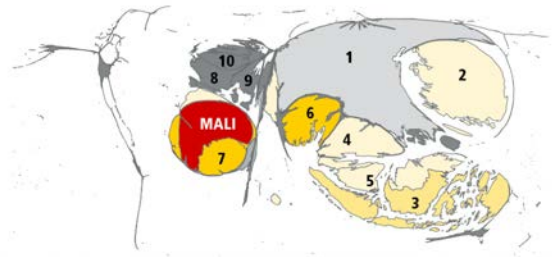
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	96/140		—	
Merchandise Trade (% of GDP)	94/140	89/140	23%	31%
Services Trade (% of GDP)	103/139	59/139	3%	8%
<b>Capital</b>	107/122		—	
FDI Stock (% of GDP)	120/132	97/140	0%	22%
FDI Flows (% of GFCF)	109/133	39/140	0%	25%
Portfolio Equity Stock (% of GDP)	93/102	87/97	0%	0%
Portfolio Equity Flows (% of GDP)	66/129	99/126	0%	0%
<b>Information</b>	106/140		—	
Internet Bandwidth (Bits per Second per Internet User)	104/140		4,893	
International Phone Calls (Minutes per Capita)	98/140	81/140	14	57
Printed Publications Trade (USD per Capita)	133/135	124/135	\$0	\$1
<b>People</b>	.		.	
Migrants (% of Population)	24/139	112/140	13%	1%
Tourists Dep./Arr. Per Capita	.	125/136	.	0.0
International Students (% of Tertiary Education Enrollment)	62/130	.	4%	.

## Summary

Mali's global connectedness, which peaked in 2009, ranks 118<sup>th</sup> globally (out of 140 countries) and 21<sup>st</sup> among the 29 Sub-Saharan African countries that were analyzed. Among Mali's depth scores, the highest is the depth of its outbound migration on which Mali ranks 24<sup>th</sup> worldwide with 13% of those born in Mali living abroad. 91% of Mali's outbound migrants have remained within Sub-Saharan Africa, which is why Mali ranks only 134<sup>th</sup> on the breadth of its outbound migration.

## Rooted Map

### Mali's Merchandise Exports, 2011



### Top Export Destinations

1. China (33%)
2. South Korea (15%)
3. Indonesia (13%)
4. Thailand (7%)
5. Malaysia (6%)

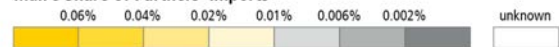
### Major Export Products

6. Bangladesh (5%)
7. Burkina Faso (3%)
8. France (2%)
9. Italy (2%)
10. Belgium (1%)

### Major Export Products

cotton, gold, livestock

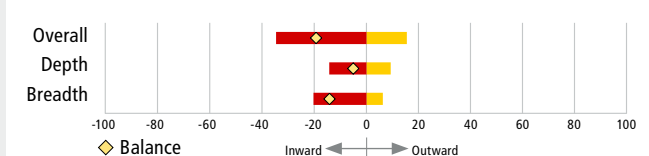
### Mali's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	111/140		—	
Merchandise Trade	119/140	96/140	6%	37%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	127/135	80/135	95%	8%
<b>People</b>	46/124		—	
Migrants	134/139	62/139	91%	85%
Tourists Departures/Arrivals	—	22/107	—	0%
International Students	—	.	—	.

## Directionality

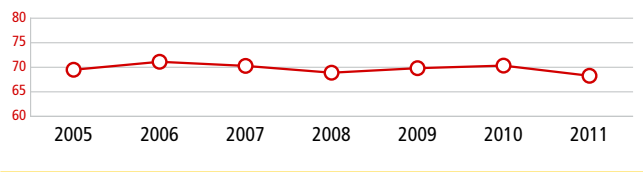


MALTA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	13/140	10/140	-3	68/100	70/100	-2
Depth	7/140	7/140	0	39/50	39/50	0
Breadth	43/140	38/140	-5	29/50	31/50	-2
Trade Pillar	11/140	11/140	0	75/100	77/100	-2
Capital Pillar	17/66	15/66	-2	65/100	68/100	-3
Information Pillar	16/101	18/101	2	75/100	75/100	0
People Pillar	27/106	27/106	0	67/100	67/100	0

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	8/140		—	
Merchandise Trade (% of GDP)	38/140	20/140	46%	69%
Services Trade (% of GDP)	2/139	5/139	50%	30%

Capital	14/122		—	
FDI Stock (% of GDP)	38/132	6/140	17%	187%
FDI Flows (% of GFCF)	43/133	8/140	5%	62%
Portfolio Equity Stock (% of GDP)	32/102	55/97	14%	2%
Portfolio Equity Flows (% of GDP)	47/129	51/126	0%	0%

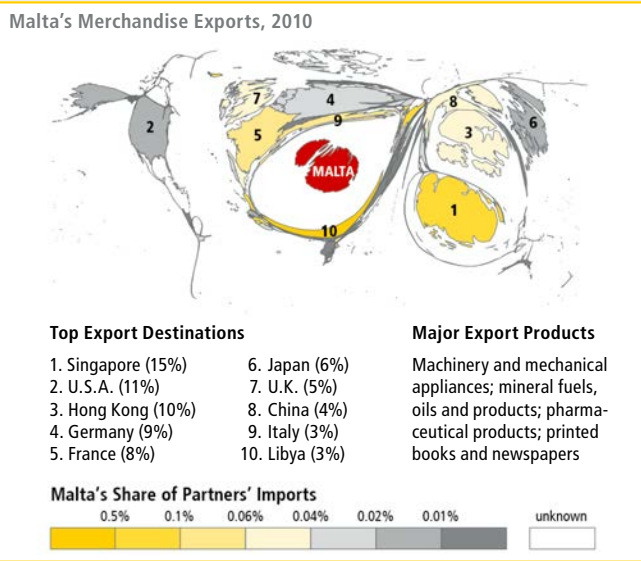
Information	20/140		—	
Internet Bandwidth (Bits per Second per Internet User)	32/140		47,850	
International Phone Calls (Minutes per Capita)	38/140	22/140	148	236
Printed Publications Trade (USD per Capita)	4/135	19/135	\$271	\$50

People	21/116			
Migrants (% of Population)	5/139	69/140	22%	4%
Tourists Dep./Arr. Per Capita	22/93	4/136	0.7	3.2
International Students (% of Tertiary Education Enrollment)	20/130	86/104	11%	0%

Summary

Malta ranks 13<sup>th</sup> out of 140 countries in the overall connectedness index (11<sup>th</sup> among European countries). Malta’s high score is driven primarily by depth rather than breadth, which is typical among small countries. Malta ranks 7<sup>th</sup> worldwide on depth and 43<sup>rd</sup> on breadth. Malta’s strongest pillar is the trade pillar, on which it ranks 11<sup>th</sup> globally and 4<sup>th</sup> within Europe. Among the more remarkable features of Malta’s connectedness profile is the depth of its services exports. Malta ranks 2<sup>nd</sup> worldwide on services exports depth and, in 2011, its services exports added up to half of its GDP and exceeded its merchandise exports. Malta’s overall connectedness has generally remained stable since 2005.

Rooted Map



Breadth

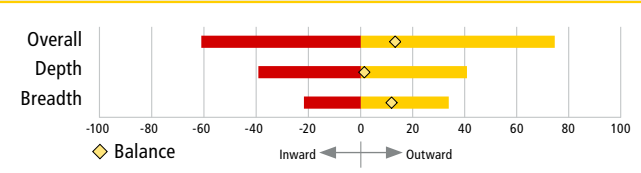
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	49/140		—	
Merchandise Trade	21/140	88/140	33%	82%

Capital	21/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	27/66	—	92%	—

Information	33/101		—	
International Phone Calls	45/101	2/101	73%	2%
Printed Publications Trade	103/135	75/135	60%	84%

People	44/124		—	
Migrants	82/139	52/139	35%	51%
Tourists Departures/Arrivals	—	17/107	—	97%
International Students	—	60/93	—	56%

Directionality



# MAURITIUS

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	46/140	43/140	-3	51/100	53/100	-2
<b>Depth</b>	22/140	19/140	-3	32/50	32/50	0
<b>Breadth</b>	87/140	80/140	-7	19/50	20/50	-1
<b>Trade Pillar</b>	45/140	30/140	-15	58/100	60/100	-2
<b>Capital Pillar</b>	50/66	52/66	2	37/100	37/100	0
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	47/106	47/106	0	53/100	53/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	42/140		—	
Merchandise Trade (% of GDP)	91/140	45/140	23%	46%
Services Trade (% of GDP)	10/139	7/139	29%	22%

<b>Capital</b>	12/122		—	
FDI Stock (% of GDP)	64/132	95/140	5%	23%
FDI Flows (% of GFCF)	49/133	66/140	4%	13%
Portfolio Equity Stock (% of GDP)	2/102	3/97	1125%	142%
Portfolio Equity Flows (% of GDP)	1/129	2/126	106%	51%

<b>Information</b>	48/140		—	
Internet Bandwidth (Bits per Second per Internet User)	73/140		12,714	
International Phone Calls (Minutes per Capita)	47/140	43/140	104	143
Printed Publications Trade (USD per Capita)	55/135	48/135	\$5	\$15

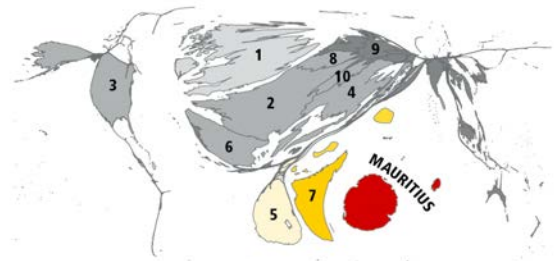
<b>People</b>	46/116		—	
Migrants (% of Population)	24/139	75/140	13%	3%
Tourists Dep./Arr. Per Capita	55/93	33/136	0.2	0.7
International Students (% of Tertiary Education Enrollment)	7/130	88/104	30%	0%

## Summary

Mauritius ranks first out of the 29 countries in the Sub-Saharan Africa region and 46<sup>th</sup> globally on this year's DHL Global Connectedness Index. It has similar ranks across pillars: 45<sup>th</sup> on trade, 47<sup>th</sup> on people and 50<sup>th</sup> on capital. Mauritius's high depth scores on portfolio equity investment and services trade are particularly notable. These scores reflect the importance of the financial services and tourism industries to Mauritius's economy. Its connectedness score increased strongly from 2008 to 2010 before declining slightly in 2011. The small decline from 2010 to 2011 was driven by the trade pillar.

## Rooted Map

### Mauritius's Merchandise Exports, 2011



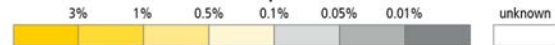
#### Top Export Destinations

1. U.K. (20%)
2. France (17%)
3. U.S.A. (11%)
4. Italy (9%)
5. South Africa (7%)
6. Spain (7%)
7. Madagascar (6%)
8. Belgium (2%)
9. Germany (2%)
10. Switzerland (2%)

#### Major Export Products

Clothing and textiles, sugar, cut flowers, molasses, fish

#### Mauritius's Share of Partners' Imports



## Breadth

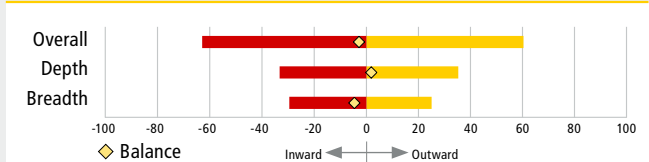
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	65/140		—	
Merchandise Trade	63/140	72/140	17%	9%

<b>Capital</b>	67/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	66/66	—	3%	—

<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	68/135	35/135	46%	6%

<b>People</b>	64/124		—	
Migrants	89/139	44/139	33%	10%
Tourists Departures/Arrivals	—	68/107	—	12%
International Students	—	55/93	—	61%

## Directionality

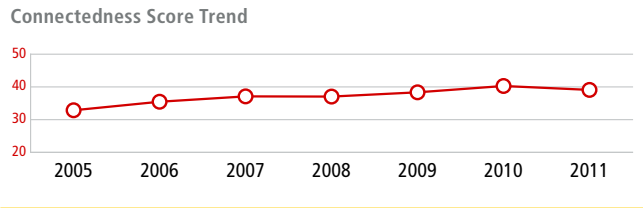




# MEXICO

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	84/140	79/140	-5	39/100	40/100	-1
Depth	93/140	90/140	-3	17/50	17/50	0
Breadth	68/140	64/140	-4	22/50	23/50	-1
Trade Pillar	107/140	109/140	2	37/100	37/100	0
Capital Pillar	40/66	34/66	-6	44/100	48/100	-4
Information Pillar	62/101	62/101	0	54/100	53/100	1
People Pillar	58/106	58/106	0	48/100	48/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	100/140		–	
Merchandise Trade (% of GDP)	70/140	84/140	30%	31%
Services Trade (% of GDP)	130/139	135/139	1%	2%

Capital	76/122		–	
FDI Stock (% of GDP)	50/132	88/140	10%	26%
FDI Flows (% of GFCF)	46/133	91/140	5%	9%
Portfolio Equity Stock (% of GDP)	·	34/97	·	11%
Portfolio Equity Flows (% of GDP)	83/129	107/126	0%	0%

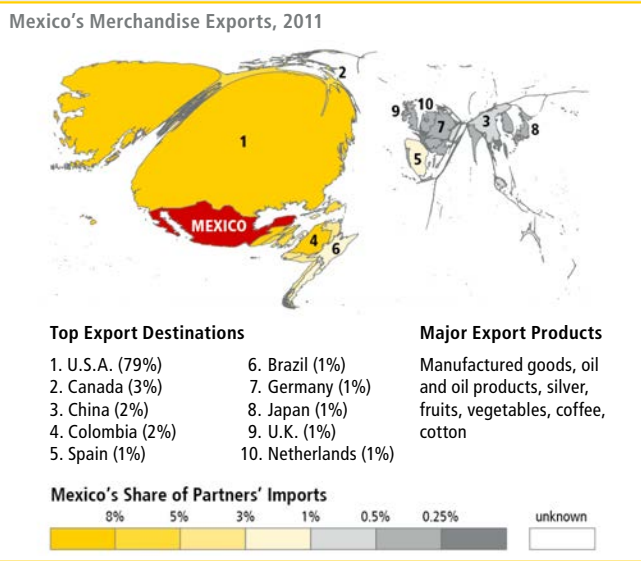
Information	71/140		–	
Internet Bandwidth (Bits per Second per Internet User)	87/140		8,743	
International Phone Calls (Minutes per Capita)	76/140	48/140	28	131
Printed Publications Trade (USD per Capita)	57/135	72/135	\$4	\$7

People	86/116			
Migrants (% of Population)	43/139	121/140	9%	1%
Tourists Dep./Arr. Per Capita	63/93	72/136	0.1	0.2
International Students (% of Tertiary Education Enrollment)	121/130	·	1%	·

## Summary

Mexico ranks 84<sup>th</sup> out of the 140 countries covered in this year’s DHL Global Connectedness Index. While its connect- edness score declined slightly from 2010 to 2011, its connectedness has generally been on an increasing trend since 2005. Mexico has higher breadth (68<sup>th</sup>) than depth (93<sup>rd</sup>). Mexico’s trade depth ranks only 100<sup>th</sup> and, as Chapter 4 of this report elaborates, Mexico could increase its exports depth via expanding its exports breadth. Strengthening its domestic supply base could also help it take greater advantage of the breadth of its free trade agreements. For details, please refer to Chapter 4, where Mexico is one of the primary examples.

## Rooted Map



## Breadth

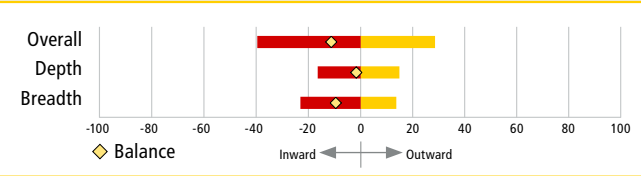
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	87/140		–	
Merchandise Trade	118/140	52/140	82%	53%

Capital	32/67		–	
FDI Stock	26/41	31/46	31%	52%
FDI Flows	·	29/41	·	39%
Portfolio Equity Stock	26/66	–	43%	–

Information	61/101		–	
International Phone Calls	72/101	39/101	97%	98%
Printed Publications Trade	80/135	51/135	70%	56%

People	41/124		–	
Migrants	100/139	95/139	93%	71%
Tourists Departures/Arrivals	–	11/107	–	91%
International Students	–	·	–	·

## Directionality

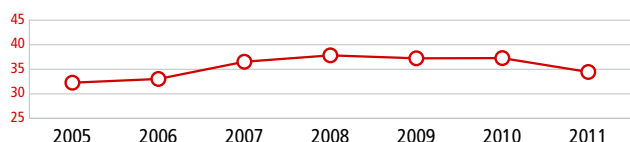


# MOLDOVA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	100/140	90/140	-10	34/100	37/100	-3
<b>Depth</b>	49/140	52/140	3	27/50	26/50	1
<b>Breadth</b>	128/140	119/140	-9	8/50	11/50	-3
<b>Trade Pillar</b>	87/140	74/140	-13	44/100	47/100	-3
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	78/101	78/101	0	45/100	44/100	1
<b>People Pillar</b>	69/106	69/106	0	43/100	43/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	28/140		—	
Merchandise Trade (% of GDP)	66/140	9/140	32%	74%
Services Trade (% of GDP)	36/139	30/139	12%	12%

<b>Capital</b>	83/122		—	
FDI Stock (% of GDP)	95/132	50/140	1%	45%
FDI Flows (% of GFCF)	86/133	59/140	1%	15%
Portfolio Equity Stock (% of GDP)	91/102	70/97	0%	1%
Portfolio Equity Flows (% of GDP)	71/129	58/126	0%	0%

<b>Information</b>	36/140		—	
Internet Bandwidth (Bits per Second per Internet User)	14/140		91,118	
International Phone Calls (Minutes per Capita)	59/140	18/140	49	268
Printed Publications Trade (USD per Capita)	86/135	80/135	\$1	\$6

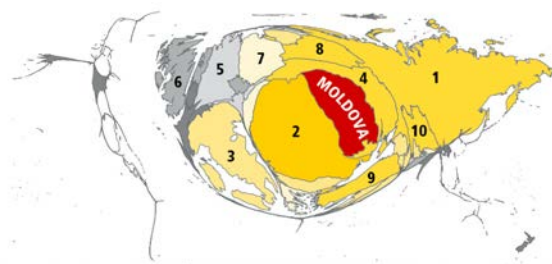
<b>People</b>	61/116		—	
Migrants (% of Population)	18/139	33/140	14%	11%
Tourists Dep./Arr. Per Capita	85/93	135/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	21/130	70/104	11%	1%

## Summary

Moldova holds the 100<sup>th</sup> rank out of the 140 countries covered on this year's DHL Global Connectedness Index and ranks 38<sup>th</sup> out of 40 European countries. Moldova has higher depth (49<sup>th</sup>) than breadth (128<sup>th</sup>), which is typical among small countries. Moldova has particularly high depth on the trade pillar, ranking 28<sup>th</sup> worldwide at the pillar level and 9<sup>th</sup> on merchandise imports depth. Its merchandise imports add up to 74% of its GDP. Moldova's connectedness declined notably from 2010 to 2011 (causing its rank to fall from 90<sup>th</sup> to 100<sup>th</sup>). This decline was driven primarily by the trade pillar.

## Rooted Map

### Moldova's Merchandise Exports, 2011



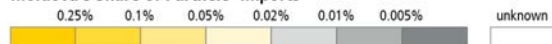
#### Top Export Destinations

1. Russia (28%)
2. Romania (17%)
3. Italy (10%)
4. Ukraine (7%)
5. Germany (5%)
6. U.K. (5%)
7. Poland (4%)
8. Belarus (3%)
9. Turkey (3%)
10. Kazakhstan (2%)

#### Major Export Products

Foodstuffs, textiles, machinery

#### Moldova's Share of Partners' Imports



## Breadth

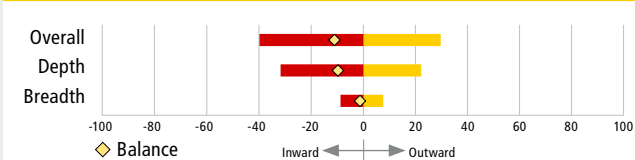
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	132/140		—	
Merchandise Trade	127/140	118/140	88%	89%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	96/101		—	
International Phone Calls	92/101	86/101	96%	96%
Printed Publications Trade	121/135	95/135	99%	83%

<b>People</b>	82/124		—	
Migrants	96/139	93/139	87%	95%
Tourists Departures/Arrivals	—	53/107	—	84%
International Students	—	69/93	—	48%

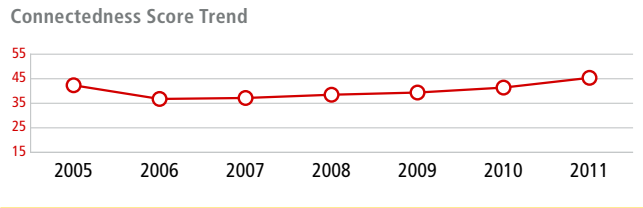
## Directionality



# MONGOLIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	67/140	76/140	9	45/100	41/100	4
Depth	24/140	37/140	13	32/50	29/50	3
Breadth	110/140	114/140	4	13/50	13/50	0
Trade Pillar	60/140	79/140	19	52/100	45/100	7
Capital Pillar	-	-	-	-	-	-
Information Pillar	-	-	-	-	-	-
People Pillar	75/106	76/106	1	41/100	41/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	13/140		-	
Merchandise Trade (% of GDP)	27/140	8/140	56%	77%
Services Trade (% of GDP)	68/139	8/139	7%	21%

Capital	23/122		-	
FDI Stock (% of GDP)	31/132	9/140	22%	110%
FDI Flows (% of GFCF)	61/133	7/140	3%	64%
Portfolio Equity Stock (% of GDP)	72/102	67/97	0%	1%
Portfolio Equity Flows (% of GDP)	52/129	6/126	0%	3%

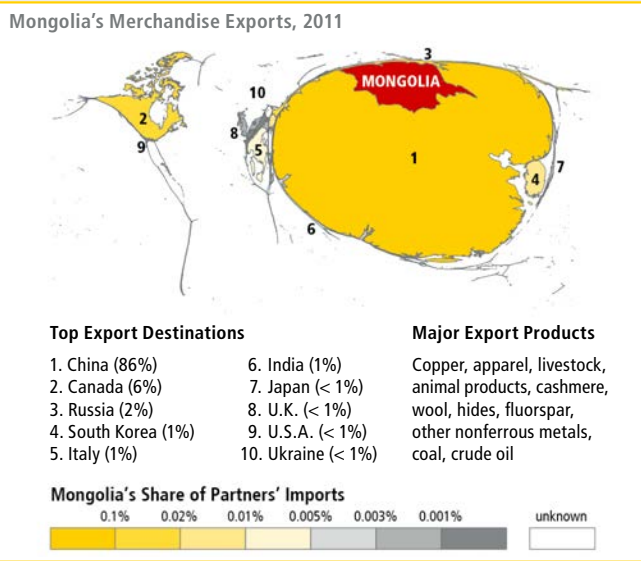
Information	83/140		-	
Internet Bandwidth (Bits per Second per Internet User)	28/140		53,576	
International Phone Calls (Minutes per Capita)	129/140	109/140	2	21
Printed Publications Trade (USD per Capita)	90/135	25/135	\$1	\$43

People	98/116			
Migrants (% of Population)	139/139	126/140	0%	0%
Tourists Dep./Arr. Per Capita	-	80/136	-	0.2
International Students (% of Tertiary Education Enrollment)	46/130	81/104	6%	1%

## Summary

Mongolia ranks 67<sup>th</sup> on this year’s DHL Global Connectedness Index, up 9 positions from its 76<sup>th</sup> rank last year. Mongolia’s gains over the past year were driven by the trade pillar and continue a trend of gradually rising connect-edness since 2006. Mongolia ranks 12<sup>th</sup> out of the 19 countries that were analyzed in the East Asia & Pacific region. The strongest aspect of Mongolia’s connectedness profile is its trade depth, on which it ranks 13<sup>th</sup> worldwide. Mon-golia ranked 8<sup>th</sup> worldwide on both merchandise and services imports depth in 2011, reflecting very large inflows contributing to its rapid expansion: Mongolia’s GDP grew 17.5% in constant currency terms in 2011 fueled by demand for its exports from China (see map).

## Rooted Map



## Breadth

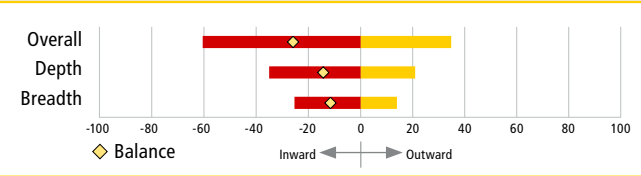
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	119/140		-	
Merchandise Trade	137/140	93/140	88%	58%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	-		-	
International Phone Calls	-	-	-	-
Printed Publications Trade	114/135	126/135	-	-

People	49/124		-	
Migrants	15/139	28/139	17%	31%
Tourists Departures/Arrivals	-	97/107	-	58%
International Students	-	33/93	-	53%

## Directionality

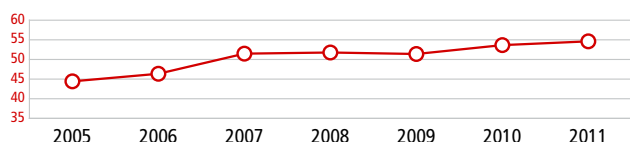


# MOROCCO

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	38/140	40/140	2	55/100	54/100	1
<b>Depth</b>	76/140	78/140	2	21/50	20/50	1
<b>Breadth</b>	28/140	27/140	-1	33/50	34/50	-1
<b>Trade Pillar</b>	32/140	37/140	5	61/100	58/100	3
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	57/106	57/106	0	49/100	49/100	0

Connectedness Score Trend



## Depth

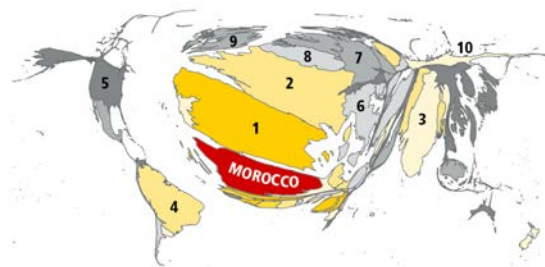
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	60/140		—	
Merchandise Trade (% of GDP)	100/140	48/140	21%	44%
Services Trade (% of GDP)	32/139	87/139	14%	6%
<b>Capital</b>	59/122		—	
FDI Stock (% of GDP)	86/132	47/140	2%	46%
FDI Flows (% of GFCF)	75/133	107/140	1%	7%
Portfolio Equity Stock (% of GDP)	57/102	51/97	1%	4%
Portfolio Equity Flows (% of GDP)	54/129	50/126	0%	0%
<b>Information</b>	94/140		—	
Internet Bandwidth (Bits per Second per Internet User)	92/140		7,558	
International Phone Calls (Minutes per Capita)	97/140	56/140	14	101
Printed Publications Trade (USD per Capita)	103/135	91/135	\$0	\$4
<b>People</b>	63/116		—	
Migrants (% of Population)	47/139	136/140	8%	0%
Tourists Dep./Arr. Per Capita	69/93	63/136	0.1	0.3
International Students (% of Tertiary Education Enrollment)	25/130	54/104	10%	2%

## Summary

Morocco ranks 38<sup>th</sup> out of 140 countries with stronger breadth (28<sup>th</sup>) than depth (76<sup>th</sup>). It holds the 6<sup>th</sup> rank within the Middle East & North Africa region and is the top ranked country within the North African sub-region. One of the most noteworthy aspects of Morocco's connectedness profile is that it holds the 32<sup>nd</sup> position in the depth of services exports, ranking 4<sup>th</sup> in its region on this component behind Lebanon, Jordan and Bahrain. Morocco's connectedness has risen steadily from 2005 to present, with only a brief pause in its growth from 2007 to 2009. Its increase from 2010 to 2011 was driven primarily by the trade pillar.

## Rooted Map

Morocco's Merchandise Exports, 2011



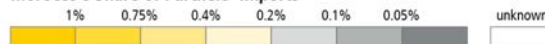
### Top Export Destinations

1. Spain (19%)
2. France (17%)
3. India (7%)
4. Brazil (6%)
5. U.S.A. (5%)

### Major Export Products

6. Italy (4%)
  7. Germany (3%)
  8. Belgium (3%)
  9. U.K. (3%)
  10. Russia (2%)
- Clothing and textiles, electric components, inorganic chemicals, transistors, crude minerals, fertilizers (including phosphates)

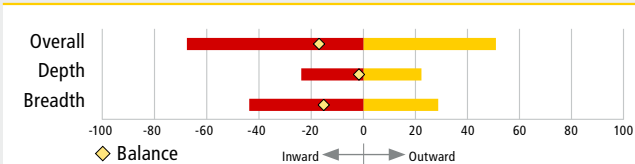
### Morocco's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	39/140		—	
Merchandise Trade	47/140	33/140	5%	14%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	53/135	92/135	14%	21%
<b>People</b>	57/124		—	
Migrants	92/139	16/139	15%	56%
Tourists Departures/Arrivals	—	57/107	—	5%
International Students	—	59/93	—	20%

## Directionality

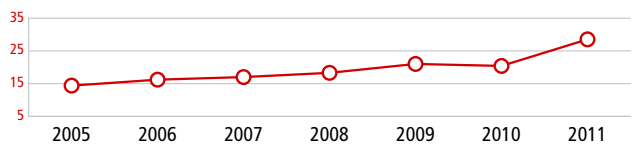


MOZAMBIQUE

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	113/140	130/140	17	29/100	20/100	9
Depth	94/140	89/140	-5	17/50	18/50	-1
Breadth	115/140	138/140	23	12/50	3/50	9
Trade Pillar	86/140	113/140	27	44/100	34/100	10
Capital Pillar	.	.	.	.	.	.
Information Pillar	101/101	101/101	0	12/100	12/100	0
People Pillar	.	.	.	.	.	.

Connectedness Score Trend



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	55/140		—	
Merchandise Trade (% of GDP)	75/140	39/140	28%	49%
Services Trade (% of GDP)	87/139	56/139	4%	9%

Capital	95/122		—	
FDI Stock (% of GDP)	130/132	36/140	0%	56%
FDI Flows (% of GFCF)	120/133	11/140	0%	49%
Portfolio Equity Stock (% of GDP)	87/102	97/97	0%	0%
Portfolio Equity Flows (% of GDP)	70/129	72/126	0%	0%

Information	131/140		—	
Internet Bandwidth (Bits per Second per Internet User)	127/140		1,244	
International Phone Calls (Minutes per Capita)	123/140	129/140	5	7
Printed Publications Trade (USD per Capita)	93/135	117/135	\$1	\$1

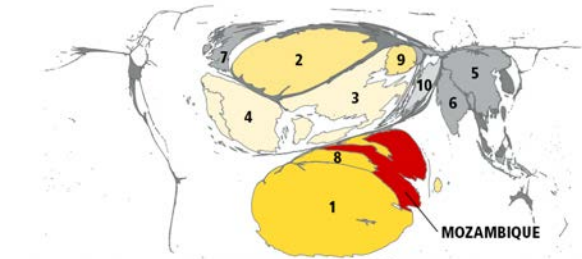
People	.		.	
Migrants (% of Population)	82/139	97/140	4%	2%
Tourists Dep./Arr. Per Capita	.	94/136	.	0.1
International Students (% of Tertiary Education Enrollment)	30/130	.	10%	.

Summary

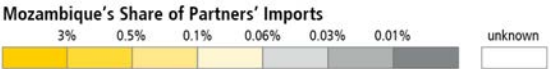
Mozambique ranks 113<sup>th</sup> on the overall connectedness index, but is the country with the largest score gain since 2010, continuing an increasing path since 2005, the first year for which the index has been calculated. Mozambique’s large gain in the past year is primarily based on increasing breadth – especially in the trade pillar – which offset a small decrease in depth. Mozambique’s connectedness relies more on inward than outward flows. For example, in FDI inflows Mozambique held the 11<sup>th</sup> position out of 140 countries while for FDI outflows it ranked 120<sup>th</sup> out of 133 countries.

Rooted Map

Mozambique’s Merchandise Exports, 2011



Top Export Destinations	Major Export Products
1. South Africa (29%)	Aluminum, prawns,
2. Belgium (15%)	cashews, cotton, sugar,
3. Italy (12%)	citrus, timber; bulk
4. Spain (9%)	electricity
5. China (7%)	
6. India (3%)	
7. U.K. (3%)	
8. Zimbabwe (2%)	
9. Slovenia (2%)	
10. Turkey (2%)	



Breadth

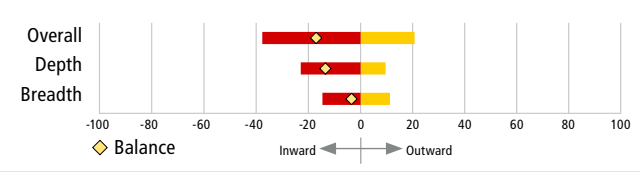
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	99/140		—	
Merchandise Trade	90/140	99/140	39%	39%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	100/101		—	
International Phone Calls	86/101	101/101	66%	66%
Printed Publications Trade	128/135	134/135	100%	45%

People	.		—	
Migrants	137/139	82/139	83%	69%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

Directionality



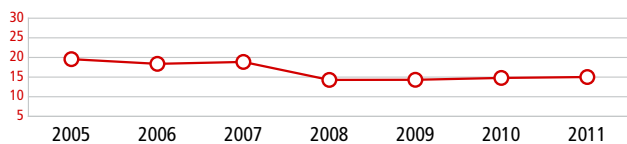


# MYANMAR

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	137/140	137/140	0	15/100	15/100	0
<b>Depth</b>	139/140	139/140	0	3/50	3/50	0
<b>Breadth</b>	114/140	117/140	3	12/50	12/50	0
<b>Trade Pillar</b>	139/140	140/140	1	13/100	11/100	2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	98/106	98/106	0	27/100	27/100	0

Connectedness Score Trend



## Depth

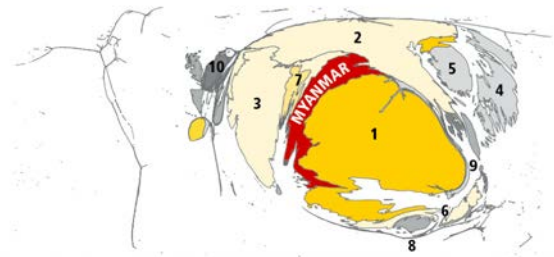
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	134/140		—	
Merchandise Trade (% of GDP)	102/140	139/140	20%	14%
Services Trade (% of GDP)	137/139	138/139	1%	1%
<b>Capital</b>	.		—	
FDI Stock (% of GDP)	.	106/140	.	17%
FDI Flows (% of GFCF)	.	51/140	.	19%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.
<b>Information</b>	114/140		—	
Internet Bandwidth (Bits per Second per Internet User)	89/140		8,180	
International Phone Calls (Minutes per Capita)	106/140	136/140	10	3
Printed Publications Trade (USD per Capita)	135/135	135/135	\$0	\$0
<b>People</b>	116/116		—	
Migrants (% of Population)	132/139	134/140	1%	0%
Tourists Dep./Arr. Per Capita	.	128/136	.	0.0
International Students (% of Tertiary Education Enrollment)	110/130	103/104	1%	0%

## Summary

Myanmar ranks 137<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, its rank unchanged versus last year. It is the lowest ranked country within the East Asia & Pacific region. Its connectedness declined from 2005 to 2008 but has since remained steady. Among the more noteworthy aspects of Myanmar's connectedness profile is its 51<sup>st</sup> rank on the depth of its inward FDI flows. Inward FDI flows over the past three years accounted for 19% of Myanmar's gross fixed capital formation. Its imports of both merchandise and services are very small in relation to the size of its economy: ranking next-to-last worldwide on both of these components of connectedness.

## Rooted Map

Myanmar's Merchandise Exports, 2011

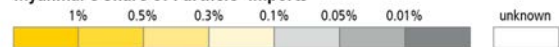


Top Export Destinations

1. Thailand (39%)
2. China (20%)
3. India (15%)
4. Japan (7%)
5. South Korea (4%)
6. Malaysia (3%)
7. Bangladesh (2%)
8. Singapore (1%)
9. Vietnam (1%)
10. Germany (1%)

Major Export Products

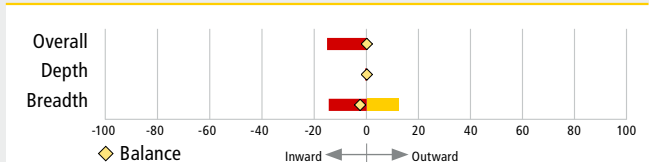
Myanmar's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	121/140		—	
Merchandise Trade	116/140	122/140	77%	92%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	133/135	90/135	63%	87%
<b>People</b>	53/124		—	
Migrants	81/139	56/139	51%	47%
Tourists Departures/Arrivals	—	60/107	—	69%
International Students	—	39/93	—	91%

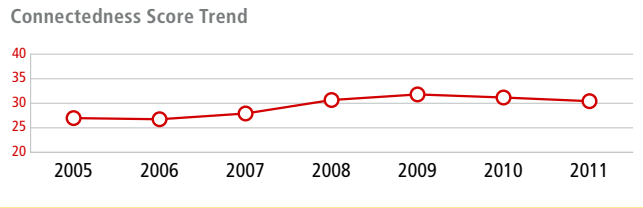
## Directionality



NAMIBIA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	109/140	110/140	1	30/100	31/100	-1
Depth	57/140	54/140	-3	25/50	26/50	-1
Breadth	136/140	133/140	-3	5/50	6/50	-1
Trade Pillar	101/140	100/140	-1	40/100	39/100	1
Capital Pillar	-	-	-	-	-	-
Information Pillar	98/101	96/101	-2	23/100	24/100	-1
People Pillar	71/106	71/106	0	42/100	42/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	40/140		-	
Merchandise Trade (% of GDP)	52/140	36/140	36%	50%
Services Trade (% of GDP)	47/139	82/139	10%	7%

Capital	65/122		-	
FDI Stock (% of GDP)	118/132	64/140	0%	36%
FDI Flows (% of GFCF)	117/133	37/140	0%	26%
Portfolio Equity Stock (% of GDP)	21/102	94/97	22%	0%
Portfolio Equity Flows (% of GDP)	11/129	66/126	3%	0%

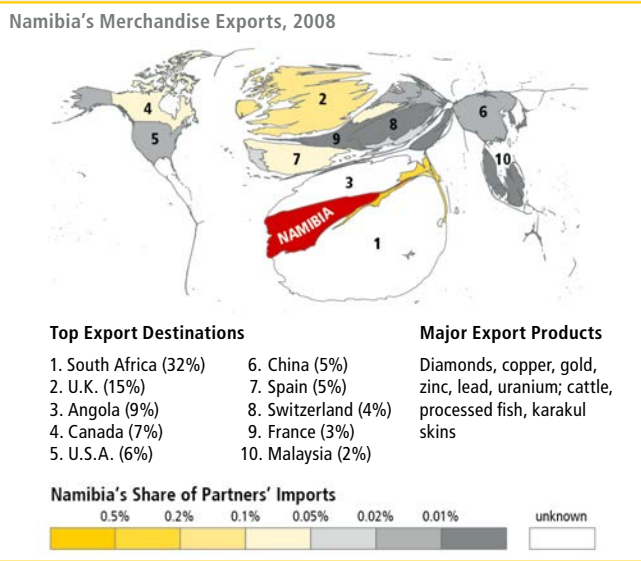
Information	96/140		-	
Internet Bandwidth (Bits per Second per Internet User)	118/140		2,349	
International Phone Calls (Minutes per Capita)	72/140	99/140	32	31
Printed Publications Trade (USD per Capita)	2/135	54/135	\$354	\$13

People	35/116			
Migrants (% of Population)	119/139	56/140	1%	6%
Tourists Dep./Arr. Per Capita	-	53/136	-	0.4
International Students (% of Tertiary Education Enrollment)	5/130	17/104	40%	10%

Summary

Namibia ranks 109<sup>th</sup> out of 140 countries on this year’s DHL Global Connectedness Index, up one place versus last year. It ranks 14<sup>th</sup> out of 29 countries in Sub-Saharan Africa. Namibia has balanced connectedness across the inward and outward directions and higher depth (on which it ranks 57<sup>th</sup> worldwide) than breadth (136<sup>th</sup>). Namibia’s global connectedness is highest on the people pillar, where it ranks the 71<sup>st</sup> globally and 4<sup>th</sup> within Sub-Saharan Africa. Namibia ranks 5<sup>th</sup> worldwide on the depth of its outbound international students, with students from Namibia studying abroad equal to 40% of Namibia’s tertiary education enrollment.

Rooted Map



Breadth

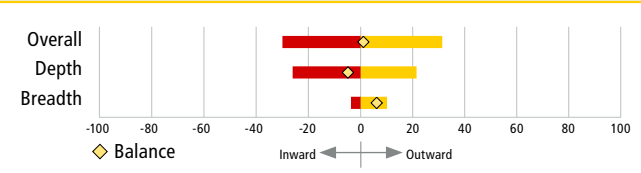
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	125/140		-	
Merchandise Trade	105/140	139/140	44%	70%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	101/101		-	
International Phone Calls	101/101	100/101	92%	92%
Printed Publications Trade	126/135	133/135	-	-

People	116/124		-	
Migrants	112/139	105/139	75%	87%
Tourists Departures/Arrivals	-	93/107	-	74%
International Students	-	77/93	-	96%

Directionality



# NEPAL

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	133/140	133/140	0	21/100	20/100	1
<b>Depth</b>	137/140	132/140	-5	4/50	5/50	-1
<b>Breadth</b>	98/140	104/140	6	16/50	15/50	1
<b>Trade Pillar</b>	136/140	135/140	-1	21/100	21/100	0
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	77/106	78/106	1	39/100	39/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	130/140		—	
Merchandise Trade (% of GDP)	140/140	86/140	5%	31%
Services Trade (% of GDP)	105/139	114/139	3%	5%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	.	139/140	.	2%
FDI Flows (% of GFCF)	.	134/140	.	2%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

<b>Information</b>	120/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	125/140	.	.	1,531
International Phone Calls (Minutes per Capita)	96/140	105/140	14	23
Printed Publications Trade (USD per Capita)	125/135	121/135	\$0	\$1

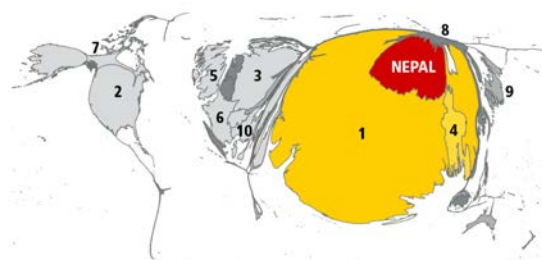
<b>People</b>	97/116	.	.	.
Migrants (% of Population)	87/139	76/140	4%	3%
Tourists Dep./Arr. Per Capita	88/93	119/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	41/130	102/104	6%	0%

## Summary

Nepal ranks 133<sup>rd</sup> on this year's DHL Global Connectedness Index, with its rank unchanged versus last year. It holds the lowest rank within the South & Central Asia region. Nepal has higher breadth (98<sup>th</sup>) than depth (137<sup>th</sup>). Among Nepal's component level depth ranks, its highest is on outbound international students (41<sup>st</sup>) and its lowest is on merchandise exports (140<sup>th</sup>). Over half of Nepal's merchandise exports went to India over the past year, as shown on the rooted map displayed on this page.

## Rooted Map

### Nepal's Merchandise Exports, 2011



#### Top Export Destinations

1. India (59%)
2. U.S.A. (10%)
3. Germany (6%)
4. Bangladesh (3%)
5. U.K. (3%)
6. France (2%)
7. Canada (2%)
8. China (2%)
9. Japan (1%)
10. Italy (1%)

#### Major Export Products

Clothing, pulses, carpets, textiles, juice, pashima, jute goods

#### Nepal's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	110/140		—	
Merchandise Trade	78/140	135/140	65%	58%

<b>Capital</b>	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	78/135	132/135	26%	65%

<b>People</b>	55/124	.	.	.
Migrants	129/139	7/139	88%	64%
Tourists Departures/Arrivals	—	34/107	—	32%
International Students	—	66/93	—	68%

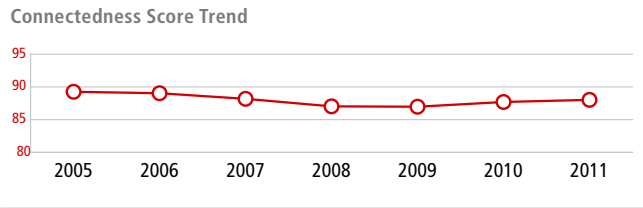
## Directionality

Not Available

NETHERLANDS

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	1/140	1/140	0	88/100	88/100	0
Depth	5/140	6/140	1	42/50	42/50	0
Breadth	3/140	3/140	0	46/50	46/50	0
Trade Pillar	1/140	1/140	0	90/100	90/100	0
Capital Pillar	4/66	4/66	0	88/100	88/100	0
Information Pillar	2/101	2/101	0	89/100	88/100	1
People Pillar	13/106	13/106	0	78/100	78/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	5/140		—	
Merchandise Trade (% of GDP)	10/140	17/140	79%	71%
Services Trade (% of GDP)	24/139	26/139	15%	14%

Capital	6/122		—	
FDI Stock (% of GDP)	8/132	22/140	112%	70%
FDI Flows (% of GFCF)	11/133	89/140	26%	9%
Portfolio Equity Stock (% of GDP)	7/102	7/97	69%	49%
Portfolio Equity Flows (% of GDP)	15/129	7/126	2%	1%

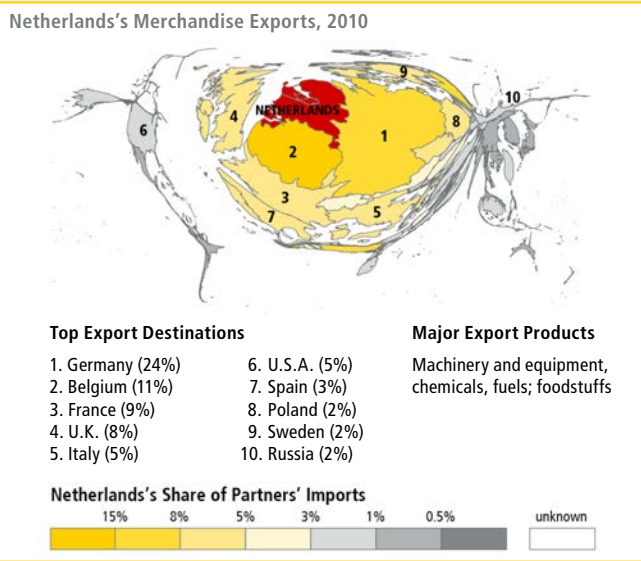
Information	10/140		—	
Internet Bandwidth (Bits per Second per Internet User)	7/140		162,532	
International Phone Calls (Minutes per Capita)	25/140	24/140	236	233
Printed Publications Trade (USD per Capita)	10/135	14/135	\$86	\$61

People	38/116			
Migrants (% of Population)	71/139	36/140	5%	11%
Tourists Dep./Arr. Per Capita	11/93	39/136	1.1	0.7
International Students (% of Tertiary Education Enrollment)	97/130	38/104	2%	4%

Summary

The Netherlands is the top ranked country on the DHL Global Connectedness Index, a position it has held since 2005, the first year for which the index has been calculated. It earns its position based on a balanced combination of high scores on both depth and breadth. The Netherlands ranks in the top 5 countries on all of the pillars of the index except for people, on which it holds the 13<sup>th</sup> position, behind 11 other European countries. One of the notable aspects of the Netherlands' connectedness profile is its larger outward than inward FDI flows. As a major foreign investor, the Netherlands ranks 11<sup>th</sup> on outward FDI flows, but ranks only 89<sup>th</sup> on inward FDI flows.

Rooted Map



Breadth

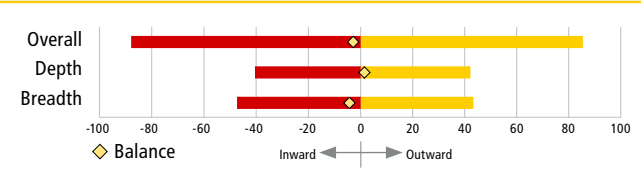
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	13/140		—	
Merchandise Trade	35/140	4/140	80%	57%

Capital	3/67		—	
FDI Stock	3/41	3/46	68%	68%
FDI Flows	10/38	9/41	71%	62%
Portfolio Equity Stock	4/66	—	45%	—

Information	4/101		—	
International Phone Calls	12/101	31/101	76%	75%
Printed Publications Trade	12/135	5/135	94%	74%

People	7/124		—	
Migrants	17/139	20/139	46%	23%
Tourists Departures/Arrivals	—	3/107	—	84%
International Students	—	26/93	—	81%

Directionality



# NEW ZEALAND

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	33/140	36/140	3	57/100	55/100	2
<b>Depth</b>	56/140	64/140	8	25/50	23/50	2
<b>Breadth</b>	34/140	34/140	0	32/50	32/50	0
<b>Trade Pillar</b>	41/140	42/140	1	59/100	57/100	2
<b>Capital Pillar</b>	34/66	38/66	4	48/100	46/100	2
<b>Information Pillar</b>	21/101	20/101	-1	73/100	74/100	-1
<b>People Pillar</b>	20/106	20/106	0	73/100	73/100	0

### Connectedness Score Trend



## Depth

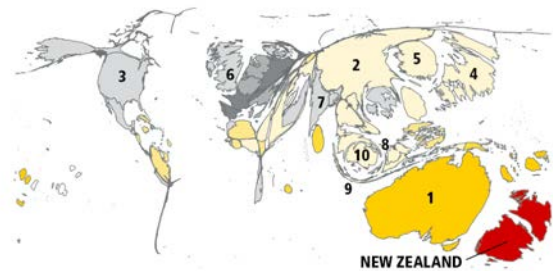
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	109/140		—	
Merchandise Trade (% of GDP)	93/140	114/140	23%	23%
Services Trade (% of GDP)	77/139	78/139	6%	7%
<b>Capital</b>	34/122		—	
FDI Stock (% of GDP)	45/132	49/140	12%	45%
FDI Flows (% of GFCF)	67/133	126/140	2%	3%
Portfolio Equity Stock (% of GDP)	22/102	42/97	21%	5%
Portfolio Equity Flows (% of GDP)	20/129	30/126	1%	0%
<b>Information</b>	17/140		—	
Internet Bandwidth (Bits per Second per Internet User)	51/140		23,706	
International Phone Calls (Minutes per Capita)	11/140	5/140	417	603
Printed Publications Trade (USD per Capita)	42/135	13/135	\$10	\$72
<b>People</b>	20/116		—	
Migrants (% of Population)	28/139	14/140	12%	22%
Tourists Dep./Arr. Per Capita	34/93	42/136	0.5	0.6
International Students (% of Tertiary Education Enrollment)	101/130	13/104	2%	14%

## Summary

New Zealand holds the 33<sup>rd</sup> position out of 140 countries in 2011 on the overall connectedness index, 9<sup>th</sup> out of the 19 countries in East Asia & Pacific. New Zealand's connectedness is slightly higher on the information (21<sup>st</sup> out of 101) and people (20<sup>th</sup> out of 140) pillars than on capital (34<sup>th</sup> out of 66) and trade (41<sup>st</sup> out of 140). Among countries in East Asia & Pacific, New Zealand ranks 2<sup>nd</sup> on the people pillar (out of 16 countries) and the 3<sup>rd</sup> on the information pillar (out of 14 countries), while it ranks 8<sup>th</sup> (out of 11) on capital and 10<sup>th</sup> (out of 19) on trade. While New Zealand's connectedness increased steadily from 2006 to 2009, it dropped sharply in 2010 and has yet to fully recover.

## Rooted Map

### New Zealand's Merchandise Exports, 2011



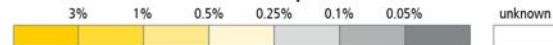
#### Top Export Destinations

1. Australia (23%)
2. China (13%)
3. U.S.A. (9%)
4. Japan (7%)
5. South Korea (4%)
6. U.K. (3%)
7. India (2%)
8. Malaysia (2%)
9. Indonesia (2%)
10. Singapore (2%)

#### Major Export Products

Dairy products, meat, wood and wood products, fish, machinery

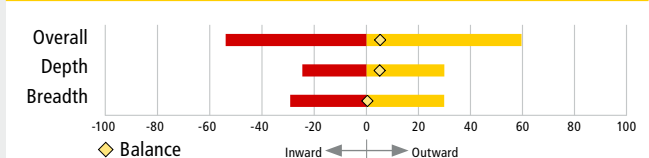
#### New Zealand's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	10/140		—	
Merchandise Trade	23/140	10/140	62%	58%
<b>Capital</b>	41/67		—	
FDI Stock	29/41	39/46	67%	70%
FDI Flows	13/38	37/41	6%	51%
Portfolio Equity Stock	38/66	—	57%	—
<b>Information</b>	44/101		—	
International Phone Calls	44/101	51/101	62%	65%
Printed Publications Trade	44/135	42/135	76%	59%
<b>People</b>	28/124		—	
Migrants	110/139	45/139	71%	44%
Tourists Departures/Arrivals	—	—	—	—
International Students	—	8/93	—	56%

## Directionality

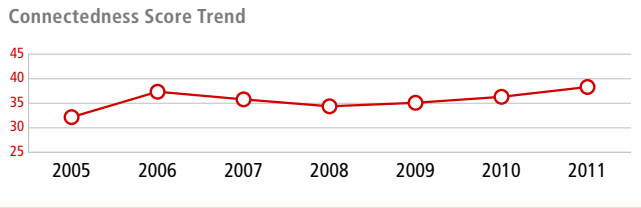




NICARAGUA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	86/140	95/140	9	38/100	36/100	2
Depth	53/140	60/140	7	26/50	24/50	2
Breadth	113/140	116/140	3	13/50	12/50	1
Trade Pillar	78/140	87/140	9	47/100	44/100	3
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	.	.	.	.	.	.



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	37/140		—	
Merchandise Trade (% of GDP)	67/140	16/140	31%	71%
Services Trade (% of GDP)	80/139	50/139	6%	9%

Capital	64/122		—	
FDI Stock (% of GDP)	82/132	15/140	3%	78%
FDI Flows (% of GFCF)	85/133	29/140	1%	30%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

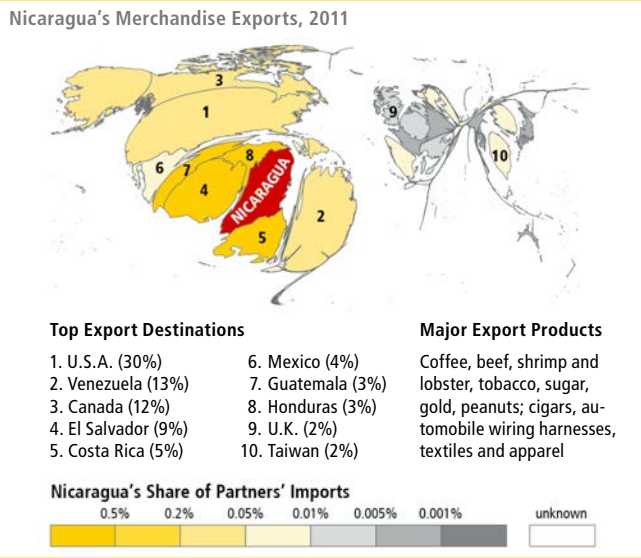
Information	78/140		—	
Internet Bandwidth (Bits per Second per Internet User)	72/140		12,857	
International Phone Calls (Minutes per Capita)	85/140	75/140	22	70
Printed Publications Trade (USD per Capita)	68/135	75/135	\$2	\$6

People	.		.	
Migrants (% of Population)	40/139	118/140	9%	1%
Tourists Dep./Arr. Per Capita	57/93	77/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	.	.	.	.

Summary

Nicaragua, the 86<sup>th</sup> ranked country on the overall connectedness index and the 6<sup>th</sup> out of the 22 countries in the South & Central America & Caribbean region, has stronger depth (53<sup>rd</sup> out of 140 countries) than breadth (113<sup>th</sup>). Nicaragua’s connectedness has been on an increasing trend since 2008, and it rose 9 places in the rankings over the past year. Nicaragua also has deeper inward than outward connectedness across multiple areas. Nicaragua ranks 16<sup>th</sup> worldwide on the depth of its merchandise imports (71% of GDP), but only 67<sup>th</sup> on merchandise exports depth. Nicaragua also ranks 15<sup>th</sup> on inward FDI stock depth versus 82<sup>nd</sup> in the outward direction.

Rooted Map



Breadth

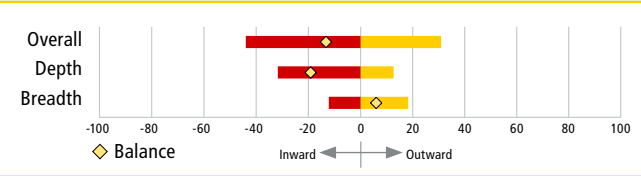
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	105/140		—	
Merchandise Trade	91/140	116/140	36%	46%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	91/135	64/135	8%	28%

People	106/124		—	
Migrants	87/139	85/139	48%	75%
Tourists Departures/Arrivals	—	91/107	—	64%
International Students	—	.	—	.

Directionality

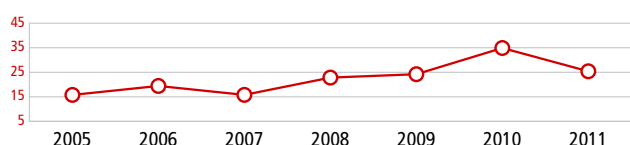


# NIGER

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	122/140	101/140	-21	25/100	35/100	-10
<b>Depth</b>	96/140	94/140	-2	16/50	16/50	0
<b>Breadth</b>	124/140	90/140	-34	9/50	19/50	-10
<b>Trade Pillar</b>	123/140	78/140	-45	31/100	45/100	-14
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	86/106	85/106	-1	35/100	36/100	-1

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	73/140		—	
Merchandise Trade (% of GDP)	101/140	61/140	21%	40%
Services Trade (% of GDP)	122/139	12/139	2%	18%

<b>Capital</b>	70/122		—	
FDI Stock (% of GDP)	100/132	41/140	1%	51%
FDI Flows (% of GFCF)	58/133	13/140	3%	46%
Portfolio Equity Stock (% of GDP)	69/102	85/97	0%	0%
Portfolio Equity Flows (% of GDP)	111/129	44/126	0%	0%

<b>Information</b>	136/140		—	
Internet Bandwidth (Bits per Second per Internet User)	129/140		1,005	
International Phone Calls (Minutes per Capita)	136/140	135/140	1	3
Printed Publications Trade (USD per Capita)	131/135	134/135	\$0	\$0

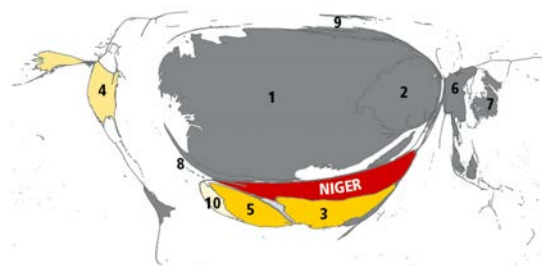
<b>People</b>	67/116		—	
Migrants (% of Population)	84/139	109/140	4%	1%
Tourists Dep./Arr. Per Capita	.	132/136	.	0.0
International Students (% of Tertiary Education Enrollment)	18/130	25/104	12%	6%

## Summary

Niger ranks 122<sup>nd</sup> on this year's DHL Global Connectedness Index, down 21 places versus last year due to the largest connectedness score decline among all countries over the past year. This decline, driven by breadth on the trade pillar, reversed the large increase in connectedness that Niger registered the previous year (described further in chapter 2). Niger's overall connectedness ranks 23<sup>rd</sup> out of 29 countries in Sub-Saharan Africa. Of particular note is the high depth of Niger's services imports. On this component, Niger ranks 12<sup>th</sup> worldwide based on services imports amounting to 18% of its GDP.

## Rooted Map

Niger's Merchandise Exports, 2011



Top Export Destinations

1. France (63%)
2. Switzerland (9%)
3. Nigeria (5%)
4. U.S.A. (5%)
5. Ghana (4%)
6. China (2%)
7. Japan (2%)
8. Spain (1%)
9. Netherlands (1%)
10. Côte d'Ivoire (1%)

Major Export Products

Uranium ore, livestock, cowpeas, onions

Niger's Share of Partners' Imports



## Breadth

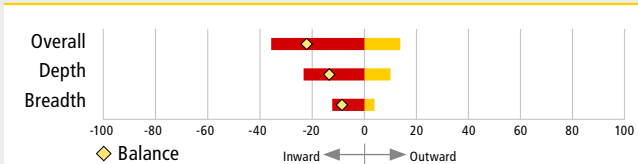
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	124/140		—	
Merchandise Trade	134/140	106/140	12%	23%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	64/135	110/135	29%	20%

<b>People</b>	109/124		—	
Migrants	138/139	115/139	93%	91%
Tourists Departures/Arrivals	—	47/107	—	0%
International Students	—	81/93	—	99%

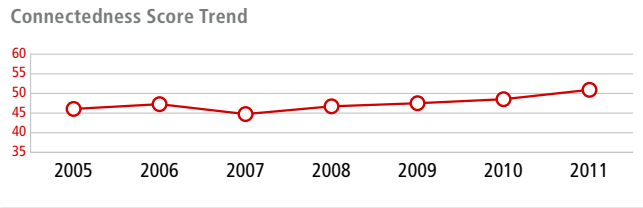
## Directionality



# NIGERIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	49/140	53/140	4	51/100	49/100	2
Depth	97/140	96/140	-1	16/50	16/50	0
Breadth	25/140	29/140	4	35/50	33/50	2
Trade Pillar	37/140	44/140	7	60/100	56/100	4
Capital Pillar	.	.	.	.	.	.
Information Pillar	73/101	71/101	-2	47/100	46/100	1
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	82/140		—	
Merchandise Trade (% of GDP)	32/140	113/140	50%	23%
Services Trade (% of GDP)	133/139	58/139	1%	8%

Capital	43/122		—	
FDI Stock (% of GDP)	83/132	82/140	2%	29%
FDI Flows (% of GFCF)	132/133	23/140	-5%	34%
Portfolio Equity Stock (% of GDP)	45/102	45/97	5%	5%
Portfolio Equity Flows (% of GDP)	32/129	22/126	0%	1%

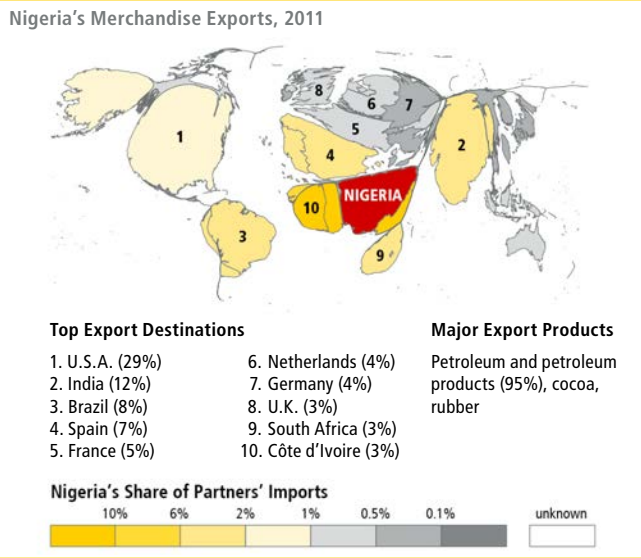
Information	133/140		—	
Internet Bandwidth (Bits per Second per Internet User)	136/140		368	
International Phone Calls (Minutes per Capita)	114/140	124/140	8	9
Printed Publications Trade (USD per Capita)	117/135	103/135	\$0	\$2

People	.		—	
Migrants (% of Population)	129/139	117/140	1%	1%
Tourists Dep./Arr. Per Capita	.	126/136	.	0.0
International Students (% of Tertiary Education Enrollment)	80/130	.	3%	.

## Summary

Nigeria’s connectedness scores have been growing steadily since 2007, enabling Nigeria to rise to the 49<sup>th</sup> rank globally on this year’s DHL Global Connectedness Index, up 4 positions versus last year. Nigeria’s connectedness gains over the past year were driven by the trade pillar. Nigeria holds the 3<sup>rd</sup> rank out of the 15 countries in the Sub-Saharan Africa region, and its connectedness is characterized by higher breadth than depth. Its merchandise imports illustrate this pattern: Nigeria ranks 18<sup>th</sup> worldwide on the breadth of its merchandise imports but only 113<sup>th</sup> on merchandise imports depth.

## Rooted Map



## Breadth

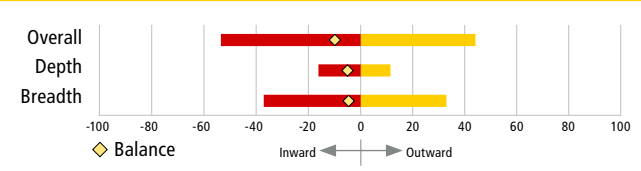
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	31/140		—	
Merchandise Trade	49/140	18/140	9%	5%

Capital	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	11/101		—	
International Phone Calls	16/101	9/101	9%	7%
Printed Publications Trade	69/135	54/135	3%	12%

People	.		—	
Migrants	60/139	61/139	62%	83%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality



# NORWAY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	11/140	11/140	0	71/100	70/100	1
<b>Depth</b>	29/140	30/140	1	31/50	30/50	1
<b>Breadth</b>	9/140	9/140	0	40/50	41/50	-1
<b>Trade Pillar</b>	43/140	32/140	-11	58/100	60/100	-2
<b>Capital Pillar</b>	9/66	11/66	2	80/100	76/100	4
<b>Information Pillar</b>	18/101	15/101	-3	75/100	76/100	-1
<b>People Pillar</b>	11/106	11/106	0	79/100	79/100	0

Connectedness Score Trend



## Depth

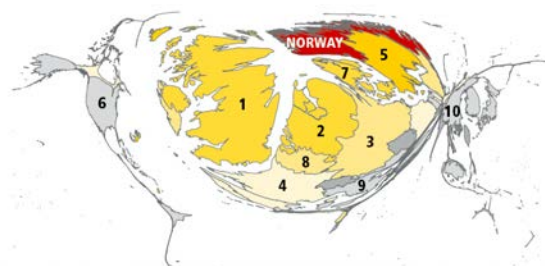
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	94/140		—	
Merchandise Trade (% of GDP)	63/140	126/140	33%	19%
Services Trade (% of GDP)	59/139	47/139	9%	9%
<b>Capital</b>	10/122		—	
FDI Stock (% of GDP)	17/132	65/140	43%	36%
FDI Flows (% of GFCF)	9/133	63/140	30%	14%
Portfolio Equity Stock (% of GDP)	6/102	23/97	84%	18%
Portfolio Equity Flows (% of GDP)	7/129	28/126	6%	0%
<b>Information</b>	11/140		—	
Internet Bandwidth (Bits per Second per Internet User)	9/140		151,257	
International Phone Calls (Minutes per Capita)	22/140	20/140	242	250
Printed Publications Trade (USD per Capita)	34/135	7/135	\$16	\$124
<b>People</b>	24/116		—	
Migrants (% of Population)	87/139	43/140	4%	10%
Tourists Dep./Arr. Per Capita	23/93	23/136	0.7	1.0
International Students (% of Tertiary Education Enrollment)	47/130	20/104	6%	7%

## Summary

Norway ranks 11<sup>th</sup> on the overall connectedness index and has maintained a remarkably stable level of connectedness since 2005 despite external macroeconomic turbulence. Norway's connectedness profile is characterized by higher breadth (9<sup>th</sup> worldwide) than depth (29<sup>th</sup>). Among Norway's pillar depth scores, it ranks 10<sup>th</sup> on the capital pillar but only 94<sup>th</sup> on the trade pillar. This reflects its very large outward FDI and portfolio investment flows and stocks, contrasted with its very low merchandise imports depth (126<sup>th</sup> out of 140 countries). Norway also ranks 9<sup>th</sup> globally on capital pillar breadth. Norway's connectedness profile reflects, in part, the investment of its petroleum income abroad across a diversified set of countries.

## Rooted Map

Norway's Merchandise Exports, 2011



### Top Export Destinations

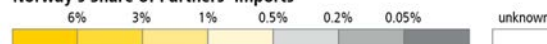
1. U.K. (27%)
2. Netherlands (12%)
3. Germany (11%)
4. France (7%)
5. Sweden (7%)

6. U.S.A. (6%)
7. Denmark (3%)
8. Belgium (3%)
9. Italy (2%)
10. China (2%)

### Major Export Products

Petroleum and petroleum products, machinery and equipment, metals, chemicals, ships, fish

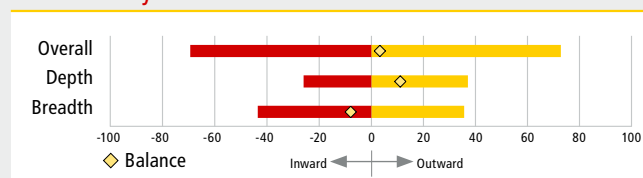
### Norway's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	26/140		—	
Merchandise Trade	48/140	13/140	83%	67%
<b>Capital</b>	9/67		—	
FDI Stock	15/41	12/46	63%	71%
FDI Flows	12/38	10/41	74%	56%
Portfolio Equity Stock	7/66	—	49%	—
<b>Information</b>	41/101		—	
International Phone Calls	29/101	57/101	88%	83%
Printed Publications Trade	58/135	46/135	94%	92%
<b>People</b>	12/124		—	
Migrants	8/139	12/139	61%	43%
Tourists Departures/Arrivals	—	39/107	—	96%
International Students	—	11/93	—	57%

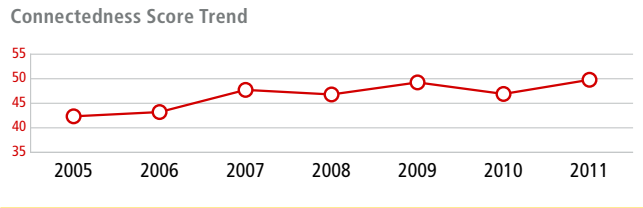
## Directionality



OMAN

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	53/140	58/140	5	50/100	47/100	3
Depth	48/140	47/140	-1	27/50	26/50	1
Breadth	67/140	79/140	12	23/50	21/50	2
Trade Pillar	53/140	53/140	0	55/100	54/100	1
Capital Pillar	-	-	-	-	-	-
Information Pillar	70/101	75/101	5	49/100	45/100	4
People Pillar	39/106	40/106	1	57/100	57/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	43/140		-	
Merchandise Trade (% of GDP)	20/140	76/140	65%	33%
Services Trade (% of GDP)	113/139	48/139	2%	9%

Capital	49/122		-	
FDI Stock (% of GDP)	68/132	99/140	5%	21%
FDI Flows (% of GFCF)	53/133	102/140	3%	7%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	38/129	37/126	0%	0%

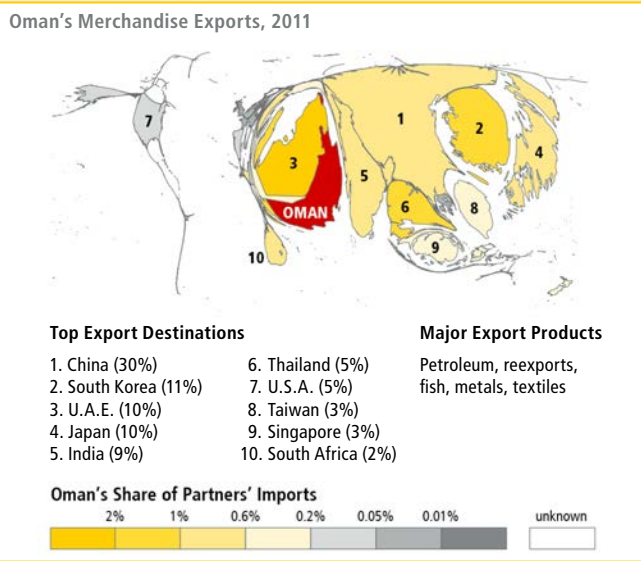
Information	47/140		-	
Internet Bandwidth (Bits per Second per Internet User)	78/140		11,648	
International Phone Calls (Minutes per Capita)	27/140	19/140	210	252
Printed Publications Trade (USD per Capita)	85/135	66/135	\$1	\$8

People	48/116			
Migrants (% of Population)	132/139	10/140	1%	30%
Tourists Dep./Arr. Per Capita	25/93	43/136	0.6	0.5
International Students (% of Tertiary Education Enrollment)	43/130	52/104	6%	2%

Summary

Oman ranks 53<sup>rd</sup> out of 140 countries on overall global connectedness, 9<sup>th</sup> among countries in the Middle East & North Africa. Although Oman has relatively similar ranks across pillars, its highest position is on the people pillar, on which it ranks 39<sup>th</sup> out of 106 countries globally (6<sup>th</sup> within its region). Oman ranks 10<sup>th</sup> globally on the depth of its inward migration, behind 5 other countries within the Middle East & North Africa (reflecting generally high scores on this component across the region). After rising from 2005 to 2007, Oman’s connectedness has remained fairly stable over the period from 2007 to 2011.

Rooted Map



Breadth

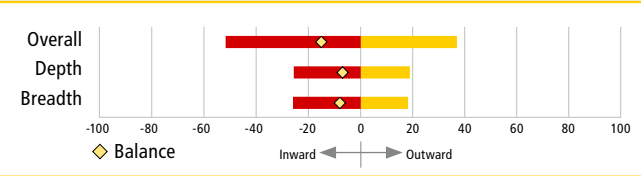
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	71/140		-	
Merchandise Trade	85/140	55/140	15%	37%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	84/101		-	
International Phone Calls	73/101	93/101	31%	46%
Printed Publications Trade	82/135	74/135	29%	33%

People	54/124		-	
Migrants	95/139	75/139	66%	11%
Tourists Departures/Arrivals	-	40/107	-	25%
International Students	-	48/93	-	50%

Directionality





# PAKISTAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	102/140	98/140	-4	34/100	36/100	-2
<b>Depth</b>	132/140	130/140	-2	5/50	6/50	-1
<b>Breadth</b>	45/140	44/140	-1	29/50	29/50	0
<b>Trade Pillar</b>	90/140	82/140	-8	43/100	45/100	-2
<b>Capital Pillar</b>	64/66	63/66	-1	17/100	19/100	-2
<b>Information Pillar</b>	68/101	67/101	-1	50/100	51/100	-1
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

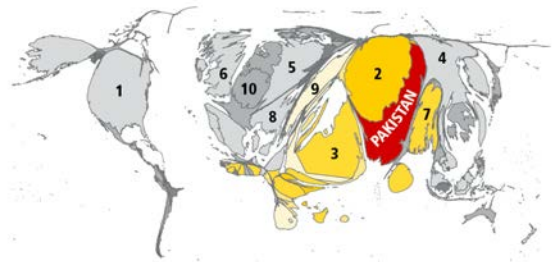
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	136/140		—	
Merchandise Trade (% of GDP)	128/140	121/140	12%	21%
Services Trade (% of GDP)	125/139	125/139	2%	3%
<b>Capital</b>	105/122		—	
FDI Stock (% of GDP)	107/132	125/140	1%	10%
FDI Flows (% of GFCF)	107/133	104/140	0%	7%
Portfolio Equity Stock (% of GDP)	83/102	68/97	0%	1%
Portfolio Equity Flows (% of GDP)	73/129	54/126	0%	0%
<b>Information</b>	108/140		—	
Internet Bandwidth (Bits per Second per Internet User)	106/140		4,752	
International Phone Calls (Minutes per Capita)	90/140	91/140	18	40
Printed Publications Trade (USD per Capita)	123/135	132/135	\$0	\$0
<b>People</b>	.		.	
Migrants (% of Population)	112/139	86/140	2%	2%
Tourists Dep./Arr. Per Capita	.	131/136	.	0.0
International Students (% of Tertiary Education Enrollment)	74/130	.	4%	.

## Summary

Pakistan ranks 102<sup>nd</sup> out of 140 countries on this year's DHL Global Connectedness Index and 8<sup>th</sup> out of the 12<sup>th</sup> countries in South & Central Asia. It has higher breadth (45<sup>th</sup> worldwide) than depth (132<sup>nd</sup>), which in part reflects limited integration within its region and especially its limited trade and investment ties with India due to the conflict between those two countries, the largest two in the region. Pakistan's connectedness has generally remained stable since 2005, though it did decline slightly over the past year, a decline that was driven primarily by the trade pillar.

## Rooted Map

### Pakistan's Merchandise Exports, 2011



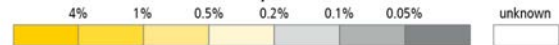
#### Top Export Destinations

1. U.S.A. (15%)
2. Afghanistan (10%)
3. U.A.E. (8%)
4. China (7%)
5. Germany (5%)
6. U.K. (5%)
7. Bangladesh (4%)
8. Italy (3%)
9. Turkey (3%)
10. Belgium (3%)

#### Major Export Products

Textiles (garments, bed linen, cotton cloth, yarn), rice, leather goods, sports goods, chemicals, manufactures, carpets and rugs

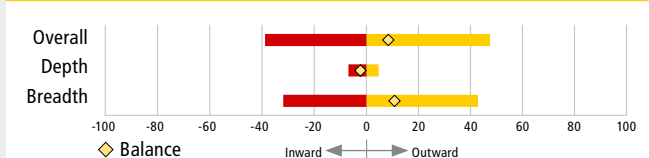
#### Pakistan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	23/140		—	
Merchandise Trade	11/140	45/140	20%	5%
<b>Capital</b>	58/67		—	
FDI Stock	.	32/46	.	0%
FDI Flows	.	.	.	.
Portfolio Equity Stock	59/66	—	14%	—
<b>Information</b>	34/101		—	
International Phone Calls	11/101	72/101	4%	0%
Printed Publications Trade	39/135	40/135	8%	13%
<b>People</b>	34/124		—	
Migrants	57/139	4/139	42%	62%
Tourists Departures/Arrivals	—	54/107	—	19%
International Students	—	.	—	.

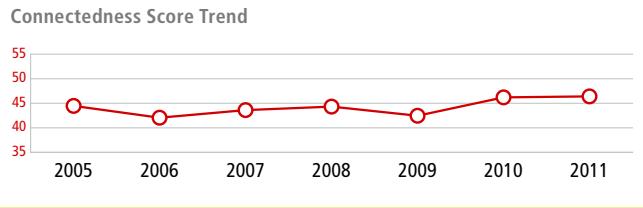
## Directionality



# PANAMA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	64/140	62/140	-2	46/100	46/100	0
Depth	14/140	17/140	3	34/50	33/50	1
Breadth	116/140	112/140	-4	12/50	13/50	-1
Trade Pillar	66/140	63/140	-3	51/100	50/100	1
Capital Pillar	42/66	45/66	3	41/100	42/100	-1
Information Pillar	20/101	21/101	1	74/100	72/100	2
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	16/140		—	
Merchandise Trade (% of GDP)	37/140	18/140	46%	71%
Services Trade (% of GDP)	13/139	36/139	22%	11%

Capital	21/122		—	
FDI Stock (% of GDP)	9/132	21/140	110%	75%
FDI Flows (% of GFCF)	8/133	32/140	32%	28%
Portfolio Equity Stock (% of GDP)	60/102	.	1%	.
Portfolio Equity Flows (% of GDP)	53/129	75/126	0%	0%

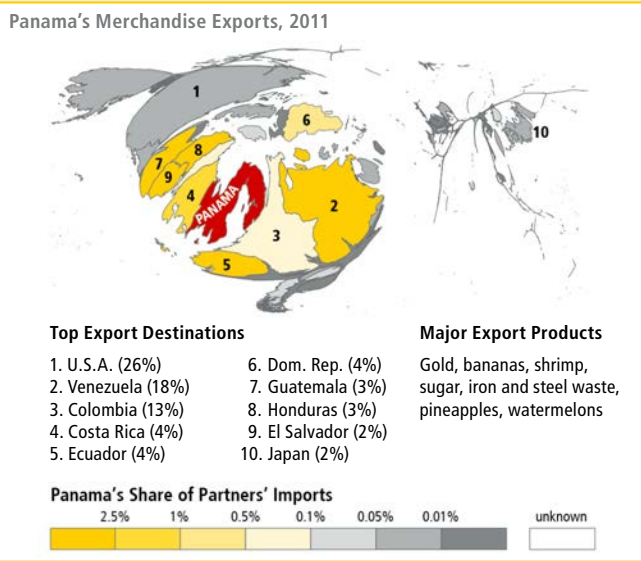
Information	52/140		—	
Internet Bandwidth (Bits per Second per Internet User)	36/140		44,121	
International Phone Calls (Minutes per Capita)	74/140	77/140	29	62
Printed Publications Trade (USD per Capita)	48/135	34/135	\$8	\$29

People	66/116			
Migrants (% of Population)	59/139	74/140	6%	3%
Tourists Dep./Arr. Per Capita	64/93	57/136	0.1	0.4
International Students (% of Tertiary Education Enrollment)	100/130	.	2%	.

## Summary

Panama ranks 64<sup>th</sup> on this year’s DHL Global Connectedness Index and 4<sup>th</sup> within its region, which includes Central and South America as well as the Caribbean. Panama has much higher depth (14<sup>th</sup> out of 140 countries) than breadth (116<sup>th</sup>). It is the top ranked country in its region on the information pillar and ranks 20<sup>th</sup> globally on this pillar. Panama’s global connectedness has remained fairly stable since 2005 with the exception of a notable increase from 2009 to 2010. Panama serves as an import hub for its region with more of its imports coming from outside of the region and more of its exports going to countries within the region.

## Rooted Map



## Breadth

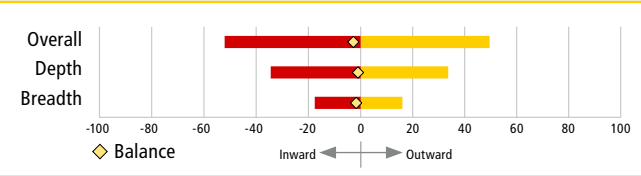
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	120/140		—	
Merchandise Trade	133/140	105/140	65%	3%

Capital	52/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	52/66	—	35%	—

Information	10/101		—	
International Phone Calls	5/101	3/101	53%	10%
Printed Publications Trade	104/135	73/135	88%	39%

People	.		—	
Migrants	75/139	49/139	9%	63%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

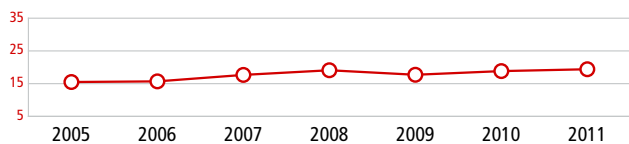


# PARAGUAY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	135/140	134/140	-1	19/100	19/100	0
<b>Depth</b>	104/140	102/140	-2	14/50	14/50	0
<b>Breadth</b>	137/140	137/140	0	5/50	5/50	0
<b>Trade Pillar</b>	118/140	119/140	1	34/100	32/100	2
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	91/101	89/101	-2	32/100	34/100	-2
<b>People Pillar</b>	105/106	105/106	0	18/100	18/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	57/140		-	
Merchandise Trade (% of GDP)	83/140	30/140	26%	58%
Services Trade (% of GDP)	76/139	126/139	6%	3%

<b>Capital</b>	117/122		-	
FDI Stock (% of GDP)	97/132	113/140	1%	15%
FDI Flows (% of GFCF)	114/133	112/140	0%	6%
Portfolio Equity Stock (% of GDP)	95/102	-	0%	-
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

<b>Information</b>	97/140		-	
Internet Bandwidth (Bits per Second per Internet User)	85/140		9,482	
International Phone Calls (Minutes per Capita)	101/140	86/140	14	50
Printed Publications Trade (USD per Capita)	111/135	93/135	\$0	\$3

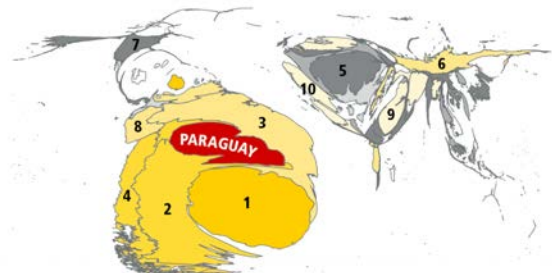
<b>People</b>	91/116		-	
Migrants (% of Population)	52/139	85/140	7%	2%
Tourists Dep./Arr. Per Capita	79/93	97/136	0.0	0.1
International Students (% of Tertiary Education Enrollment)	114/130	-	1%	-

## Summary

Paraguay ranks 135<sup>th</sup> on this year's DHL Global Connectedness Index (out of 140 countries globally) and last within the South & Central America & Caribbean region. It has higher depth (104<sup>th</sup>) than breadth (137<sup>th</sup>), and its highest depth is within the trade pillar on which it ranks 57<sup>th</sup>. Paraguay has particularly high depth with respect to its merchandise imports, with merchandise imports adding up to 58% of its GDP. Paraguay also has a relatively high rank (52<sup>nd</sup>) on outward migration. Its connectedness has generally remained stable since 2005, increasing modestly over this period.

## Rooted Map

### Paraguay's Merchandise Exports, 2011



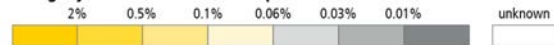
#### Top Export Destinations

1. Uruguay (19%)
2. Argentina (18%)
3. Brazil (14%)
4. Chile (9%)
5. Switzerland (5%)
6. Russia (4%)
7. U.S.A. (3%)
8. Peru (2%)
9. Israel (2%)
10. Spain (2%)

#### Major Export Products

Soybeans, feed, cotton, meat, edible oils, electricity, wood, leather

#### Paraguay's Share of Partners' Imports



## Breadth

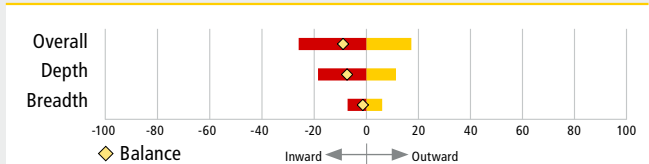
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	127/140		-	
Merchandise Trade	128/140	114/140	67%	52%

<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	92/101		-	
International Phone Calls	88/101	82/101	73%	63%
Printed Publications Trade	81/135	112/135	38%	59%

<b>People</b>	123/124		-	
Migrants	130/139	120/139	87%	89%
Tourists Departures/Arrivals	-	104/107	-	90%
International Students	-	-	-	-

## Directionality



# PERU

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	65/140	63/140	-2	46/100	46/100	0
<b>Depth</b>	100/140	100/140	0	15/50	15/50	0
<b>Breadth</b>	38/140	39/140	1	31/50	31/50	0
<b>Trade Pillar</b>	80/140	80/140	0	47/100	45/100	2
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	51/101	52/101	1	59/100	56/100	3
<b>People Pillar</b>	73/106	74/106	1	41/100	41/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	120/140		-	
Merchandise Trade (% of GDP)	79/140	118/140	27%	22%
Services Trade (% of GDP)	110/139	123/139	3%	4%

<b>Capital</b>	39/122		-	
FDI Stock (% of GDP)	89/132	84/140	2%	28%
FDI Flows (% of GFCF)	84/133	45/140	1%	21%
Portfolio Equity Stock (% of GDP)	36/102	24/97	10%	16%
Portfolio Equity Flows (% of GDP)	23/129	63/126	1%	0%

<b>Information</b>	93/140		-	
Internet Bandwidth (Bits per Second per Internet User)	86/140		9,319	
International Phone Calls (Minutes per Capita)	100/140	87/140	14	49
Printed Publications Trade (USD per Capita)	66/135	87/135	\$3	\$4

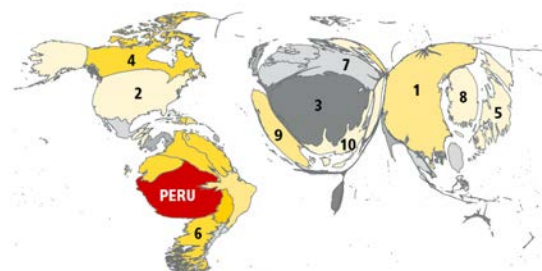
<b>People</b>	104/116			
Migrants (% of Population)	103/139	137/140	3%	0%
Tourists Dep./Arr. Per Capita	68/93	92/136	0.1	0.1
International Students (% of Tertiary Education Enrollment)	109/130	-	1%	-

## Summary

Peru ranks 65<sup>th</sup> out of 140 countries worldwide on this year's DHL Global Connectedness Index and ranks 3<sup>rd</sup> among South American countries. Peru has higher breadth (38<sup>th</sup> worldwide) than depth (100<sup>th</sup>). This pattern holds true for Peru's merchandise exports, over 80% of which are destined to countries outside of Central and South America and the Caribbean. This reflects the global demand pattern for Peru's largest exports, which come from its mining industry (gold and gold-related products accounted for 39% of exports in 2011). After rising prior to the onset of the global financial crisis, Peru's global connectedness has remained fairly stable over the past five years.

## Rooted Map

Peru's Merchandise Exports, 2011



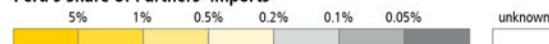
Top Export Destinations

1. China (15%)
2. U.S.A. (13%)
3. Switzerland (13%)
4. Canada (9%)
5. Japan (5%)
6. Chile (4%)
7. Germany (4%)
8. South Korea (4%)
9. Spain (4%)
10. Italy (3%)

Major Export Products

Copper, gold, lead, zinc, tin, iron ore, molybdenum, silver; crude petroleum and petroleum products, natural gas; coffee

Peru's Share of Partners' Imports



## Breadth

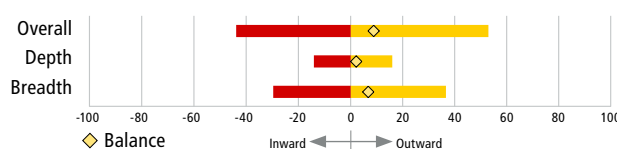
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	40/140		-	
Merchandise Trade	30/140	53/140	17%	27%

<b>Capital</b>	-		-	
FDI Stock	-	27/46	-	19%
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	29/101		-	
International Phone Calls	43/101	12/101	38%	9%
Printed Publications Trade	97/135	29/135	89%	24%

<b>People</b>	39/124		-	
Migrants	34/139	36/139	27%	43%
Tourists Departures/Arrivals	-	56/107	-	56%
International Students	-	-	-	-

## Directionality



# PHILIPPINES

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	69/140	81/140	12	43/100	40/100	3
<b>Depth</b>	111/140	116/140	5	13/50	11/50	2
<b>Breadth</b>	40/140	46/140	6	30/50	29/50	1
<b>Trade Pillar</b>	49/140	55/140	6	56/100	53/100	3
<b>Capital Pillar</b>	63/66	65/66	2	18/100	14/100	4
<b>Information Pillar</b>	32/101	31/101	-1	67/100	66/100	1
<b>People Pillar</b>	63/106	63/106	0	46/100	46/100	0

Connectedness Score Trend



## Depth

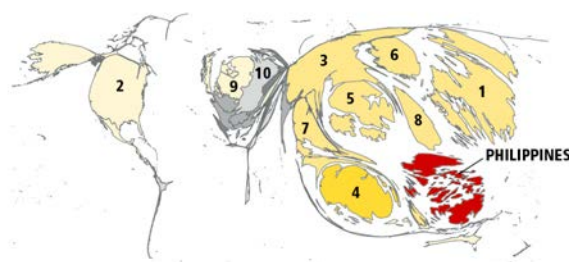
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	98/140		—	
Merchandise Trade (% of GDP)	95/140	91/140	23%	30%
Services Trade (% of GDP)	66/139	96/139	7%	6%
<b>Capital</b>	91/122		—	
FDI Stock (% of GDP)	79/132	120/140	3%	12%
FDI Flows (% of GFCF)	80/133	117/140	1%	5%
Portfolio Equity Stock (% of GDP)	81/102	48/97	0%	4%
Portfolio Equity Flows (% of GDP)	67/129	55/126	0%	0%
<b>Information</b>	95/140		—	
Internet Bandwidth (Bits per Second per Internet User)	74/140		12,360	
International Phone Calls (Minutes per Capita)	105/140	72/140	10	75
Printed Publications Trade (USD per Capita)	107/135	111/135	\$0	\$1
<b>People</b>	110/116		—	
Migrants (% of Population)	84/139	123/140	4%	0%
Tourists Dep./Arr. Per Capita	83/93	106/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	126/130	96/104	0%	0%

## Summary

The Philippines' overall connectedness ranks the 69<sup>th</sup> on this year's DHL Global Connectedness Index, up 12 places from its 81<sup>st</sup> rank last year. It also ranks 13<sup>th</sup> this year out of 19 countries in the East Asia & Pacific region. The Philippines has higher breadth (40<sup>th</sup>) than depth (111<sup>th</sup>). Its highest pillar rank is on the information pillar, where it ranks 32<sup>nd</sup> out of 101 countries. The Philippines' connectedness declined from 2007 to 2010 and then began recovering in 2011, though its connectedness remained lower in 2011 than it was between 2005 and 2011. Its increase from 2010 to 2011 was driven by the trade and capital pillars.

## Rooted Map

Philippines's Merchandise Exports, 2011



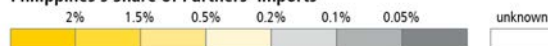
### Top Export Destinations

1. Japan (19%)
2. U.S.A. (15%)
3. China (13%)
4. Singapore (9%)
5. Hong Kong (8%)
6. South Korea (5%)
7. Thailand (4%)
8. Taiwan (4%)
9. Netherlands (4%)
10. Germany (4%)

### Major Export Products

Semiconductors and electronic products, transport equipment, garments, copper products, petroleum products, coconut oil, fruits

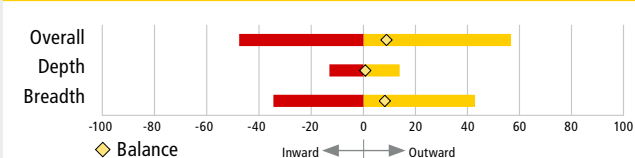
### Philippines's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	29/140		—	
Merchandise Trade	25/140	40/140	67%	64%
<b>Capital</b>	63/67		—	
FDI Stock	·	·	·	·
FDI Flows	·	·	·	·
Portfolio Equity Stock	62/66	—	8%	—
<b>Information</b>	6/101		—	
International Phone Calls	13/101	18/101	50%	42%
Printed Publications Trade	32/135	27/135	64%	40%
<b>People</b>	19/124		—	
Migrants	24/139	30/139	23%	48%
Tourists Departures/Arrivals	—	38/107	—	64%
International Students	—	14/93	—	62%

## Directionality



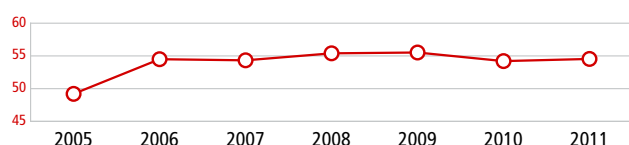


# POLAND

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	39/140	39/140	0	55/100	54/100	1
<b>Depth</b>	50/140	51/140	1	27/50	26/50	1
<b>Breadth</b>	47/140	47/140	0	28/50	28/50	0
<b>Trade Pillar</b>	52/140	51/140	-1	56/100	55/100	1
<b>Capital Pillar</b>	35/66	33/66	-2	48/100	48/100	0
<b>Information Pillar</b>	19/101	19/101	0	75/100	74/100	1
<b>People Pillar</b>	30/106	30/106	0	63/100	63/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	50/140		—	
Merchandise Trade (% of GDP)	51/140	57/140	36%	40%
Services Trade (% of GDP)	70/139	92/139	7%	6%

<b>Capital</b>	35/122		—	
FDI Stock (% of GDP)	49/132	60/140	10%	38%
FDI Flows (% of GFCF)	41/133	69/140	6%	13%
Portfolio Equity Stock (% of GDP)	54/102	43/97	1%	5%
Portfolio Equity Flows (% of GDP)	55/129	20/126	0%	1%

<b>Information</b>	44/140		—	
Internet Bandwidth (Bits per Second per Internet User)	37/140		40,244	
International Phone Calls (Minutes per Capita)	73/140	46/140	32	134
Printed Publications Trade (USD per Capita)	32/135	64/135	\$20	\$8

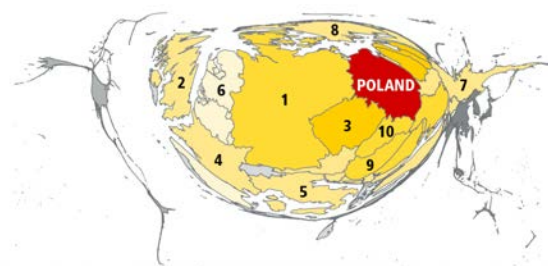
<b>People</b>	78/116			
Migrants (% of Population)	68/139	90/140	5%	2%
Tourists Dep./Arr. Per Capita	53/93	62/136	0.2	0.3
International Students (% of Tertiary Education Enrollment)	105/130	76/104	1%	1%

## Summary

After a sharp increase in 2005, Poland's connectedness score has remained stable since 2006. Its rank remains unchanged versus last year at 39<sup>th</sup> out of the 140 countries covered in this year's index. Poland's strongest pillar is the information pillar, on which it ranks 19<sup>th</sup> globally and 14<sup>th</sup> within Europe. Poland's connectedness generally exhibits a high degree of regionalization, with more than 90% of many types of flows remaining within Europe. One notable exception to this pattern is Poland's outward migration on which Poland ranks 1<sup>st</sup> worldwide on breadth, with half of Polish emigrants residing outside of Europe.

## Rooted Map

Poland's Merchandise Exports, 2011



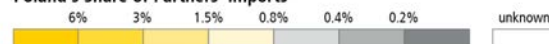
### Top Export Destinations

1. Germany (27%)
2. U.K. (7%)
3. Czech Rep. (6%)
4. France (6%)
5. Italy (6%)
6. Netherlands (5%)
7. Russia (4%)
8. Sweden (3%)
9. Hungary (3%)
10. Slovakia (3%)

### Major Export Products

Machinery and transport equipment (37.8%), intermediate manufactured goods, miscellaneous manufactured goods

### Poland's Share of Partners' Imports



## Breadth

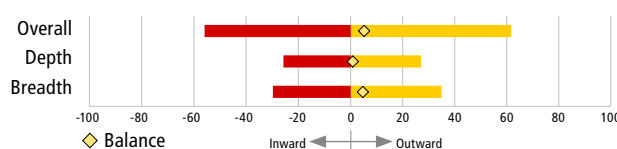
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	58/140		—	
Merchandise Trade	57/140	67/140	91%	86%

<b>Capital</b>	40/67		—	
FDI Stock	19/41	13/46	91%	92%
FDI Flows	20/38	19/41	75%	92%
Portfolio Equity Stock	54/66	—	88%	—

<b>Information</b>	13/101		—	
International Phone Calls	15/101	50/101	96%	88%
Printed Publications Trade	17/135	9/135	96%	84%

<b>People</b>	10/124		—	
Migrants	1/139	57/139	53%	96%
Tourists Departures/Arrivals	—	9/107	—	86%
International Students	—	18/93	—	70%

## Directionality



# PORTUGAL

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	37/140	33/140	-4	55/100	58/100	-3
<b>Depth</b>	52/140	43/140	-9	26/50	27/50	-1
<b>Breadth</b>	42/140	40/140	-2	29/50	31/50	-2
<b>Trade Pillar</b>	68/140	72/140	4	49/100	47/100	2
<b>Capital Pillar</b>	28/66	21/66	-7	54/100	62/100	-8
<b>Information Pillar</b>	30/101	28/101	-2	68/100	68/100	0
<b>People Pillar</b>	21/106	21/106	0	72/100	72/100	0

Connectedness Score Trend



## Depth

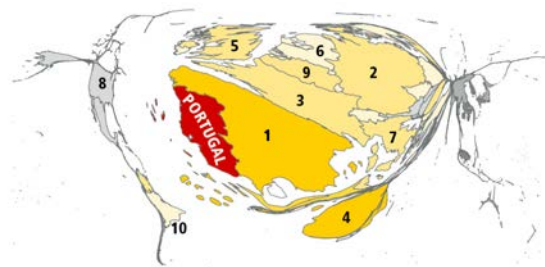
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	75/140		—	
Merchandise Trade (% of GDP)	85/140	75/140	25%	34%
Services Trade (% of GDP)	44/139	85/139	11%	7%
<b>Capital</b>	47/122		—	
FDI Stock (% of GDP)	28/132	48/140	29%	46%
FDI Flows (% of GFCF)	47/133	74/140	5%	12%
Portfolio Equity Stock (% of GDP)	34/102	22/97	12%	18%
Portfolio Equity Flows (% of GDP)	123/129	126/126	0%	-1%
<b>Information</b>	25/140		—	
Internet Bandwidth (Bits per Second per Internet User)	10/140		135,332	
International Phone Calls (Minutes per Capita)	46/140	39/140	111	158
Printed Publications Trade (USD per Capita)	43/135	36/135	\$9	\$23
<b>People</b>	17/116		—	
Migrants (% of Population)	14/139	48/140	16%	9%
Tourists Dep./Arr. Per Capita	2/93	18/136	2.0	1.2
International Students (% of Tertiary Education Enrollment)	75/130	50/104	3%	2%

## Summary

Portugal ranks 37<sup>th</sup> on this year's DHL Global Connectedness Index, down from 33<sup>rd</sup> last year. Its connectedness peaked in 2007 and since has fallen back to its 2005 level. Portugal ranks among the top 30 countries worldwide on all of the pillars except trade, on which it ranks 68<sup>th</sup> globally and 30<sup>th</sup> within Europe. The decline in Portugal's connectedness from 2010 to 2011 was driven by the capital pillar. Portugal's falling capital connectedness, however, was offset partially by an increase on the trade pillar over the past year.

## Rooted Map

Portugal's Merchandise Exports, 2011



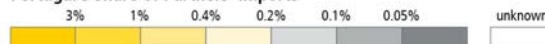
### Top Export Destinations

- Spain (26%)
- Germany (14%)
- France (12%)
- Angola (6%)
- U.K. (5%)
- Netherlands (4%)
- Italy (4%)
- U.S.A. (3%)
- Belgium (3%)
- Brazil (1%)

### Major Export Products

Agricultural products, food products, wine, oil products, chemical products, plastics and rubber, hides, leather, wood and cork

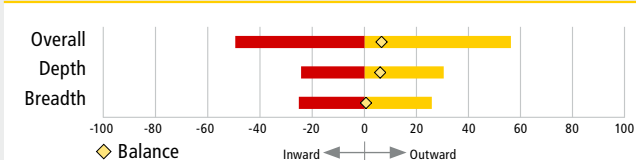
### Portugal's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	60/140		—	
Merchandise Trade	53/140	75/140	78%	76%
<b>Capital</b>	22/67		—	
FDI Stock	24/41	20/46	82%	84%
FDI Flows	27/38	14/41	87%	81%
Portfolio Equity Stock	19/66	—	68%	—
<b>Information</b>	52/101		—	
International Phone Calls	41/101	62/101	63%	81%
Printed Publications Trade	51/135	47/135	47%	92%
<b>People</b>	36/124		—	
Migrants	48/139	89/139	59%	30%
Tourists Departures/Arrivals	—	8/107	—	92%
International Students	—	50/93	—	20%

## Directionality

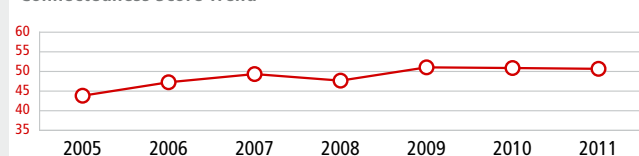


# QATAR

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	50/140	47/140	-3	51/100	51/100	0
<b>Depth</b>	63/140	59/140	-4	24/50	25/50	-1
<b>Breadth</b>	54/140	55/140	1	27/50	26/50	1
<b>Trade Pillar</b>	72/140	64/140	-8	49/100	50/100	-1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	42/101	44/101	2	63/100	60/100	3
<b>People Pillar</b>	33/106	33/106	0	62/100	62/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	101/140		—	
Merchandise Trade (% of GDP)	26/140	135/140	56%	15%
Services Trade (% of GDP)	124/139	115/139	2%	4%

<b>Capital</b>	53/122		—	
FDI Stock (% of GDP)	47/132	105/140	11%	18%
FDI Flows (% of GFCF)	36/133	90/140	8%	9%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	5/129	124/126	9%	-1%

<b>Information</b>	26/140		—	
Internet Bandwidth (Bits per Second per Internet User)	55/140		22,333	
International Phone Calls (Minutes per Capita)	5/140	16/140	779	273
Printed Publications Trade (USD per Capita)	80/135	29/135	\$1	\$35

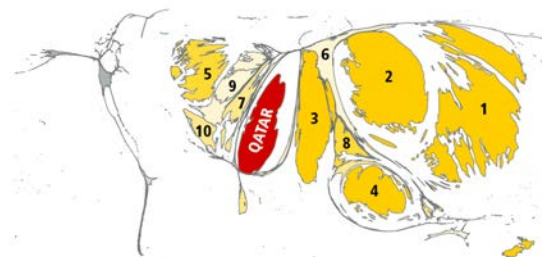
<b>People</b>	11/116			
Migrants (% of Population)	109/139	2/140	2%	74%
Tourists Dep./Arr. Per Capita	.	22/136	.	1.1
International Students (% of Tertiary Education Enrollment)	10/130	3/104	20%	39%

## Summary

Qatar holds the 50<sup>th</sup> rank on this year's DHL Global Connectedness Index with similar ranks on both depth and breadth as well as inward and outward connectedness. It ranks 8<sup>th</sup> among countries in the Middle East & North Africa. Qatar's connectedness is highest on the people pillar, ranking 33<sup>rd</sup> worldwide and the 4<sup>th</sup> in its region. This reflects Qatar's 2<sup>nd</sup> rank worldwide on inward migration in light of its substantial employment of foreign labor. Nonetheless, Qatar's inward migration is very narrowly focused in terms of origin countries, ranking 136<sup>th</sup> worldwide on breadth for this component. Qatar's connectedness score rose modestly over the period from 2005 to 2009 and has remained stable over the past two years.

## Rooted Map

Qatar's Merchandise Exports, 2011



Top Export Destinations

1. Japan (29%)
2. South Korea (20%)
3. India (11%)
4. Singapore (7%)
5. U.K. (7%)
6. China (4%)
7. Italy (3%)
8. Thailand (2%)
9. Belgium (2%)
10. Spain (2%)

Major Export Products

Liquefied natural gas (LNG), petroleum products, fertilizers, steel

Qatar's Share of Partners' Imports



## Breadth

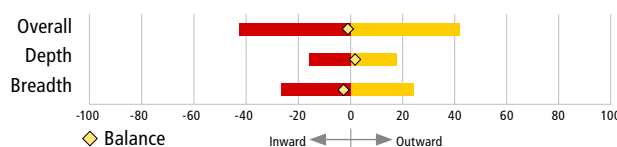
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	48/140		—	
Merchandise Trade	73/140	28/140	1%	30%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	69/101		—	
International Phone Calls	70/101	81/101	55%	47%
Printed Publications Trade	35/135	28/135	48%	23%

<b>People</b>	78/124		—	
Migrants	68/139	136/139	64%	0%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	47/93	—	69%

## Directionality

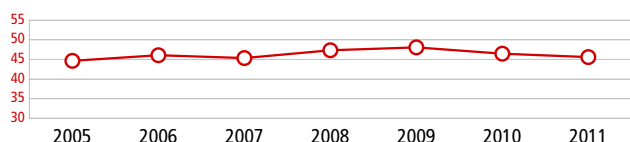


# ROMANIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	66/140	60/140	-6	46/100	46/100	0
<b>Depth</b>	81/140	74/140	-7	20/50	21/50	-1
<b>Breadth</b>	56/140	56/140	0	25/50	26/50	-1
<b>Trade Pillar</b>	61/140	62/140	1	52/100	50/100	2
<b>Capital Pillar</b>	62/66	60/66	-2	20/100	24/100	-4
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	32/106	32/106	0	62/100	62/100	0

Connectedness Score Trend



## Depth

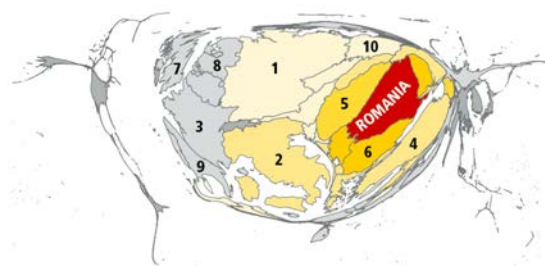
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	58/140		—	
Merchandise Trade (% of GDP)	61/140	60/140	33%	40%
Services Trade (% of GDP)	82/139	94/139	5%	6%
<b>Capital</b>	97/122		—	
FDI Stock (% of GDP)	103/132	61/140	1%	38%
FDI Flows (% of GFCF)	119/133	94/140	0%	9%
Portfolio Equity Stock (% of GDP)	62/102	72/97	1%	1%
Portfolio Equity Flows (% of GDP)	57/129	100/126	0%	0%
<b>Information</b>	41/140		—	
Internet Bandwidth (Bits per Second per Internet User)	13/140		114,451	
International Phone Calls (Minutes per Capita)	64/140	55/140	40	106
Printed Publications Trade (USD per Capita)	61/135	77/135	\$3	\$6
<b>People</b>	69/116		—	
Migrants (% of Population)	74/139	122/140	5%	1%
Tourists Dep./Arr. Per Capita	29/93	60/136	0.5	0.4
International Students (% of Tertiary Education Enrollment)	84/130	67/104	3%	1%

## Summary

Romania ranks 66<sup>th</sup> out of 140 countries worldwide on this year's DHL Global Connectedness Index, down 6 positions from its 60<sup>th</sup> rank last year. It ranks 32<sup>nd</sup> among the 40 European countries covered in this year's index. Romania's strongest pillar is the people pillar on which it ranks 32<sup>nd</sup> globally and 25<sup>th</sup> in Europe, a position that is primarily reflective of its strong breadth on that pillar. Romania also has remarkably high international internet connectivity, ranking 13<sup>th</sup> worldwide on international internet bandwidth per internet user. Romania's connectedness has generally been stable since 2005 but has declined modestly over the past two years.

## Rooted Map

Romania's Merchandise Exports, 2011



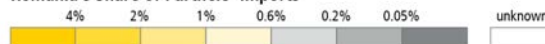
Top Export Destinations

1. Germany (19%)
2. Italy (13%)
3. France (8%)
4. Turkey (6%)
5. Hungary (6%)
6. Bulgaria (4%)
7. U.K. (3%)
8. Netherlands (3%)
9. Spain (2%)
10. Poland (2%)

Major Export Products

Machinery and equipment, metals and metal products, textiles and footwear, chemicals, agricultural products, minerals and fuels

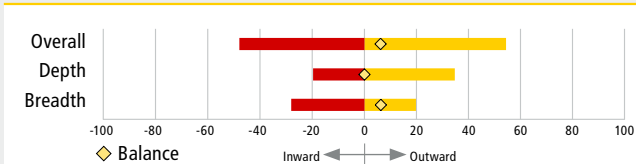
Romania's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	64/140		—	
Merchandise Trade	55/140	83/140	81%	81%
<b>Capital</b>	57/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	56/66	—	99%	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	33/135	33/135	95%	91%
<b>People</b>	17/124		—	
Migrants	28/139	40/139	57%	86%
Tourists Departures/Arrivals	—	12/107	—	82%
International Students	—	32/93	—	59%

## Directionality

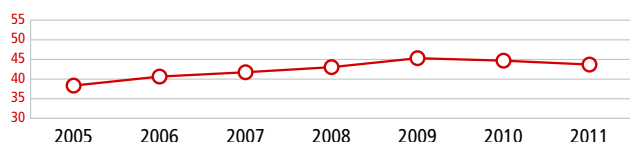


# RUSSIAN FEDERATION

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	68/140	66/140	-2	44/100	45/100	-1
<b>Depth</b>	92/140	91/140	-1	17/50	17/50	0
<b>Breadth</b>	53/140	50/140	-3	27/50	28/50	-1
<b>Trade Pillar</b>	55/140	50/140	-5	55/100	55/100	0
<b>Capital Pillar</b>	51/66	48/66	-3	36/100	39/100	-3
<b>Information Pillar</b>	71/101	70/101	-1	47/100	47/100	0
<b>People Pillar</b>	62/106	62/106	0	47/100	47/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	121/140		—	
Merchandise Trade (% of GDP)	74/140	128/140	28%	17%
Services Trade (% of GDP)	108/139	109/139	3%	5%

<b>Capital</b>	47/122		—	
FDI Stock (% of GDP)	33/132	91/140	20%	25%
FDI Flows (% of GFCF)	20/133	64/140	17%	14%
Portfolio Equity Stock (% of GDP)	71/102	30/97	0%	13%
Portfolio Equity Flows (% of GDP)	59/129	118/126	0%	0%

<b>Information</b>	80/140		—	
Internet Bandwidth (Bits per Second per Internet User)	44/140		31,911	
International Phone Calls (Minutes per Capita)	88/140	108/140	20	23
Printed Publications Trade (USD per Capita)	73/135	76/135	\$2	\$6

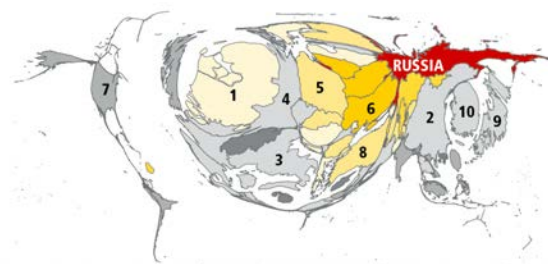
<b>People</b>	64/116			
Migrants (% of Population)	49/139	47/140	8%	9%
Tourists Dep./Arr. Per Capita	44/93	84/136	0.3	0.1
International Students (% of Tertiary Education Enrollment)	125/130	66/104	1%	1%

## Summary

The Russian Federation ranks 68<sup>th</sup> on this year's DHL Global Connectedness Index. It has higher breadth (53<sup>rd</sup>) than depth (92<sup>nd</sup>), which is typical of the pattern observed among large countries. The breadth of the Russian Federation's merchandise trade is particularly noteworthy, ranking 14<sup>th</sup> overall and 11<sup>th</sup> with respect to imports only. The Russian Federation's global connectedness rose steadily from 2005 to 2009 before beginning a period of small declines. The Russian Federation fell 2 positions in the rankings from 2010 to 2011 due primarily to the trade and capital pillars.

## Rooted Map

Russia's Merchandise Exports, 2011



### Top Export Destinations

1. Netherlands (15%)
2. China (8%)
3. Italy (7%)
4. Germany (6%)
5. Poland (5%)
6. Ukraine (4%)
7. U.S.A. (4%)
8. Turkey (4%)
9. Japan (3%)
10. South Korea (3%)

### Major Export Products

Petroleum and petroleum products, natural gas, metals, wood and wood products, chemicals, and a wide variety of civilian and military manufactures

### Russia's Share of Partners' Imports



## Breadth

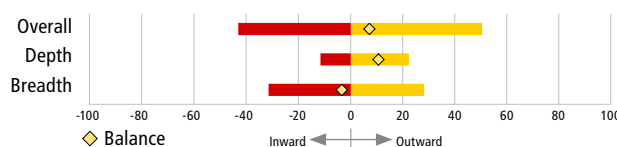
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	14/140		—	
Merchandise Trade	29/140	11/140	65%	55%

<b>Capital</b>	48/67		—	
FDI Stock	20/41	30/46	74%	86%
FDI Flows	18/38	·	80%	·
Portfolio Equity Stock	61/66	—	49%	—

<b>Information</b>	74/101		—	
International Phone Calls	95/101	65/101	59%	74%
Printed Publications Trade	40/135	32/135	35%	83%

<b>People</b>	60/124		—	
Migrants	105/139	106/139	59%	47%
Tourists Departures/Arrivals	—	·	—	·
International Students	—	31/93	—	34%

## Directionality





# RWANDA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	138/140	139/140	1	14/100	12/100	2
<b>Depth</b>	129/140	129/140	0	7/50	7/50	0
<b>Breadth</b>	130/140	135/140	5	7/50	5/50	2
<b>Trade Pillar</b>	137/140	137/140	0	18/100	15/100	3
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	95/101	94/101	-1	27/100	24/100	3
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

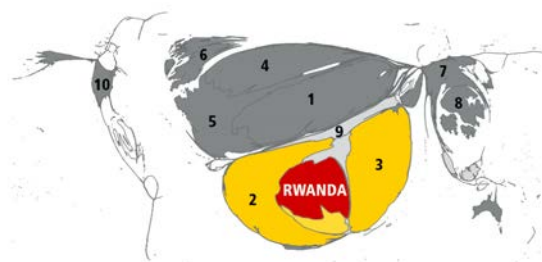
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	127/140		—	
Merchandise Trade (% of GDP)	138/140	98/140	6%	28%
Services Trade (% of GDP)	96/139	76/139	4%	7%
<b>Capital</b>	105/122		—	
FDI Stock (% of GDP)	119/132	128/140	0%	9%
FDI Flows (% of GFCF)	71/133	105/140	2%	7%
Portfolio Equity Stock (% of GDP)	70/102	83/97	0%	0%
Portfolio Equity Flows (% of GDP)	83/129	39/126	0%	0%
<b>Information</b>	126/140		—	
Internet Bandwidth (Bits per Second per Internet User)	109/140		4,414	
International Phone Calls (Minutes per Capita)	138/140	137/140	1	2
Printed Publications Trade (USD per Capita)	126/135	107/135	\$0	\$2
<b>People</b>	.		—	
Migrants (% of Population)	103/139	58/140	3%	4%
Tourists Dep./Arr. Per Capita	.	100/136	.	0.1
International Students (% of Tertiary Education Enrollment)	61/130	.	4%	.

## Summary

Rwanda ranks 138<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, up one place in the rankings versus last year. It ranks 27<sup>th</sup> out of 29 countries in Sub-Saharan Africa. While Rwanda's overall global connectedness is low, it does have high ranks on particular aspects of connectedness. Its 39<sup>th</sup> rank worldwide on the depth of its inward portfolio equity flows is particularly noteworthy. Rwanda also ranks 58<sup>th</sup> on inward migration depth, with 4% of its population made up of first generation immigrants.

## Rooted Map

### Rwanda's Merchandise Exports, 2011



#### Top Export Destinations

1. Switzerland (17%)
2. Congo, DRC (14%)
3. Kenya (14%)
4. Belgium (10%)
5. France (10%)
6. U.K. (4%)
7. China (3%)
8. Hong Kong (3%)
9. Sudan (2%)
10. U.S.A. (2%)

#### Major Export Products

Coffee, tea, hides, tin ore

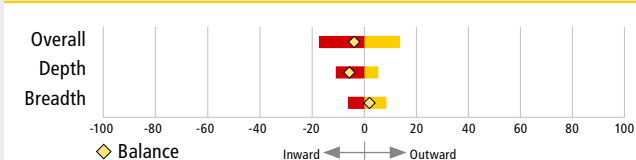
#### Rwanda's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	117/140		—	
Merchandise Trade	120/140	113/140	38%	46%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	78/101		—	
International Phone Calls	89/101	60/101	70%	16%
Printed Publications Trade	55/135	102/135	18%	47%
<b>People</b>	.		—	
Migrants	126/139	135/139	85%	96%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

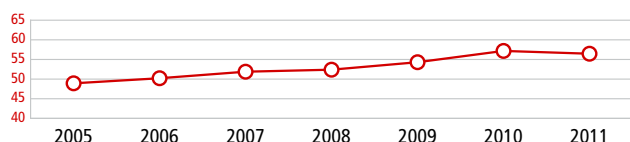


# SAUDI ARABIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	36/140	34/140	-2	56/100	57/100	-1
<b>Depth</b>	72/140	62/140	-10	22/50	24/50	-2
<b>Breadth</b>	27/140	28/140	1	34/50	33/50	1
<b>Trade Pillar</b>	19/140	19/140	0	67/100	68/100	-1
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	65/101	64/101	-1	53/100	52/100	1
<b>People Pillar</b>	51/106	51/106	0	52/100	52/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	74/140		-	
Merchandise Trade (% of GDP)	23/140	124/140	63%	19%
Services Trade (% of GDP)	121/139	42/139	2%	10%

<b>Capital</b>	69/122		-	
FDI Stock (% of GDP)	63/132	71/140	5%	34%
FDI Flows (% of GFCF)	56/133	38/140	3%	25%
Portfolio Equity Stock (% of GDP)	27/102	80/97	18%	1%
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%

<b>Information</b>	50/140		-	
Internet Bandwidth (Bits per Second per Internet User)	42/140		32,985	
International Phone Calls (Minutes per Capita)	23/140	71/140	241	75
Printed Publications Trade (USD per Capita)	89/135	85/135	\$1	\$5

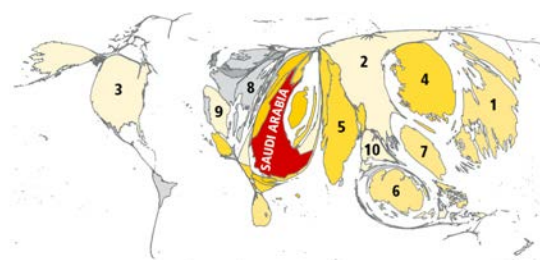
<b>People</b>	54/116			
Migrants (% of Population)	123/139	11/140	1%	27%
Tourists Dep./Arr. Per Capita	46/93	56/136	0.3	0.4
International Students (% of Tertiary Education Enrollment)	57/130	46/104	5%	3%

## Summary

Saudi Arabia's global connectedness remained robust through the financial crisis, rising steadily from 2005 to 2010. Saudi Arabia ranks 36<sup>th</sup> out of 140 countries on the overall global connectedness index, 5<sup>th</sup> out of 15 countries in the Middle East & North Africa. Its strongest pillar is the trade pillar where it ranks 19<sup>th</sup> worldwide, a ranking that is fueled by its oil exports. Saudi Arabia ranks 23<sup>rd</sup> on merchandise exports depth but only 124<sup>th</sup> on merchandise imports depth. It also ranks 11<sup>th</sup> on the depth of its inward migration, reflecting its extensive employment of migrant labor.

## Rooted Map

Saudi Arabia's Merchandise Exports, 2011



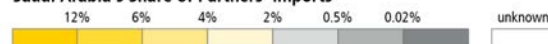
### Top Export Destinations

1. Japan (14%)
2. China (14%)
3. U.S.A. (13%)
4. South Korea (10%)
5. India (8%)
6. Singapore (5%)
7. Taiwan (3%)
8. Italy (3%)
9. Spain (2%)
10. Thailand (2%)

### Major Export Products

Petroleum and petroleum products (90%)

### Saudi Arabia's Share of Partners' Imports



## Breadth

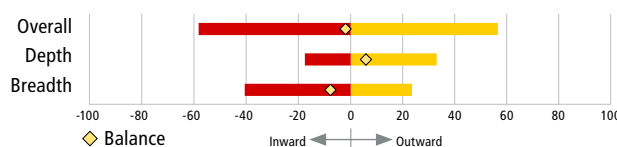
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	10/140		-	
Merchandise Trade	34/140	2/140	9%	9%

<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	76/101		-	
International Phone Calls	51/101	88/101	47%	35%
Printed Publications Trade	134/135	22/135	0%	21%

<b>People</b>	61/124		-	
Migrants	49/139	60/139	65%	36%
Tourists Departures/Arrivals	-	101/107	-	80%
International Students	-	29/93	-	25%

## Directionality



# SENEGAL

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	110/140	115/140	5	30/100	27/100	3
<b>Depth</b>	108/140	109/140	1	14/50	13/50	1
<b>Breadth</b>	96/140	109/140	13	17/50	14/50	3
<b>Trade Pillar</b>	106/140	112/140	6	38/100	35/100	3
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

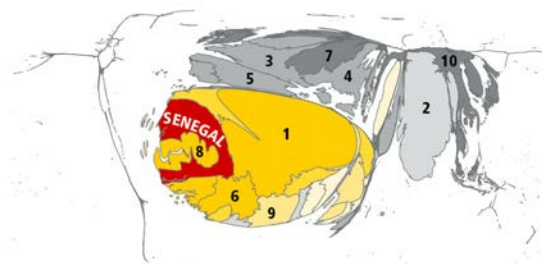
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	85/140		—	
Merchandise Trade (% of GDP)	113/140	55/140	18%	41%
Services Trade (% of GDP)	79/139	70/139	6%	7%
<b>Capital</b>	104/122		—	
FDI Stock (% of GDP)	85/132	119/140	2%	13%
FDI Flows (% of GFCF)	74/133	92/140	1%	9%
Portfolio Equity Stock (% of GDP)	80/102	86/97	0%	0%
Portfolio Equity Flows (% of GDP)	68/129	102/126	0%	0%
<b>Information</b>	109/140		—	
Internet Bandwidth (Bits per Second per Internet User)	116/140		2,909	
International Phone Calls (Minutes per Capita)	84/140	92/140	23	39
Printed Publications Trade (USD per Capita)	109/135	109/135	\$0	\$1
<b>People</b>	.		.	
Migrants (% of Population)	77/139	103/140	4%	2%
Tourists Dep./Arr. Per Capita	.	95/136	.	0.1
International Students (% of Tertiary Education Enrollment)	16/130	.	13%	.

## Summary

Senegal holds the 110<sup>th</sup> rank out of 140 countries on this year's DHL Global Connectedness Index, up from 115<sup>th</sup> last year. Senegal's global connectedness has risen steadily since 2005 and its growth accelerated in the past year. Senegal has slightly higher breadth (96<sup>th</sup> rank worldwide) than depth (108<sup>th</sup>), and among the 29 countries that were analyzed in Sub-Saharan Africa, Senegal ranks 15<sup>th</sup> on overall global connectedness. Its highest individual component rank is on the depth of its outbound international students. Senegal ranks 16<sup>th</sup> on this component with university students studying abroad equal to 13% of its total tertiary education enrollment.

## Rooted Map

### Senegal's Merchandise Exports, 2011



#### Top Export Destinations

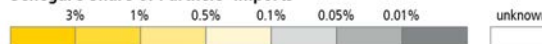
1. Mali (23%)
2. India (13%)
3. France (5%)
4. Italy (5%)
5. Spain (4%)

6. Guinea (4%)
7. Switzerland (4%)
8. The Gambia (4%)
9. Côte d'Ivoire (3%)
10. China (3%)

#### Major Export Products

Fish, groundnuts (peanuts), petroleum products, phosphates, cotton

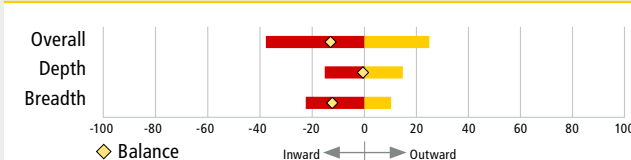
#### Senegal's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	96/140		—	
Merchandise Trade	121/140	63/140	51%	14%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	61/135	127/135	70%	1%
<b>People</b>	111/124		—	
Migrants	111/139	118/139	55%	86%
Tourists Departures/Arrivals	—	72/107	—	18%
International Students	—	.	—	.

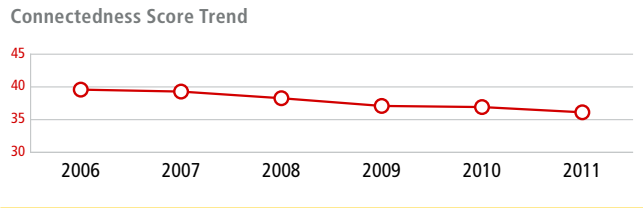
## Directionality



SERBIA

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	96/140	92/140	-4	36/100	37/100	-1
Depth	54/140	48/140	-6	26/50	26/50	0
Breadth	120/140	121/140	1	10/50	11/50	-1
Trade Pillar	105/140	102/140	-3	39/100	39/100	0
Capital Pillar	-	-	-	-	-	-
Information Pillar	61/101	60/101	-1	54/100	54/100	0
People Pillar	60/106	60/106	0	48/100	48/100	0



Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	52/140		-	
Merchandise Trade (% of GDP)	80/140	46/140	26%	45%
Services Trade (% of GDP)	56/139	54/139	9%	9%

Capital	67/122		-	
FDI Stock (% of GDP)	55/132	51/140	8%	45%
FDI Flows (% of GFCF)	76/133	50/140	1%	20%
Portfolio Equity Stock (% of GDP)	78/102	61/97	0%	2%
Portfolio Equity Flows (% of GDP)	105/129	46/126	0%	0%

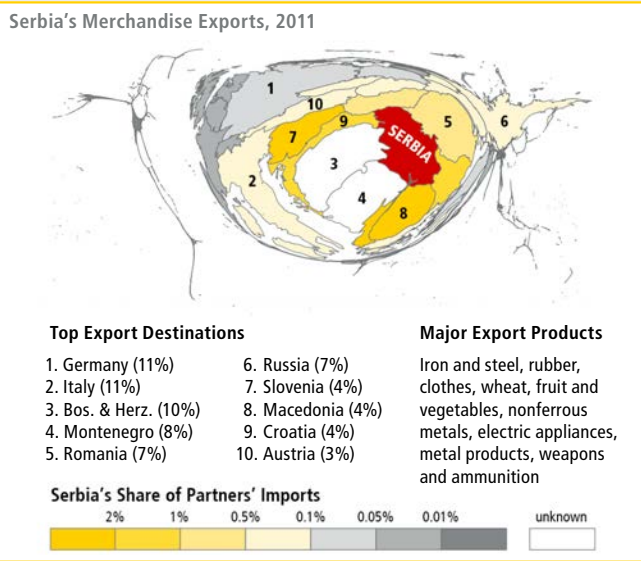
Information	37/140		-	
Internet Bandwidth (Bits per Second per Internet User)	19/140		76,761	
International Phone Calls (Minutes per Capita)	52/140	53/140	69	113
Printed Publications Trade (USD per Capita)	44/135	70/135	\$9	\$7

People	41/116			
Migrants (% of Population)	21/139	53/140	14%	7%
Tourists Dep./Arr. Per Capita	-	89/136	-	0.1
International Students (% of Tertiary Education Enrollment)	54/130	31/104	5%	4%

Summary

Serbia ranks 96<sup>th</sup> out of the 140 countries covered on this year’s DHL Global Connectedness Index. It has higher depth (54<sup>th</sup>) than breadth (120<sup>th</sup>). Its flows are very highly regionalized, with 90% or more of all of the types of flows with available data taking place within Europe. One of the more notable aspects of Serbia’s connectedness profile is its 21<sup>st</sup> position in the depth of outward migration, with emigrants adding up to 14% of its population. Serbia’s connect-edness has declined slowly but steadily from 2006 to 2011. Serbia also has very strong international internet connec-tivity, ranking 19<sup>th</sup> worldwide on international internet bandwidth per internet user.

Rooted Map



Breadth

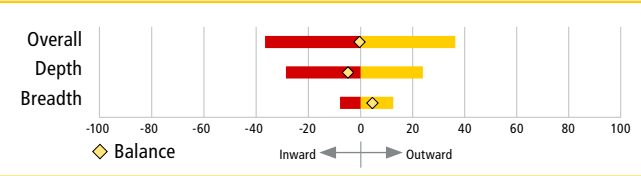
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	113/140		-	
Merchandise Trade	111/140	111/140	95%	90%

Capital	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

Information	77/101		-	
International Phone Calls	84/101	89/101	97%	97%
Printed Publications Trade	57/135	45/135	94%	90%

People	98/124		-	
Migrants	-	-	-	-
Tourists Departures/Arrivals	-	51/107	-	93%
International Students	-	85/93	-	98%

Directionality

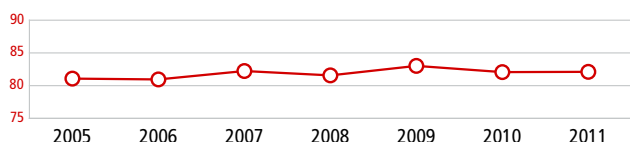


# SINGAPORE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	2/140	2/140	0	82/100	82/100	0
<b>Depth</b>	2/140	2/140	0	47/50	47/50	0
<b>Breadth</b>	23/140	22/140	-1	35/50	36/50	-1
<b>Trade Pillar</b>	2/140	2/140	0	88/100	89/100	-1
<b>Capital Pillar</b>	10/66	10/66	0	78/100	77/100	1
<b>Information Pillar</b>	8/101	6/101	-2	80/100	82/100	-2
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

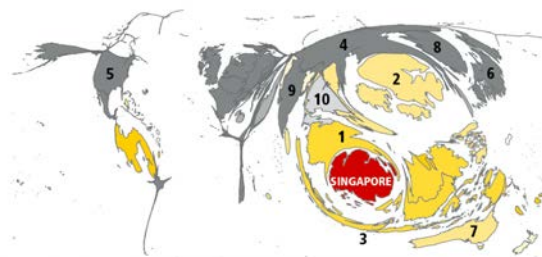
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	2/140		—	
Merchandise Trade (% of GDP)	2/140	2/140	158%	141%
Services Trade (% of GDP)	5/139	3/139	48%	43%
<b>Capital</b>	4/122		—	
FDI Stock (% of GDP)	7/132	3/140	133%	204%
FDI Flows (% of GFCF)	7/133	4/140	38%	81%
Portfolio Equity Stock (% of GDP)	5/102	8/97	169%	45%
Portfolio Equity Flows (% of GDP)	6/129	119/126	7%	0%
<b>Information</b>	1/140		—	
Internet Bandwidth (Bits per Second per Internet User)	2/140		547,064	
International Phone Calls (Minutes per Capita)	1/140	1/140	1420	1057
Printed Publications Trade (USD per Capita)	1/135	1/135	\$408	\$307
<b>People</b>	7/116		—	
Migrants (% of Population)	55/139	6/140	6%	39%
Tourists Dep./Arr. Per Capita	4/93	10/136	1.4	1.8
International Students (% of Tertiary Education Enrollment)	31/130	7/104	9%	23%

## Summary

Singapore ranks second overall and is among the top 10 countries on all four pillars of the index. It is also the top-ranked country in the East Asia & Pacific region on the trade, capital, and people pillars, and ranks second in its region on the information pillar. Singapore's higher depth (2<sup>nd</sup> worldwide) than breadth (23<sup>rd</sup>) is typical of the pattern observed among small countries. As a major trade hub, Singapore's merchandise exports exceed its GDP (adding up to 158% of GDP in 2011). Singapore's depth on the information pillar is also exceptional, leading the world in terms of both international telephone call minutes and imports and exports of printed publications on a per capita basis.

## Rooted Map

### Singapore's Merchandise Exports, 2011



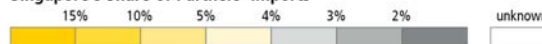
#### Top Export Destinations

1. Malaysia (13%)
2. Hong Kong (12%)
3. Indonesia (11%)
4. China (11%)
5. U.S.A. (6%)
6. Japan (5%)
7. Australia (4%)
8. South Korea (4%)
9. India (4%)
10. Thailand (4%)

#### Major Export Products

Machinery and equipment (including electronics and telecommunications), pharmaceuticals and other chemicals, refined petroleum products

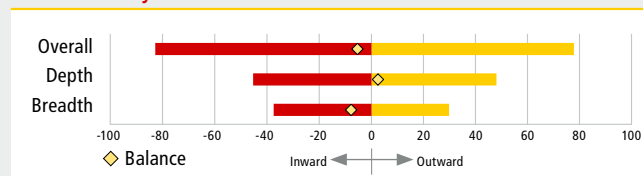
#### Singapore's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	27/140		—	
Merchandise Trade	41/140	24/140	70%	53%
<b>Capital</b>	16/67		—	
FDI Stock	27/41	4/46	77%	31%
FDI Flows	.	.	.	.
Portfolio Equity Stock	21/66	—	49%	—
<b>Information</b>	38/101		—	
International Phone Calls	53/101	36/101	61%	68%
Printed Publications Trade	20/135	69/135	52%	37%
<b>People</b>	.		—	
Migrants	65/139	97/139	59%	86%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality

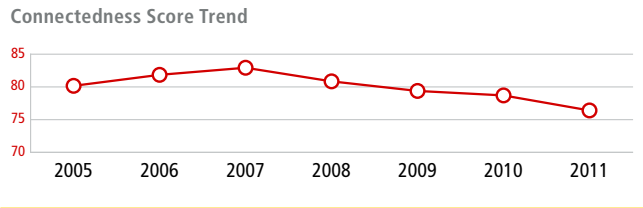




# SLOVAK REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	51/140	50/140	-1	51/100	50/100	1
Depth	27/140	26/140	-1	31/50	31/50	0
Breadth	84/140	88/140	4	19/50	20/50	-1
Trade Pillar	31/140	28/140	-3	61/100	62/100	-1
Capital Pillar	47/66	51/66	4	39/100	38/100	1
Information Pillar	58/101	59/101	1	54/100	54/100	0
People Pillar	37/106	38/106	1	58/100	58/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	17/140		—	
Merchandise Trade (% of GDP)	4/140	6/140	83%	80%
Services Trade (% of GDP)	73/139	74/139	7%	7%

Capital	68/122		—	
FDI Stock (% of GDP)	70/132	39/140	4%	53%
FDI Flows (% of GFCF)	54/133	119/140	3%	4%
Portfolio Equity Stock (% of GDP)	55/102	81/97	1%	0%
Portfolio Equity Flows (% of GDP)	63/129	52/126	0%	0%

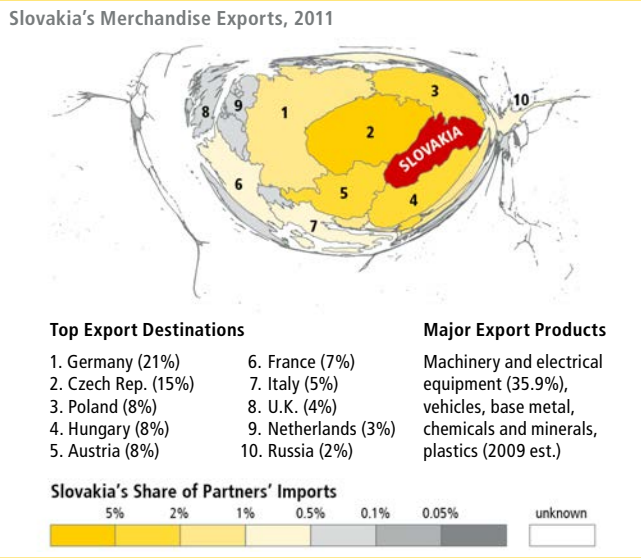
Information	56/140		—	
Internet Bandwidth (Bits per Second per Internet User)	75/140		12,276	
International Phone Calls (Minutes per Capita)	53/140	66/140	62	80
Printed Publications Trade (USD per Capita)	20/135	32/135	\$49	\$31

People	22/116			
Migrants (% of Population)	46/139	87/140	8%	2%
Tourists Dep./Arr. Per Capita	26/93	16/136	0.6	1.2
International Students (% of Tertiary Education Enrollment)	14/130	41/104	13%	3%

## Summary

Slovak Republic’s connectedness score peaked in 2007 before falling back to its 2005 level. It ranks 51<sup>st</sup> worldwide on this year’s DHL Global Connectedness Index and 26<sup>th</sup> out of 40 European countries. Slovak Republic has higher depth (27<sup>th</sup> rank globally) than breadth (84<sup>th</sup>), which is not unusual among relatively small countries. Although Slovak Republic’s connectedness is balanced across all four pillars, it holds its highest position on the trade pillar (31<sup>st</sup> out of 140 countries). Slovak Republic ranks 4<sup>th</sup> worldwide on merchandise exports depth, with merchandise exports adding up to 83% of its GDP. 96% of its merchandise exports go to other European countries, the highest intra-regional proportion among European countries.

## Rooted Map



## Breadth

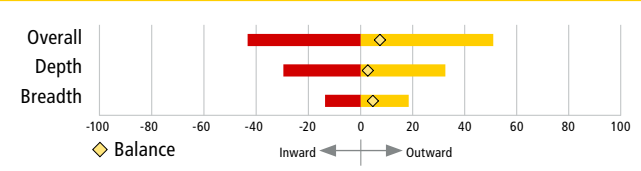
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	91/140		—	
Merchandise Trade	75/140	95/140	96%	88%

Capital	44/67		—	
FDI Stock	33/41	34/46	99%	93%
FDI Flows	31/38	30/41	96%	75%
Portfolio Equity Stock	36/66	—	78%	—

Information	72/101		—	
International Phone Calls	63/101	87/101	93%	95%
Printed Publications Trade	30/135	66/135	97%	93%

People	66/124		—	
Migrants	93/139	110/139	83%	96%
Tourists Departures/Arrivals	—	46/107	—	92%
International Students	—	52/93	—	87%

## Directionality



# SLOVENIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	34/140	37/140	3	57/100	55/100	2
<b>Depth</b>	18/140	21/140	3	33/50	32/50	1
<b>Breadth</b>	63/140	62/140	-1	24/50	23/50	1
<b>Trade Pillar</b>	22/140	24/140	2	66/100	63/100	3
<b>Capital Pillar</b>	37/66	41/66	4	45/100	43/100	2
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	44/106	44/106	0	55/100	55/100	0

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	9/140		—	
Merchandise Trade (% of GDP)	16/140	15/140	70%	71%
Services Trade (% of GDP)	31/139	45/139	14%	9%
<b>Capital</b>	61/122		—	
FDI Stock (% of GDP)	41/132	80/140	14%	31%
FDI Flows (% of GFCF)	93/133	130/140	0%	3%
Portfolio Equity Stock (% of GDP)	44/102	59/97	6%	2%
Portfolio Equity Flows (% of GDP)	56/129	36/126	0%	0%
<b>Information</b>	22/140		—	
Internet Bandwidth (Bits per Second per Internet User)	23/140		68,250	
International Phone Calls (Minutes per Capita)	36/140	47/140	166	132
Printed Publications Trade (USD per Capita)	11/135	18/135	\$81	\$51
<b>People</b>	40/116		—	
Migrants (% of Population)	67/139	50/140	5%	8%
Tourists Dep./Arr. Per Capita	5/93	26/136	1.4	0.9
International Students (% of Tertiary Education Enrollment)	91/130	55/104	2%	2%

## Summary

Slovenia's connectedness remains below its 2007 pre-crisis peak, but grew modestly from 2010 to 2011, enabling Slovenia's rank to increase from 37<sup>th</sup> to 34<sup>th</sup>. Slovenia ranks 20<sup>th</sup> out of the 40 European countries covered in the index. Slovenia has higher depth (18<sup>th</sup> globally) than breadth (63<sup>rd</sup>). Its strongest pillar is the trade pillar, on which it ranks 22<sup>nd</sup> globally and 10<sup>th</sup> within Europe. The increase in Slovenia's connectedness from 2010 to 2011 was driven by the capital and trade pillars. Slovenia's connectedness pattern is highly regionalized with more than 90% of many types of flows taking place only within Europe.

## Rooted Map

### Slovenia's Merchandise Exports, 2011



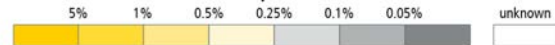
#### Top Export Destinations

1. Germany (20%)
2. Italy (12%)
3. Austria (8%)
4. Croatia (6%)
5. France (6%)

#### Major Export Products

6. Hungary (4%)
  7. Slovakia (4%)
  8. Russia (4%)
  9. Poland (3%)
  10. Serbia (3%)
- Manufactured goods, machinery and transport equipment, chemicals, food

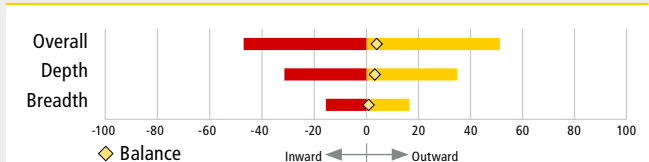
#### Slovenia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	82/140		—	
Merchandise Trade	77/140	86/140	91%	81%
<b>Capital</b>	34/67		—	
FDI Stock	37/41	38/46	84%	98%
FDI Flows	37/38	31/41	65%	96%
Portfolio Equity Stock	16/66	—	63%	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	24/135	30/135	92%	92%
<b>People</b>	63/124		—	
Migrants	73/139	123/139	68%	83%
Tourists Departures/Arrivals	—	31/107	—	89%
International Students	—	63/93	—	87%

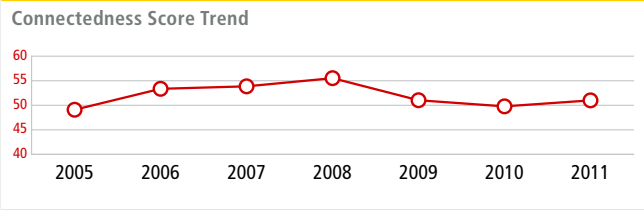
## Directionality



# SOUTH AFRICA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	48/140	51/140	3	51/100	50/100	1
Depth	80/140	80/140	0	20/50	19/50	1
Breadth	39/140	41/140	2	31/50	30/50	1
Trade Pillar	20/140	25/140	5	66/100	63/100	3
Capital Pillar	43/66	44/66	1	41/100	42/100	-1
Information Pillar	69/101	69/101	0	49/100	48/100	1
People Pillar	.	.	.	.	.	.



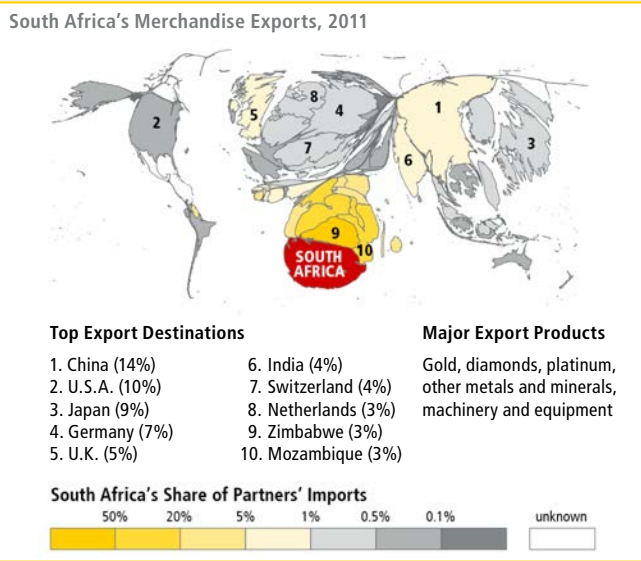
## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	104/140		—	
Merchandise Trade (% of GDP)	90/140	93/140	24%	30%
Services Trade (% of GDP)	99/139	107/139	4%	5%
Capital	30/122		—	
FDI Stock (% of GDP)	36/132	76/140	18%	32%
FDI Flows (% of GFCF)	102/133	111/140	0%	6%
Portfolio Equity Stock (% of GDP)	18/102	10/97	30%	34%
Portfolio Equity Flows (% of GDP)	26/129	15/126	1%	1%
Information	85/140		—	
Internet Bandwidth (Bits per Second per Internet User)	62/140		18,874	
International Phone Calls (Minutes per Capita)	86/140	107/140	21	23
Printed Publications Trade (USD per Capita)	75/135	79/135	\$2	\$6
People	.		.	
Migrants (% of Population)	115/139	68/140	2%	4%
Tourists Dep./Arr. Per Capita	65/93	82/136	0.1	0.2
International Students (% of Tertiary Education Enrollment)	.	.	.	.

## Summary

South Africa ranks 48<sup>th</sup> worldwide on the DHL Global Connectedness Index and ranks 2<sup>nd</sup> in the Sub-Saharan Africa region, after Mauritius, and 1<sup>st</sup> within Sub-Saharan Africa itself. South Africa has significantly higher breadth (39<sup>th</sup> worldwide) than depth (80<sup>th</sup>), which reflects the relatively limited proportion of its international flows that take place within its own region. Only 7% of South Africa's imports and 16% of its exports are intra-regional. This pattern, in light of Sub-Saharan Africa's low share of overall world trade flows, earns South Africa the top rank globally on trade breadth. South Africa's overall connectedness score peaked in 2008 and, as of 2011, was only slightly higher than it was in 2005.

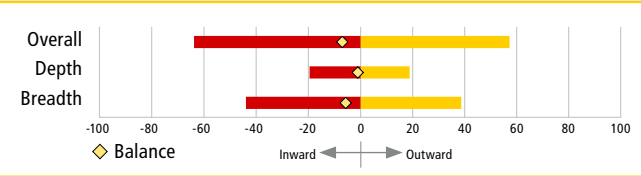
## Rooted Map



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	1/140		—	
Merchandise Trade	4/140	1/140	16%	7%
Capital	49/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	49/66	—	1%	—
Information	66/101		—	
International Phone Calls	76/101	61/101	64%	28%
Printed Publications Trade	74/135	8/135	84%	0%
People	88/124		—	
Migrants	53/139	29/139	38%	70%
Tourists Departures/Arrivals	—	85/107	—	72%
International Students	—	86/93	—	100%

## Directionality



# SPAIN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	25/140	27/140	2	63/100	61/100	2
<b>Depth</b>	64/140	70/140	6	23/50	22/50	1
<b>Breadth</b>	12/140	12/140	0	39/50	40/50	-1
<b>Trade Pillar</b>	48/140	52/140	4	56/100	54/100	2
<b>Capital Pillar</b>	14/66	17/66	3	68/100	66/100	2
<b>Information Pillar</b>	13/101	14/101	1	76/100	76/100	0
<b>People Pillar</b>	29/106	29/106	0	64/100	64/100	0

Connectedness Score Trend



## Depth

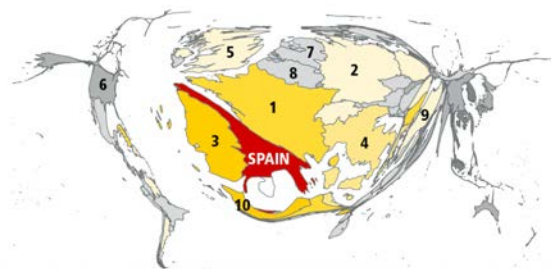
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	111/140		—	
Merchandise Trade (% of GDP)	103/140	110/140	20%	24%
Services Trade (% of GDP)	54/139	89/139	9%	6%
<b>Capital</b>	27/122		—	
FDI Stock (% of GDP)	18/132	54/140	42%	42%
FDI Flows (% of GFCF)	32/133	96/140	9%	8%
Portfolio Equity Stock (% of GDP)	42/102	27/97	7%	14%
Portfolio Equity Flows (% of GDP)	42/129	43/126	0%	0%
<b>Information</b>	29/140		—	
Internet Bandwidth (Bits per Second per Internet User)	25/140		64,069	
International Phone Calls (Minutes per Capita)	32/140	61/140	176	93
Printed Publications Trade (USD per Capita)	31/135	44/135	\$20	\$15
<b>People</b>	57/116		—	
Migrants (% of Population)	96/139	26/140	3%	14%
Tourists Dep./Arr. Per Capita	45/93	19/136	0.3	1.1
International Students (% of Tertiary Education Enrollment)	111/130	49/104	1%	3%

## Summary

Spain holds the 25<sup>th</sup> rank globally on this year's DHL Global Connectedness Index and the 16<sup>th</sup> rank among European countries. Spain, like other large economies, ranks higher on breadth (12<sup>th</sup> worldwide) than on depth (64<sup>th</sup>). Spain ranks among the top 15 countries on the capital and information pillars, but only 48<sup>th</sup> overall and 111<sup>th</sup> on depth on the trade pillar. This pattern is reflected, for example, in Spain's modest exports to Latin America (see map) which contrast with its substantial outward FDI in that region. Spain's connectedness has fluctuated since 2005, rising prior to the onset of the financial crisis and then declining. Its partial recovery from 2010 to 2011 was spurred by increasing depth, most notably on the trade pillar.

## Rooted Map

Spain's Merchandise Exports, 2011



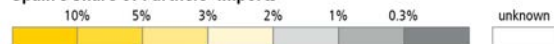
### Top Export Destinations

1. France (19%)
2. Germany (11%)
3. Portugal (9%)
4. Italy (9%)
5. U.K. (7%)
6. U.S.A. (4%)
7. Netherlands (3%)
8. Belgium (3%)
9. Turkey (2%)
10. Morocco (2%)

### Major Export Products

Machinery, motor vehicles; foodstuffs, pharmaceuticals, medicines, other consumer goods

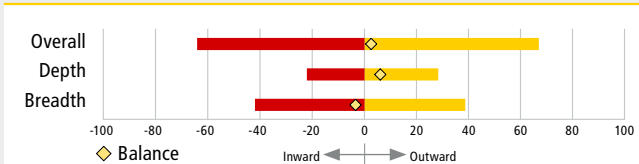
### Spain's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	16/140		—	
Merchandise Trade	31/140	17/140	74%	62%
<b>Capital</b>	15/67		—	
FDI Stock	10/41	1/46	54%	84%
FDI Flows	9/38	22/41	61%	87%
Portfolio Equity Stock	23/66	—	79%	—
<b>Information</b>	20/101		—	
International Phone Calls	27/101	44/101	55%	76%
Printed Publications Trade	25/135	3/135	64%	72%
<b>People</b>	27/124		—	
Migrants	54/139	37/139	60%	36%
Tourists Departures/Arrivals	—	28/107	—	95%
International Students	—	34/93	—	32%

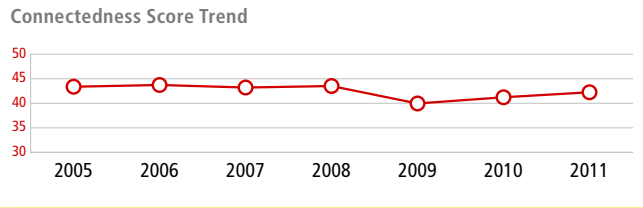
## Directionality



# SRI LANKA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	75/140	77/140	2	42/100	41/100	1
Depth	124/140	124/140	0	10/50	8/50	2
Breadth	31/140	30/140	-1	33/50	33/50	0
Trade Pillar	70/140	70/140	0	49/100	47/100	2
Capital Pillar	.	.	.	.	.	.
Information Pillar	.	.	.	.	.	.
People Pillar	65/106	65/106	0	46/100	46/100	0



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	107/140		-	
Merchandise Trade (% of GDP)	115/140	73/140	17%	34%
Services Trade (% of GDP)	93/139	104/139	4%	5%

Capital	121/122		-	
FDI Stock (% of GDP)	105/132	130/140	1%	9%
FDI Flows (% of GFCF)	100/133	125/140	0%	3%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	125/129	125/126	-1%	-1%

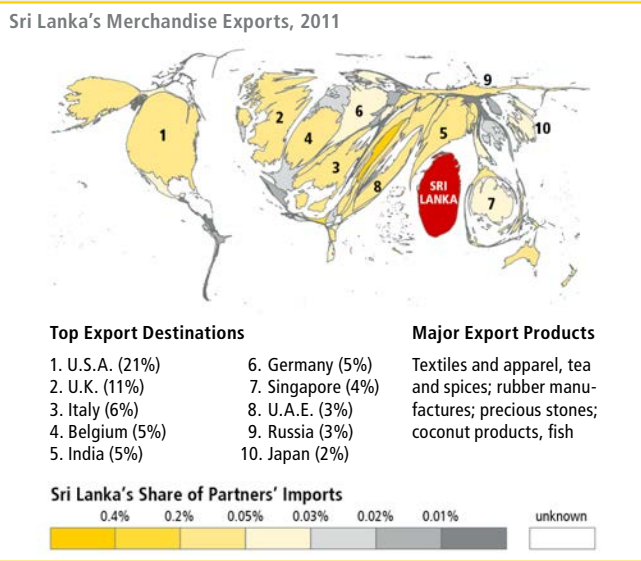
Information	90/140		-	
Internet Bandwidth (Bits per Second per Internet User)	103/140		5,224	
International Phone Calls (Minutes per Capita)	71/140	80/140	33	57
Printed Publications Trade (USD per Capita)	41/135	98/135	\$11	\$3

People	83/116			
Migrants (% of Population)	71/139	105/140	5%	2%
Tourists Dep./Arr. Per Capita	75/93	110/136	0.1	0.0
International Students (% of Tertiary Education Enrollment)	42/130	.	6%	.

## Summary

Sri Lanka ranks 75<sup>th</sup> on this year’s DHL Global Connectedness Index, up 2 places versus its 77<sup>th</sup> position last year. Sri Lanka has much higher breadth (31<sup>st</sup>) than depth (124<sup>th</sup>). Its low breadth score reflects, in part, limited intra-regional integration within its region. Only 9% of Sri Lanka’s merchandise exports are destined to countries in South & Central Asia. While Sri Lanka’s connectedness score held steady from 2005 to 2008, it fell in 2009 and has yet to recapture its prior level, in spite of having increased in both of the past two years.

## Rooted Map



## Breadth

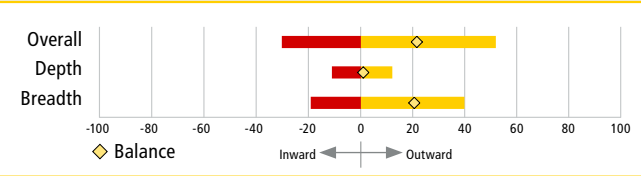
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	42/140		-	
Merchandise Trade	16/140	71/140	9%	28%

Capital	.		-	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	-	.	-

Information	.		-	
International Phone Calls	.	.	.	.
Printed Publications Trade	108/135	89/135	4%	18%

People	47/124		-	
Migrants	43/139	131/139	30%	99%
Tourists Departures/Arrivals	-	30/107	-	27%
International Students	-	.	-	.

## Directionality





# SWEDEN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	8/140	7/140	-1	75/100	77/100	-2
<b>Depth</b>	13/140	13/140	0	35/50	36/50	-1
<b>Breadth</b>	11/140	7/140	-4	40/50	41/50	-1
<b>Trade Pillar</b>	23/140	20/140	-3	65/100	67/100	-2
<b>Capital Pillar</b>	8/66	5/66	-3	80/100	82/100	-2
<b>Information Pillar</b>	7/101	8/101	1	81/100	80/100	1
<b>People Pillar</b>	7/106	7/106	0	82/100	82/100	0

### Connectedness Score Trend



## Depth

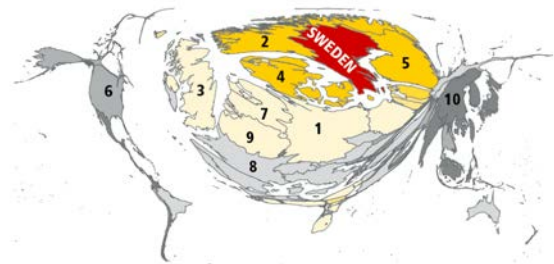
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	46/140		—	
Merchandise Trade (% of GDP)	54/140	78/140	35%	33%
Services Trade (% of GDP)	30/139	37/139	14%	10%
<b>Capital</b>	8/122		—	
FDI Stock (% of GDP)	12/132	29/140	67%	63%
FDI Flows (% of GFCF)	10/133	98/140	28%	8%
Portfolio Equity Stock (% of GDP)	9/102	11/97	55%	32%
Portfolio Equity Flows (% of GDP)	13/129	25/126	2%	1%
<b>Information</b>	13/140		—	
Internet Bandwidth (Bits per Second per Internet User)	4/140		244,440	
International Phone Calls (Minutes per Capita)	20/140	32/140	267	211
Printed Publications Trade (USD per Capita)	18/135	17/135	\$51	\$53
<b>People</b>	29/116		—	
Migrants (% of Population)	93/139	25/140	3%	14%
Tourists Dep./Arr. Per Capita	6/93	45/136	1.4	0.5
International Students (% of Tertiary Education Enrollment)	78/130	22/104	3%	7%

## Summary

Sweden ranks 8<sup>th</sup> out of 140 countries on the DHL Global Connectedness Index and is among the top 10 countries globally on the capital, information, and people pillars. It ranks 23<sup>rd</sup> on the trade pillar. Among the more exceptional aspects of Sweden's connectedness profile is its 4<sup>th</sup> rank worldwide on internet bandwidth per internet user. Sweden also has significantly higher inward than outward FDI depth scores, reflecting in particular relatively small inward FDI flows over the past three years. Sweden's overall connectedness has declined modestly since 2008, closing 2011 with slightly lower connectedness than in 2005.

## Rooted Map

### Sweden's Merchandise Exports, 2011



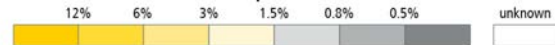
### Top Export Destinations

1. Germany (11%)
2. Norway (9%)
3. U.K. (8%)
4. Denmark (7%)
5. Finland (7%)
6. U.S.A. (6%)
7. Netherlands (5%)
8. France (5%)
9. Belgium (5%)
10. China (3%)

### Major Export Products

Machinery (35%), motor vehicles, paper products, pulp and wood, iron and steel products, chemicals

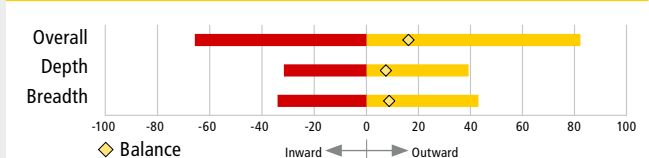
### Sweden's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	37/140		—	
Merchandise Trade	20/140	57/140	73%	84%
<b>Capital</b>	11/67		—	
FDI Stock	8/41	17/46	73%	88%
FDI Flows	11/38	12/41	70%	69%
Portfolio Equity Stock	10/66	—	63%	—
<b>Information</b>	24/101		—	
International Phone Calls	22/101	47/101	85%	89%
Printed Publications Trade	34/135	18/135	64%	83%
<b>People</b>	4/124		—	
Migrants	7/139	24/139	64%	52%
Tourists Departures/Arrivals	—	20/107	—	91%
International Students	—	5/93	—	29%

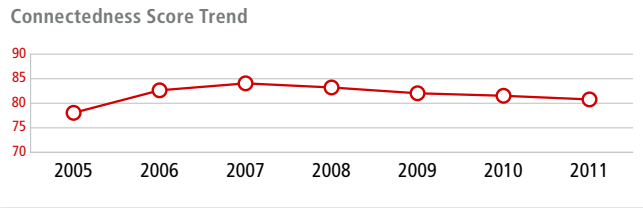
## Directionality



SWITZERLAND

Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	5/140	3/140	-2	81/100	82/100	-1
Depth	9/140	8/140	-1	37/50	38/50	-1
Breadth	4/140	4/140	0	44/50	43/50	1
Trade Pillar	18/140	16/140	-2	67/100	69/100	-2
Capital Pillar	3/66	3/66	0	88/100	88/100	0
Information Pillar	5/101	3/101	-2	84/100	84/100	0
People Pillar	2/106	2/106	0	88/100	88/100	0



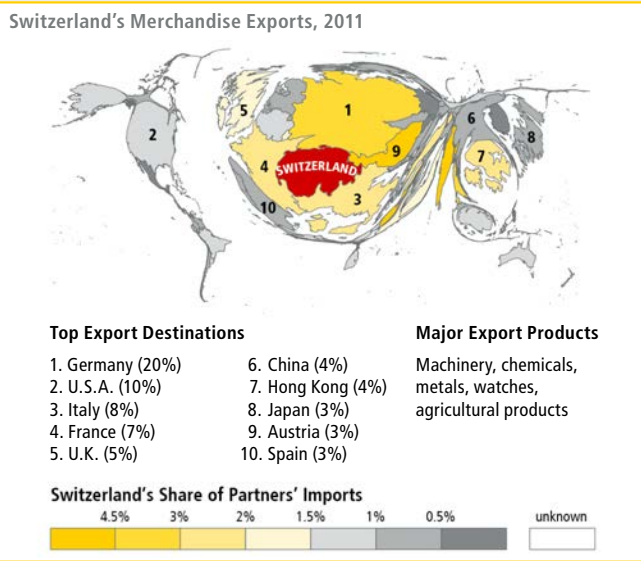
Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	51/140		—	
Merchandise Trade (% of GDP)	50/140	77/140	37%	33%
Services Trade (% of GDP)	26/139	71/139	15%	7%
Capital	5/122		—	
FDI Stock (% of GDP)	5/132	11/140	154%	91%
FDI Flows (% of GFCF)	4/133	58/140	46%	15%
Portfolio Equity Stock (% of GDP)	8/102	5/97	67%	97%
Portfolio Equity Flows (% of GDP)	31/129	26/126	0%	0%
Information	3/140		—	
Internet Bandwidth (Bits per Second per Internet User)	5/140		167,636	
International Phone Calls (Minutes per Capita)	7/140	8/140	677	490
Printed Publications Trade (USD per Capita)	9/135	3/135	\$87	\$252
People	9/116		—	
Migrants (% of Population)	60/139	13/140	6%	23%
Tourists Dep./Arr. Per Capita	7/93	20/136	1.3	1.1
International Students (% of Tertiary Education Enrollment)	59/130	10/104	4%	15%

Summary

Switzerland ranks 5<sup>th</sup> overall and among the top 10 countries on the capital, information and people pillars (and 18<sup>th</sup> on trade). It ranks 4<sup>th</sup> on breadth and 9<sup>th</sup> on depth, with its high ranking on breadth particularly notable in light of its relatively small population (breadth is positively correlated with population). Switzerland is the top ranked country in terms of the breadth of its outward FDI stock and ranks second on the breadth of its merchandise exports and its inward FDI Flows. The breadth of Switzerland’s merchandise exports is supported by its strength in luxury products whose high value-to-weight and value-to-bulk ratios make them less sensitive to geographic distance.

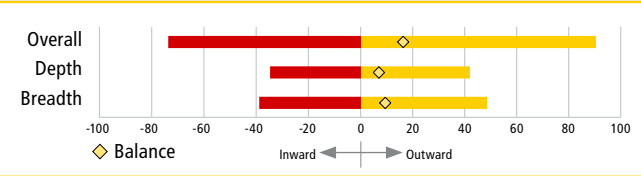
Rooted Map



Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	25/140		—	
Merchandise Trade	2/140	59/140	60%	79%
Capital	4/67		—	
FDI Stock	1/41	6/46	53%	84%
FDI Flows	5/38	2/41	40%	80%
Portfolio Equity Stock	9/66	—	60%	—
Information	25/101		—	
International Phone Calls	19/101	42/101	79%	87%
Printed Publications Trade	3/135	77/135	74%	97%
People	6/124		—	
Migrants	23/139	22/139	67%	66%
Tourists Departures/Arrivals	—	6/107	—	74%
International Students	—	15/93	—	74%

Directionality



# SYRIAN ARAB REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	127/140	117/140	-10	24/100	27/100	-3
<b>Depth</b>	121/140	115/140	-6	10/50	12/50	-2
<b>Breadth</b>	106/140	99/140	-7	14/50	15/50	-1
<b>Trade Pillar</b>	121/140	108/140	-13	33/100	38/100	-5
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	96/101	98/101	2	23/100	20/100	3
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

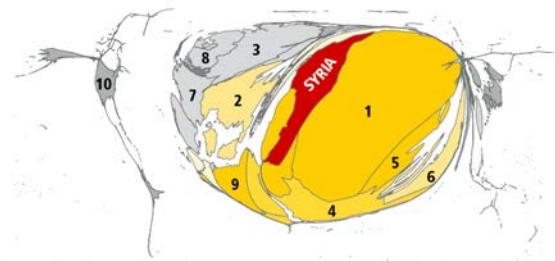
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	108/140		—	
Merchandise Trade (% of GDP)	111/140	100/140	18%	27%
Services Trade (% of GDP)	38/139	97/139	12%	6%
<b>Capital</b>	115/122		—	
FDI Stock (% of GDP)	106/132	104/140	1%	18%
FDI Flows (% of GFCF)	115/133	86/140	0%	10%
Portfolio Equity Stock (% of GDP)	92/102	.	0%	.
Portfolio Equity Flows (% of GDP)	103/129	75/126	0%	0%
<b>Information</b>	107/140		—	
Internet Bandwidth (Bits per Second per Internet User)	113/140		3,489	
International Phone Calls (Minutes per Capita)	92/140	89/140	16	41
Printed Publications Trade (USD per Capita)	96/135	123/135	\$1	\$1
<b>People</b>	.		.	
Migrants (% of Population)	107/139	35/140	2%	11%
Tourists Dep./Arr. Per Capita	42/93	54/136	0.3	0.4
International Students (% of Tertiary Education Enrollment)	.	.	.	.

## Summary

Syria ranks 127<sup>th</sup> on this year's DHL Global Connectedness Index, down 10 places versus last year's ranking. Its score had remained fairly stable until 2009, after which it began to decline. Syria holds low positions both on both depth (121<sup>st</sup>) and breadth (106<sup>th</sup>) and across the pillars. Its highest component level depth rank is on its inward migration. Syria ranks 35<sup>th</sup> worldwide on inward migration depth, with immigrants making up 11% of its population. 91% of Syria's immigrants come from within the Middle East & North Africa region, placing it 108<sup>th</sup> out of 139 countries on immigration breadth. Syria also ranks 38<sup>th</sup> on services exports depth, with services exports accounting for 12% of its GDP.

## Rooted Map

Syria's Merchandise Exports, 2011



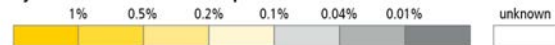
Top Export Destinations

1. Iraq (39%)
2. Italy (8%)
3. Germany (7%)
4. Saudi Arabia (6%)
5. Kuwait (4%)
6. U.A.E. (4%)
7. France (3%)
8. Netherlands (3%)
9. Libya (3%)
10. U.S.A. (2%)

Major Export Products

Crude oil, minerals, petroleum products, fruits and vegetables, cotton fiber, textiles, clothing, meat and live animals, wheat

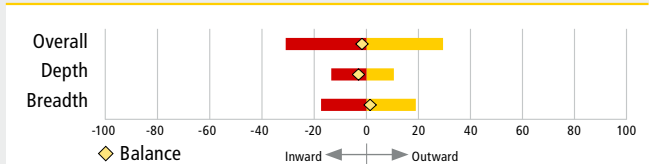
Syria's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	95/140		—	
Merchandise Trade	108/140	79/140	65%	42%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	98/101		—	
International Phone Calls	94/101	94/101	91%	87%
Printed Publications Trade	107/135	117/135	81%	74%
<b>People</b>	95/124		—	
Migrants	13/139	108/139	50%	91%
Tourists Departures/Arrivals	—	100/107	—	79%
International Students	—	.	—	.

## Directionality

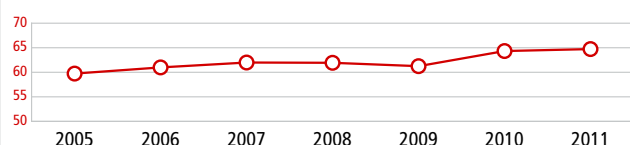


# TAIWAN (CHINA)

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	21/140	22/140	1	65/100	64/100	1
<b>Depth</b>	23/140	18/140	-5	32/50	32/50	0
<b>Breadth</b>	32/140	36/140	4	33/50	32/50	1
<b>Trade Pillar</b>	6/140	7/140	1	82/100	81/100	1
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	39/101	37/101	-2	63/100	64/100	-1
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	20/140		—	
Merchandise Trade (% of GDP)	18/140	27/140	66%	60%
Services Trade (% of GDP)	48/139	52/139	10%	9%

<b>Capital</b>	42/122		—	
FDI Stock (% of GDP)	16/132	121/140	46%	12%
FDI Flows (% of GFCF)	30/133	135/140	11%	2%
Portfolio Equity Stock (% of GDP)	20/102	9/97	29%	40%
Portfolio Equity Flows (% of GDP)	77/129	73/126	0%	0%

<b>Information</b>	42/140		—	
Internet Bandwidth (Bits per Second per Internet User)	40/140		34,588	
International Phone Calls (Minutes per Capita)	37/140	52/140	153	114
Printed Publications Trade (USD per Capita)	83/135	59/135	\$1	\$10

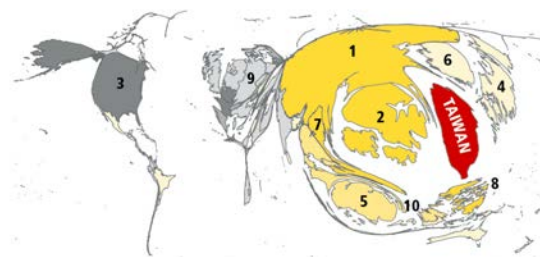
<b>People</b>	.		.	
Migrants (% of Population)	.	94/140	.	2%
Tourists Dep./Arr. Per Capita	38/93	.	0.4	.
International Students (% of Tertiary Education Enrollment)	.	33/104	.	4%

## Summary

Taiwan (China) ranks 21<sup>st</sup> out of 140 countries on the DHL Global Connectedness Index. Its strongest position is on the trade pillar, where it ranks 6<sup>th</sup> globally and 4<sup>th</sup> in East Asia & Pacific (behind Singapore, Thailand and Malaysia). Taiwan's connectedness has risen modestly since 2005, with its largest increase taking place from 2009 to 2010. From 2010 to 2011, Taiwan's rank increased by one position (from 22<sup>nd</sup> to 21<sup>st</sup>), reflecting an increase in its breadth rank that offset a decline in its depth rank.

## Rooted Map

Taiwan (China)'s Merchandise Exports, 2011



### Top Export Destinations

1. China (28%)
2. Hong Kong (13%)
3. U.S.A. (12%)
4. Japan (6%)
5. Singapore (5%)
6. South Korea (4%)
7. Vietnam (3%)
8. Philippines (2%)
9. Germany (2%)
10. Malaysia (2%)

### Major Export Products

Electronics, flat panels, machinery; metals; textiles, plastics, chemicals; optical, photographic, measuring, and medical instruments

### Taiwan's Share of Partners' Imports



## Breadth

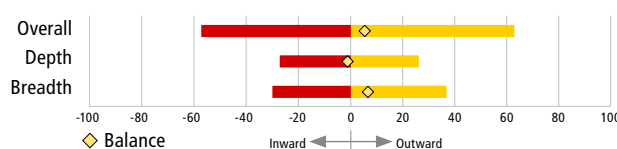
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	18/140		—	
Merchandise Trade	24/140	23/140	69%	58%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	28/41	.	40%
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	53/101		—	
International Phone Calls	69/101	56/101	86%	75%
Printed Publications Trade	31/135	16/135	85%	53%

<b>People</b>	62/124		—	
Migrants	45/139	91/139	10%	86%
Tourists Departures/Arrivals	—	102/107	—	88%
International Students	—	19/93	—	68%

## Directionality



# TAJIKISTAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	132/140	125/140	-7	22/100	23/100	-1
<b>Depth</b>	110/140	95/140	-15	13/50	16/50	-3
<b>Breadth</b>	125/140	129/140	4	9/50	7/50	2
<b>Trade Pillar</b>	131/140	130/140	-1	25/100	25/100	0
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	67/101	66/101	-1	50/100	51/100	-1
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

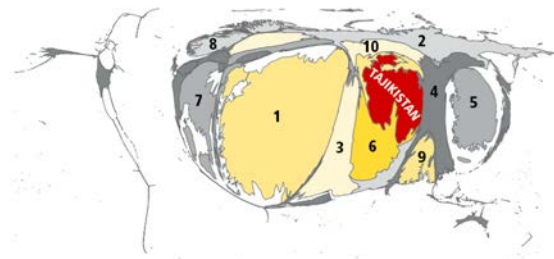
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	84/140		—	
Merchandise Trade (% of GDP)	105/140	40/140	19%	49%
Services Trade (% of GDP)	109/139	90/139	3%	6%
<b>Capital</b>	.		—	
FDI Stock (% of GDP)	.	111/140	.	15%
FDI Flows (% of GFCF)	.	136/140	.	0%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	75/126	0%	0%
<b>Information</b>	129/140		—	
Internet Bandwidth (Bits per Second per Internet User)	133/140		526	
International Phone Calls (Minutes per Capita)	109/140	97/140	9	33
Printed Publications Trade (USD per Capita)	.	.	.	.
<b>People</b>	.		—	
Migrants (% of Population)	30/139	63/140	11%	4%
Tourists Dep./Arr. Per Capita	.	.	.	.
International Students (% of Tertiary Education Enrollment)	63/130	53/104	4%	2%

## Summary

Tajikistan holds the 132<sup>nd</sup> rank globally on this year's DHL Global Connectedness Index, down 7 places versus last year's ranking. It ranks 11<sup>th</sup> out of the 12 countries in South & Central Asia. Among Tajikistan's component level depth ranks, its outward migration and merchandise imports are particularly notable. Tajikistan ranks 30<sup>th</sup> out of 139 countries worldwide on the depth of its outward migration, with emigrants equal to 11% of its population and only 38% remaining within the South & Central Asia region. It also ranks 40<sup>th</sup> out of 140 countries worldwide on the depth of its merchandise imports, which add up to 49% of its GDP.

## Rooted Map

### Tajikistan's Merchandise Exports, 2011



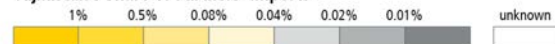
#### Top Export Destinations

1. Turkey (32%)
2. Russia (9%)
3. Iran (7%)
4. China (7%)
5. South Korea (7%)
6. Afghanistan (6%)
7. Italy (5%)
8. Norway (4%)
9. Bangladesh (3%)
10. Kazakhstan (2%)

#### Major Export Products

Aluminum, electricity, cotton, fruits, vegetable oil, textiles

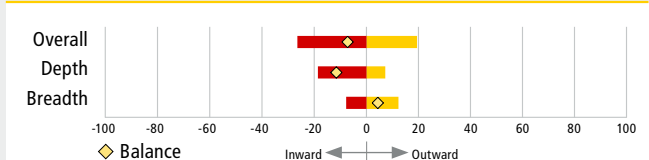
#### Tajikistan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	137/140		—	
Merchandise Trade	130/140	133/140	49%	17%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	9/101		—	
International Phone Calls	18/101	26/101	27%	9%
Printed Publications Trade	.	.	.	.
<b>People</b>	103/124		—	
Migrants	116/139	84/139	38%	70%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	67/93	—	93%

## Directionality





# THAILAND

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	15/140	20/140	5	67/100	65/100	2
<b>Depth</b>	33/140	38/140	5	30/50	28/50	2
<b>Breadth</b>	17/140	18/140	1	37/50	36/50	1
<b>Trade Pillar</b>	5/140	5/140	0	86/100	83/100	3
<b>Capital Pillar</b>	26/66	28/66	2	57/100	56/100	1
<b>Information Pillar</b>	46/101	49/101	3	59/100	57/100	2
<b>People Pillar</b>	54/106	54/106	0	50/100	49/100	1

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	10/140		—	
Merchandise Trade (% of GDP)	17/140	23/140	66%	66%
Services Trade (% of GDP)	39/139	22/139	12%	15%

<b>Capital</b>	29/122		—	
FDI Stock (% of GDP)	51/132	56/140	10%	40%
FDI Flows (% of GFCF)	34/133	84/140	8%	10%
Portfolio Equity Stock (% of GDP)	53/102	20/97	1%	20%
Portfolio Equity Flows (% of GDP)	39/129	31/126	0%	0%

<b>Information</b>	89/140		—	
Internet Bandwidth (Bits per Second per Internet User)	82/140		10,622	
International Phone Calls (Minutes per Capita)	107/140	101/140	10	27
Printed Publications Trade (USD per Capita)	16/135	96/135	\$58	\$3

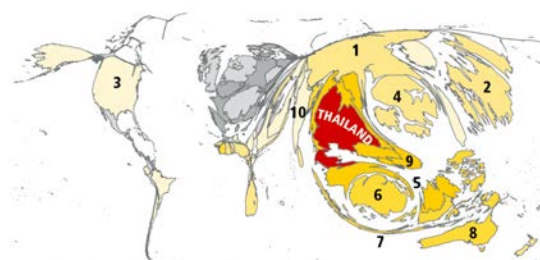
<b>People</b>	99/116			
Migrants (% of Population)	119/139	104/140	1%	2%
Tourists Dep./Arr. Per Capita	66/93	67/136	0.1	0.2
International Students (% of Tertiary Education Enrollment)	116/130	75/104	1%	1%

## Summary

Thailand's connectedness has risen markedly from 2005 to 2011, ranking 15<sup>th</sup> on this year's DHL Global Connectedness Index (up from 20<sup>th</sup> last year). Thailand also ranks 4<sup>th</sup> out of the 19 countries in East Asia and Pacific. Consistent with Thailand's export driven strategy for economic development, its strongest pillar is the trade pillar, on which it ranks 5<sup>th</sup> worldwide, with high ranks on both depth and breadth. Thailand lags, however, on information and people pillar depth, ranking in the bottom half of countries on information pillar depth and the bottom 20% on people pillar depth.

## Rooted Map

Thailand's Merchandise Exports, 2011



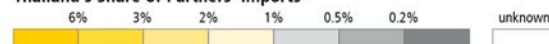
### Top Export Destinations

1. China (12%)
2. Japan (11%)
3. U.S.A. (10%)
4. Hong Kong (7%)
5. Malaysia (5%)
6. Singapore (5%)
7. Indonesia (4%)
8. Australia (4%)
9. Vietnam (3%)
10. India (2%)

### Major Export Products

Textiles and footwear, fishery products, rice, rubber, jewelry, automobiles, computers and electrical appliances

### Thailand's Share of Partners' Imports



## Breadth

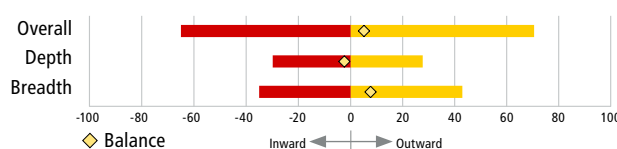
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	17/140		—	
Merchandise Trade	15/140	31/140	61%	61%

<b>Capital</b>	27/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	32/66	—	37%	—

<b>Information</b>	27/101		—	
International Phone Calls	23/101	48/101	67%	70%
Printed Publications Trade	60/135	17/135	99%	50%

<b>People</b>	25/124		—	
Migrants	29/139	46/139	58%	75%
Tourists Departures/Arrivals	—	44/107	—	57%
International Students	—	16/93	—	77%

## Directionality



# TOGO

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	71/140	99/140	28	43/100	35/100	8
<b>Depth</b>	70/140	76/140	6	23/50	20/50	3
<b>Breadth</b>	75/140	102/140	27	21/50	15/50	6
<b>Trade Pillar</b>	46/140	67/140	21	57/100	48/100	9
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	96/106	95/106	-1	29/100	29/100	0

### Connectedness Score Trend



## Depth

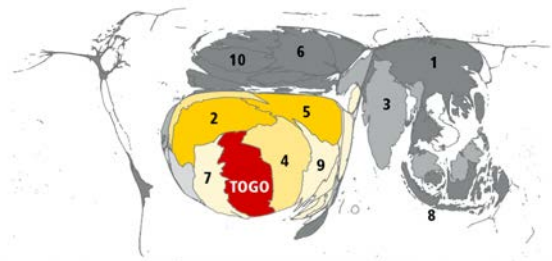
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	41/140		—	
Merchandise Trade (% of GDP)	68/140	42/140	30%	47%
Services Trade (% of GDP)	53/139	23/139	9%	15%
<b>Capital</b>	66/122		—	
FDI Stock (% of GDP)	72/132	108/140	4%	17%
FDI Flows (% of GFCF)	40/133	80/140	6%	11%
Portfolio Equity Stock (% of GDP)	64/102	57/97	1%	2%
Portfolio Equity Flows (% of GDP)	46/129	60/126	0%	0%
<b>Information</b>	103/140		—	
Internet Bandwidth (Bits per Second per Internet User)	98/140		6,443	
International Phone Calls (Minutes per Capita)	111/140	93/140	9	38
Printed Publications Trade (USD per Capita)	114/135	110/135	\$0	\$1
<b>People</b>	70/116		—	
Migrants (% of Population)	91/139	77/140	4%	3%
Tourists Dep./Arr. Per Capita	.	109/136	.	0.0
International Students (% of Tertiary Education Enrollment)	33/130	64/104	9%	1%

## Summary

Togo achieved one of the largest connectedness increases from 2010 to 2011 among the countries studied, increasing its rank to 71<sup>st</sup>, up 28 places from its 99<sup>th</sup> position last year. Togo's large increase, which continued a growth trend that began in 2008, was driven primarily by breadth in the trade pillar. After these gains, Togo now ranks 4<sup>th</sup> among the 29 countries analyzed in Sub-Saharan Africa and 2<sup>nd</sup> among all of the countries classified in the "low" category on the United Nations Development Program's Human Development Index. Whereas Togo previously had higher depth than breadth, it now has similar ranks across both dimensions of connectedness.

## Rooted Map

### Togo's Merchandise Exports, 2011



#### Top Export Destinations

1. China (11%)
2. Burkina Faso (8%)
3. India (8%)
4. Benin (8%)
5. Niger (6%)
6. Germany (6%)
7. Ghana (5%)
8. Indonesia (5%)
9. Nigeria (4%)
10. Belgium (3%)

#### Major Export Products

Reexports, cotton, phosphates, coffee, cocoa

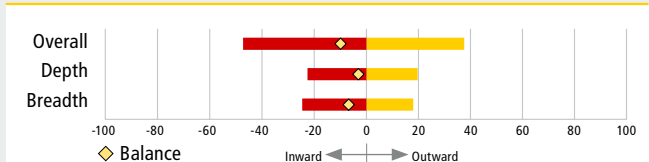
#### Togo's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	70/140		—	
Merchandise Trade	69/140	66/140	41%	6%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	125/135	81/135	98%	4%
<b>People</b>	120/124		—	
Migrants	125/139	94/139	84%	86%
Tourists Departures/Arrivals	—	95/107	—	48%
International Students	—	.	—	.

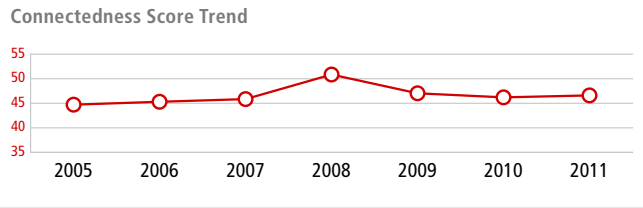
## Directionality



# TRINIDAD AND TOBAGO

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
Overall	63/140	61/140	-2	47/100	46/100	1
Depth	20/140	23/140	3	33/50	31/50	2
Breadth	109/140	105/140	-4	13/50	15/50	-2
Trade Pillar	95/140	106/140	11	41/100	38/100	3
Capital Pillar	.	.	.	.	.	.
Information Pillar	26/101	26/101	0	69/100	69/100	0
People Pillar	.	.	.	.	.	.



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
Trade	49/140		—	
Merchandise Trade (% of GDP)	22/140	64/140	64%	38%
Services Trade (% of GDP)	102/139	137/139	3%	1%

Capital	.	.	.	.
FDI Stock (% of GDP)	52/132	13/140	10%	82%
FDI Flows (% of GFCF)	12/133	34/140	26%	27%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

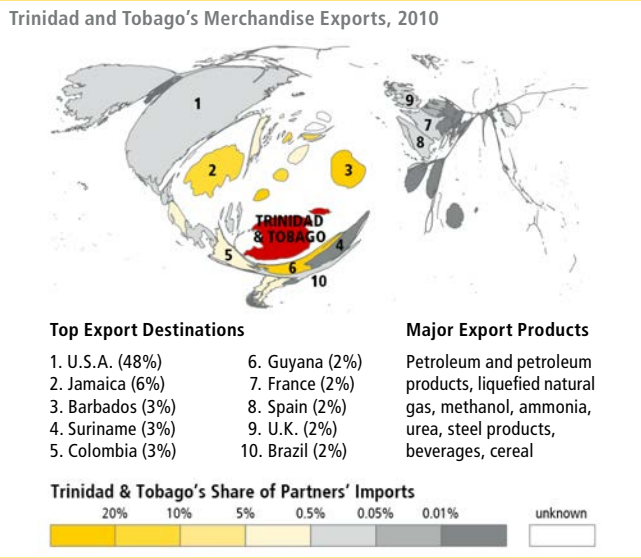
Information	31/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	59/140	.	19,753	.
International Phone Calls (Minutes per Capita)	26/140	15/140	226	287
Printed Publications Trade (USD per Capita)	56/135	42/135	\$4	\$18

People	.	.	.	.
Migrants (% of Population)	8/139	84/140	20%	3%
Tourists Dep./Arr. Per Capita	.	64/136	.	0.3
International Students (% of Tertiary Education Enrollment)	6/130	.	33%	.

## Summary

Trinidad and Tobago’s overall connectedness spiked in 2008 before returning to its 2007 level. It ranks 63<sup>rd</sup> out of 140 countries globally and the 3<sup>rd</sup> among the 22 countries in South & Central America & the Caribbean. Trinidad and Tobago’s high depth rank (20<sup>th</sup> out of 140 countries and first in the Caribbean) but low breadth (109<sup>th</sup> out of 140 countries and the second to last in the Caribbean) reflects its role as a regional hub in the Caribbean. Trinidad and Tobago’s connectedness is highest in the information pillar (where it ranks 26<sup>th</sup> worldwide out of 101 countries). Trinidad and Tobago is also noteworthy for the large proportion of its university students studying abroad, ranking 6<sup>th</sup> worldwide on this component.

## Rooted Map



## Breadth

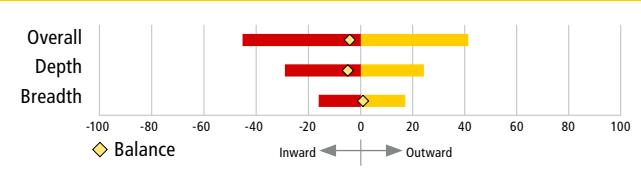
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
Trade	109/140		—	
Merchandise Trade	110/140	101/140	31%	22%

Capital	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

Information	46/101	.	.	.
International Phone Calls	52/101	11/101	23%	5%
Printed Publications Trade	113/135	63/135	93%	4%

People	65/124	.	.	.
Migrants	63/139	66/139	4%	70%
Tourists Departures/Arrivals	—	73/107	—	24%
International Students	—	.	—	.

## Directionality

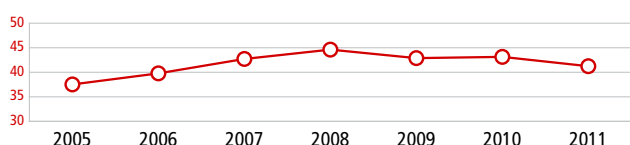


# TUNISIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	78/140	70/140	-8	41/100	43/100	-2
<b>Depth</b>	69/140	65/140	-4	23/50	23/50	0
<b>Breadth</b>	88/140	83/140	-5	19/50	20/50	-1
<b>Trade Pillar</b>	51/140	36/140	-15	56/100	58/100	-2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	87/101	86/101	-1	39/100	39/100	0
<b>People Pillar</b>	70/106	70/106	0	42/100	42/100	0

Connectedness Score Trend



## Depth

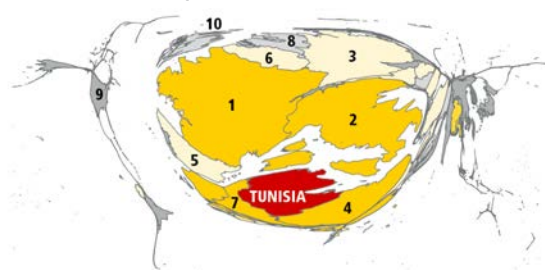
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	38/140		—	
Merchandise Trade (% of GDP)	46/140	34/140	38%	52%
Services Trade (% of GDP)	51/139	80/139	10%	7%
<b>Capital</b>	90/122		—	
FDI Stock (% of GDP)	108/132	23/140	1%	68%
FDI Flows (% of GFCF)	89/133	62/140	1%	14%
Portfolio Equity Stock (% of GDP)	76/102	46/97	0%	5%
Portfolio Equity Flows (% of GDP)	83/129	113/126	0%	0%
<b>Information</b>	81/140		—	
Internet Bandwidth (Bits per Second per Internet User)	69/140		14,832	
International Phone Calls (Minutes per Capita)	81/140	74/140	25	71
Printed Publications Trade (USD per Capita)	84/135	92/135	\$1	\$3
<b>People</b>	65/116		—	
Migrants (% of Population)	57/139	130/140	6%	0%
Tourists Dep./Arr. Per Capita	49/93	40/136	0.2	0.7
International Students (% of Tertiary Education Enrollment)	51/130	79/104	5%	1%

## Summary

The 78<sup>th</sup> position in the overall connectedness ranking is held by Tunisia, which ranks 11<sup>th</sup> out of 14 countries in the Middle East & North Africa. Tunisia's rank fell 8 places versus last year, with the decline driven primarily by the trade pillar. The trade pillar, however, remains Tunisia's strongest pillar, on which it ranks the 51<sup>st</sup> out of 140 countries. In addition, Tunisia's connectedness profile also reveals large inward FDI stocks, ranking 23<sup>rd</sup> globally on this component. While Tunisia's connectedness score rose consistently from 2005 to 2008, it has since that year been on a more moderate declining trend.

## Rooted Map

Tunisia's Merchandise Exports, 2011



Top Export Destinations

1. France (29%)
2. Italy (19%)
3. Germany (10%)
4. Libya (7%)
5. Spain (4%)
6. Belgium (3%)
7. Algeria (2%)
8. Netherlands (2%)
9. U.S.A. (2%)
10. U.K. (2%)

Major Export Products

Clothing, semi-finished goods and textiles, agricultural products, mechanical goods, phosphates and chemicals, hydrocarbons, electrical equipment

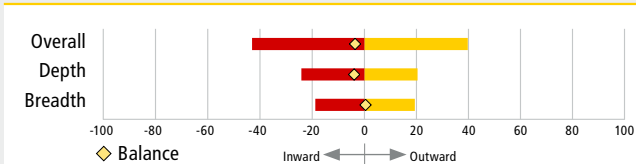
Tunisia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	81/140		—	
Merchandise Trade	76/140	77/140	13%	10%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	87/101		—	
International Phone Calls	78/101	85/101	31%	17%
Printed Publications Trade	95/135	98/135	15%	16%
<b>People</b>	81/124		—	
Migrants	90/139	96/139	12%	76%
Tourists Departures/Arrivals	—	62/107	—	44%
International Students	—	.	—	.

## Directionality

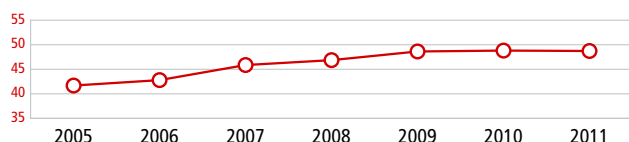


# TURKEY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	56/140	52/140	-4	49/100	49/100	0
<b>Depth</b>	107/140	110/140	3	14/50	13/50	1
<b>Breadth</b>	24/140	19/140	-5	35/50	36/50	-1
<b>Trade Pillar</b>	50/140	60/140	10	56/100	52/100	4
<b>Capital Pillar</b>	41/66	36/66	-5	42/100	47/100	-5
<b>Information Pillar</b>	28/101	30/101	2	69/100	66/100	3
<b>People Pillar</b>	59/106	59/106	0	48/100	48/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	115/140		—	
Merchandise Trade (% of GDP)	114/140	88/140	17%	31%
Services Trade (% of GDP)	84/139	134/139	5%	3%

<b>Capital</b>	88/122		—	
FDI Stock (% of GDP)	77/132	103/140	3%	18%
FDI Flows (% of GFCF)	77/133	99/140	1%	8%
Portfolio Equity Stock (% of GDP)	86/102	44/97	0%	5%
Portfolio Equity Flows (% of GDP)	104/129	40/126	0%	0%

<b>Information</b>	74/140		—	
Internet Bandwidth (Bits per Second per Internet User)	41/140		33,938	
International Phone Calls (Minutes per Capita)	95/140	73/140	15	73
Printed Publications Trade (USD per Capita)	81/135	102/135	\$1	\$2

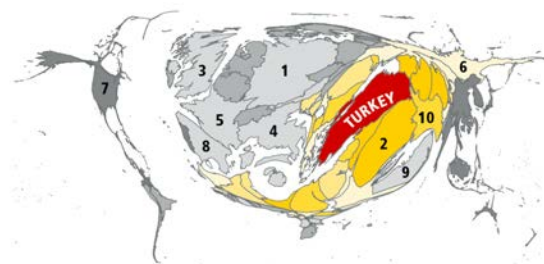
<b>People</b>	82/116		—	
Migrants (% of Population)	82/139	95/140	4%	2%
Tourists Dep./Arr. Per Capita	58/93	58/136	0.2	0.4
International Students (% of Tertiary Education Enrollment)	102/130	78/104	2%	1%

## Summary

Turkey's global connectedness rose strongly from 2005 to 2009 and has remained stable over the past two years, ranking 56<sup>th</sup> on this year's DHL Global Connectedness Index. Turkey has higher breadth (24<sup>th</sup>) than depth (107<sup>th</sup>), a typical pattern for a large country. Among Turkey's depth scores, its very low services imports (ranked 134<sup>th</sup> out of 139 countries) may reflect an untapped opportunity. Over the past year, Turkey's stable connectedness score masked significant changes at the pillar level. A decline on the capital pillar was offset by increases on the trade and information pillars.

## Rooted Map

Turkey's Merchandise Exports, 2011



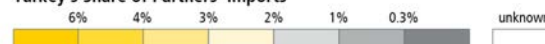
### Top Export Destinations

1. Germany (11%)
2. Iraq (6%)
3. U.K. (6%)
4. Italy (6%)
5. France (5%)
6. Russia (5%)
7. U.S.A. (4%)
8. Spain (3%)
9. U.A.E. (3%)
10. Iran (3%)

### Major Export Products

Apparel, foodstuffs, textiles, metal manufactures, transport equipment

### Turkey's Share of Partners' Imports



## Breadth

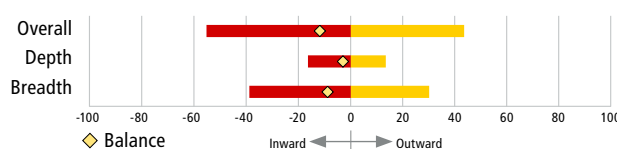
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	15/140		—	
Merchandise Trade	36/140	7/140	6%	6%

<b>Capital</b>	30/67		—	
FDI Stock	23/41	14/46	29%	0%
FDI Flows	29/38	18/41	17%	1%
Portfolio Equity Stock	33/66	—	1%	—

<b>Information</b>	12/101		—	
International Phone Calls	8/101	49/101	4%	0%
Printed Publications Trade	29/135	4/135	25%	1%

<b>People</b>	43/124		—	
Migrants	72/139	72/139	3%	4%
Tourists Departures/Arrivals	—	32/107	—	8%
International Students	—	42/93	—	42%

## Directionality



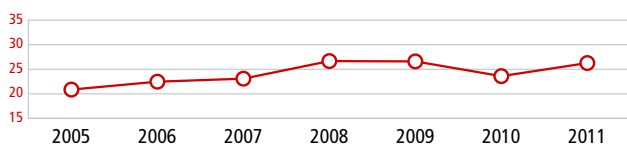


# UGANDA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	119/140	124/140	5	26/100	24/100	2
<b>Depth</b>	120/140	126/140	6	11/50	8/50	3
<b>Breadth</b>	99/140	97/140	-2	16/50	16/50	0
<b>Trade Pillar</b>	110/140	120/140	10	36/100	32/100	4
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	106/106	106/106	0	16/100	16/100	0

Connectedness Score Trend



## Depth

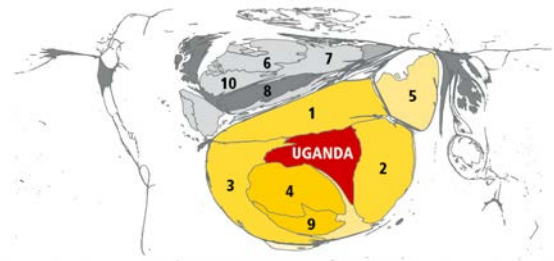
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	99/140		—	
Merchandise Trade (% of GDP)	126/140	81/140	13%	32%
Services Trade (% of GDP)	65/139	28/139	8%	13%
<b>Capital</b>	87/122		—	
FDI Stock (% of GDP)	131/132	59/140	0%	39%
FDI Flows (% of GFCF)	121/133	53/140	0%	19%
Portfolio Equity Stock (% of GDP)	.	69/97	.	1%
Portfolio Equity Flows (% of GDP)	81/129	34/126	0%	0%
<b>Information</b>	132/140		—	
Internet Bandwidth (Bits per Second per Internet User)	122/140		1,752	
International Phone Calls (Minutes per Capita)	126/140	131/140	4	6
Printed Publications Trade (USD per Capita)	120/135	108/135	\$0	\$1
<b>People</b>	106/116		—	
Migrants (% of Population)	132/139	96/140	1%	2%
Tourists Dep./Arr. Per Capita	92/93	113/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	83/130	.	3%	.

## Summary

Uganda ranks 119<sup>th</sup> out of 140 countries on this year's DHL Global Connectedness Index, up from 124<sup>th</sup> last year. It ranks 22<sup>nd</sup> in Sub-Saharan Africa (out of 29 countries analyzed in that region). Among its pillar level depth scores, Uganda has its highest depth on the capital pillar, on which it ranks 87<sup>th</sup> worldwide. It has stronger inward than outward connectedness, a pattern that is most pronounced on the trade and capital pillars. The depth of Uganda's services trade is also particularly noteworthy. Uganda ranks 28<sup>th</sup> worldwide on services imports depth and 65<sup>th</sup> on services exports depth.

## Rooted Map

Uganda's Merchandise Exports, 2010



### Top Export Destinations

1. Sudan (13%)
2. Kenya (12%)
3. Congo, DRC (11%)
4. Rwanda (9%)
5. U.A.E. (7%)

### Major Export Products

6. Netherlands (6%)
  7. Germany (5%)
  8. Switzerland (4%)
  9. Burundi (3%)
  10. Belgium (3%)
- Coffee, fish and fish products, tea, cotton, flowers, horticultural products; gold

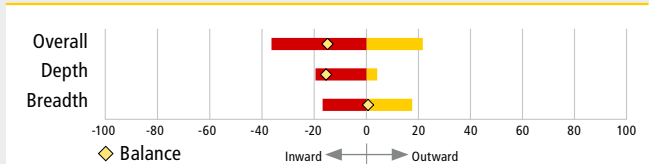
### Uganda's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	93/140		—	
Merchandise Trade	98/140	85/140	55%	24%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	119/135	55/135	87%	12%
<b>People</b>	118/124		—	
Migrants	74/139	130/139	37%	97%
Tourists Departures/Arrivals	—	98/107	—	75%
International Students	—	.	—	.

## Directionality



# UKRAINE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	52/140	56/140	4	50/100	48/100	2
<b>Depth</b>	51/140	58/140	7	26/50	25/50	1
<b>Breadth</b>	65/140	67/140	2	24/50	23/50	1
<b>Trade Pillar</b>	34/140	47/140	13	60/100	55/100	5
<b>Capital Pillar</b>	30/66	31/66	1	52/100	52/100	0
<b>Information Pillar</b>	83/101	82/101	-1	40/100	40/100	0
<b>People Pillar</b>	55/106	55/106	0	49/100	49/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	31/140		—	
Merchandise Trade (% of GDP)	43/140	35/140	42%	50%
Services Trade (% of GDP)	43/139	55/139	11%	9%

<b>Capital</b>	63/122		—	
FDI Stock (% of GDP)	67/132	58/140	5%	40%
FDI Flows (% of GFCF)	78/133	43/140	1%	22%
Portfolio Equity Stock (% of GDP)	85/102	56/97	0%	2%
Portfolio Equity Flows (% of GDP)	78/129	41/126	0%	0%

<b>Information</b>	87/140		—	
Internet Bandwidth (Bits per Second per Internet User)	84/140		9,835	
International Phone Calls (Minutes per Capita)	83/140	79/140	24	60
Printed Publications Trade (USD per Capita)	64/135	100/135	\$3	\$2

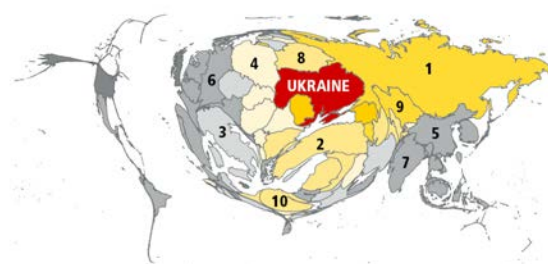
<b>People</b>	52/116			
Migrants (% of Population)	32/139	34/140	11%	11%
Tourists Dep./Arr. Per Capita	39/93	48/136	0.4	0.5
International Students (% of Tertiary Education Enrollment)	106/130	63/104	1%	1%

## Summary

Ukraine ranks 52<sup>nd</sup> on this year's DHL Global Connectedness Index and 27<sup>th</sup> within Europe. Ukraine's highest position is on the trade pillar, where it ranks 34<sup>th</sup> out of 140 countries, 31<sup>st</sup> on trade depth and 73<sup>rd</sup> on trade breadth. It is noteworthy that, among European countries, Ukraine has the fourth highest share of its merchandise exports going to other regions (outside of Europe) and the second highest share among non-EU members (after Switzerland). Ukraine's connectedness was rising swiftly prior to the onset of the financial crisis, suffered a moderate decline, and has now recovered to set a new record in 2011.

## Rooted Map

Ukraine's Merchandise Exports, 2011



### Top Export Destinations

1. Russia (27%)
2. Turkey (6%)
3. Italy (5%)
4. Poland (4%)
5. China (4%)
6. Germany (3%)
7. India (3%)
8. Belarus (3%)
9. Kazakhstan (2%)
10. Egypt (2%)

### Major Export Products

Ferrous and nonferrous metals, fuel and petroleum products, chemicals, machinery and transport equipment, food products

### Ukraine's Share of Partners' Imports



## Breadth

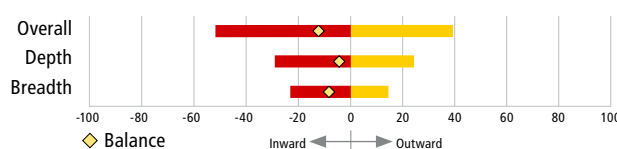
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	73/140		—	
Merchandise Trade	72/140	70/140	61%	74%

<b>Capital</b>	20/67		—	
FDI Stock	41/41	29/46	98%	85%
FDI Flows	·	·	·	·
Portfolio Equity Stock	13/66	—	100%	—

<b>Information</b>	80/101		—	
International Phone Calls	90/101	75/101	93%	90%
Printed Publications Trade	85/135	58/135	76%	90%

<b>People</b>	77/124		—	
Migrants	94/139	74/139	80%	83%
Tourists Departures/Arrivals	—	105/107	—	96%
International Students	—	20/93	—	20%

## Directionality

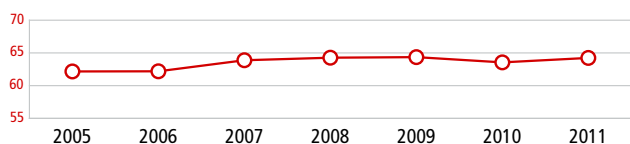


# UNITED ARAB EMIRATES

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	23/140	23/140	0	64/100	64/100	0
<b>Depth</b>	12/140	11/140	-1	36/50	37/50	-1
<b>Breadth</b>	46/140	53/140	7	28/50	27/50	1
<b>Trade Pillar</b>	13/140	13/140	0	72/100	70/100	2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	37/101	38/101	1	64/100	63/100	1
<b>People Pillar</b>	.	.	.	.	.	.

### Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	23/140		—	
Merchandise Trade (% of GDP)	7/140	31/140	79%	57%
Services Trade (% of GDP)	107/139	32/139	3%	11%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	40/132	92/140	16%	24%
FDI Flows (% of GFCF)	59/133	103/140	3%	7%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	.	.	.	.

<b>Information</b>	14/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	47/140	.	.	.
International Phone Calls (Minutes per Capita)	8/140	3/140	669	962
Printed Publications Trade (USD per Capita)	25/135	31/135	\$42	\$33

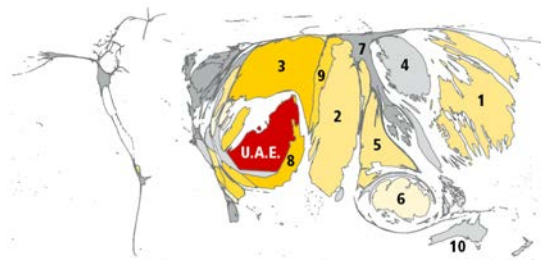
<b>People</b>	14/116	.	.	.
Migrants (% of Population)	93/139	4/140	3%	44%
Tourists Dep./Arr. Per Capita	.	25/136	.	0.9
International Students (% of Tertiary Education Enrollment)	27/130	2/104	10%	39%

## Summary

The United Arab Emirates ranks 23<sup>rd</sup> out of the 140 countries covered in this year's DHL Global Connectedness Index and is the top ranked country among OPEC members. UAE's highest position is on the trade pillar – on which it ranks 13<sup>th</sup> globally and first within the Middle East & North Africa as well as among OPEC countries. Merchandise exports account for 79% of the UAE's GDP, the highest share among OPEC Countries covered in the index. One of the most remarkable characteristics of the UAE's global connectedness is its 4<sup>th</sup> rank worldwide on inward migration. This reflects the participation of expatriates and migrant labor across the UAE's economy.

## Rooted Map

### U.A.E.'s Merchandise Exports, 2011



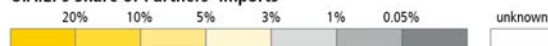
#### Top Export Destinations

1. Japan (19%)
2. India (16%)
3. Iran (13%)
4. South Korea (6%)
5. Thailand (6%)
6. Singapore (5%)
7. China (4%)
8. Oman (3%)
9. Pakistan (3%)
10. Australia (2%)

#### Major Export Products

Crude oil (45%), natural gas, reexports, dried fish, dates

#### U.A.E.'s Share of Partners' Imports



## Breadth

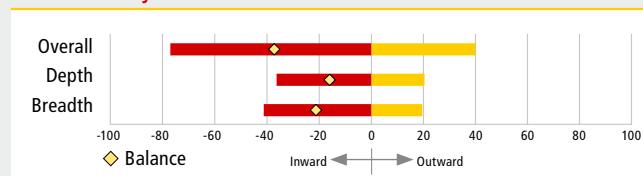
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	46/140		—	
Merchandise Trade	92/140	8/140	22%	8%

<b>Capital</b>	.	.	.	.
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	73/101	.	.	.
International Phone Calls	67/101	90/101	32%	25%
Printed Publications Trade	59/135	23/135	70%	18%

<b>People</b>	.	.	.	.
Migrants	80/139	43/139	58%	11%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality



# UNITED KINGDOM

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	6/140	8/140	2	77/100	76/100	1
<b>Depth</b>	43/140	40/140	-3	28/50	28/50	0
<b>Breadth</b>	1/140	1/140	0	49/50	48/50	1
<b>Trade Pillar</b>	21/140	21/140	0	66/100	63/100	3
<b>Capital Pillar</b>	5/66	7/66	2	83/100	82/100	1
<b>Information Pillar</b>	1/101	1/101	0	93/100	93/100	0
<b>People Pillar</b>	5/106	5/106	0	84/100	84/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	103/140		—	
Merchandise Trade (% of GDP)	104/140	103/140	20%	26%
Services Trade (% of GDP)	42/139	77/139	11%	7%

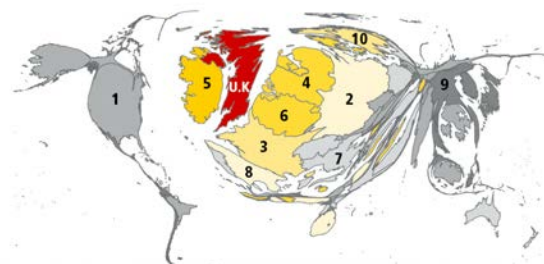
<b>Capital</b>	13/122		—	
FDI Stock (% of GDP)	10/132	42/140	72%	50%
FDI Flows (% of GFCF)	18/133	56/140	19%	18%
Portfolio Equity Stock (% of GDP)	12/102	6/97	44%	54%
Portfolio Equity Flows (% of GDP)	118/129	19/126	0%	1%

<b>Information</b>	8/140		—	
Internet Bandwidth (Bits per Second per Internet User)	6/140		166,073	
International Phone Calls (Minutes per Capita)	15/140	28/140	340	226
Printed Publications Trade (USD per Capita)	13/135	23/135	\$69	\$45

<b>People</b>	37/116			
Migrants (% of Population)	53/139	39/140	7%	10%
Tourists Dep./Arr. Per Capita	17/93	51/136	0.9	0.5
International Students (% of Tertiary Education Enrollment)	120/130	12/104	1%	15%

## Rooted Map

U.K.'s Merchandise Exports, 2011



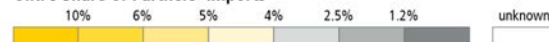
### Top Export Destinations

1. U.S.A. (13%)
2. Germany (11%)
3. France (8%)
4. Netherlands (8%)
5. Ireland (6%)
6. Belgium (5%)
7. Italy (3%)
8. Spain (3%)
9. China (3%)
10. Sweden (2%)

### Major Export Products

Manufactured goods, fuels, chemicals; food, beverages, tobacco

### U.K.'s Share of Partners' Imports



## Breadth

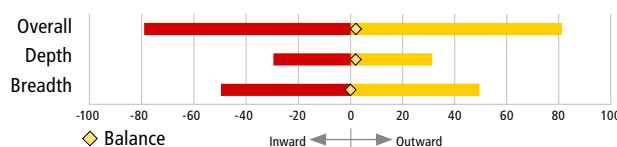
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	2/140		—	
Merchandise Trade	3/140	6/140	59%	60%

<b>Capital</b>	2/67		—	
FDI Stock	4/41	2/46	56%	55%
FDI Flows	3/38	7/41	41%	41%
Portfolio Equity Stock	6/66	—	36%	—

<b>Information</b>	2/101		—	
International Phone Calls	1/101	22/101	39%	48%
Printed Publications Trade	1/135	1/135	56%	39%

<b>People</b>	2/124		—	
Migrants	10/139	8/139	22%	33%
Tourists Departures/Arrivals	—	—	—	—
International Students	—	4/93	—	35%

## Directionality



The United Kingdom ranks 6<sup>th</sup> in the overall connectedness index with higher breadth (1<sup>st</sup>) than depth (43<sup>rd</sup>), reflecting the very global distribution of its international ties but the more modest scale of its international flows in relation to the size of its domestic economy. The United Kingdom is the top ranked country on the information pillar but ranks only 21<sup>st</sup> on the trade pillar. Its stronger integration in capital and services than in merchandise is evidenced by its depth ranks: 13<sup>th</sup> on the capital pillar and 8<sup>th</sup> on the information pillar but only 103<sup>rd</sup> on the trade pillar, with significantly higher ranks on services trade than merchandise trade. Its breadth, however, is consistently high, ranking 2<sup>nd</sup> on all four pillars.

# UNITED STATES

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	20/140	21/140	1	65/100	65/100	0
<b>Depth</b>	89/140	87/140	-2	18/50	18/50	0
<b>Breadth</b>	2/140	2/140	0	47/50	47/50	0
<b>Trade Pillar</b>	76/140	73/140	-3	48/100	47/100	1
<b>Capital Pillar</b>	6/66	6/66	0	82/100	82/100	0
<b>Information Pillar</b>	17/101	17/101	0	75/100	75/100	0
<b>People Pillar</b>	31/106	31/106	0	62/100	62/100	0

### Connectedness Score Trend



## Depth

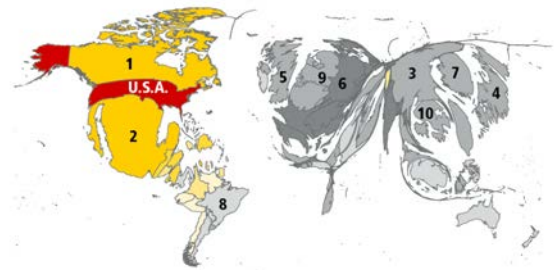
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	139/140		—	
Merchandise Trade (% of GDP)	133/140	134/140	10%	15%
Services Trade (% of GDP)	97/139	133/139	4%	3%
<b>Capital</b>	20/122		—	
FDI Stock (% of GDP)	25/132	94/140	30%	23%
FDI Flows (% of GFCF)	23/133	93/140	15%	9%
Portfolio Equity Stock (% of GDP)	19/102	17/97	30%	23%
Portfolio Equity Flows (% of GDP)	28/129	17/126	1%	1%
<b>Information</b>	34/140		—	
Internet Bandwidth (Bits per Second per Internet User)	33/140		47,174	
International Phone Calls (Minutes per Capita)	24/140	65/140	237	81
Printed Publications Trade (USD per Capita)	33/135	50/135	\$19	\$14
<b>People</b>	75/116		—	
Migrants (% of Population)	129/139	27/140	1%	14%
Tourists Dep./Arr. Per Capita	52/93	73/136	0.2	0.2
International Students (% of Tertiary Education Enrollment)	130/130	42/104	0%	3%

## Summary

The United States ranks 20<sup>th</sup> overall and has the world's second highest breadth score, reflecting its significant ties to nearly every other country around the world. It has a more modest rank on depth (89<sup>th</sup>), which is not unusual for a country with a very large internal market. The U.S. has its strongest position on the capital pillar on which it ranks 6<sup>th</sup> overall and 1<sup>st</sup> on breadth. On the other hand, the U.S. has a remarkably low score on the trade pillar, 76<sup>th</sup> overall and 139<sup>th</sup> (next to last) on depth. Merchandise and services exports account for only 14% of U.S. GDP and imports add up to only 18%. The U.S. has maintained a stable level of connectedness since 2007.

## Rooted Map

### U.S.A.'s Merchandise Exports, 2011



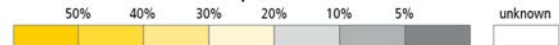
#### Top Export Destinations

1. Canada (19%)
2. Mexico (13%)
3. China (7%)
4. Japan (4%)
5. U.K. (4%)
6. Germany (3%)
7. South Korea (3%)
8. Brazil (3%)
9. Netherlands (3%)
10. Hong Kong (2%)

#### Major Export Products

Agricultural products (soybeans, fruit, corn), industrial supplies (organic chemicals), capital goods (transistors, aircraft)

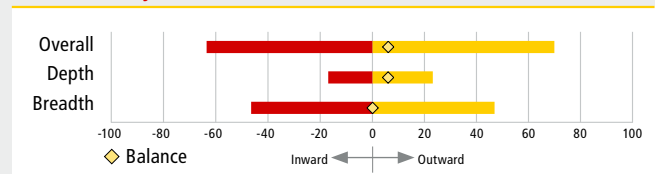
#### U.S.A.'s Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	6/140		—	
Merchandise Trade	10/140	16/140	32%	26%
<b>Capital</b>	1/67		—	
FDI Stock	2/41	9/46	17%	10%
FDI Flows	4/38	4/41	15%	11%
Portfolio Equity Stock	2/66	—	13%	—
<b>Information</b>	22/101		—	
International Phone Calls	9/101	59/101	29%	48%
Printed Publications Trade	16/135	31/135	56%	23%
<b>People</b>	13/124		—	
Migrants	30/139	6/139	28%	30%
Tourists Departures/Arrivals	—	49/107	—	56%
International Students	—	2/93	—	6%

## Directionality





# URUGUAY

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	101/140	105/140	4	34/100	34/100	0
<b>Depth</b>	105/140	103/140	-2	14/50	14/50	0
<b>Breadth</b>	79/140	85/140	6	20/50	20/50	0
<b>Trade Pillar</b>	111/140	110/140	-1	36/100	35/100	1
<b>Capital Pillar</b>	54/66	53/66	-1	32/100	33/100	-1
<b>Information Pillar</b>	79/101	81/101	2	42/100	41/100	1
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	125/140		—	
Merchandise Trade (% of GDP)	117/140	115/140	17%	23%
Services Trade (% of GDP)	72/139	120/139	7%	4%

<b>Capital</b>	92/122		—	
FDI Stock (% of GDP)	110/132	67/140	1%	36%
FDI Flows (% of GFCF)	122/133	36/140	0%	27%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	69/129	106/126	0%	0%

<b>Information</b>	61/140		—	
Internet Bandwidth (Bits per Second per Internet User)	43/140		32,078	
International Phone Calls (Minutes per Capita)	60/140	78/140	46	61
Printed Publications Trade (USD per Capita)	37/135	101/135	\$13	\$2

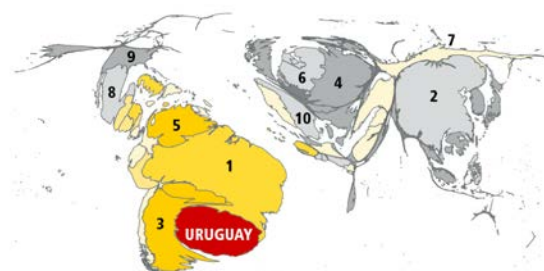
<b>People</b>	59/116			
Migrants (% of Population)	51/139	88/140	7%	2%
Tourists Dep./Arr. Per Capita	43/93	36/136	0.3	0.7
International Students (% of Tertiary Education Enrollment)	103/130	.	2%	.

## Summary

Uruguay's overall connectedness started to follow a declining trend in 2007 stabilizing between 2010 and 2011. In 2011, Uruguay ranks 101<sup>st</sup> out of 140 countries and 14<sup>th</sup> out of 22 countries in South & Central America & the Caribbean. Uruguay's higher position on breadth (79<sup>th</sup> out of 140 countries) than depth (105<sup>th</sup> out of 140) is unusual, as small countries typically have higher depth than breadth. Uruguay especially low depth on the trade pillar (125<sup>th</sup>) may reflect an untapped opportunity. Uruguay's merchandise trade depth is very low, but its services exports are relatively higher, ranking 72<sup>nd</sup> on services exports depth.

## Rooted Map

Uruguay's Merchandise Exports, 2011



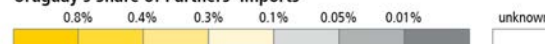
Top Export Destinations

1. Brazil (20%)
2. China (15%)
3. Argentina (7%)
4. Germany (6%)
5. Venezuela (4%)
6. Netherlands (4%)
7. Russia (4%)
8. Mexico (3%)
9. U.S.A. (3%)
10. Spain (3%)

Major Export Products

Beef, soybeans, cellulose, rice, wheat, wood, dairy products; wool

Uruguay's Share of Partners' Imports



## Breadth

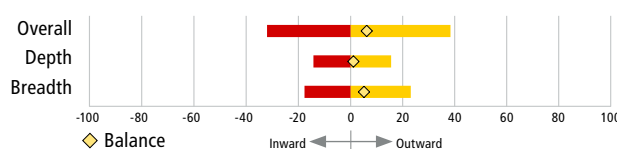
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	61/140		—	
Merchandise Trade	52/140	76/140	42%	46%

<b>Capital</b>	45/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	38/41	.	70%
Portfolio Equity Stock	41/66	—	13%	—

<b>Information</b>	93/101		—	
International Phone Calls	85/101	71/101	68%	62%
Printed Publications Trade	130/135	107/135	.	.

<b>People</b>	.		—	
Migrants	83/139	80/139	61%	50%
Tourists Departures/Arrivals	—	.	—	.
International Students	—	.	—	.

## Directionality



# UZBEKISTAN

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	123/140	122/140	-1	25/100	24/100	1
<b>Depth</b>	123/140	120/140	-3	10/50	10/50	0
<b>Breadth</b>	100/140	107/140	7	15/50	15/50	0
<b>Trade Pillar</b>	132/140	132/140	0	25/100	24/100	1
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	66/101	65/101	-1	52/100	51/100	1
<b>People Pillar</b>	81/106	81/106	0	38/100	38/100	0

### Connectedness Score Trend



## Depth

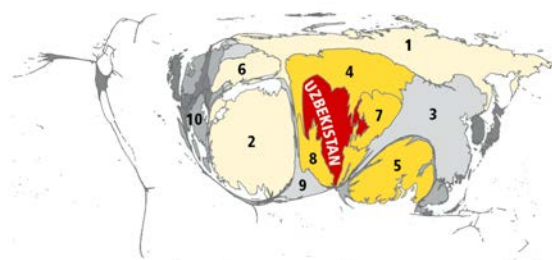
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	116/140		—	
Merchandise Trade (% of GDP)	73/140	117/140	29%	22%
Services Trade (% of GDP)	100/139	139/139	3%	1%
<b>Capital</b>	-		—	
FDI Stock (% of GDP)	-	114/140	-	15%
FDI Flows (% of GFCF)	-	61/140	-	14%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	-	-	-	-
<b>Information</b>	128/140		—	
Internet Bandwidth (Bits per Second per Internet User)	132/140		579	
International Phone Calls (Minutes per Capita)	121/140	88/140	6	42
Printed Publications Trade (USD per Capita)	-	-	-	-
<b>People</b>	73/116		—	
Migrants (% of Population)	45/139	62/140	9%	4%
Tourists Dep./Arr. Per Capita	71/93	108/136	0.1	0.0
International Students (% of Tertiary Education Enrollment)	34/130	94/104	9%	0%

## Summary

Uzbekistan ranks 123<sup>rd</sup> on this year's DHL Global Connectedness Index, down one place versus last year's ranking. It is the 9<sup>th</sup> ranked country out of 12 in South & Central Asia. Uzbekistan's connectedness peaked in 2008 and has since returned to its 2005 level. Focusing on its pillar level depth scores, Uzbekistan's connectedness is deepest on the people pillar where it ranks 73<sup>rd</sup> out of 116 countries, a position that is driven primarily by its relatively higher ranks on migration and international student flows. Its lowest depth rank is on the information pillar, where it ranks 128<sup>th</sup> out of 140 countries.

## Rooted Map

### Uzbekistan's Merchandise Exports, 2011



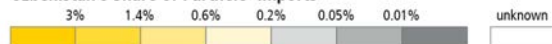
#### Top Export Destinations

1. Russia (21%)
2. Turkey (17%)
3. China (15%)
4. Kazakhstan (10%)
5. Bangladesh (9%)
6. Ukraine (4%)
7. Kyrgyzstan (4%)
8. Turkmenistan (3%)
9. Iran (2%)
10. Italy (2%)

#### Major Export Products

Energy products, cotton, gold, mineral fertilizers, ferrous and nonferrous metals, textiles, food products, machinery, automobiles

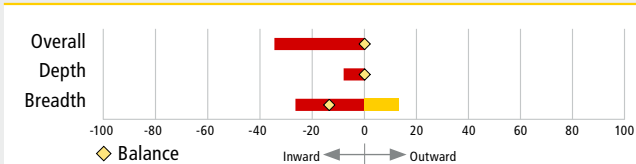
#### Uzbekistan's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	107/140		—	
Merchandise Trade	129/140	89/140	45%	15%
<b>Capital</b>	-		—	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-
<b>Information</b>	8/101		—	
International Phone Calls	17/101	20/101	38%	15%
Printed Publications Trade	-	-	-	-
<b>People</b>	86/124		—	
Migrants	109/139	21/139	34%	41%
Tourists Departures/Arrivals	-	-	-	-
International Students	-	79/93	-	75%

## Directionality



# VENEZUELA, RB

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	128/140	132/140	4	24/100	20/100	4
<b>Depth</b>	128/140	131/140	3	7/50	5/50	2
<b>Breadth</b>	95/140	103/140	8	17/50	15/50	2
<b>Trade Pillar</b>	128/140	134/140	6	30/100	23/100	7
<b>Capital Pillar</b>	66/66	66/66	0	11/100	10/100	1
<b>Information Pillar</b>	55/101	46/101	-9	57/100	58/100	-1
<b>People Pillar</b>	99/106	99/106	0	26/100	26/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	126/140		—	
Merchandise Trade (% of GDP)	72/140	133/140	29%	15%
Services Trade (% of GDP)	138/139	121/139	1%	4%

<b>Capital</b>	108/122		—	
FDI Stock (% of GDP)	60/132	116/140	6%	14%
FDI Flows (% of GFCF)	60/133	129/140	3%	3%
Portfolio Equity Stock (% of GDP)	90/102	89/97	0%	0%
Portfolio Equity Flows (% of GDP)	114/129	68/126	0%	0%

<b>Information</b>	100/140		—	
Internet Bandwidth (Bits per Second per Internet User)	90/140		8,108	
International Phone Calls (Minutes per Capita)	68/140	117/140	36	14
Printed Publications Trade (USD per Capita)	127/135	89/135	\$0	\$4

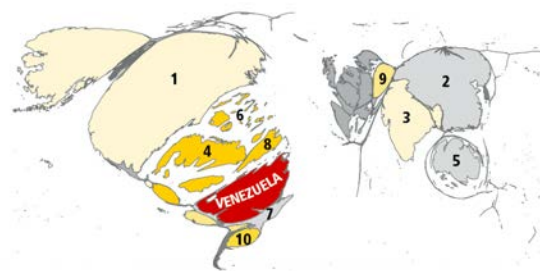
<b>People</b>	108/116			
Migrants (% of Population)	117/139	72/140	1%	3%
Tourists Dep./Arr. Per Capita	77/93	120/136	0.1	0.0
International Students (% of Tertiary Education Enrollment)	124/130	98/104	1%	0%

## Summary

Venezuela ranks 128<sup>th</sup> globally out of 140 countries, up 4 places versus last year's ranking. It has higher breadth (95<sup>th</sup>) than depth (128<sup>th</sup>). Merchandise exports account for 29% of Venezuela's GDP, ranking it 72<sup>nd</sup> globally in terms of merchandise exports depth. Among OPEC member countries, however, Venezuela has the lowest rankings on both overall connectedness and on the trade pillar. Venezuela's connectedness had been on a declining trend from 2007 to 2010, but rebounded in 2011, erasing much of its prior decline.

## Rooted Map

Venezuela's Merchandise Exports, 2011



Top Export Destinations

1. U.S.A. (51%)
2. China (13%)
3. India (7%)
4. Cuba (5%)
5. Singapore (4%)

Major Export Products

6. The Bahamas (2%)
  7. Brazil (2%)
  8. Dom. Rep. (1%)
  9. Belarus (1%)
  10. Uruguay (1%)
- Petroleum, bauxite and aluminum, minerals, chemicals, agricultural products, basic manufactures

Venezuela's Share of Partners' Imports



## Breadth

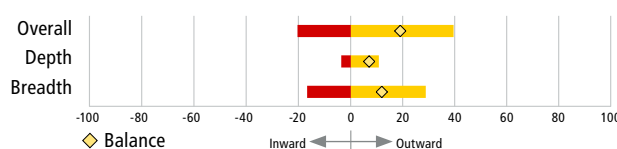
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	86/140		—	
Merchandise Trade	86/140	84/140	15%	27%

<b>Capital</b>	66/67		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	65/66	—	84%	—

<b>Information</b>	26/101		—	
International Phone Calls	10/101	27/101	43%	16%
Printed Publications Trade	63/135	87/135	73%	54%

<b>People</b>	80/124		—	
Migrants	36/139	109/139	21%	75%
Tourists Departures/Arrivals	—	50/107	—	41%
International Students	—	83/93	—	95%

## Directionality

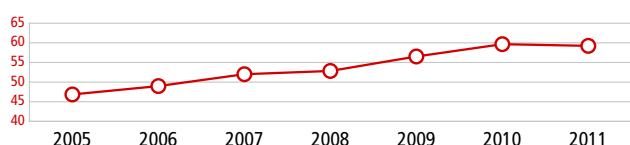


# VIETNAM

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	31/140	30/140	-1	59/100	60/100	-1
<b>Depth</b>	46/140	44/140	-2	27/50	27/50	0
<b>Breadth</b>	36/140	33/140	-3	32/50	33/50	-1
<b>Trade Pillar</b>	7/140	6/140	-1	82/100	82/100	0
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	79/106	77/106	-2	39/100	40/100	-1

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	11/140		—	
Merchandise Trade (% of GDP)	8/140	4/140	79%	87%
Services Trade (% of GDP)	69/139	41/139	7%	10%

<b>Capital</b>	.	.	.	.
FDI Stock (% of GDP)	.	31/140	.	60%
FDI Flows (% of GFCF)	62/133	42/140	3%	23%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	116/129	14/126	0%	1%

<b>Information</b>	104/140	.	.	.
Internet Bandwidth (Bits per Second per Internet User)	83/140	.	.	9,998
International Phone Calls (Minutes per Capita)	122/140	114/140	5	16
Printed Publications Trade (USD per Capita)	113/135	119/135	\$0	\$1

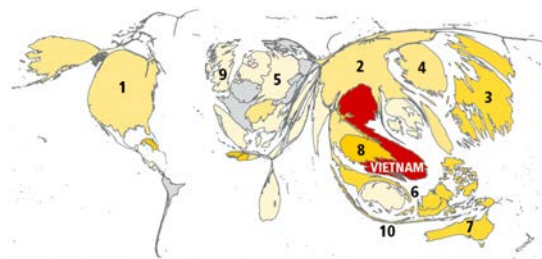
<b>People</b>	109/116	.	.	.
Migrants (% of Population)	107/139	138/140	2%	0%
Tourists Dep./Arr. Per Capita	89/93	103/136	0.0	0.0
International Students (% of Tertiary Education Enrollment)	89/130	92/104	2%	0%

## Summary

Vietnam holds the 31<sup>st</sup> rank overall on this year's DHL Global Connectedness Index, with the 8<sup>th</sup> highest score among the 19 countries in the East Asia & Pacific region. Vietnam's connectedness is strongest on the trade pillar, on which it ranks the 7<sup>th</sup> globally and 5<sup>th</sup> within its region. Within the trade pillar, Vietnam ranks highest on the depth of its merchandise trade – 4<sup>th</sup> on imports (87% of GDP) and 8<sup>th</sup> on exports (79% of GDP). Vietnam is also among the countries with the broadest export pattern, ranking 5<sup>th</sup> on breadth. The breadth of its imports, however, is significantly lower. For a much more detailed examination of Vietnam's connectedness pattern and its implications, refer to Chapter 4 where Vietnam is covered as one of the chapter's main examples.

## Rooted Map

Vietnam's Merchandise Exports, 2011



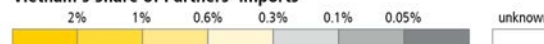
### Top Export Destinations

1. U.S.A. (18%)
2. China (12%)
3. Japan (12%)
4. South Korea (5%)
5. Germany (4%)

### Major Export Products

6. Malaysia (3%)
  7. Australia (3%)
  8. Cambodia (3%)
  9. U.K. (3%)
  10. Indonesia (3%)
- Clothes, shoes, marine products, crude oil, electronics, wooden products, rice, machinery

### Vietnam's Share of Partners' Imports



## Breadth

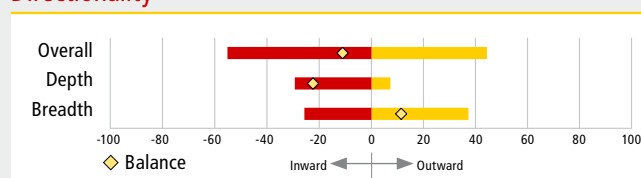
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	32/140		—	
Merchandise Trade	5/140	60/140	50%	77%

<b>Capital</b>	.	.	.	.
FDI Stock	40/41	40/46	60%	72%
FDI Flows	.	33/41	.	56%
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.	.	.	.
International Phone Calls	.	.	.	.
Printed Publications Trade	22/135	72/135	42%	82%

<b>People</b>	38/124	.	.	.
Migrants	19/139	19/139	20%	65%
Tourists Departures/Arrivals	—	59/107	—	78%
International Students	—	44/93	—	98%

## Directionality



# YEMEN, REPUBLIC

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	108/140	109/140	1	31/100	32/100	-1
<b>Depth</b>	117/140	112/140	-5	12/50	12/50	0
<b>Breadth</b>	86/140	81/140	-5	19/50	20/50	-1
<b>Trade Pillar</b>	99/140	95/140	-4	40/100	42/100	-2
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	89/106	89/106	0	33/100	33/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	95/140		—	
Merchandise Trade (% of GDP)	55/140	109/140	35%	24%
Services Trade (% of GDP)	89/139	81/139	4%	7%

<b>Capital</b>	98/122		—	
FDI Stock (% of GDP)	94/132	123/140	2%	12%
FDI Flows (% of GFCF)	66/133	139/140	2%	-13%
Portfolio Equity Stock (% of GDP)	74/102	.	0%	.
Portfolio Equity Flows (% of GDP)	41/129	75/126	0%	0%

<b>Information</b>	123/140		—	
Internet Bandwidth (Bits per Second per Internet User)	128/140		1,082	
International Phone Calls (Minutes per Capita)	127/140	104/140	3	24
Printed Publications Trade (USD per Capita)	132/135	46/135	\$0	\$15

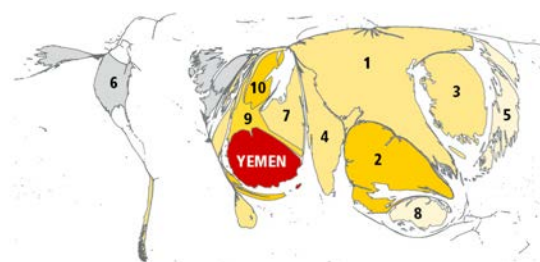
<b>People</b>	88/116			
Migrants (% of Population)	100/139	91/140	3%	2%
Tourists Dep./Arr. Per Capita	.	117/136	.	0.0
International Students (% of Tertiary Education Enrollment)	85/130	47/104	3%	3%

## Summary

Yemen ranks 108<sup>th</sup> out of 140 countries on the overall connectedness index and 13<sup>th</sup> within the Middle East & North Africa. After rising strongly from 2005 to 2007 and then declining modestly, Yemen's connectedness has remained stable over the last four years. Its rank improved by one position over the past year. Focusing on Yemen's depth scores, its depth is highest on the people pillar and lowest on the information pillar. Yemen also has particularly low inward FDI flows and stocks, ranking 139<sup>th</sup> out of 140 countries on the depth of its inward FDI flows and 123<sup>rd</sup> out of 140 countries on the depth of its inward FDI stocks.

## Rooted Map

Yemen's Merchandise Exports, 2011



### Top Export Destinations

1. China (30%)
2. Thailand (14%)
3. South Korea (11%)
4. India (8%)
5. Japan (6%)
6. U.S.A. (6%)
7. U.A.E. (5%)
8. Singapore (3%)
9. Saudi Arabia (3%)
10. Kuwait (3%)

### Major Export Products

Crude oil, coffee, dried and salted fish, liquefied natural gas

### Yemen's Share of Partners' Imports



## Breadth

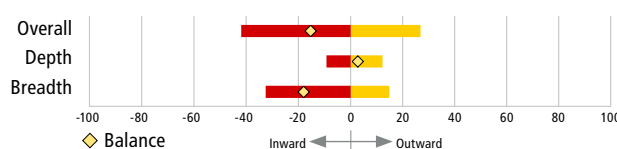
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	83/140		—	
Merchandise Trade	83/140	78/140	13%	40%

<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—

<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	132/135	97/135	41%	3%

<b>People</b>	92/124		—	
Migrants	119/139	10/139	88%	29%
Tourists Departures/Arrivals	—	96/107	—	73%
International Students	—	.	—	.

## Directionality



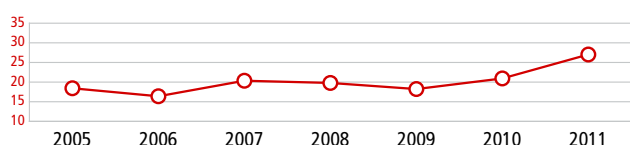


# ZAMBIA

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	116/140	128/140	12	27/100	21/100	6
<b>Depth</b>	77/140	79/140	2	21/50	20/50	1
<b>Breadth</b>	134/140	139/140	5	6/50	1/50	5
<b>Trade Pillar</b>	117/140	128/140	11	34/100	26/100	8
<b>Capital Pillar</b>	.	.	.	.	.	.
<b>Information Pillar</b>	.	.	.	.	.	.
<b>People Pillar</b>	.	.	.	.	.	.

Connectedness Score Trend



## Depth

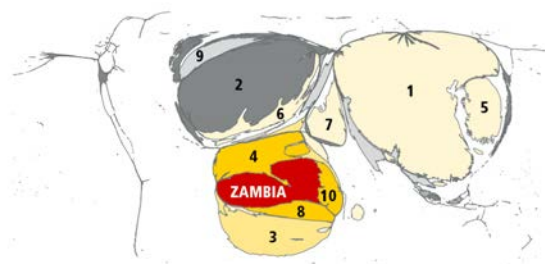
	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	56/140		—	
Merchandise Trade (% of GDP)	39/140	65/140	46%	37%
Services Trade (% of GDP)	123/139	101/139	2%	5%
<b>Capital</b>	19/122		—	
FDI Stock (% of GDP)	35/132	25/140	18%	67%
FDI Flows (% of GFCF)	16/133	18/140	21%	37%
Portfolio Equity Stock (% of GDP)	.	.	.	.
Portfolio Equity Flows (% of GDP)	83/129	42/126	0%	0%
<b>Information</b>	134/140		—	
Internet Bandwidth (Bits per Second per Internet User)	135/140		452	
International Phone Calls (Minutes per Capita)	133/140	125/140	2	9
Printed Publications Trade (USD per Capita)	92/135	106/135	\$1	\$2
<b>People</b>	.		.	
Migrants (% of Population)	112/139	101/140	2%	2%
Tourists Dep./Arr. Per Capita	.	99/136	.	0.1
International Students (% of Tertiary Education Enrollment)	.	.	.	.

## Summary

Zambia ranks 116<sup>th</sup> out of 140 countries on the overall connectedness index, up from 128<sup>th</sup> last year. Zambia's large increase in its global connectedness over the past year was driven by the trade pillar. Within Sub-Saharan Africa, Zambia is the 19<sup>th</sup> ranked country. Focusing on Zambia's depth rankings at the pillar level due to limited breadth data and the closer relationship between depth and growth, Zambia's high rank on the capital pillar (19<sup>th</sup> out of 122 countries) is particularly noteworthy. Zambia ranks among the top 35 countries worldwide on the depth of its FDI across both flows and stocks, both inward and outward. Inward FDI flows accounted for 37% of Zambia's gross fixed capital formation over the past three years.

## Rooted Map

Zambia's Merchandise Exports, 2011



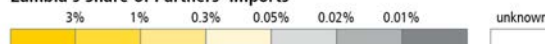
### Top Export Destinations

1. China (36%)
2. Switzerland (19%)
3. South Africa (8%)
4. Congo, DRC (6%)
5. South Korea (5%)
6. Italy (4%)
7. U.A.E. (3%)
8. Zimbabwe (2%)
9. Belgium (2%)
10. Malawi (2%)

### Major Export Products

Copper/cobalt (64%), cobalt, electricity; tobacco, flowers, cotton

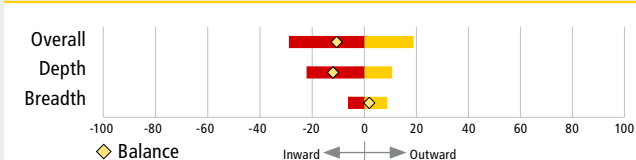
### Zambia's Share of Partners' Imports



## Breadth

	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	129/140		—	
Merchandise Trade	114/140	130/140	21%	62%
<b>Capital</b>	.		—	
FDI Stock	.	.	.	.
FDI Flows	.	.	.	.
Portfolio Equity Stock	.	—	.	—
<b>Information</b>	.		—	
International Phone Calls	.	.	.	.
Printed Publications Trade	124/135	113/135	99%	51%
<b>People</b>	119/124		—	
Migrants	122/139	104/139	78%	90%
Tourists Departures/Arrivals	—	90/107	—	72%
International Students	—	.	—	.

## Directionality

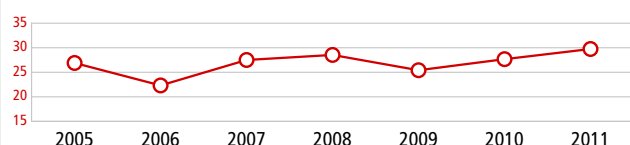


# ZIMBABWE

## Key Scores and Trends

	Rank			Score		
	2011	2010	Change	2011	2010	Change
<b>Overall</b>	111/140	114/140	3	30/100	28/100	2
<b>Depth</b>	59/140	66/140	7	25/50	23/50	2
<b>Breadth</b>	139/140	136/140	-3	5/50	5/50	0
<b>Trade Pillar</b>	104/140	107/140	3	39/100	38/100	1
<b>Capital Pillar</b>	-	-	-	-	-	-
<b>Information Pillar</b>	93/101	95/101	2	28/100	24/100	4
<b>People Pillar</b>	83/106	83/106	0	36/100	36/100	0

Connectedness Score Trend



## Depth

	Rank		Level	
	Outward	Inward	Outward	Inward
<b>Trade</b>	36/140		-	
Merchandise Trade (% of GDP)	48/140	41/140	38%	47%
Services Trade (% of GDP)	-	-	-	-

<b>Capital</b>	-		-	
FDI Stock (% of GDP)	73/132	90/140	4%	25%
FDI Flows (% of GFCF)	44/133	49/140	5%	20%
Portfolio Equity Stock (% of GDP)	-	-	-	-
Portfolio Equity Flows (% of GDP)	-	-	-	-

<b>Information</b>	101/140		-	
Internet Bandwidth (Bits per Second per Internet User)	123/140		1,748	
International Phone Calls (Minutes per Capita)	99/140	90/140	14	41
Printed Publications Trade (USD per Capita)	23/135	22/135	\$44	\$46

<b>People</b>	74/116			
Migrants (% of Population)	109/139	78/140	2%	3%
Tourists Dep./Arr. Per Capita	76/93	-	0.1	-
International Students (% of Tertiary Education Enrollment)	9/130	72/104	21%	1%

## Summary

Zimbabwe ranks 111<sup>th</sup> on this year's DHL Global Connectedness Index, up from 114<sup>th</sup> last year. It is the 16<sup>th</sup> ranked country out of 29 in Sub-Saharan Africa. Zimbabwe ranks 59<sup>th</sup> out of 140 countries on depth, but only 139<sup>th</sup> out of 140 (next-to-last) on breadth. Zimbabwe's merchandise exports, as depicted in the rooted map on this page, exemplify the limited breadth of Zimbabwe's connectedness. More than half of its exports are destined to South Africa alone. Its highest individual component rank is on the depth of its outbound international students. Zimbabwe ranks 9<sup>th</sup> on this component with university students studying abroad equal to 21% of its total tertiary education enrollment.

## Rooted Map

Zimbabwe's Merchandise Exports, 2010



### Top Export Destinations

1. South Africa (54%)
2. U.A.E. (10%)
3. China (7%)
4. U.K. (3%)
5. Mozambique (3%)
6. Italy (2%)
7. Zambia (2%)
8. Belgium (2%)
9. Germany (1%)
10. Malawi (1%)

### Major Export Products

Platinum, cotton, tobacco, gold, ferroalloys, textiles/clothing

### Zimbabwe's Share of Partners' Imports



## Breadth

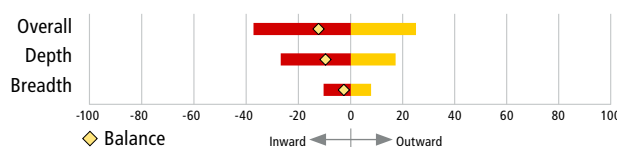
	Rank		% Same Region	
	Outward	Inward	Outward	Inward
<b>Trade</b>	136/140		-	
Merchandise Trade	123/140	137/140	64%	70%

<b>Capital</b>	-		-	
FDI Stock	-	-	-	-
FDI Flows	-	-	-	-
Portfolio Equity Stock	-	-	-	-

<b>Information</b>	97/101		-	
International Phone Calls	82/101	79/101	53%	48%
Printed Publications Trade	129/135	135/135	100%	99%

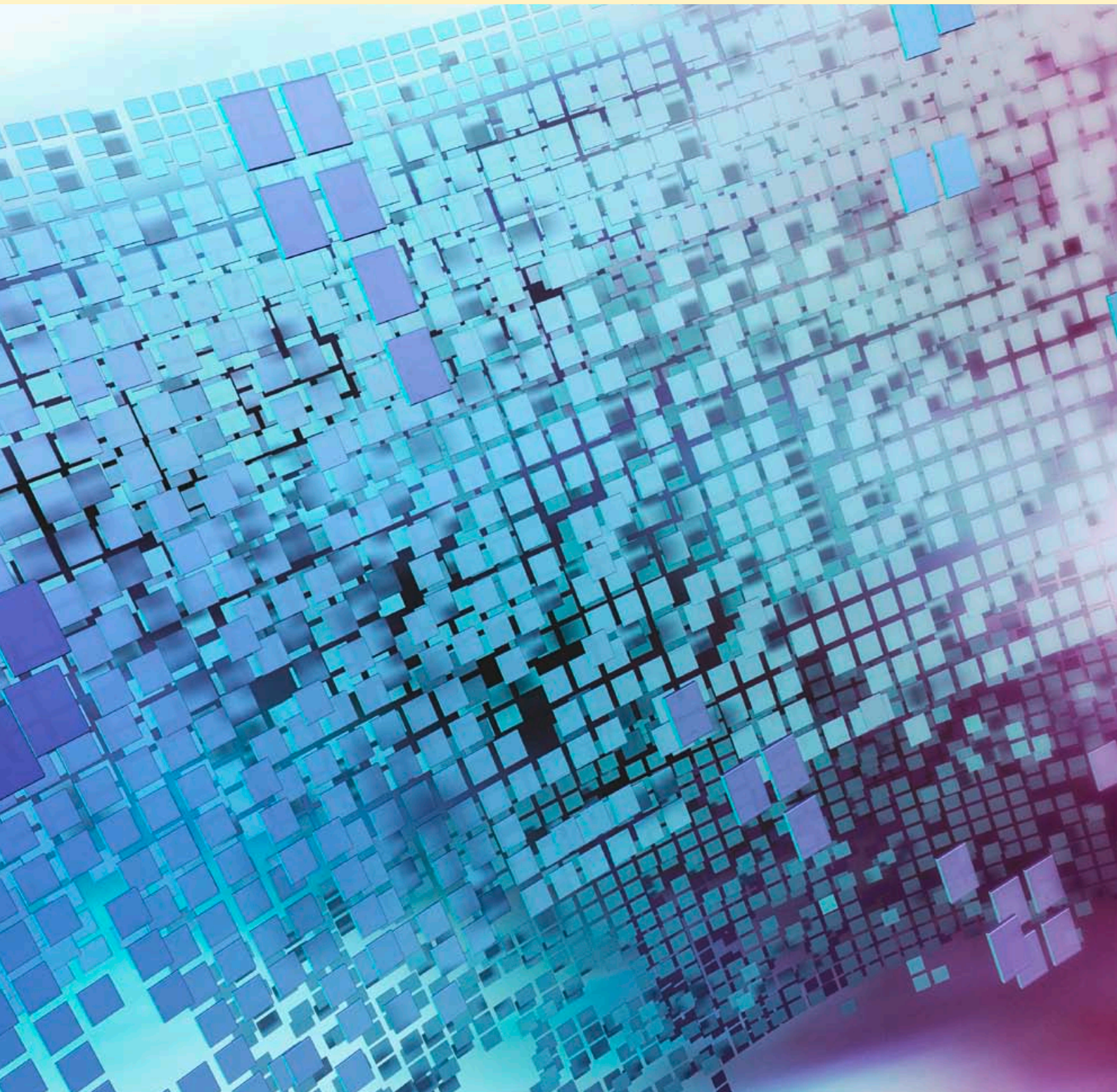
<b>People</b>	96/124		-	
Migrants	103/139	48/139	62%	73%
Tourists Departures/Arrivals	-	-	-	-
International Students	-	78/93	-	99%

## Directionality





## Appendix A – Historical and Pillar Level Scores and Ranks



**Table A.1**  
**Global Connectedness Scores and Ranks, 2005–2011**

Country	Global Connectedness Score (0–100)							Global Connectedness Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Albania	18	21	23	26	29	30	29	130	127	125	121	113	111	112
Angola	38	37	41	42	44	38	37	78	88	76	79	66	87	90
Argentina	36	40	39	37	36	34	32	82	77	82	95	95	102	106
Armenia	34	33	34	37	40	41	40	91	98	101	91	77	78	81
Australia	57	58	59	60	61	60	60	29	31	31	29	27	28	30
Austria	67	68	70	67	63	63	65	17	19	16	19	25	25	19
Azerbaijan	39	36	37	44	41	40	37	75	92	88	69	75	82	92
Bahamas, The	45	43	41	41	44	43	43	56	65	75	80	65	69	70
Bahrain	73	70	70	67	65	61	62	9	15	17	18	18	26	27
Bangladesh	30	33	34	33	33	36	37	107	101	102	102	102	97	91
Barbados	38	41	40	41	39	38	38	77	73	78	82	84	86	85
Belarus	31	31	32	32	33	34	37	102	107	105	103	103	103	94
Belgium	80	82	83	81	79	79	76	5	5	4	5	6	6	7
Benin	10	10	17	17	19	21	23	138	139	133	134	132	129	130
Bolivia	24	17	20	21	20	22	25	119	131	129	129	131	126	125
Bosnia and Herzegovina	23	24	26	25	24	25	26	122	120	119	122	122	120	121
Botswana	23	21	24	24	20	18	20	121	126	124	125	129	135	134
Brazil	44	45	44	45	42	43	42	62	61	67	67	71	72	77
Brunei Darussalam	36	38	35	34	37	42	41	84	82	97	101	90	74	80
Bulgaria	47	54	53	55	55	55	54	51	37	43	39	37	38	40
Burkina Faso	12	11	16	20	16	16	18	136	138	135	131	136	136	136
Burundi	10	11	6	7	10	9	10	137	137	140	140	140	140	140
Cambodia	40	41	43	42	42	45	48	71	71	70	76	73	65	60
Cameroon	24	23	24	28	26	26	27	117	122	123	116	117	118	117
Canada	56	58	59	59	59	60	60	32	29	32	30	30	29	29
Central African Republic	13	13	12	13	14	13	11	135	136	138	138	137	138	139
Chad	34	33	37	34	39	38	33	90	100	89	100	85	89	104
Chile	48	48	50	54	51	53	54	49	52	50	41	46	41	41
China	39	41	42	42	41	43	43	74	72	72	75	76	73	74
Colombia	31	33	33	31	33	33	34	99	102	104	106	104	108	103
Costa Rica	39	43	46	43	40	38	38	73	66	60	72	78	88	87
Cote d'Ivoire	31	32	34	37	38	38	35	101	103	103	89	88	84	97
Croatia	47	49	53	52	51	48	49	50	48	44	47	45	55	57
Cyprus	48	52	53	54	51	53	51	47	43	42	42	44	42	45
Czech Republic	60	58	61	58	59	59	59	25	30	29	31	31	31	32
Denmark	72	72	75	74	74	73	74	11	12	10	9	9	9	9
Dominican Republic	26	28	31	30	26	29	28	115	114	108	112	118	112	115
Ecuador	31	31	32	32	31	34	35	103	106	106	105	108	106	99
Egypt, Arab Rep.	35	40	38	43	42	41	40	88	75	83	73	72	75	82
El Salvador	21	22	23	25	20	22	24	124	125	127	123	130	127	129
Estonia	49	50	51	54	51	51	52	45	45	49	43	49	48	43
Ethiopia	40	39	40	39	36	39	41	72	79	77	84	97	83	79
Fiji	36	35	35	36	34	36	36	83	95	100	97	101	96	95
Finland	65	69	71	70	66	65	64	19	17	14	13	16	19	24
France	71	73	73	72	70	69	66	12	11	11	11	13	14	17
Gabon	32	37	36	40	43	43	40	97	87	93	83	67	71	83
Georgia	30	38	42	44	39	44	42	105	80	73	70	86	67	76
Germany	72	76	76	74	70	69	73	10	9	9	10	11	13	10
Ghana	36	37	36	39	36	36	43	85	89	91	85	93	94	72
Greece	52	54	54	53	51	48	48	36	39	37	45	50	57	58
Guatemala	21	24	25	22	20	24	26	125	119	122	128	128	123	120
Guinea	37	38	37	42	40	37	43	80	81	85	77	79	93	73
Guyana	48	51	48	49	47	50	52	46	44	56	54	59	49	44
Honduras	37	36	36	37	36	37	37	81	91	92	94	94	91	93
Hong Kong SAR (China)	70	69	69	69	69	70	70	14	16	18	14	14	12	12
Hungary	63	66	63	62	64	66	62	20	20	24	24	21	18	26
Iceland	70	73	72	69	66	63	64	13	10	12	16	15	24	22
India	36	38	39	45	45	45	47	86	83	80	65	63	64	62
Indonesia	32	30	31	30	31	33	33	94	109	107	111	109	107	105
Iran, Islamic Rep.	31	32	30	31	29	25	25	104	104	110	108	112	119	126
Ireland	82	82	82	81	81	81	81	3	4	6	6	5	4	4
Israel	66	68	68	68	64	66	66	18	18	19	17	23	17	18
Italy	61	62	61	58	56	56	61	23	25	28	32	35	35	28
Jamaica	45	45	43	42	38	38	38	59	63	68	78	89	85	88
Japan	49	50	54	52	50	51	53	41	46	41	48	51	46	42
Jordan	53	53	54	56	52	52	51	35	41	38	37	42	44	47
Kazakhstan	43	47	48	48	47	47	49	65	56	55	55	60	59	54
Kenya	35	35	35	37	35	34	35	87	96	98	90	99	104	98
Korea, Rep.	54	56	59	63	64	66	68	34	33	30	23	22	15	14
Kuwait	49	48	49	52	53	52	48	43	50	52	50	40	45	61



Country	Global Connectedness Score (0–100)							Global Connectedness Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Kyrgyz Republic	28	30	29	32	27	25	25	110	111	113	104	115	121	124
Lao PDR	21	18	19	17	16	20	22	127	130	130	135	135	131	131
Latvia	46	48	48	46	42	44	48	55	53	54	62	74	68	59
Lebanon	55	56	58	57	54	58	57	33	32	34	35	38	32	35
Lithuania	50	53	52	51	47	48	49	39	42	46	52	61	54	55
Luxembourg	84	86	84	83	82	80	81	2	2	2	3	4	5	3
Macedonia, FYR	32	37	39	41	39	40	38	98	86	81	81	82	80	89
Madagascar	31	34	35	37	39	35	32	100	97	99	93	83	100	107
Malawi	29	30	28	31	25	28	28	109	112	114	109	119	113	114
Malaysia	59	65	68	65	66	66	66	27	21	20	20	17	16	16
Mali	27	26	28	28	31	27	27	114	116	116	117	110	116	118
Malta	69	71	70	69	70	70	68	15	13	15	15	12	10	13
Mauritius	46	46	48	46	50	53	51	53	59	57	63	52	43	46
Mexico	33	35	37	37	38	40	39	93	94	87	92	87	79	84
Moldova	32	33	37	38	37	37	34	95	99	90	88	91	90	100
Mongolia	42	37	37	38	39	41	45	67	90	86	86	81	76	67
Morocco	44	46	51	52	51	54	55	61	57	48	49	43	40	38
Mozambique	14	16	17	18	21	20	29	133	133	134	133	126	130	113
Myanmar	20	18	19	14	14	15	15	128	129	131	137	138	137	137
Namibia	27	27	28	31	32	31	30	112	115	115	110	105	110	109
Nepal	14	14	15	16	23	20	21	134	135	137	136	125	133	133
Netherlands	89	89	88	87	87	88	88	1	1	1	1	1	1	1
New Zealand	57	56	57	58	59	55	57	30	34	36	33	29	36	33
Nicaragua	32	37	36	34	35	36	38	96	85	94	99	98	95	86
Niger	16	19	16	23	24	35	25	131	128	136	126	123	101	122
Nigeria	46	47	45	47	48	49	51	54	54	64	60	57	53	49
Norway	69	71	71	70	72	70	71	16	14	13	12	10	11	11
Oman	42	43	48	47	49	47	50	66	67	58	59	53	58	53
Pakistan	35	35	36	36	34	36	34	89	93	95	96	100	98	102
Panama	44	42	44	44	42	46	46	60	69	66	68	70	62	64
Paraguay	15	16	18	19	18	19	19	132	134	132	132	134	134	135
Peru	42	46	47	45	45	46	46	68	60	59	64	64	63	65
Philippines	48	48	49	46	43	40	43	48	51	53	61	68	81	69
Poland	49	54	54	55	56	54	55	40	35	39	40	36	39	39
Portugal	56	59	62	62	59	58	55	31	27	26	25	32	33	37
Qatar	44	47	49	48	51	51	51	63	55	51	56	47	47	50
Romania	45	46	45	47	48	46	46	58	58	63	57	55	60	66
Russian Federation	38	41	42	43	45	45	44	76	74	74	74	62	66	68
Rwanda	7	9	10	13	12	12	14	139	140	139	139	139	139	138
Saudi Arabia	49	50	52	52	54	57	56	44	47	47	46	39	34	36
Senegal	24	25	26	26	27	27	30	120	118	121	120	114	115	110
Serbia	.	40	39	38	37	37	36	.	78	79	87	92	92	96
Singapore	81	81	82	82	83	82	82	4	6	5	4	2	2	2
Slovak Republic	50	54	57	56	53	50	51	38	38	35	36	41	50	51
Slovenia	52	54	59	57	56	55	57	37	36	33	34	34	37	34
South Africa	49	53	54	56	51	50	51	42	40	40	38	48	51	48
Spain	61	62	64	62	61	61	63	24	23	22	27	28	27	25
Sri Lanka	43	44	43	44	40	41	42	64	64	69	71	80	77	75
Sweden	76	79	79	79	78	77	75	8	7	7	7	7	7	8
Switzerland	78	83	84	83	82	82	81	6	3	3	2	3	3	5
Syrian Arab Republic	30	31	30	29	29	27	24	106	105	111	113	111	117	127
Taiwan (China)	60	61	62	62	61	64	65	26	26	25	26	26	22	21
Tajikistan	27	30	30	27	24	23	22	111	110	109	118	121	125	132
Thailand	58	59	61	62	64	65	67	28	28	27	28	24	20	15
Togo	29	31	29	24	31	35	43	108	108	112	124	107	99	71
Trinidad and Tobago	45	45	46	51	47	46	47	57	62	62	51	58	61	63
Tunisia	38	40	43	45	43	43	41	79	76	71	66	69	70	78
Turkey	42	43	46	47	49	49	49	69	68	61	58	54	52	56
Uganda	21	22	23	27	27	24	26	126	123	126	119	116	124	119
Ukraine	42	42	44	49	48	48	50	70	70	65	53	56	56	52
United Arab Emirates	62	62	64	64	64	64	64	21	24	23	21	20	23	23
United Kingdom	77	78	79	76	76	76	77	7	8	8	8	8	8	6
United States	62	63	65	64	65	65	65	22	22	21	22	19	21	20
Uruguay	33	37	38	36	36	34	34	92	84	84	98	96	105	101
Uzbekistan	25	23	26	29	24	24	25	116	121	120	114	124	122	123
Venezuela, RB	24	26	26	23	20	20	24	118	117	118	127	127	132	128
Vietnam	47	49	52	53	57	60	59	52	49	45	44	33	30	31
Yemen, Rep.	22	28	36	31	32	32	31	123	113	96	107	106	109	108
Zambia	18	16	20	20	18	21	27	129	132	128	130	133	128	116
Zimbabwe	27	22	28	29	25	28	30	113	124	117	115	120	114	111



**Table A.2**  
**Depth Scores and Ranks, 2005–2011**

Country	Depth Score (0–50)							Depth Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Albania	13	15	17	19	19	21	23	99	93	89	83	79	73	65
Angola	20	16	17	18	20	17	16	66	85	90	84	73	92	99
Argentina	10	12	12	11	9	9	8	116	108	113	117	119	123	126
Armenia	17	15	14	13	17	18	19	76	90	96	106	90	84	86
Australia	17	18	20	22	23	22	22	79	79	77	72	62	68	74
Austria	35	37	39	37	33	34	36	10	11	9	12	17	16	11
Azerbaijan	24	23	20	19	18	18	19	47	53	79	81	86	85	84
Bahamas, The	26	28	29	31	29	29	30	43	35	34	30	31	33	35
Bahrain	42	42	43	41	37	35	34	5	5	5	5	10	14	15
Bangladesh	0	1	2	3	1	3	5	140	139	139	138	140	138	134
Barbados	26	27	29	31	29	29	28	41	43	37	31	33	36	40
Belarus	16	16	18	19	20	22	25	84	86	82	80	74	71	58
Belgium	43	44	45	44	42	42	40	4	4	4	4	4	5	6
Benin	3	4	12	10	10	12	13	135	136	115	120	116	114	109
Bolivia	9	9	10	13	11	11	12	117	120	118	107	114	117	116
Bosnia and Herzegovina	16	18	20	20	18	20	21	82	80	78	79	81	77	78
Botswana	23	21	24	23	19	18	20	51	67	59	71	77	86	82
Brazil	7	8	8	8	7	8	7	125	125	126	127	126	128	130
Brunei Darussalam	27	27	25	25	28	29	29	36	41	52	55	34	34	37
Bulgaria	27	32	34	34	30	30	30	32	22	18	18	30	28	34
Burkina Faso	4	4	5	5	5	4	5	131	137	134	133	132	135	131
Burundi	2	5	2	2	1	1	3	138	133	140	140	138	140	140
Cambodia	23	25	26	26	26	27	28	49	48	50	48	48	45	42
Cameroon	6	5	6	6	3	4	5	129	130	127	132	136	136	133
Canada	27	28	27	27	26	27	27	33	40	45	45	49	46	47
Central African Republic	4	4	5	5	4	5	5	133	134	132	134	134	134	135
Chad	16	14	14	13	18	18	18	87	101	98	108	83	88	88
Chile	23	23	25	27	24	25	26	52	55	57	44	58	57	55
China	10	11	12	11	9	11	10	115	112	111	118	120	119	122
Colombia	8	9	9	9	9	9	11	124	123	122	122	121	122	118
Costa Rica	21	22	24	24	22	21	22	60	60	58	61	64	72	73
Cote d'Ivoire	16	16	17	18	18	19	18	83	87	91	86	82	81	90
Croatia	26	28	29	29	26	26	24	42	38	35	36	45	55	60
Cyprus	27	31	32	31	31	34	33	35	27	27	27	22	15	19
Czech Republic	31	32	33	32	32	31	31	18	23	21	25	21	22	26
Denmark	30	31	33	32	33	32	34	22	25	20	26	16	20	16
Dominican Republic	14	15	14	15	13	15	15	94	94	97	97	104	98	103
Ecuador	12	12	13	14	12	15	16	104	107	107	102	111	99	95
Egypt, Arab Rep.	11	14	13	15	12	14	12	108	100	104	100	108	105	114
El Salvador	14	15	16	18	14	15	16	93	95	93	85	97	97	98
Estonia	36	38	38	38	36	38	38	9	9	11	9	11	9	8
Ethiopia	6	6	4	4	1	5	5	127	128	135	136	139	133	136
Fiji	26	27	26	29	27	28	28	37	45	47	39	43	39	41
Finland	28	32	33	33	30	29	29	30	20	19	22	29	32	39
France	26	28	28	27	25	26	24	39	37	41	46	52	50	62
Gabon	16	17	17	18	19	20	20	86	83	88	87	80	75	79
Georgia	13	19	21	23	22	24	22	98	77	76	70	67	61	71
Germany	27	30	31	30	27	28	31	34	32	28	35	42	41	30
Ghana	9	11	10	13	13	14	19	118	115	121	113	103	104	85
Greece	18	20	22	20	18	16	17	75	71	69	78	85	93	91
Guatemala	12	13	14	13	12	13	15	101	103	100	112	110	108	102
Guinea	11	14	12	16	12	15	18	106	97	112	93	109	101	87
Guyana	28	28	29	30	28	31	33	28	34	36	33	35	27	21
Honduras	22	22	23	24	21	22	22	58	64	67	64	72	69	75
Hong Kong SAR (China)	48	49	50	50	50	50	50	2	1	1	1	1	1	1
Hungary	33	36	34	34	34	36	34	15	14	17	16	15	12	17
Iceland	33	36	37	34	34	29	31	13	12	14	15	14	31	28
India	4	5	6	9	8	9	11	130	129	129	124	124	121	119
Indonesia	9	8	9	9	7	8	8	121	124	125	123	128	125	125
Iran, Islamic Rep.	4	5	3	4	3	3	4	134	132	136	135	137	137	138
Ireland	40	40	40	40	42	43	44	7	7	7	7	5	4	4
Israel	31	32	33	31	27	29	29	19	19	24	29	41	35	38
Italy	20	22	23	19	17	19	23	65	63	64	82	89	83	66
Jamaica	23	24	25	25	23	23	23	50	52	55	54	61	63	67
Japan	11	12	13	13	10	11	13	107	109	106	114	115	118	113
Jordan	33	33	33	33	30	30	29	16	17	22	19	25	29	36
Kazakhstan	20	23	27	26	24	23	24	64	56	46	52	60	67	61
Kenya	9	9	9	13	12	13	14	120	122	123	109	112	106	106
Korea, Rep.	19	20	21	25	24	25	28	71	74	75	59	56	56	44
Kuwait	22	24	26	27	29	28	23	55	50	49	43	32	42	68

Country	Depth Score (0–50)							Depth Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Kyrgyz Republic	19	22	22	23	22	19	20	69	61	70	66	66	82	83
Lao PDR	8	10	10	9	8	13	15	123	116	120	125	123	107	101
Latvia	26	28	27	24	23	26	30	38	39	43	63	63	49	32
Lebanon	31	31	32	33	32	31	30	20	26	26	21	19	24	31
Lithuania	27	30	30	29	27	31	32	31	30	32	37	39	25	25
Luxembourg	47	48	47	47	46	46	46	3	3	3	3	3	3	3
Macedonia, FYR	21	23	26	28	26	26	27	61	57	48	40	50	53	45
Madagascar	8	10	12	13	13	12	13	122	118	109	111	105	111	112
Malawi	10	10	9	10	8	8	8	113	119	124	121	122	127	127
Malaysia	33	36	37	34	36	37	36	17	13	12	14	12	10	10
Mali	10	13	11	13	10	12	12	112	106	117	115	118	113	115
Malta	38	39	38	38	38	39	39	8	8	10	10	7	7	7
Mauritius	25	27	27	26	30	32	32	45	44	44	47	28	19	22
Mexico	14	15	16	15	16	17	17	91	91	92	98	92	90	93
Moldova	23	23	25	26	25	26	27	53	58	53	51	55	52	49
Mongolia	22	22	23	25	24	29	32	59	59	62	57	59	37	24
Morocco	16	17	19	20	18	20	21	85	81	80	76	84	78	76
Mozambique	14	15	14	15	14	18	17	95	92	95	99	100	89	94
Myanmar	6	6	6	4	4	3	3	126	127	130	137	135	139	139
Namibia	20	20	23	25	26	26	25	67	69	66	58	46	54	57
Nepal	1	1	3	3	7	5	4	139	140	137	139	127	132	137
Netherlands	42	42	41	41	40	42	42	6	6	6	6	6	6	5
New Zealand	22	22	23	25	25	23	25	57	65	61	56	54	64	56
Nicaragua	16	20	22	23	22	24	26	81	73	71	65	65	60	53
Niger	6	6	6	8	15	16	16	128	126	131	129	94	94	96
Nigeria	13	14	14	15	14	16	16	97	98	101	96	99	96	97
Norway	29	30	31	30	30	30	31	26	28	29	34	27	30	29
Oman	24	26	29	29	28	26	27	48	47	39	38	37	47	48
Pakistan	4	5	6	7	5	6	5	132	131	128	130	131	130	132
Panama	30	33	33	33	31	33	34	23	18	25	20	23	17	14
Paraguay	12	12	12	13	13	14	14	102	111	108	105	102	102	104
Peru	12	14	16	15	14	15	15	105	96	94	101	101	100	100
Philippines	17	17	18	16	14	11	13	78	82	85	92	98	116	111
Poland	19	23	23	23	24	26	27	70	54	60	67	57	51	50
Portugal	26	29	31	31	28	27	26	40	33	31	32	36	43	52
Qatar	25	27	29	26	26	25	24	46	42	40	53	44	59	63
Romania	18	21	21	22	20	21	20	72	68	74	73	75	74	81
Russian Federation	14	16	17	16	17	17	17	92	89	87	91	87	91	92
Rwanda	2	2	3	7	6	7	7	137	138	138	131	130	129	129
Saudi Arabia	14	16	19	20	22	24	22	90	88	81	77	68	62	72
Senegal	12	12	14	14	12	13	14	103	110	103	104	107	109	108
Serbia	22	24	26	26	25	26	26	56	51	51	49	51	48	54
Singapore	48	49	49	49	49	47	47	1	2	2	2	2	2	2
Slovak Republic	31	32	33	33	31	31	31	21	21	23	23	24	26	27
Slovenia	29	32	34	34	32	32	33	25	24	16	17	18	21	18
South Africa	16	19	21	23	20	19	20	80	75	73	69	76	80	80
Spain	20	22	23	21	21	22	23	62	66	63	75	71	70	64
Sri Lanka	11	11	11	11	7	8	10	109	114	116	119	129	124	124
Sweden	33	35	36	36	35	36	35	14	15	15	13	13	13	13
Switzerland	34	38	39	40	38	38	37	11	10	8	8	8	8	9
Syrian Arab Republic	14	14	13	13	10	12	10	96	102	105	110	117	115	121
Taiwan (China)	28	30	31	31	30	32	32	27	31	30	28	26	18	23
Tajikistan	22	25	25	21	17	16	13	54	49	56	74	91	95	110
Thailand	25	26	27	28	28	28	30	44	46	42	41	38	38	33
Togo	18	18	18	17	19	20	23	74	78	84	90	78	76	70
Trinidad and Tobago	30	30	30	33	32	31	33	24	29	33	24	20	23	20
Tunisia	18	20	22	24	21	23	23	73	70	68	62	70	65	69
Turkey	10	11	12	12	12	13	14	114	113	110	116	106	110	107
Uganda	3	4	5	8	8	8	11	136	135	133	128	125	126	120
Ukraine	20	20	23	24	25	25	26	68	72	65	60	53	58	51
United Arab Emirates	34	35	37	38	37	37	36	12	16	13	11	9	11	12
United Kingdom	28	28	29	27	27	28	28	29	36	38	42	40	40	43
United States	15	17	18	17	17	18	18	88	84	86	88	88	87	89
Uruguay	12	13	14	15	15	14	14	100	105	102	94	95	103	105
Uzbekistan	9	9	12	14	11	10	10	119	121	114	103	113	120	123
Venezuela, RB	11	10	10	8	5	5	7	111	117	119	126	133	131	128
Vietnam	20	22	25	26	26	27	27	63	62	54	50	47	44	46
Yemen, Rep.	11	14	14	15	14	12	12	110	99	99	95	96	112	117
Zambia	15	13	18	17	15	20	21	89	104	83	89	93	79	77
Zimbabwe	17	19	22	23	22	23	25	77	76	72	68	69	66	59

**Table A.3**  
**Breadth Scores and Ranks, 2005–2011**

Country	Breadth Score (0–50)							Breadth Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Albania	5	5	6	8	10	9	6	133	135	131	127	122	125	133
Angola	18	20	24	23	23	21	22	91	77	64	68	71	76	71
Argentina	26	28	27	25	27	26	24	55	47	51	58	56	57	64
Armenia	16	18	20	24	23	23	21	95	91	84	64	68	69	73
Australia	40	40	39	38	38	38	38	12	12	13	15	14	14	13
Austria	31	31	31	30	30	29	29	34	41	37	42	43	45	44
Azerbaijan	14	13	17	25	23	21	18	107	113	95	59	70	75	91
Bahamas, The	19	15	11	11	15	14	14	82	100	116	117	106	110	107
Bahrain	31	27	27	26	28	26	27	37	48	50	53	50	54	52
Bangladesh	30	31	32	30	33	33	32	43	35	34	43	31	31	33
Barbados	12	14	10	10	11	9	10	113	107	120	119	119	123	122
Belarus	15	14	14	13	13	13	12	103	103	106	110	109	115	117
Belgium	37	38	38	37	37	37	36	17	16	15	17	16	17	19
Benin	7	6	5	7	9	9	9	130	133	134	128	126	124	123
Bolivia	15	8	10	8	9	11	13	102	125	123	126	123	120	111
Bosnia and Herzegovina	7	6	6	6	6	5	5	132	131	130	134	134	134	138
Botswana	0	1	0	1	1	0	0	139	140	140	140	140	140	140
Brazil	38	38	35	37	35	35	35	15	17	22	19	23	23	22
Brunei Darussalam	9	10	10	8	9	13	11	124	120	122	123	124	111	119
Bulgaria	20	22	19	22	25	24	24	77	70	91	77	59	61	66
Burkina Faso	8	7	12	15	11	11	13	128	128	114	103	117	118	112
Burundi	8	7	5	5	9	7	7	126	129	137	137	125	128	131
Cambodia	17	16	17	16	16	18	20	93	96	97	99	99	94	81
Cameroon	19	18	18	22	22	22	22	85	94	94	71	74	72	72
Canada	28	30	32	32	34	33	33	48	43	33	33	28	32	30
Central African Republic	10	9	7	9	10	8	6	122	122	128	120	120	126	132
Chad	18	19	22	20	21	20	15	88	85	69	86	82	82	102
Chile	25	25	25	27	27	28	28	58	57	57	48	55	49	48
China	29	30	30	31	31	32	32	44	44	44	37	37	35	35
Colombia	23	24	24	22	24	23	22	63	63	65	78	64	63	69
Costa Rica	18	21	22	19	18	17	16	89	75	72	91	94	96	97
Cote d'Ivoire	15	16	17	19	20	19	17	105	99	96	88	84	89	94
Croatia	21	22	23	23	25	23	24	70	72	67	70	60	65	61
Cyprus	21	21	21	22	20	18	18	71	74	77	72	86	92	90
Czech Republic	29	26	28	26	27	27	28	45	53	47	57	53	51	51
Denmark	42	41	41	41	42	40	40	9	9	9	8	8	10	10
Dominican Republic	12	13	16	15	12	14	14	115	115	101	105	112	108	108
Ecuador	19	19	19	18	19	19	19	84	89	87	94	89	91	89
Egypt, Arab Rep.	24	26	25	28	30	28	28	60	55	58	46	45	48	50
El Salvador	7	7	7	7	6	7	8	131	127	127	131	133	131	126
Estonia	12	12	13	15	14	13	14	112	117	110	101	107	113	105
Ethiopia	33	33	36	34	35	34	36	25	26	20	23	24	25	18
Fiji	10	9	8	8	8	8	8	120	123	125	124	130	127	127
Finland	37	37	37	37	37	36	35	16	18	18	16	19	20	26
France	45	45	45	45	44	43	42	5	6	4	4	4	5	6
Gabon	16	20	19	23	25	23	19	98	84	90	69	62	66	82
Georgia	17	19	21	21	17	21	20	94	87	78	83	97	78	80
Germany	45	46	45	44	43	42	43	4	4	5	5	7	6	5
Ghana	27	26	26	26	23	23	24	49	54	53	55	69	68	62
Greece	35	33	32	33	33	32	31	22	27	30	27	32	37	37
Guatemala	9	11	11	9	8	10	11	125	118	119	122	127	122	118
Guinea	26	24	25	26	28	22	25	57	64	55	54	51	73	59
Guyana	20	23	19	19	19	20	19	78	66	88	92	93	87	85
Honduras	15	14	13	13	15	15	15	104	106	108	109	101	100	101
Hong Kong SAR (China)	21	20	19	20	20	20	20	72	81	86	87	87	86	78
Hungary	30	31	29	28	30	30	28	41	39	46	47	44	42	49
Iceland	37	37	35	34	32	34	33	19	19	21	24	34	26	29
India	32	32	33	36	37	36	36	33	32	27	20	17	21	20
Indonesia	24	23	22	21	24	25	25	62	67	68	81	66	58	58
Iran, Islamic Rep.	27	27	26	27	26	22	21	50	50	52	52	58	71	76
Ireland	42	42	42	41	39	38	38	8	8	8	10	13	13	15
Israel	35	36	36	37	37	37	37	21	21	19	18	18	16	16
Italy	41	40	38	39	38	38	38	10	13	14	13	15	15	14
Jamaica	22	21	19	16	15	15	14	69	76	92	96	105	101	103
Japan	38	38	41	39	40	40	41	14	14	11	12	11	11	7
Jordan	20	20	21	22	21	22	22	76	78	76	73	79	74	70
Kazakhstan	23	24	22	22	23	24	25	65	61	73	75	72	60	57
Kenya	26	26	26	24	23	21	21	56	52	54	62	67	77	74
Korea, Rep.	35	36	38	38	39	41	40	20	20	16	14	12	8	8
Kuwait	27	24	23	25	24	24	25	51	62	66	61	63	59	60

Country	Breadth Score (0–50)							Breadth Rank (out of 140 countries)						
	2005	2006	2007	2008	2009	2010	2011	2005	2006	2007	2008	2009	2010	2011
Kyrgyz Republic	8	8	7	9	5	6	6	127	126	129	121	136	132	135
Lao PDR	13	8	9	8	8	7	7	111	124	124	125	128	130	129
Latvia	19	20	21	22	19	18	18	80	82	79	79	90	93	93
Lebanon	25	25	25	23	22	27	26	59	59	56	67	77	52	55
Lithuania	22	23	22	22	19	18	18	67	69	71	80	88	95	92
Luxembourg	37	38	38	36	36	34	35	18	15	17	21	20	24	21
Macedonia, FYR	11	15	13	12	14	15	10	118	102	111	112	108	106	121
Madagascar	23	24	22	24	26	23	19	64	65	70	63	57	70	83
Malawi	19	20	20	21	17	20	20	86	80	85	84	96	84	77
Malaysia	27	29	31	31	30	30	30	52	46	43	40	46	43	41
Mali	16	14	17	16	20	15	14	99	109	98	100	83	98	104
Malta	32	33	32	31	32	31	29	31	30	32	38	35	38	43
Mauritius	21	19	21	19	20	20	19	73	88	80	89	85	80	87
Mexico	18	20	21	22	22	23	22	87	79	81	74	75	64	68
Moldova	10	11	11	12	12	11	8	123	119	115	114	113	119	128
Mongolia	21	14	14	14	15	13	13	74	105	104	107	102	114	110
Morocco	29	29	32	32	33	34	33	46	45	31	36	29	27	28
Mozambique	1	1	3	4	7	3	12	138	139	138	138	131	138	115
Myanmar	13	13	13	10	11	12	12	108	112	109	118	118	117	114
Namibia	7	6	5	6	6	6	5	129	132	136	133	135	133	136
Nepal	13	13	12	13	16	15	16	110	114	112	108	98	104	98
Netherlands	48	47	47	46	47	46	46	2	2	3	3	3	3	3
New Zealand	34	34	33	33	35	32	32	23	24	26	29	25	34	34
Nicaragua	16	18	14	11	13	12	13	100	93	103	115	110	116	113
Niger	10	13	10	15	10	19	9	119	110	121	102	121	90	124
Nigeria	33	33	31	32	34	33	35	28	25	42	34	27	29	25
Norway	41	41	40	40	42	41	40	11	10	12	11	9	9	9
Oman	18	17	19	18	21	21	23	90	95	89	95	81	79	67
Pakistan	31	31	30	29	29	29	29	38	40	45	45	47	44	45
Panama	14	10	11	11	12	13	12	106	121	117	116	115	112	116
Paraguay	3	4	5	6	4	5	5	137	136	135	136	137	137	137
Peru	31	31	31	31	31	31	31	39	36	38	41	40	39	38
Philippines	31	31	31	29	29	29	30	36	37	39	44	48	46	40
Poland	30	31	31	32	31	28	28	40	34	40	32	36	47	47
Portugal	30	30	31	32	31	31	29	42	42	36	35	41	40	42
Qatar	19	20	21	22	25	26	27	83	83	82	76	61	55	54
Romania	26	25	24	26	28	26	25	54	56	60	56	49	56	56
Russian Federation	24	25	24	27	28	28	27	61	58	61	50	52	50	53
Rwanda	5	6	7	6	6	5	7	135	130	126	132	132	135	130
Saudi Arabia	34	34	33	32	32	33	34	24	22	28	31	33	28	27
Senegal	12	13	12	13	15	14	17	114	111	113	111	103	109	96
Serbia	.	16	13	12	12	11	10	.	98	107	113	116	121	120
Singapore	33	32	33	33	34	36	35	27	31	25	30	26	22	23
Slovak Republic	19	22	25	24	22	20	19	81	71	59	66	76	88	84
Slovenia	23	23	24	24	24	23	24	66	68	62	65	65	62	63
South Africa	33	34	33	33	31	30	31	29	23	29	28	38	41	39
Spain	40	41	41	41	40	40	39	13	11	10	9	10	12	12
Sri Lanka	33	33	32	33	33	33	33	26	29	35	26	30	30	31
Sweden	43	43	43	43	43	41	40	7	7	7	7	6	7	11
Switzerland	44	45	45	43	44	43	44	6	5	6	6	5	4	4
Syrian Arab Republic	16	18	16	16	19	15	14	97	92	99	98	91	99	106
Taiwan (China)	31	31	31	31	31	32	33	35	38	41	39	39	36	32
Tajikistan	5	6	6	7	8	7	9	134	134	133	130	129	129	125
Thailand	32	33	34	33	36	36	37	30	28	23	25	22	18	17
Togo	11	12	11	7	12	15	21	116	116	118	129	114	102	75
Trinidad and Tobago	15	15	16	18	15	15	13	101	101	100	93	104	105	109
Tunisia	19	19	20	20	22	20	19	79	86	83	85	78	83	88
Turkey	32	32	34	35	36	36	35	32	33	24	22	21	19	24
Uganda	18	18	18	19	19	16	16	92	90	93	90	92	97	99
Ukraine	22	21	22	25	23	23	24	68	73	74	60	73	67	65
United Arab Emirates	29	27	27	27	27	27	28	47	49	48	51	54	53	46
United Kingdom	49	50	50	49	49	48	49	1	1	1	1	1	1	1
United States	46	47	47	47	47	47	47	3	3	2	2	2	2	2
Uruguay	21	25	24	21	21	20	20	75	60	63	82	80	85	79
Uzbekistan	16	14	14	15	13	15	15	96	108	105	104	111	107	100
Venezuela, RB	13	16	16	15	16	15	17	109	97	102	106	100	103	95
Vietnam	27	27	27	27	30	33	32	53	51	49	49	42	33	36
Yemen, Rep.	11	14	21	16	17	20	19	117	104	75	97	95	81	86
Zambia	3	3	2	3	3	1	6	136	138	139	139	139	139	134
Zimbabwe	10	3	6	6	4	5	5	121	137	132	135	138	136	139

Figure A.1  
The 2012 DHL Global Connectedness Index, Trade Pillar Only

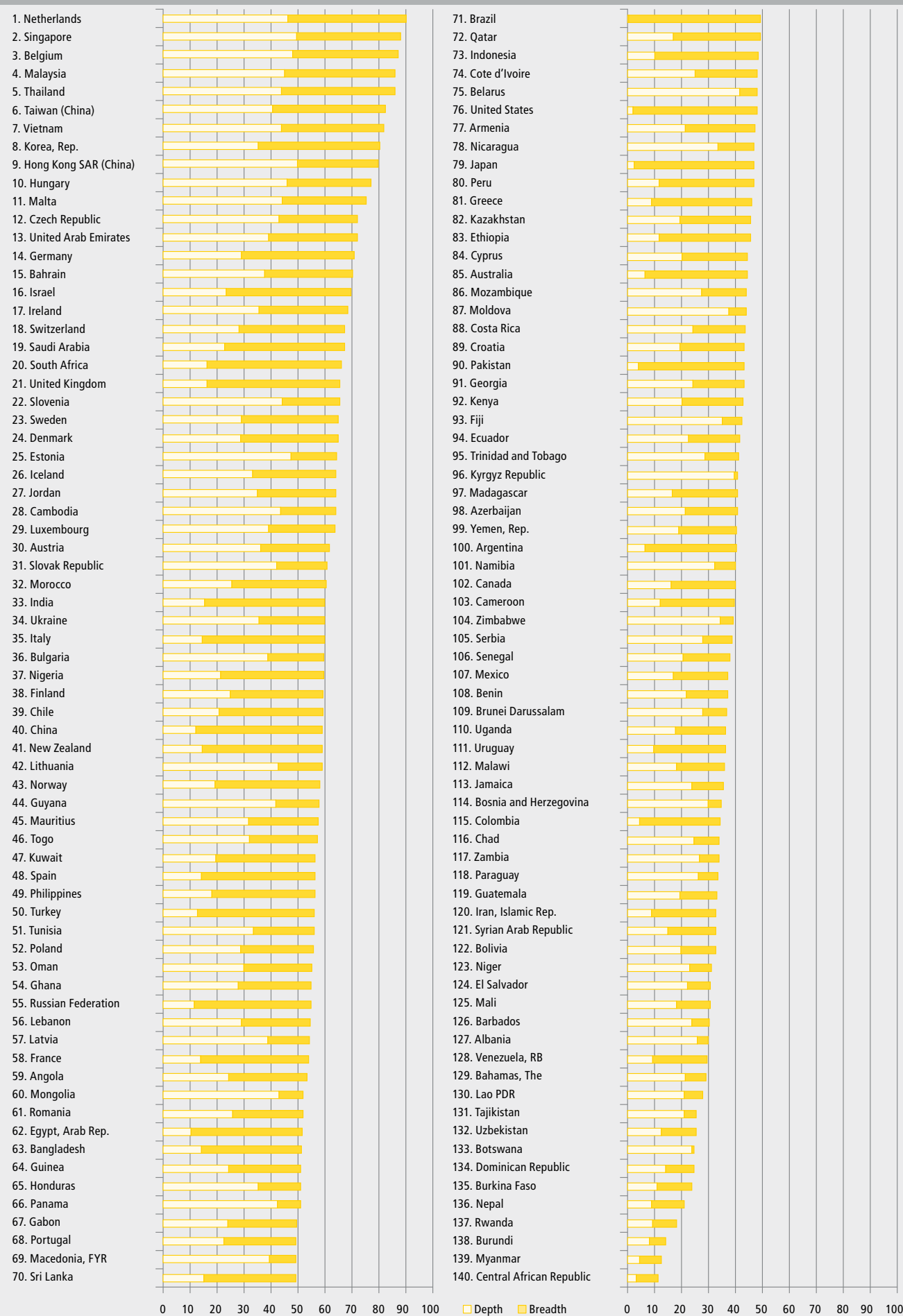




Figure A.2 The 2012 DHL Global Connectedness Index, Capital Pillar Only

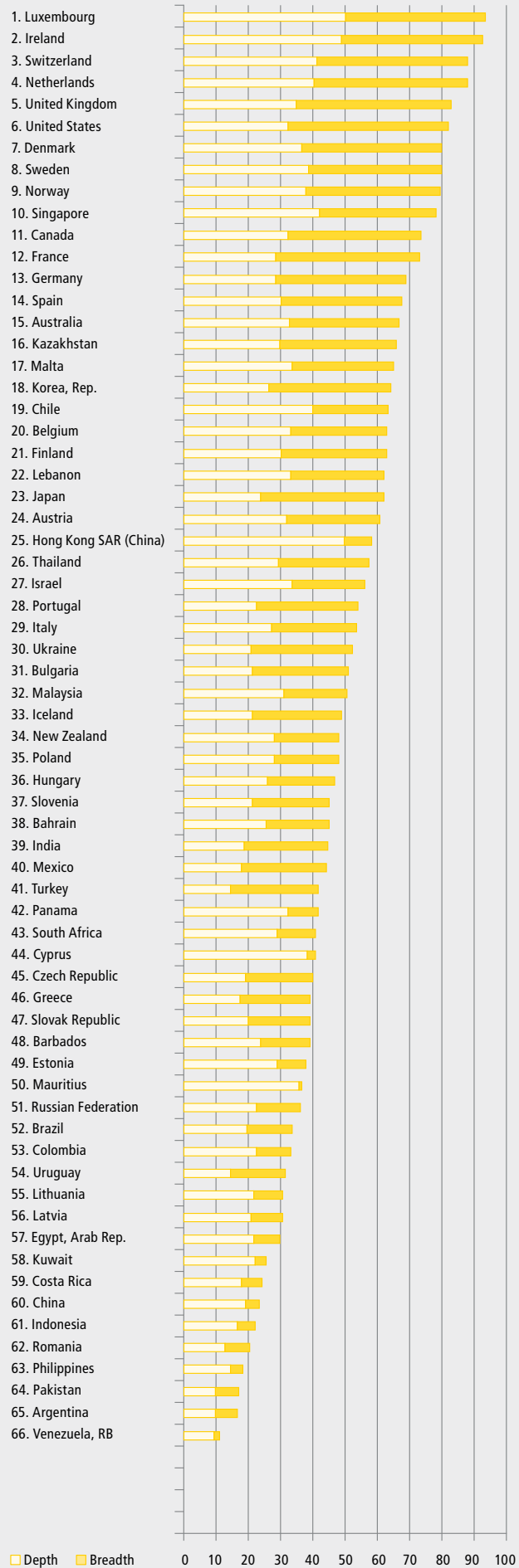


Figure A.3  
The 2012 DHL Global Connectedness Index, Information Pillar Only

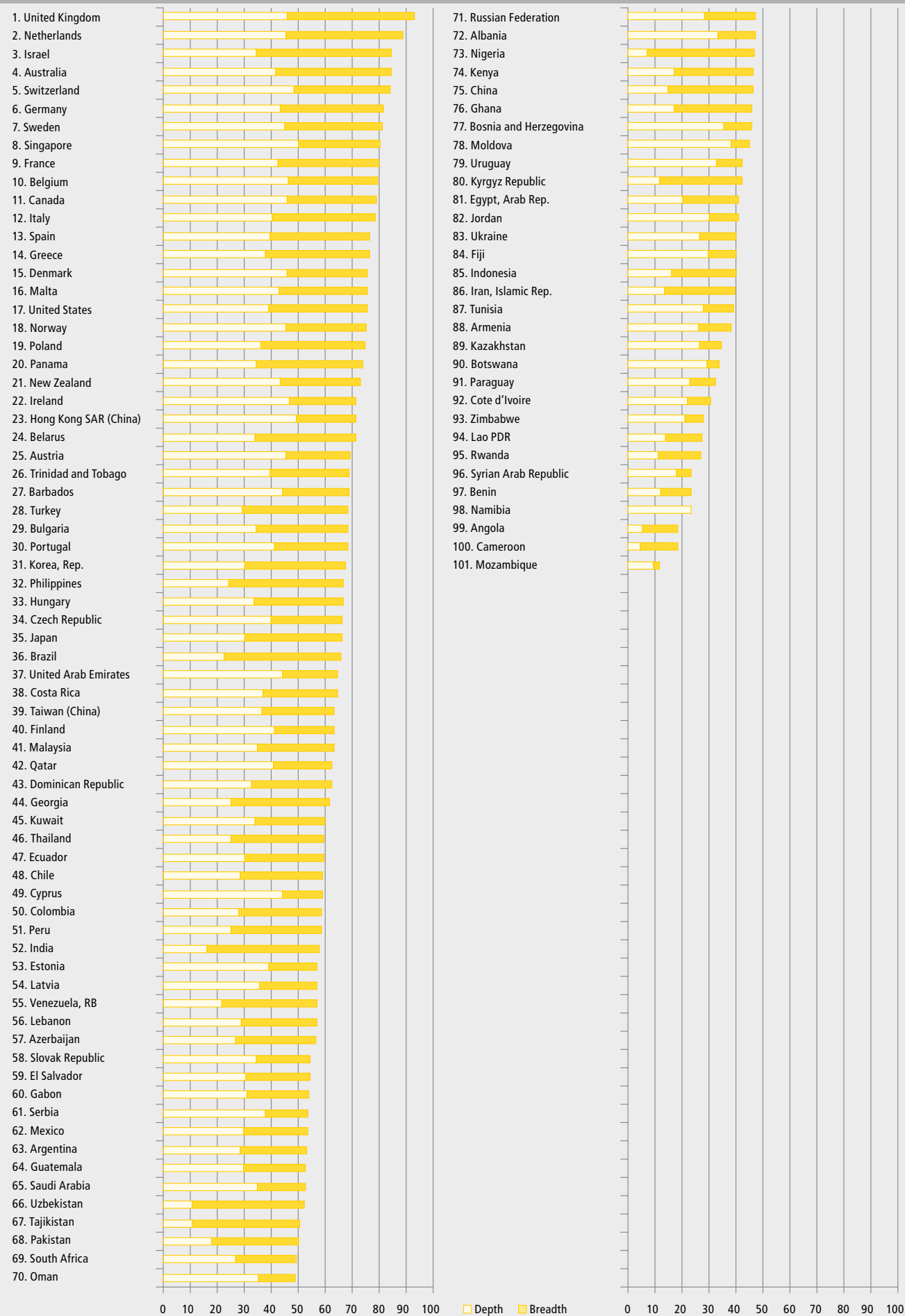
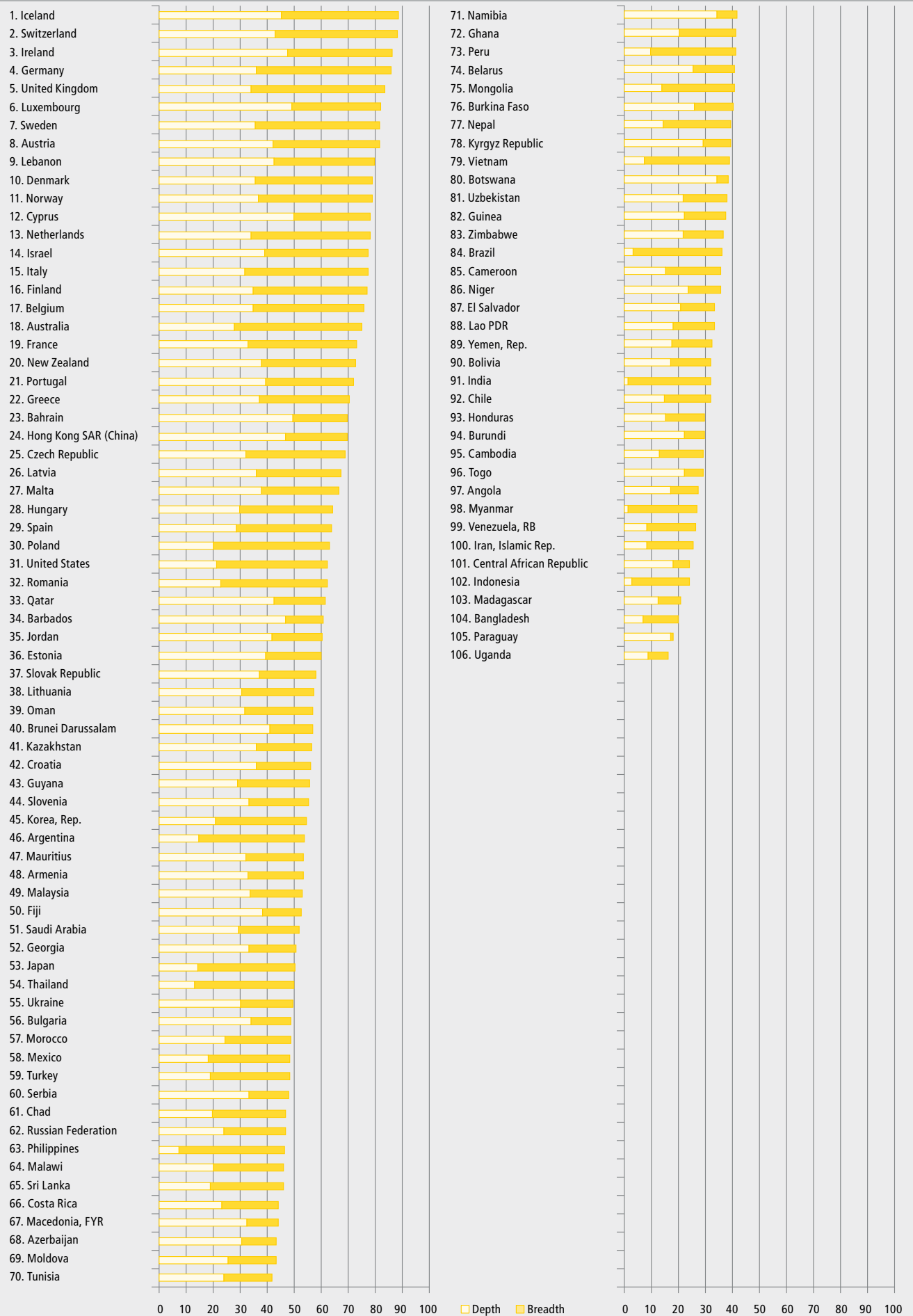


Figure A.4  
The 2012 DHL Global Connectedness Index, People Pillar Only



# Appendix B – Data Sources, Policy Regressions, Region Classifications

This appendix cites the data sources employed in the generation and analysis of the DHL Global Connectedness Index and provides additional technical details. It is divided into three parts: First, it lists the data sources that were used to generate the DHL Global Connectedness Index, separately providing sources for depth and for breadth. Second, it provides tabular results from selected regressions presented in Chapter 4 and cites the data sources used in those regressions. Third, it provides a table showing how countries were classified into regions.

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Data Sources Employed to Calculate the DHL Global Connectedness Index	page 251
<b>Part 2</b>	
Selected Policy Regressions Cited in Chapter 4	page 255
<b>Part 3</b>	
Regional Classification of Countries	page 259

Part 1 Data Sources Employed to Calculate the DHL Global Connectedness Index  
Table B.1 Data Sources Employed to Calculate Depth Scores

Pillar	Variable	Definition	Source
Trade	Merchandise Exports	Total merchandise exports as percentage of GDP in US dollars at current prices.	World Trade Organization Statistics Database ( <a href="http://stat.wto.org/Home/WSDBHome.aspx?Language=E">http://stat.wto.org/Home/WSDBHome.aspx?Language=E</a> )
	Merchandise Imports	Total merchandise imports as percentage of GDP in US dollars.	
	Services Exports	Total exports of commercial services as percentage of GDP in US dollars.	
	Services Imports	Total imports of commercial services as percentage of GDP in US dollars.	
Capital	FDI Outward Stocks	FDI outward stock as a percentage of GDP.	World Investment Report (UNCTAD) ( <a href="http://www.unctad.org/Templates/Page.aspx?intItemID=1465">http://www.unctad.org/Templates/Page.aspx?intItemID=1465</a> )
	FDI Inward Stocks	FDI inward stock as a percentage of GDP.	
	FDI Outflows	FDI outflows as percentage of gross fixed capital formation. Data are presented as the average of the outflows in the current year and the two previous years to reduce volatility.	
	FDI Inflows	FDI inflows as percentage of gross fixed capital formation. Data are presented as the average of the inflows in the current year and the two previous years to reduce volatility.	
	Portfolio Equity Outward Stocks	Equity securities assets in millions of US dollars.	International Investment Position (IIP) within Balance of Payments Statistics (BOP) from IMF. ( <a href="http://www.imf.org/external/np/sta/bop/bop.htm">http://www.imf.org/external/np/sta/bop/bop.htm</a> ); data for Taiwan from International Investment Position from Central Bank of the Republic of China (Taiwan) ( <a href="http://www.cbc.gov.tw/lp.asp?ctNode=513&amp;CtUnit=225&amp;BaseDSD=7&amp;mp=2">http://www.cbc.gov.tw/lp.asp?ctNode=513&amp;CtUnit=225&amp;BaseDSD=7&amp;mp=2</a> )
	Portfolio Equity Inward Stocks	Equity securities liabilities in millions of US dollars.	
	Portfolio Equity Outflows	Equity securities assets (net) in millions of US dollars. Data are presented as the average of the current year and the 2 previous years to reduce volatility.	Balance of Payments Statistics (BOP) from IMF. ( <a href="http://www.imf.org/external/np/sta/bop/bop.htm">http://www.imf.org/external/np/sta/bop/bop.htm</a> ); data on Taiwan from Balance of Payments Quarterly, Republic of China (Taiwan) from Central Bank of the Republic of China (Taiwan) ( <a href="http://www.cbc.gov.tw/ct.aspx?litem=1061&amp;ctNode=535&amp;mp=2">http://www.cbc.gov.tw/ct.aspx?litem=1061&amp;ctNode=535&amp;mp=2</a> ); data for Vietnam retrieved from WDI ( <a href="http://databank.worldbank.org/ddp/home.do?Step=12&amp;id=4&amp;CNO=2">http://databank.worldbank.org/ddp/home.do?Step=12&amp;id=4&amp;CNO=2</a> )
	Portfolio Equity Inflows	Equity securities liabilities (net) in millions of US dollars. Data are presented as the average of the current year and the 2 previous years to reduce volatility.	
Information	Internet Bandwidth	International internet bandwidth per Internet user.	ITU ( <a href="http://www.itu.int/ITU-D/ict/publications/world/world.html">http://www.itu.int/ITU-D/ict/publications/world/world.html</a> )
	Incoming Telephone Call Minutes	Total incoming telephone calling minutes per capita.	Telegeography International Traffic Database ( <a href="http://www.telegeography.com/research-services/telegeography-report-database/">http://www.telegeography.com/research-services/telegeography-report-database/</a> )
	Outgoing Telephone Call Minutes	Total outgoing telephone calling minutes per capita.	
	Printed Publications Exports	Total exports of HS49 per capita. HS49 includes printed books, newspapers, pictures, manuscripts, typescripts and plans.	UN Comtrade ( <a href="http://comtrade.un.org/db/">http://comtrade.un.org/db/</a> ); data for Taiwan were retrieved from Bureau of Foreign Trade ( <a href="http://cus93.trade.gov.tw/ENGLISH/FSCE/">http://cus93.trade.gov.tw/ENGLISH/FSCE/</a> )
	Printed Publications Imports	Total imports of HS49 per capita. HS49 includes printed books, newspapers, pictures, manuscripts, typescripts and plans.	



Part 1 Data Sources Employed to Calculate the DHL Global Connectedness Index  
 Table B.1 (continued) Data Sources Employed to Calculate Depth Scores

Pillar	Variable	Definition	Source
People	Outbound Migrants	International outbound emigrants share of population (2000–2002). It is taken as a constant across the whole period.	Human Development Report 2009. "Overcoming barriers: Human mobility and development". United Nations Development Programme. ( <a href="http://hdr.undp.org/en/reports/global/hdr2009/">http://hdr.undp.org/en/reports/global/hdr2009/</a> ); Data for Taiwan were retrieved from Statistical Yearbook of the Interior ( <a href="http://sowf.moi.gov.tw/stat/year/elist.htm">http://sowf.moi.gov.tw/stat/year/elist.htm</a> )
	Inbound Migrants	International inbound migrants as % of total population.	United Nations Population Division, Trends in Total Migrant Stock: 2008 Revision; ( <a href="http://esa.un.org/migration/">http://esa.un.org/migration/</a> ); data for Taiwan were retrieved from Statistical Yearbook of the Interior ( <a href="http://sowf.moi.gov.tw/stat/year/elist.htm">http://sowf.moi.gov.tw/stat/year/elist.htm</a> )
	Outbound Tourists	Outbound tourists. Departures of overnight visitors (tourists) as percentage of total population.	Compendium of Tourism Statistics. UNWTO ( <a href="http://unwto.org/en">http://unwto.org/en</a> ); gaps were filled using World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
	Inbound Tourists	Inbound tourists. Arrivals of non-resident overnight visitors (tourists) at national borders as percentage of total population.	
	Outgoing International Students	Total number of students studying abroad as % of total tertiary students.	Students mobility for each country by country of origin. UNESCO Institute for Statistics ( <a href="http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Topic=0">http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Topic=0</a> ); Ministry of Education Republic of China (Taiwan) ( <a href="http://english.moe.gov.tw/lp.asp?CtNode=1184&amp;CtUnit=415&amp;BaseDSD=16&amp;mp=1">http://english.moe.gov.tw/lp.asp?CtNode=1184&amp;CtUnit=415&amp;BaseDSD=16&amp;mp=1</a> )
	Incoming International Students	Total number of foreign students as % of total tertiary students.	
Variables for Rescaling	Gross Domestic Product	Gross domestic product, current prices in billions of US dollars.	World Economic Outlook Database from International Monetary Fund ( <a href="http://www.imf.org/external/ns/cs.aspx?id=28">http://www.imf.org/external/ns/cs.aspx?id=28</a> )
	Population	Total population counting all residents regardless of legal status or citizenship – except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Midyear estimates.	World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
	Tertiary Students	Enrolment in total tertiary. Public and private. Full and part time.	UNESCO Institute for Statistics ( <a href="http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Topic=0">http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Topic=0</a> ) with data gaps for European countries filled in using data from Eurostat.  Data for Taiwan were retrieved from Ministry of Education Republic of China (Taiwan) ( <a href="http://english.moe.gov.tw/lp.asp?CtNode=1184&amp;CtUnit=415&amp;BaseDSD=16&amp;mp=1">http://english.moe.gov.tw/lp.asp?CtNode=1184&amp;CtUnit=415&amp;BaseDSD=16&amp;mp=1</a> )

Part 1 Data Sources Employed to Calculate the DHL Global Connectedness Index  
Table B.2 Data Sources Employed to Calculate Breadth Scores

Pillar	Variable	Definition	Source
Trade	Merchandise Exports	Total merchandise exports reported by exporters in US dollars.	Direction of Trade Statistics (DOTS) from IMF ( <a href="http://elibrary-data.imf.org/QueryBuilder.aspx?key=19784661&amp;s=322">http://elibrary-data.imf.org/QueryBuilder.aspx?key=19784661&amp;s=322</a> ). For those countries classifying their partners as Yugoslavia, Czechoslovakia, Belgium-Luxembourg and U.S.S.R. country-level data were retrieved from UN Comtrade ( <a href="http://comtrade.un.org/db/">http://comtrade.un.org/db/</a> )
	Merchandise Imports	Total merchandise imports reported by importers in US dollars.	
Capital	FDI Outward Stocks	For OECD countries, outward FDI position in millions of US dollars. For Hong Kong, FDI stocks outward in millions of US dollars are used. For China net outward FDI in millions of US dollars. For Singapore total direct investment by country of destination in millions of US dollars.	OECD ( <a href="http://stats.oecd.org/Index.aspx">http://stats.oecd.org/Index.aspx</a> ), National Bureau of Statistics of China ( <a href="http://www.stats.gov.cn/english/statisticaldata/yearlydata/">http://www.stats.gov.cn/english/statisticaldata/yearlydata/</a> ), the Government of the Hong Kong Special Administrative Region ( <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp</a> ), Department of Statistics Singapore ( <a href="http://www.singstat.gov.sg/pubn/business.html#sia">http://www.singstat.gov.sg/pubn/business.html#sia</a> ); data for Brazil retrieved from Columbia FDI Profiles ( <a href="http://www.vcc.columbia.edu/content/columbia-fdi-profiles">http://www.vcc.columbia.edu/content/columbia-fdi-profiles</a> ); data for Vietnam from VietnamReport ( <a href="http://vn500.com.vn/2011-07-11-more-than-20-years-of-vietnam-outbound-investment">http://vn500.com.vn/2011-07-11-more-than-20-years-of-vietnam-outbound-investment</a> )
	FDI Inward Stocks	For OECD countries, inward FDI position in millions of US dollars. For Hong Kong FDI inward stock in millions of US dollars is used. For China same pattern as in Inflows FDI is assumed. For Singapore total direct investment in Singapore by country in millions of US dollars.	OECD ( <a href="http://stats.oecd.org/Index.aspx">http://stats.oecd.org/Index.aspx</a> ), National Bureau of Statistics of China ( <a href="http://www.stats.gov.cn/english/statisticaldata/yearlydata/">http://www.stats.gov.cn/english/statisticaldata/yearlydata/</a> ), the Government of the Hong Kong Special Administrative Region ( <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp</a> ), Department of Statistics Singapore ( <a href="http://www.singstat.gov.sg/pubn/business.html#sia">http://www.singstat.gov.sg/pubn/business.html#sia</a> ); data for Argentina, China, Indonesia, Pakistan, Bulgaria, Russia retrieved from Columbia FDI Profiles ( <a href="http://www.vcc.columbia.edu/content/columbia-fdi-profiles">http://www.vcc.columbia.edu/content/columbia-fdi-profiles</a> ); data for Vietnam from VietPartners ( <a href="http://www.vietpartners.com/statistic-fdi.htm">http://www.vietpartners.com/statistic-fdi.htm</a> )
	FDI Outflows	For OECD countries FDI outflows in millions of US dollars. For Hong Kong, 3 years average of FDI net outflows. For China 3 years average of net outward FDI flows in millions of US dollars. For Singapore, same structure as outward FDI stocks is assumed.	OECD ( <a href="http://stats.oecd.org/Index.aspx">http://stats.oecd.org/Index.aspx</a> ), National Bureau of Statistics of China ( <a href="http://www.stats.gov.cn/english/statisticaldata/yearlydata/">http://www.stats.gov.cn/english/statisticaldata/yearlydata/</a> ), the Government of the Hong Kong Special Administrative Region ( <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp</a> ), Department of Statistics of Singapore ( <a href="http://www.singstat.gov.sg/pubn/business.html#sia">http://www.singstat.gov.sg/pubn/business.html#sia</a> ); data for Colombia, Ukraine, India retrieved from Columbia FDI Profiles ( <a href="http://www.vcc.columbia.edu/content/columbia-fdi-profiles">http://www.vcc.columbia.edu/content/columbia-fdi-profiles</a> )
	FDI Inflows	For OECD countries 3 years average of FDI inflows in millions of US dollars is used. For Hong Kong, 3 years average of FDI net inflows. For China same pattern as in FDI inward is assumed. For Singapore, same structure as inward FDI stocks is assumed.	OECD ( <a href="http://stats.oecd.org/Index.aspx">http://stats.oecd.org/Index.aspx</a> ), National Bureau of Statistics of China ( <a href="http://www.stats.gov.cn/english/statisticaldata/yearlydata/">http://www.stats.gov.cn/english/statisticaldata/yearlydata/</a> ), the Government of the Hong Kong Special Administrative Region ( <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1040003_dt_latest.jsp</a> ), department of Statistics Singapore ( <a href="http://www.singstat.gov.sg/pubn/business.html#sia">http://www.singstat.gov.sg/pubn/business.html#sia</a> ); data for Colombia, Malaysia, Egypt, Taiwan and India retrieved from Columbia FDI Profiles ( <a href="http://www.vcc.columbia.edu/content/columbia-fdi-profiles">http://www.vcc.columbia.edu/content/columbia-fdi-profiles</a> ); data for Vietnam from General Statistics Office of Vietnam ( <a href="http://www.gso.gov.vn/default_en.aspx?tabid=471&amp;idmid=3&amp;itmID=13119">http://www.gso.gov.vn/default_en.aspx?tabid=471&amp;idmid=3&amp;itmID=13119</a> )
	Portfolio Equity Outward Stocks	Portfolio Equity assets in millions of US dollars.	The Coordinated Portfolio Investment Survey (CPIS) from the IMF ( <a href="http://www.imf.org/external/np/sta/pi/geo.htm">http://www.imf.org/external/np/sta/pi/geo.htm</a> ).

Part 1 Data Sources Employed to Calculate the DHL Global Connectedness Index  
 Table B.2 (continued) Data Sources Employed to Calculate Breadth Scores

Pillar	Variable	Definition	Source
Information	Incoming Telephone Call Minutes	Minutes of phone calls by country of origin and destination. If the sum across all origins as percentage of the total minutes of phone calls received in a country in each year is lower than 70%, the score obtained is not displayed. Instead, a score using interpolation procedure is used.	Telegeography ( <a href="http://www.telegeography.com/index.html">http://www.telegeography.com/index.html</a> )
	Outgoing Telephone Call Minutes	Minutes of phone calls by country of origin and destination. If the sum across all destinations as percentage of the total minutes of phone calls placed by a country in each year is lower than 70%, the score obtained is not displayed. Instead, a score using interpolation procedure is used.	
	Printed Publications Exports	Bilateral exports of the sub-headings included under the code 49 according to the Harmonized System Classification reported by exporters.	UN Comtrade ( <a href="http://comtrade.un.org/db/">http://comtrade.un.org/db/</a> ); data for Taiwan were retrieved from Bureau of Foreign Trade ( <a href="http://cus93.trade.gov.tw/ENGLISH/FSCE/">http://cus93.trade.gov.tw/ENGLISH/FSCE/</a> )
	Printed Publications Imports	Bilateral imports of the sub-headings included under the code 49 according to the Harmonized System Classification reported by importers.	
People	Migrants	Migrant stock according to Version 4 of the global database of the Development Research Centre on Migration, Globalisation and Poverty that consists of a 226 × 226 origin-destination matrix of migrant stock. Entered United Nations data for country of birth totals where data missing.	Global Migrant Origin Database. ( <a href="http://www.migrationdrc.org/research/typesofmigration/global_migrant_origin_database.html">http://www.migrationdrc.org/research/typesofmigration/global_migrant_origin_database.html</a> ); data for Taiwan from Statistical Yearbook of interior ( <a href="http://sowf.moi.gov.tw/stat/year/elist.htm">http://sowf.moi.gov.tw/stat/year/elist.htm</a> )
	Inbound Tourists	Multiple breadth calculations have been done (one per each measure from UNWTO). Then the results are reported in the following order of priority. a. Arrivals of Overnight Tourists at Borders by Country of Residence. b. Arrivals of Overnight Tourists at All Types of Accommodations by Country of Residence. c. Arrivals of Overnight Tourists at Hotels by Country of Residence. d. Arrivals of Overnight Tourists at Borders by Nationality. e. Arrivals of Overnight Tourists at All Types of Accommodations by Nationality. f. Arrivals of Overnight Tourists at Hotels by Nationality.	Compendium of Tourism Statistics. UNWTO ( <a href="http://unwto.org/en">http://unwto.org/en</a> )
	Incoming International Students	Incoming students by country of origin.	UNESCO Institute for Statistics ( <a href="http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Top-ic=0">http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&amp;IF_Language=eng&amp;BR_Top-ic=0</a> ); data for Taiwan from Ministry of Education Republic of China (Taiwan) ( <a href="http://english.moe.gov.tw/ct.asp?xItem=9874&amp;CtNode=404&amp;mp=1">http://english.moe.gov.tw/ct.asp?xItem=9874&amp;CtNode=404&amp;mp=1</a> )

Part 2 Selected Policy Regressions Cited in Chapter 4  
Table B.3 Regression Analysis of Per Capita GDP Growth, 2000–2011

	Regression based on Depth Dimension Only	Regression based on Overall Global Connectedness
Intercept	7.902*** (1.006)	8.107*** (1.008)
Depth Dimension, 2005	0.0502** (0.0207)	
Global Connectedness Index, 2005		0.0386*** (0.0122)
Log Per Capita GDP, 2000	-0.800*** (0.143)	-0.911*** (0.155)
Observations	139	138
R-squared	0.198	0.203

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Part 2 Selected Policy Regressions Cited in Chapter 4  
Table B.4 Regression Analysis of Depth Scores Based on Structural Factors Only

		Determinants of Depth of Connectedness				
		Overall	Trade	Capital	Information	People
Structural Factors	Remoteness	-1.032*** (0.226)	-1.664*** (0.423)	-0.580 (0.352)	-0.980*** (0.184)	-1.363*** (0.256)
	Landlocked	-0.706 (0.881)	-2.040 (1.862)	-0.344 (1.494)	-1.588* (0.885)	1.569 (1.294)
	Population (log)	(0.881) (0.237)	(1.862) (0.500)	(1.494) (0.314)	(0.885) (0.212)	(1.294) (0.299)
	GDP per Capita (log)	2.589*** (0.333)	-0.420 (0.610)	4.868*** (0.490)	6.113*** (0.295)	3.043*** (0.388)
	Linguistic Commonality	9.396*** (3.270)	4.394 (6.144)	16.41*** (4.533)	9.947*** (2.895)	14.81*** (4.281)
	Constant	63.62*** (6.380)	37.91*** (5.764)	89.59*** (11.45)	-13.83* (7.935)	-3.228 (5.177)
	Observations	959	959	840	959	798
	R-squared	0.653	0.305	0.579	0.832	0.768

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Part 2 Selected Policy Regressions Cited in Chapter 4  
Table B.5 Regression Analysis of Depth Scores Based on Policy and Structural Factors

		Determinants of Depth of Connectedness				
		Overall	Trade	Capital	Information	People
Policy Factors	Tariffs (Wtd Mean Applied)	-0.320***	-0.645***			
		(0.0950)	(0.153)			
	Logistic Performance Index	6.537***	9.083***			
		(1.392)	(2.922)			
	Regulatory Quality	1.974**		6.448***		
		(0.795)		(1.303)		
	Press Freedom	-0.0465***			0.0341**	
		(0.0136)			(0.0137)	
	Labor Freedom	0.0118				0.0955***
		(0.0253)				(0.0355)
	Regional Integration	-0.0560	-0.548	-0.757	0.308	-0.448
		(0.601)	(1.311)	(0.776)	(0.501)	(0.721)
	Violent Conflict	-2.660*	-4.179	0.0584	-0.0808	-3.455*
		(1.481)	(2.683)	(1.904)	(1.149)	(1.920)
Structural Factors	Remoteness	-0.854***	-1.450***	-0.381	-0.829***	-1.567***
		(0.225)	(0.480)	(0.364)	(0.207)	(0.307)
	Landlocked	-1.354	-3.195*	-1.134	-1.963**	1.348
		(0.855)	(1.822)	(1.585)	(0.857)	(1.174)
	Population (log)	-3.077***	-4.746***	-0.179	-1.160***	-3.968***
		(0.297)	(0.554)	(0.322)	(0.225)	(0.315)
	GDP per Capita (log)	-0.484	-4.158***	2.205***	5.836***	2.784***
		(0.500)	(0.949)	(0.632)	(0.323)	(0.391)
	Linguistic Commonality	6.684**	1.288	8.233*	8.497**	13.40***
		(3.077)	(5.766)	(4.807)	(3.261)	(4.410)
Constant		63.62***	122.3***	-13.50*	-6.506	66.94***
		(6.380)	(11.02)	(7.560)	(5.499)	(7.144)
Observations		908	917	840	945	789
R-squared		0.765	0.433	0.640	0.840	0.781

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



Part 2 Selected Policy Regressions Cited in Chapter 4  
Table B.6 Structural Variables in Regression Analysis

Variable	Definition	Source
Remoteness	<p>How far is a country from the rest of the world according to the measure proposed by Wei (1996):</p> $Remoteness_k = \sum_{j \neq k} w_j * \log(Distance_{jk})$ <p>Where <math>w_j = \frac{GDP_j}{\sum_{i \neq j} GDP_i}</math></p> <p>It has been normalized between 0 and 10 using min-max normalization.</p>	GDP from World Economic Outlook from International Monetary Fund ( <a href="http://www.imf.org/external/ns/cs.aspx?id=28">http://www.imf.org/external/ns/cs.aspx?id=28</a> ) and distance from CEPII ( <a href="http://www.cepii.fr/welcome.asp">http://www.cepii.fr/welcome.asp</a> )
Population	Total population is counting all residents regardless of legal status or citizenship – except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Midyear estimates. In logarithms.	World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
GDP per capita	Gross Domestic Product per capita (in constant 2000 US\$). In logarithms.	World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
Landlocked	Dummy equal to 1 if the country is landlocked and 0 otherwise.	CEPII ( <a href="http://www.cepii.fr/welcome.asp">http://www.cepii.fr/welcome.asp</a> )
Linguistic Commonality	The percent of the world GDP that shares an official language with each country. A higher value will be related with a more integrated country in terms of language.	Data on GDP from World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> ) and information about official languages from CEPII ( <a href="http://www.cepii.fr/welcome.asp">http://www.cepii.fr/welcome.asp</a> )

Part 2 Selected Policy Regressions Cited in Chapter 4  
Table B.7 Policy Variables in Regression Analysis

Variable	Definition	Source
Tariffs (Weighted mean applied)	Average of effectively applied rates weighted by the product import shares corresponding to each partner country.	World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
Logistic Performance Index	Perceptions of a country's logistics based on efficiency of customs clearance process, quality of trade- and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. The index ranges from 1 to 5, with a higher score representing better performance.	World Development Indicators from World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> )
Regulatory Quality	Perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The original index ranges between -2.5 (weak governance performance) and 2.5 (strong governance performance). It has been rescaled by adding 3 to make it always positive.	World Governance Indicators ( <a href="http://info.worldbank.org/governance/wgi/sc_country.asp">http://info.worldbank.org/governance/wgi/sc_country.asp</a> )
Press Freedom	An index obtained through a questionnaire with 43 criteria that assess the state of press freedom in each country. It includes every kind of violation directly affecting journalists (such as murders, imprisonment, physical attacks and threats) and news media (censorship, confiscation of newspaper issues, searches and harassment) as well as the degree of impunity enjoyed by those responsible for these press freedom violations. The original index allots a lower value for a freer situation, while a higher index is allotted for a less free environment. The original index has been transformed according to: 142-grade. As a result, a higher value should be interpreted as a freer situation.	Reporters Without Borders ( <a href="http://en.rsf.org/">http://en.rsf.org/</a> )
Labor Freedom	A quantitative measure that looks into various aspects of the legal and regulatory framework of a country's labor market. It provides cross-country data on regulations concerning minimum wages; laws inhibiting layoffs; severance requirements; and measurable regulatory burdens on hiring, hours, and so on.	Heritage Economic Freedom Index. It is based on data from the World Bank's Doing Business Report. ( <a href="http://www.heritage.org/index/labor-freedom">http://www.heritage.org/index/labor-freedom</a> )
Regional Integration	<p>Regional Trade Agreements Integration based on the following calculation:</p> $RTA_{int_k} = \sum_{s; j \neq k} intrta_s * w_j$ $w_j = \frac{\sum_{i \neq j} d_{is} * GDP_i}{\sum_{i \neq j} GDP_i}$ <p>Where <math>s</math> = EU, NAFTA, Mercosur, Asean, Caricom, GCC; <math>d_{is}</math> is a dummy variable equal to 1 if the country <math>i</math> is part of a particular <math>s</math> RTA and 0 otherwise and <math>intrta_s</math> is a measure of the depth of integration in the same <math>s</math> RTA. The measure of the depth of integration is a scale from 1 to 8 according to the number of activities that are allowed within the member of the RTA.</p> <p>A positive number means that the country is involved in any RTA, the higher the value, the more integrated the RTA is, and a zero value means that the country is not involved in any RTA among the group considered here.</p>	The GDP per capita data are from the World Development Indicators from the World Bank ( <a href="http://databank.worldbank.org/ddp/home.do">http://databank.worldbank.org/ddp/home.do</a> ), the measure of the depth of integration is based on <a href="http://en.wikipedia.org/wiki/Trade_bloc#Comparison_between_regional_trade_blocs">http://en.wikipedia.org/wiki/Trade_bloc#Comparison_between_regional_trade_blocs</a> and the RTAs dummies from the International Trade Statistics from World Trade Organization ( <a href="http://www.wto.org/english/res_e/statis_e/statis_e.htm">http://www.wto.org/english/res_e/statis_e/statis_e.htm</a> )
Violent Conflict	Dummy variable equal to 1 when the government of one country in one year is an actor in a violent conflict.	UCDP One-sided Violence Dataset ( <a href="http://www.pcr.uu.se/research/ucdp/datasets/ucdp_one-sided_violence_dataset/">http://www.pcr.uu.se/research/ucdp/datasets/ucdp_one-sided_violence_dataset/</a> ). The latest presentation of the data is in Sundberg, Ralph 2009. "Revisiting One-sided Violence – A Global and Regional Analysis" in Harbom, Lotta & Ralph Sundberg Eds. States in Armed Conflict 2008. Uppsala: Universitetsstryckeriet. The original citation for the data Eck, Kristine and Lisa Hultman. 2007. "Violence Against Civilians in War." Journal of Peace Research 44(2).

## Part 3 Regional Classification of countries

Table B.8 Regional Classification of Countries

Region	Countries
East Asia & Pacific	Brunei Darussalam, Cambodia, China, Fiji, Hong Kong SAR (China), Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, New Zealand, Philippines, Singapore, Taiwan (China), Thailand, Vietnam.
Europe	Albania, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, FYR Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom.
Middle East & North Africa	Bahrain, Egypt, Iran, Israel, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen
North America	Canada, Mexico, United States
South & Central America & the Caribbean	Argentina, Bahamas, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela.
South & Central Asia	Azerbaijan, Bangladesh, Georgia, India, Kazakhstan, Kyrgyz Republic, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkey, Uzbekistan.
Sub-Saharan Africa	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, Togo, Uganda, Zambia, Zimbabwe.

# Notes

## 1. How Globalized is the World?

1 These figures are prior to corrections for double counting that are described later in this chapter.

2 See Guillaume Daudin, Christine Riffart, and Danielle Schweisguth, "Value-Added Trade and Regionalization," OFCE Centre de Recherche en Économie de Sciences Po Paris, September 2008; and Robert C. Johnson and Guillermo Noguera, "Accounting for Intermediates: Production Sharing and Trade in Value Added," unpublished draft, June 2009.

3 Note that the merchandise trade and services trade to GDP ratios presented here sum to 32% rather than the 30% figure cited earlier. Such a discrepancy between these figures in the source data is typical.

4 "Trade growth to slow in 2012 after strong deceleration in 2011," WTO Press Release, April 12, 2012 and "Slow global growth to hit trade in 2012 and 2013, WTO Says," WTO Press Release, September 21, 2012.

5 These estimates were calculated based on IMF projections of merchandise and total trade in the October 2012 revision of the IMF World Economic Outlook database – backing out implied services trade growth.

6 Simon J. Evenett, "Débâcle: The 11th GTA report on protectionism," Global Trade Alert, June 14, 2012.

7 Because domestically held equity valuations also fell in 2008 and rebounded in 2009, the decline in the depth of portfolio equity stocks would presumably have been softened if the denominator of this depth ratio was total portfolio equity assets (domestic plus international) rather than GDP. However, data limitations precluded the use of that (theoretically superior) depth metric.

8 Boris Groendahl and Gavin Finch, "Banks Cut Cross-Border Lending Most Since Lehman: BIS," Bloomberg, June 4, 2012.

9 UNCTAD World Investment Report 2012.

10 Based on data reported by the Universal Postal Union.

11 Based on data reported by the International Telecommunications Union (ITU).

12 Estimate based on data reported in the Telegeography Report.

13 "Stories from Elsewhere," The Economist, July 2, 2012.

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- 5 How can these depth ratios exceed 100%? In some industries, finished products may cross national borders more than once on their way to their final point of sale. Intermediate goods that available data do not distinguish from finished goods, inventory stock changes, inventory shrinkage, and sales that take place outside of

formal retail channels, as well as more basic data availability and quality constraints, also introduce some fuzziness around these quantifications.

- 6 Note that the 30% benchmark used here reflects exports as a percentage of GDP without the adjustment to remove double-counting that was introduced in Chapter 1. Because industry level analysis permits some distinction between finished goods and intermediate goods, the problem of double-counting is not as severe here as in global and country level analysis, though it still cannot be removed entirely. Thus, a more precise placement of this benchmark would probably fall somewhere between 20% and 30%.
- 7 For all industries except pharmaceuticals, depth scores are calculated based on quantity rather than value to avoid analytical problems associated with mark-ups at various stages of distribution. For pharmaceuticals, value data are used because no quantity data are available. This biases the pharmaceutical industry's depth score downward relative to the others.
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Comtrade (HS as reported 481810); Milk (kg): Consumption data from Passport, Euromonitor International, Imports data from UN Comtrade (HS as reported 481810); Mobiles (units): Production data from Passport, Euromonitor International, Exports data from UN Comtrade (HS as reported 851712); Pharmaceuticals (\$): Sales data from World Health Organization, Imports and Exports data from UN Comtrade (HS as reported 3004); Cars (units): Production data from Organisation Internationale des Constructeurs d'Automobiles (OICA), Exports data from UN Comtrade (HS96 8703); Commercial Vehicles (units): Production data from Organisation Internationale des Constructeurs d'Automobiles (OICA), Exports data from UN Comtrade (SITC3 782); Wheat (kg): Production data from Grain Market Report, 2012, International Grains Council ([www.igc.int](http://www.igc.int)), Exports data from UN Comtrade (HS as reported 1001); Corn (kg): Production data from Grain Market Report, 2012, International Grains Council, Exports data from UN Comtrade (HS as reported 1005); Soybeans (kg): Production data from Grain Market Report, 2012, International Grains Council, Exports data from UN Comtrade (HS as reported 1201); Sugar (kg): Production data from Grain Market Report, 2012, International Grains Council, Exports data from UN Comtrade (HS as reported 1701); Cement (kg): Production data from UN Industrial Commodity Statistics Database, Exports data from UN Comtrade (HS as reported 2523); Vodka (L): Consumption data from Passport, Euromonitor International, Imports data from UN Comtrade (HS as reported 481810); Dishwashers (units): Consumption data from Passport, Euromonitor International, Imports data from UN Comtrade (HS 96 842211); Electronic Integrated Circuits (\$): Consumption data from IC Insights, Imports and Exports data from UN Comtrade (SITC3 7764).

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## 5. DHL Global Connectedness Index Methodology

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5 For more information, see [www.ey.com/globalization](http://www.ey.com/globalization)

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In the current global economic climate where the threat of increased protectionism and isolationist tendencies is of genuine concern, this report offers a compelling argument, based on a methodologically robust analysis, of why increased global and regional inter-connectedness and openness is the more prudent policy path on which to proceed.

Pascal Lamy, Director-General, World Trade Organization

Prosperity depends not on more trade, but on more conscious trade – and more deliberate paths for the flow of people, information and capital as well. The Global Connectedness Index lays out a distinct path for every country, and more importantly, a rationale for why that plan makes sense, backed up by Pankaj Ghemawat's prescient theory of global economic health.

Art Kleiner, Editor-in-Chief of Strategy+Business