



# 2007 Global Logistics Guide

**A**s U.S. businesses develop more offshore links, their supply chains become harder to handle—the more links in the chain, the more potential cracks for concern. One way global businesses can reconcile some of these worries is by diligently selecting the countries they elect to source from, outsource manufacturing to, warehouse product in, and distribute goods through.

From an inbound perspective, businesses look at sourcing strategies with flexibility, reliability, and total landed cost in mind. Increasingly, they use multiple source points to alleviate pressure on their primary supply lines and create alternative routing options. Exporters, too, value the importance of keeping product moving at the lowest cost while maintaining the highest level of customer service. On both accounts, businesses have three options: outsource logistics responsibilities to 3PLs and forwarders with expertise in a specific industry niche or region; assess the value of logistics locations per their own specific criteria, then go it alone or acquire business interests “in country” to fulfill

their goals; or, as the case may often be, they can do both.

Whether penetrating new markets, realigning distribution channels, or creating contingency options, companies need to map their unique business needs with available resources and expertise.

*Inbound Logistics'* annual Global Logistics Guide presents a good place to start globe trekking. Our guide offers a macro-perspective of the global supply chain to help shippers and consignees evaluate and qualify expansion opportunities with countries that best fit their logistics and supply chain needs. *IL* identifies global hotspots as excelling in three key areas:

- 1. Transportation Infrastructure:** The density and breadth of airport and port infrastructure.
- 2. IT Competency:** The progressiveness of information and communication technology investment.
- 3. People Power:** The strength and expertise of home-grown logistics talent.

We call this benchmark of measuring a country's logistics

potential the TIP Quotient.

Another good indicator of a country's logistics potential is the amount of foreign direct investment (FDI) the United States pumps into its economy. Though FDI alone does not translate to economic development promise, it's little surprise that countries with good transportation infrastructure, IT capabilities, logistics talent, and favorable, pro-business governments capture a bigger slice of the American pie.

Other intangibles come into play as well. Our X-Factor disclaimer, or “proclaimer” as the case may be, takes into account extraneous factors such as political and social conditions, and progressive or regressive economic policies that might impede trade or augment a country's TIP Quotient.

Our Global Logistics Guide is just that – it is a guide to help you sort out countries and their logistics capabilities, their strengths and their weaknesses. If you have questions about our methodology or selections, please email: [editor@inboundlogistics.com](mailto:editor@inboundlogistics.com)

#### **SOURCES:**

U.S. Department of State; World Port Rankings, American Association of Port Authorities (AAPA); Airports Council International; World Economic Forum's Growth Competitiveness Index; World Economic Forum's Global Information Technology Report; Central Intelligence Agency's World Fact Book; Bureau of Economic Analysis, U.S. Direct Investment Abroad

#### **METHODOLOGY:**

Countries are ranked on three criteria: Transportation infrastructure (1 to 4 points), IT competency (1 to 3 points), and People power (1 to 3 points). Points are totaled for all categories – taking into consideration X-Factor +/- points – to decide final ranking: 10 is highest, 3 is lowest.

The Global Information Technology Report published by the World Economic Forum ranks 115 countries by their capacity to leverage global information and communications technology (ICT) developments. It uses the Networked Readiness Index (NRI) to measure the degree of preparation of a nation or community to participate in and benefit from ICT developments.

# The Americas

## Canada

OVERALL RANK

8

GDP	\$1.2 trillion
EXPORTS	\$405 billion
IMPORTS	\$353 billion
FDI (2005)	\$235 billion

T	I	P
4	3	3

Canada remains one of the world's foremost global economies thanks in part to its proximity to the U.S. Vancouver and Toronto serve as vital port and airport hubs, and the country has an abundance of natural resources. The U.S. consumes 85 percent of Canadian exports.

**X FACTOR (-2)** Canada's economy is entirely reliant on the U.S. economy – for better or for worse. While Mexico has the potential and resources to absorb inbound cargo from Asia, Canada does not. There are also concerns about how its publicly funded health care system can absorb soaring costs.

## Brazil

OVERALL RANK

5

GDP	\$621 billion
EXPORTS	\$138 billion
IMPORTS	\$96 billion
FDI (2005)	\$32 billion

T	I	P
3	1	1

Still the most progressive South American economy, Brazil is fast becoming an alternative sourcing and manufacturing point due to the development of its main port facilities – Tubarao, Itaqui, and Santos. A lack of widespread IT capabilities, however, dropped it six spots in the World Economic Forum's GTR index. High government debt remains a concern for potential investors.

## Chile

OVERALL RANK

4

GDP	\$100 billion
EXPORTS	\$58 billion
IMPORTS	\$35 billion
FDI (2005)	\$10 billion

T	I	P
1	2	1

In terms of IT investment and competency, Chile ranks third in the Americas, moving up six spots in the GTR index. Despite strong economic growth over the past 15 years, unemployment remains high. Continuing reform and trade liberalization – reflected in recent trade agreements with the EU and China in particular – may force the issue as Chile looks to create a more sustainable economic footprint.

## Mexico

OVERALL RANK

6

GDP	\$742 billion
EXPORTS	\$249 billion
IMPORTS	\$253 billion
FDI (2005)	\$71 billion

T	I	P
2	1	1

Mexican trade is inextricably linked to the United States. With congestion and capacity limitations threatening U.S. West Coast throughput, Mexico is making great strides to improve its port and inland transport capabilities to facilitate land bridge options for cargo moving inbound to the U.S. Weaknesses in IT competency and English proficiency are still evident and reflect the country's paltry ranking of 58th in the World Economic Forum's Global Competitive Index.

**X FACTOR (+2)** A new administration led by Felipe Calderon has made economic and social reform a priority, which, coupled with U.S. demand for alternative inbound routings, bodes well for Mexico's future trade growth.

- T** Transportation Infrastructure
- I** Information Technology
- P** People Power

# Europe

## Ireland

GDP	\$203 billion	<b>7</b>		
EXPORTS	\$120 billion	T	I	P
IMPORTS	\$87 billion	1	3	3
FDI (2005)	\$62 billion	1	3	3

Ireland will never be a major transshipment location simply because it's an island with no road connections to mainland Europe. Strengths in the IT, financial, and pharmaceutical sectors, however, have enhanced the country's value proposition. A well-educated, English-speaking workforce; ancestral affinities; and booming Celtic Tiger economy translated into \$62 billion in FDI from the U.S. in 2005, up from \$39 billion in 2001. Increasing consumerism will demand further investment in inland road infrastructure improvements and logistics services expertise.

## United Kingdom

GDP	\$2.3 trillion	<b>7</b>		
EXPORTS	\$469 billion	T	I	P
IMPORTS	\$603 billion	3	3	3
FDI (2005)	\$324 billion	3	3	3

The UK receives more FDI from the U.S. than any other country, thanks in great part to its similar culture and language, and long history of political alliance. Felixstowe and London Heathrow are among the world's top container ports and cargo airports, respectively.

**X FACTOR (-2)** Like the U.S., the UK faces increasing congestion and capacity problems at its ports and urban areas; unlike the U.S., it lacks alternate coasts to pick up the slack. Over-the-road and rail freight bound for mainland Europe are similarly constrained by the Channel Tunnel's capacity limitations.

## The Netherlands

GDP	\$613 billion	<b>8</b>		
EXPORTS	\$414 billion	T	I	P
IMPORTS	\$374 billion	4	3	2
FDI (2005)	\$181 billion	4	3	2

Laying claim to the third-largest port globally in terms of cargo tonnage (Rotterdam), and the 16th-ranked airport (Amsterdam), the Netherlands continues to pace the world in progressive transport and technology policy. It ranks 12th in the world in IT readiness according to the World Economic Forum's GTR listing, has a well-educated labor pool, and is a vanguard in developing middle management logistics expertise. Not surprisingly, the U.S. invested \$181 billion in 2005, the second-largest allotment in Europe to the UK.

**X FACTOR (-1)** Despite the Netherlands' seemingly comprehensive logistics capabilities, recent congestion issues and infrastructure limitations at the Port of Rotterdam – to the point of restricting empty cargo container movement – might make potential investors and shippers more speculative about where they locate facilities and move product.

## Sweden

GDP	\$372 billion	<b>6</b>		
EXPORTS	\$174 billion	T	I	P
IMPORTS	\$152 billion	1	3	2
FDI (2005)	\$33 billion	1	3	2

Sweden excels in IT proficiency (8th), is ranked 3rd in the World Economic Forum's Growth Competitive Index, and has a pedigree for manufacturing excellence. But to date, U.S. FDI has been static, a trend that typifies Scandinavia at large. One obvious reason is its location on the edge of Europe; second is the high quality of life and cost of doing business, a result of inflated taxes used to subsidize social services. Further development of the EU's Trans-European transport networks and Nordic Triangle project will give Sweden further incentive to rationalize economic and social policies to attract more foreign interest.

## Finland

GDP	\$196 billion	<b>6</b>		
EXPORTS	\$85 billion	T	I	P
IMPORTS	\$72 billion	1	3	2
FDI (2005)	\$2 billion	1	3	2

Finland's IT network readiness is among the best in the world – as is its health care system, education and training programs, and quality of life. Its location on the periphery of northern Europe, however, is disadvantageous. With freight volume in and out of Eastern Europe on the rise, the Finnish government is making a concerted effort to strengthen transport connections with Europe and Russia. By 2015, Finland hopes to fulfill its obligation in developing a link in the Nordic Triangle, an EU-sponsored multimodal transport corridor linking Scandinavia with central Europe and Russia.

## Estonia

GDP	\$14 billion	<b>5</b>		
EXPORTS	\$10 billion	T	I	P
IMPORTS	\$12 billion	1	2	2
FDI (2005)	\$18 million	1	2	2

Estonia remains the shining star among Eastern Europe's upstarts, ranking 29th on the World Economic Forum's Global Competitive Index, ahead of Spain, Portugal, Italy, Hungary, and Poland. Like its Eastern Bloc peers, reform and privatization have helped stabilize the economy and a strong natural resources reserve makes it energy independent. A competitive economic footing has encouraged the financial sector to readily loan money and stimulate SMB growth.

## Spain

GDP	\$1.1 trillion	<b>7</b>		
EXPORTS	\$222 billion	T	I	P
IMPORTS	\$324 billion	3	2	2
FDI (2005)	\$43 billion	3	2	2

Spain has three highly regarded container ports in Valencia, Barcelona, and Algeciras; and Madrid Baraja is ranked 45th in the world among cargo airports. IT investment and readiness rank in the second tier, which is surprising given Spain's prominence in Europe. In terms of logistics training Spain leads the way: The University of Zaragoza has partnered with MIT, local industry, and the government to sponsor the MIT-Zaragoza International Logistics Program, a research and education partnership that offers faculty and students direct access to a concentration of logistics activity and new technology in a real-world setting.

## France

GDP	\$1.9 trillion	<b>7</b>		
EXPORTS	\$490 billion	T	I	P
IMPORTS	\$529 billion	4	2	2
FDI (2005)	\$61 billion	4	2	2

France's transportation capabilities are among Europe's best, with well-developed highways, two major ports – Le Havre and Marseille – and Charles de Gaulle International Airport. The country faces increasing competition from Germany, Switzerland, and the Netherlands, where current U.S. foreign direct investment is considerably greater.

**X FACTOR (-1)** The French government has tried to liberalize some labor policies but has received little recognition or support from the populace. Thirty-hour workweeks and proposed legislation to mandate daily naps might wake up investors.

## Germany

GDP	\$2.9 trillion	<b>9</b>		
EXPORTS	\$1.1 trillion	T	I	P
IMPORTS	\$916 billion	4	3	2
FDI (2005)	\$86 billion	4	3	2

Despite its esteem as one of the world's largest economies, Germany struggles with poor economic growth due to residual difficulties integrating with Eastern Germany, restrictive and binding labor regulations, and the migration of manufacturing to cheaper Eastern Europe locations. Germany's reputation for precision and efficiency, however, might be a perfect complement for distribution-oriented activities. Its location in central Europe could be pivotal if it commits to shifting from production-oriented activities to distribution and logistics. Hamburg places 9th in the world for container traffic; Frankfurt ranks 6th in cargo airports.

## Switzerland

GDP	\$387 billion	<b>8</b>		
EXPORTS	\$166 billion	T	I	P
IMPORTS	\$162 billion	2	3	3
FDI (2005)	\$83 billion	2	3	3

Switzerland's economic stability and enviable location in the middle of Europe makes it one of the world's best logistics locations. It also happens to be the most competitive global economy according to the World Economic Forum's annual report. Despite a relatively small labor pool, its favorable business climate and well-developed transportation networks – via rail, road, and river – make it a pivotal supply chain corridor, especially as Eastern Europe embraces manufacturing growth. That major global players such as Panalpina, Kuehne + Nagel, SwissLog, and Swiss Air call Switzerland home is testament to the government and industry's commitment to logistics – and why U.S. FDI peaked at \$106 billion in 2004.

## Belgium

GDP	\$368 billion	<b>7</b>		
EXPORTS	\$335 billion	T	I	P
IMPORTS	\$334 billion	3	2	2
FDI (2005)	\$37 billion	3	2	2

The promise of increased freight volume out of Eastern Europe positions Belgium as a major transport nexus. Antwerp, the transportation capital of the Flemish flat plains, has historically been one of Europe's top ports – globally it ranks 17th in total cargo volume. The economy is largely driven by raw materials imports and finished goods exports, and is further strengthened by the country's highly developed canal, railway, and road networks.

## Czech Republic

GDP	\$119 billion	<b>5</b>		
EXPORTS	\$89 billion	T	I	P
IMPORTS	\$88 billion	1	2	2
FDI (2005)	\$3 billion	1	2	2

The Czech Republic continues to make great progress in economic development, thanks in part to its strength in the IT sector, moving up 8 spots in the GTR index to 29. Its accession into the EU and aggressive approach to reforming economic policies has helped it leverage its location to attract foreign investment. But, the Czech Republic must do more to encourage private sector investment in transportation infrastructure, ease high unemployment, and assuage concerns about political collusion and corruption.

**T** Transportation Infrastructure  
**I** Information Technology  
**P** People Power

# Africa, Asia & The Middle East

## United Arab Emirates

OVERALL RANK

6

GNP	\$111 billion
EXPORTS	\$137 billion
IMPORTS	\$89 billion
FDI (2005)	\$3 billion

T I P  
3 2 2

The United Arab Emirates is fast becoming – if not already – the Middle East's primary cargo hub. Dubai Airport ranks 18th in the world in terms of total airfreight volume and 10th in ocean container volume; Khor Fakkan has also entered the ranks of the world's top-50 container ports. Strong oil reserves have given UAE the cash flow and luxury to invest heavily in infrastructure, and the government has been equally aggressive in establishing trade agreements with the United States.

**X FACTOR (-1)** UAE's dependence on oil money, exorbitant real estate prices, and location in a highly charged socio-political climate might make some U.S. businesses uneasy.

## South Africa

OVERALL RANK

7

GNP	\$200 billion
EXPORTS	\$59 billion
IMPORTS	\$62 billion
FDI (2005)	\$4 billion

T I P  
2 2 3

The abolition of Apartheid set a tone for economic liberalization in South Africa, though past social stigmas – poverty and unemployment – are still problematic. The economy has always been reliant on natural resources such as platinum, gold, and coal and a thriving mining industry, which has helped in the development of its top port – Richard's Bay. The government has become more active in reducing tariffs and subsidies, encouraging privatization, and diversifying its economy in hopes of luring more foreign investment.

## Russia

OVERALL RANK

4

GDP	\$733 billion
EXPORTS	\$318 billion
IMPORTS	\$172 billion
FDI (2005)	\$6 billion

T I P  
1 1 1

Russia's economy keeps plugging along following 8 years of positive growth. The government, however, has done little to enact reform and critics point to excessive state control as a contributing factor to long-term malaise. The country depends too much on petroleum and gas exports, leaving the economy vulnerable to violent shifts in global demand. Transport infrastructure badly needs improvement and IT development lags behind the rest of the world. Russia slipped 9 spots to 62nd in the World Economic Forum's Growth Competitiveness Index.

**X FACTOR (+1)** While most indicators discount Russia's potential as a logistics hotspot, one bright note is its proximity to Eastern Europe. The shift of manufacturing eastward within Europe may position Russia as a contributor to this outsourcing phenomenon. U.S. FDI has grown fivefold in the last 5 years, suggesting stateside business interests may be looking to Russia's future rather than reflecting on its past.

## China

OVERALL RANK

8

GDP	\$2.5 trillion
EXPORTS	\$974 billion
IMPORTS	\$778 billion
FDI (2005)	\$17 billion

T I P  
2 1 2

While cultural, political, and language differences still make going it alone difficult, a growing number of 3PLs, forwarders, carriers, and integrators can facilitate introductions. Coastal China is becoming considerably developed and rising manufacturing costs are pushing development inland, further exposing China's embryonic transport network. Still, the pace with which government is investing in infrastructure and training workers is unparalleled. For some forward-thinking businesses, China's greatest potential may be as a growing middle-class consumer market.

**X FACTOR (+3)** There are numerous obstacles to penetrating China due to cultural differences and poor inland transport options. But 3PLs are paving the way. And, for the foreseeable future, cheap labor costs still outweigh growing pains.

## Japan

OVERALL RANK

9

GDP	\$4.9 trillion
EXPORTS	\$590 billion
IMPORTS	\$524 billion
FDI (2005)	\$75 billion

T I P  
4 3 3

Following more than 5 years of fiscal growth, Japan appears to be well past the economic doldrums that beset it for nearly a decade and a half. Conservative investment has given way to more liberal government and industry spending to diversify and expand Japan's export potential beyond its well-established automotive and electronics sectors.

**X FACTOR (-1)** Despite 7 ports ranked among the world's top 50 in cargo volume, increasing Asian origin demand and competition from smaller and less-congested countries such as Singapore and Malaysia loom as potential obstacles for Japan's crowded ports.

## South Korea

OVERALL RANK

7

GDP	\$769 billion
EXPORTS	\$328 billion
IMPORTS	\$300 billion
FDI (2005)	\$19 billion

T I P  
4 3 2

Despite increasing competition from China and Singapore, South Korea's economic livelihood remains stable thanks to comprehensive transport capabilities that include 4 ports and 1 airport (Seoul) among the top 50 in the world. The country ranks high in IT network readiness, and its education system is excellent. Little wonder why U.S. FDI in South Korea has doubled over the past 5 years.

**X FACTOR (-2)** Inevitably the biggest thorn in South Korea's side is its cantankerous neighbor to the north. With upstart countries such as Taiwan, Singapore, and Malaysia making rapid progress luring stateside interests, it has increasingly less leverage with ongoing unrest in North Korea.

## Malaysia

OVERALL RANK

7

GNP	\$132 billion
EXPORTS	\$159 billion
IMPORTS	\$127 billion
FDI (2005)	\$10 billion

T I P  
3 2 2

Adequate IT infrastructure and a solid transport footprint have secured Malaysia as a leading logistics location in Southeast Asia. Kuala Lumpur ranks 31st among global cargo airports, joining Port Kelang (27th) as the country's primary gateways. Recent disturbances as a result of the Asian Tsunami and SARS scare left their mark, but the government is making a concerted effort to complement raw materials exports with manufacturing and IT.

## Singapore

OVERALL RANK

9

GNP	\$122 billion
EXPORTS	\$284 billion
IMPORTS	\$246 billion
FDI (2005)	\$48 billion

T I P  
4 3 3

Singapore's booming economy is predicated by a strong export market and well-developed transportation and IT footprints to support and facilitate foreign trade. It ranks 2nd in the IT index, 5th in the World Economic Forum's Growth Competitive poll, and is home to the world's busiest cargo port and 9th-busiest airport. English is among its 3 primary languages, it has a well-educated workforce, and its proximity to China and India make it a viable transshipment location for U.S. businesses. U.S. FDI crested at \$51 billion in 2004, up from \$41 billion in 2001.

## India

OVERALL RANK

7

GDP	\$796 billion
EXPORTS	\$112 billion
IMPORTS	\$188 billion
FDI (2005)	\$8 billion

T I P  
2 2 3

India's reputation as a BPO outsourcing hotspot has given way to more concerted efforts luring manufacturing activities – and it has worked. The country has a well-educated workforce proficient in English, and the government is looking to further develop coastal and inland transport infrastructure to boost competitiveness with China. GDP growth remains strong, but population expansion and social problems are causes for concern.

**X FACTOR (+1)** The ongoing dispute with Pakistan over Kashmir and inadequate inland transportation infrastructure still have investors wary about making a long-term commitment to India.

## Thailand

OVERALL RANK

5

GNP	\$197 billion
EXPORTS	\$124 billion
IMPORTS	\$119 billion
FDI (2005)	\$9 billion

T I P  
2 2 1

A strong transportation backbone, which includes a major cargo airport (Bangkok) and seaport (Laem Chabang), is a major asset to Thailand's economy. But the country is still reeling from the 2004 tsunami that ravaged its coastline, and attempts to improve logistics capabilities have been hampered by mediocre IT investment and lack of logistics expertise.

## Taiwan

OVERALL RANK

8

GNP	\$354 billion
EXPORTS	\$215 billion
IMPORTS	\$205 billion
FDI (2005)	\$13 billion

T I P  
3 3 2

Taiwan ranks high in IT network readiness, jumping 8 spots in the CTR index. It has 2 major cargo facilities in Taipei (13th) and Kaohsiung (16th) that rank among the world's busiest cargo airports and ports, respectively. Key to growth and viability is its relationship with China, which has become Taiwan's largest export market and second-largest source of imports. English proficiency is above average for the region, and Taiwan's electronics manufacturing strength is a valued asset among prospective outsourcers.

T Transportation Infrastructure  
I Information Technology  
P People Power