Global Logistics Guide

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 homegrown 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

SOUDCES



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.

Canada

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

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.

OVERALL RANK

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.

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United States

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OVERALL RANK

Canada

Mexico GDP \$742 billion **EXPORTS** \$249 billion IMPORTS \$253 billion FDI (2005) \$71 billion 2

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.

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.

Transportation Infrastructure Information Technology **People Power**

The Americas

ATLANTIC OCEAN

Brazil

Die las

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



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 GITR index. High government debt remains a concern for potential investors.

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Chile

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



In terms of IT investment and competency, Chile ranks third in the Americas, moving up six spots in the GITR 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.

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Europe

OVERALL RANK Ireland GDP \$203 billion EXPORTS \$120 billion IMPORTS \$87 billion TIP 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.



Spain has three highly regarded con-tainer 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.

T Transportation Infrastructure

Information Technology



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.

OVERALL

RANK

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.



are among Europe's best, with welldeveloped 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.

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.



EXPORTS \$414 billion IMPORTS \$374 billion T I P FDI (2005) \$181 billion

Laying claim to the third-largest port globally in terms of cargo tonnage (Rotterdam), and the 16thranked 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 GITR 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.

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.



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.

OVERALL RANK Sweden GDP \$372 billion EXPORTS \$174 billion

IMPORTS \$152 billion TIP FDI (2005) \$33 billion 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.

Switzerland GDP \$387 billion EXPORTS \$166 billion IMPORTS \$162 billion T I P

FDI (2005) \$83 billion

OVERALL RANK

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.

Finland GDP \$196 billion EXPORTS \$85 billion IMPORTS \$72 billion TI FDI (2005) \$2 billion

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 dis-advantageous. 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.



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.

P People Power







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 arowth.

Czech Republic

GDP \$119 billion EXPORTS \$89 billion IMPORTS \$88 billion

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 GITR 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.



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OVERALL RANK

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Africa, Asia & The Middle East



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.

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.

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South Africa			_		
	GDP	\$200 billion			
	EXPORTS	\$59 billion			
	IMPORTS	\$62 billion	Т		P
	FDI (2005)	\$4 billion	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 GDP \$733 billion **EXPORTS** \$318 billion

IMPORTS \$172 billion TIP FDI (2005) \$6 billion Russia's economy keeps plugging along following 8 years of positive growth. The government, however, has done little to enact reform

OVERALL RANK

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.

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.

OVERALL RANK India GDP \$796 billion **EXPORTS** \$112 billion IMPORTS \$188 billion T I P FDI (2005) \$8 billion 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.

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.

OVERALL China GDP \$2.5 trillion **EXPORTS** \$974 billion IMPORTS \$778 billion TIIP FDI (2005) \$17 billion 2 1 2

RANK

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.

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.

Saudi Arabia

Énna OVERALL RANK Malaysia GNP \$132 billion EXPORTS \$159 billion IMPORTS \$127 billion T FDI (2005) \$10 billion 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.

T Transportation Infrastructure Т Information Technology P People Power



Japan

Rus sia

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Pakida

Katalo

GDP \$4.9 trillion

IMPORTS \$524 billion T | P

Following more than 5 years of fis-

EXPORTS \$590 billion

FDI (2005) \$75 billion

EXPORTS \$284 billion IMPORTS \$246 billion T I P FDI (2005) \$48 billion

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 9thbusiest airport. English is among its 3 primary languages, it has a welleducated 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.

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

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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.

talavsia

Thailand

South Korea

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



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.

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.



iness, jumping 8 spots in the GITR 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.