

Recent Trends in U.S. Services Trade

2012 Annual Report

**July 2012
Publication No. 4338**

**Investigation No. 332-345
United States International Trade Commission**



U.S. International Trade Commission

COMMISSIONERS

Irving A. Williamson, Chairman
Deanna Tanner Okun
Daniel R. Pearson
Shara L. Aranoff
Dean A. Pinkert
David S. Johanson

Robert B. Koopman
Director, Office of Operations

Karen Laney
Director, Office of Industries

**Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436**

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Recent Trends in U.S. Services Trade

2012 Annual Report

Investigation No. 332-345

Publication 4338



July 2012

This report was prepared principally by

Project Leader

Isaac Wohl
isaac.wohl@usitc.gov

Deputy Project Leader

Tamar Khachaturian
tamar.khachaturian@usitc.gov

Principal Authors

Chapter 1	George Serletis	george.serletis@usitc.gov
	Cynthia Payne	cynthia.payne@usitc.gov
Chapter 2	George Serletis	george.serletis@usitc.gov
Chapter 3	Lisa Alejandro	lisa.alejandro@usitc.gov
Chapter 4	Jennifer Powell	jennifer.powell@usitc.gov
Chapter 5	Joann Peterson	joann.peterson@usitc.gov
Chapter 6	Matthew Reisman	matthew.reisman@usitc.gov
Chapter 7	Martha Lawless	martha.lawless@usitc.gov
Chapter 8	Eric Forden	eric.forden@usitc.gov
Chapter 9	Isaac Wohl	isaac.wohl@usitc.gov

Content Reviewers

Laura Bloodgood and William Powers

Editor

Peg Hausman

Special Assistance from

Trina Chambers, Lynette Gabourel, and Monica Reed

Under the direction of

Richard W. Brown, Chief, Services Division
richard.brown@usitc.gov

ABSTRACT

Recent Trends in U.S. Services Trade: 2012 Annual Report focuses on exports and imports of infrastructure services, including banking, insurance, logistics, retail, securities, and telecommunications services. These services are essential inputs to firms in virtually every economic sector. The largest infrastructure service firms are located in developed countries and offer their services globally through cross-border trade and affiliate transactions. Economic growth in developing and emerging countries continues to create new opportunities for expansion and investment by infrastructure service firms, though many countries maintain regulations and policies that pose challenges for stakeholders in services trade.

Infrastructure service industries have shown signs of recovery following the recent financial crisis and ensuing economic downturn. Employment in infrastructure services continued to decline slightly in 2010, but wages, productivity, and value added grew strongly. While the United States had a small cross-border trade deficit in infrastructure services, it maintained a large trade surplus in affiliate sales, which accounted for the majority of infrastructure services trade.

PREFACE

This report is the 16th in a series of annual reports on recent trends in U.S. services trade that the U.S. International Trade Commission (the Commission or USITC) has published. The Commission also publishes an annual companion report on U.S. merchandise trade, titled *Shifts in U.S. Merchandise Trade*.¹ These annual reports are the product of a recurring investigation instituted by the Commission in 1993 under section 332(b) of the Tariff Act of 1930.² The information contained in this report reflects the knowledge, industry contacts, and analytic skills that are used by the Commission in providing expert analyses of service industries in its statutory investigations and in apprising its customers of global industry trends, regional developments, and competitiveness issues.

In recent years, the Commission has published several reports on the services sector in addition to the *Recent Trends* series, including *Property and Casualty Insurance Services: Competitive Conditions in Foreign Markets*.³ Services have also been addressed in *ASEAN: Regional Trends in Economic Integration, Export Competitiveness, and Inbound Investment for Selected Industries*⁴ and the *Small and Medium-Sized Enterprises* series—three reports on small and medium-sized enterprises published in 2010.⁵

¹ The Commission will not publish this report in 2012.

² On August 27, 1993, on its own motion and pursuant to section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)), the USITC instituted investigation no. 332-345, *Annual Reports on U.S. Trade Shifts in Selected Industries*. On December 20, 1994, the Commission on its own motion expanded the scope of this report to include more detailed coverage of service industries. Under the expanded scope, the Commission publishes two annual reports, *Shifts in U.S. Merchandise Trade* and *Recent Trends in U.S. Services Trade*. Services trade is presented in a separate report in order to provide more comprehensive and timely coverage of the sector's performance. The current report format was developed by the USITC in response to Congressional interest in establishing a systematic means of examining and reporting on the significance of major trade developments, by product, and with leading U.S. trading partners, in the services, agriculture, and manufacturing sectors.

³ USITC Publication 4068, March 2009.

⁴ USITC Publication 4176, August 2009.

⁵ USITC Publication 4125, January 2010; USITC Publication 4169, July 2010; and USITC Publication 4189, November 2010.

CONTENTS

	<i>Page</i>
Abstract	i
Preface	iii
Abbreviations and Acronyms	xi
Executive Summary	xiii
Chapter 1: Introduction	1-1
Data and organization	1-1
The U.S. services sector	1-2
Global services trade	1-2
U.S. trade in services	1-4
Cross-border trade, 2010	1-5
Cross-border trade, 2011	1-8
Affiliate transactions	1-9
Bibliography	1-12
Chapter 2: Infrastructure Services Overview	2-1
Services regulation and liberalization	2-1
Gross domestic product (GDP), employment, labor productivity, and salaries	2-3
U.S. trade in infrastructure services	2-7
Bibliography	2-11
Chapter 3: Banking Services	3-1
Summary	3-1
Introduction	3-1
Competitive conditions in the global banking services market	3-2
Demand and supply factors	3-4
Trade trends	3-6
Cross-border trade	3-6
Nontariff measures affecting trade	3-8
Outlook	3-9
Bibliography	3-10

CONTENTS—*Continued*

	<i>Page</i>
Chapter 4: Insurance Services	4-1
Summary	4-1
Introduction	4-1
Competitive conditions in the global insurance services market	4-2
Demand and supply factors	4-5
Trade trends	4-9
Cross-border trade	4-9
Affiliate transactions	4-13
Nontariff measures affecting trade	4-15
Outlook	4-16
Bibliography	4-19
Chapter 5: Logistics Services	5-1
Summary	5-1
Introduction	5-1
Competitive conditions in the global logistics services market	5-2
Demand and supply factors	5-6
Trade trends	5-10
Cross-border trade	5-10
Affiliate transactions	5-13
Nontariff measures affecting trade	5-14
Outlook	5-15
Bibliography	5-16
Chapter 6: Retail Services	6-1
Summary	6-1
Introduction	6-1
Competitive conditions in the global retail services market	6-2
Demand and supply factors	6-4
Trade trends	6-9
Affiliate transactions	6-9
Nontariff measures affecting trade	6-12
Outlook	6-13
Bibliography	6-15

CONTENTS—*Continued*

	<i>Page</i>
Chapter 7: Securities Services	7-1
Summary.....	7-1
Introduction.....	7-1
Competitive conditions in the global securities services market.....	7-2
Demand and supply factors.....	7-5
Trade trends.....	7-10
Cross-border trade.....	7-10
Affiliate transactions.....	7-14
Nontariff measures affecting trade.....	7-14
Outlook.....	7-15
Bibliography.....	7-17
Chapter 8: Telecommunication Services	8-1
Summary.....	8-1
Introduction.....	8-1
Competitive conditions in the global telecommunication services market.....	8-2
Demand and supply factors.....	8-5
Trade trends.....	8-9
Cross-border trade.....	8-9
Affiliate transactions.....	8-11
Nontariff measures affecting trade.....	8-13
Outlook.....	8-14
Bibliography.....	8-15
Chapter 9: Services Roundtable	9-1
Approaches to services trade liberalization.....	9-1
The role of regulations.....	9-2
Broader economic issues.....	9-3
List of external participants at the Commission’s services roundtable held on November 3, 2011.....	9-5
Boxes	
1.1 Services trade under the General Agreement on Trade in Services.....	1-4
1.2 The rise of affiliate transactions.....	1-5
3.1 Retailers increasingly provide financial services.....	3-4
3.2 Understanding BEA data on cross-border trade and affiliate transactions in banking services.....	3-7
4.1 The Russian insurance market.....	4-3
4.2 Understanding BEA data on cross-border trade and affiliate transactions in insurance services.....	4-10
5.1 3PL firms become important players in the healthcare industry.....	5-9
5.2 An explanation of BEA data on cross-border trade and affiliate transactions in logistics services.....	5-10
6.1 Cross-border e-commerce emerges as an avenue for entering new markets.....	6-5
6.2 Understanding BEA data on retail services.....	6-10

CONTENTS—Continued

Page

Boxes—Continued

7.1	The Dodd-Frank Act of 2010 fundamentally redefined financial regulation in the United States.....	7-8
7.2	Understanding data on cross-border trade and affiliate transactions in securities services	7-11
8.1	International submarine cables	8-7
8.2	Understanding BEA data on cross-border trade and affiliate transactions in telecommunication services.....	8-10

Figures

1.1	Global services: The United States led the world in cross-border exports and imports of services in 2010.....	1-3
1.2	U.S. services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2001–10	1-6
1.3	U.S. services: Infrastructure services accounted for a large share of U.S. cross-border exports and imports of services in 2010	1-7
1.4	U.S. services: Infrastructure services led services transactions by affiliates in 2009	1-11
2.1	U.S. infrastructure services: Finance and insurance services had the largest contribution to GDP in 2010.....	2-4
2.2	U.S. infrastructure services: Retail trade accounted for the largest share of infrastructure services employment in 2010.....	2-4
2.3	U.S. infrastructure services: Finance led U.S. cross-border exports and insurance services led cross-border imports of infrastructure services in 2010.....	2-8
2.4	U.S. infrastructure services: In 2009, trade in wholesale services led transactions by foreign affiliates of U.S. firms and U.S. affiliates of foreign firms.....	2-10
3.1	Banking services: Europe and North America held the majority of bank assets in 2011	3-3
3.2	Banking services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2006–10.....	3-8
4.1	Insurance services: U.S. cross-border trade in private-sector services resulted in a U.S. trade deficit each year during 2006–10	4-10
4.2	Insurance services: U.S. cross-border insurance trade yielded significant deficits with Bermuda and the United Kingdom.....	4-11
4.3	Insurance services: Bermuda and Canada were the top markets for U.S. exports, while Bermuda supplied the most insurance services imports in 2010	4-12
4.4	Insurance services: Services supplied by U.S.-owned foreign affiliates exceeded services supplied by foreign-owned U.S. affiliates beginning in 2005	4-14

CONTENTS—*Continued*

	<i>Page</i>
Figures—<i>Continued</i>	
5.1	Logistics services: Scope of 3PL engagement with client varies 5-3
5.2	Logistics services: U.S. cross-border trade in logistics services resulted in a U.S. trade deficit each year during 2006–10 5-11
5.3	Logistics services: The United Kingdom was the top market for U.S. exports, while Japan was the leading source of U.S. imports in 2010 5-12
5.4	Logistics services: Among the top five U.S. trading partners in logistics services, the United Kingdom was the only country with which the United States posted a trade surplus in 2010..... 5-13
6.1	Retail services: Although the United States still held the largest shares of global retailing revenues from 2005 to 2010, the share going to the BRIC countries (Brazil, Russia, India, and China) rose during that period 6-3
6.2	Retail services: Services supplied by U.S.-owned foreign affiliates grew faster than retailing services supplied by foreign-owned U.S. affiliates in recent years.... 6-10
6.3	Retail services: Canada and the United Kingdom accounted for nearly half of the retailing services supplied by U.S.-owned foreign affiliates in 2009, while more than one-fifth of all retailing services supplied by foreign-owned U.S. affiliates in 2009 involved affiliates from the Netherlands 6-11
7.1	Securities services: Global investment banking fees remain below their 2007 peak... 7-4
7.2	Securities services: U.S. cross-border trade in securities services resulted in a U.S. trade surplus each year during 2006–10 7-12
7.3	Securities services: The U.S. showed a cross-border trade surplus in purchases of long-term securities during 2005–11 7-13
8.1	Telecommunication services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2006–10..... 8-11
8.2	Telecommunication services: Brazil and the United Kingdom were the top markets for U.S. exports, while the United Kingdom was the leading source of telecommunication services imports in 2010 8-12
8.3	Telecommunication services: The U.S. showed a cross-border trade surplus with major trading partners in 2010..... 8-13

CONTENTS—*Continued*

	<i>Page</i>
Tables	
1.1 U.S. private services exports and imports to the world, by category, 2010–11	1-9
2.1 United States: GDP, FTEs, wage and salary accruals, and labor productivity, by goods and service sectors, 2005–10.....	2-5
2.2 United States: GDP, FTEs, wage and salary accruals, and labor productivity, by service industries, 2005–10	2-6
2.3 U.S. infrastructure services: Top five cross-border export and import markets and leading industries, 2010	2-9
3.1 Banking services: Top 10 global banks by total assets, 2011	3-2
4.1 Insurance services: Top 10 insurance markets, by total premiums, 2005–10.....	4-2
4.2 Insurance services: Top 10 global insurance companies, by revenue, 2010.....	4-4
5.1 Logistics services: Top 10 countries by global revenues, 2010.....	5-4
5.2 Logistics costs as a percentage of GDP for top 10 global logistics markets in 2010, and percentage change for 2006–10	5-4
5.3 Top 10 global 3PL firms by revenue, 2010	5-5
6.1 Top 10 retailers, by global retail sales, 2009	6-4
7.1 Global investment banking: Top banks, 2011	7-4
8.1 Telecommunication services: Top 20 global telecommunications markets, by revenue and share of global revenues, 2010.....	8-3
8.2 Telecommunication services: Top 15 global telecommunication services firms, by revenue and employees.....	8-4
8.3 Telecommunication Services: Telecommunication services firms’ regional presence, selected, 2011	8-4
8.4 Telecommunication services: Selected mergers and acquisitions, 2009–11.....	8-8

ABBREVIATIONS AND ACRONYMS

3G	third generation (telecommunications services)
4G	fourth generation (telecommunications services)
3PL	third-party logistics
AIG	American International Group
ASEAN	Association of Southeast Asian Nations
ATM	automatic teller machine
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics (U.S.)
BRIC	Brazil, Russia, India, and China
B2C	business-to-consumer (sales over the Internet)
CAFTA-DR	Dominican Republic-Central America-United States Free Trade Agreement
CAGR	compound annual growth rate
EIU	Economist Intelligence Unit
FDI	foreign direct investment
FIO	Federal Insurance Office
FTA	free trade agreement
FTEs	full-time equivalent employees
GATS	General Agreement on Trade in Services
GATT	General Agreement on Trade and Tariffs
GDP	gross domestic product
GM	General Motors
G7	Group of Seven (major economies, namely Canada, France, Germany, Japan, the United Kingdom, and the United States)

ABBREVIATIONS AND ACRONYMS—

cont.

G20	Group of Twenty (major economies, namely Argentina, Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States)
IMF	International Monetary Fund
IT	information technology
M&A	merger and acquisition
MiFID	Markets in Financial Instruments Directive
NAIC	National Association of Insurance Commissioners
OECD	Organisation for Economic Co-operation and Development
OTC	over-the-counter (financial instruments)
QFII	Qualified Foreign Institutional Investor (China)
RFID	radio frequency identification
RTA	regional trade agreement
SIM	subscriber identity module
TIC	Treasury International Capital system
UNCTAD	United Nations Conference on Trade and Development
USDOC	U.S. Department of Commerce
USDOL	U.S. Department of Labor
USITC	U.S. International Trade Commission
USTR	Office of the U.S. Trade Representative
WTO	World Trade Organization

Executive Summary

The United States is the world's largest services market and was the world's largest cross-border exporter and importer of services in 2010.¹ In recent years, global trade in services showed signs of recovering from the economic downturn, with both U.S. exports and imports of services increasing rapidly.

The 2012 *Recent Trends in U.S. Services Trade* report, part of an annual series prepared by the U.S. International Trade Commission (Commission or USITC), provides an overview of U.S. trade in services. This year's report focuses primarily on recent developments in the banking, insurance, logistics, retail, securities, and telecommunication services industries.² These infrastructure services are critical inputs to every sector and directly affect the competitiveness and productivity of the overall economy. The United States remained a world leader in these industries, generating a cross-border trade surplus in all but the insurance and logistics industries in 2010.

During both the global economic downturn and the recent recovery in trade volumes, infrastructure services firms have continued to develop new technologies, test new business models, and otherwise adapt to changing commercial environments. New financial regulations have impacted the banking, insurance, and securities industries, while innovative technologies such as e-commerce platforms and smartphones have affected the retail and telecommunications industries. Most infrastructure services industries face relative maturity and saturation in developed markets, in contrast with rapid growth and fragmentation in developing markets.

Key Findings

Total U.S. Trade in Services

The United States led the global services market in 2009–10

Services industries make up the overwhelming majority of U.S. production and employment, accounting for 79 percent (\$9 trillion) of total U.S. private-sector real gross domestic product and 82 percent (82 million) of U.S. private-sector full-time employees in 2010. The United States is highly competitive in the global services market and is the world's top exporter and importer of services. In 2010, the United States exported \$518 billion of commercial services across borders (14 percent of the global total) and imported \$358 billion of such services (10 percent of the global total). The U.S. services trade surplus of \$160 billion was the world's highest. Other significant services traders

¹ This report uses timeframes based on data availability. For example, BEA data on cross-border trade are available through 2010, while data on affiliate transactions are available through 2009. More recent timeframes are used where possible.

² Beginning in 2008, the *Recent Trends* report has discussed the professional and infrastructure service subsectors in alternate years, to allow more detailed analysis of individual services industries. Professional services, such as education, healthcare, and legal services, are labor-intensive industries employing highly skilled individuals, and frequently require specialized licenses or training. Infrastructure services, such as banking, insurance, and logistics services, are capital-intensive industries providing critical inputs to industrial activity and economic growth, and are used by every firm regardless of economic sector.

included Germany (the second-largest services exporter and importer), the United Kingdom (the third-largest services exporter and fourth-largest importer), and China (the fourth-largest services exporter and third-largest importer). Royalties and license fees had the largest single-industry share of U.S. exports (20 percent of the total) and travel services had the largest single-industry share of U.S. imports (21 percent).

Affiliate transactions are the principal means of providing services to overseas customers, exceeding cross-border services trade. Services sold by foreign affiliates of U.S. parent firms totaled \$1.1 trillion in 2009, while services purchased from U.S. affiliates of foreign parent firms totaled \$669 billion. The largest purchasers of services from foreign affiliates were the United Kingdom, Canada, Ireland, and Japan, while the largest sellers of services through U.S. affiliates were the United Kingdom, Germany, and Japan.

U.S. trade in services returned to trend following a drop in 2009

In 2010, U.S. cross-border services exports increased by 9 percent, following a 2005–09 compound annual growth rate (CAGR) of 8 percent. This growth was spread across service industries, led by industrial engineering, passenger fares, and training services. U.S. services imports grew by 6 percent in 2010 (identical to the 2005–09 CAGR), led by advertising, database and other information services, and trade-related services. Cross-border exports and imports of services both fell in 2009 following the financial crisis, and the 2010 growth rates suggest a return to a longer-term trend. The 2009 figures for affiliate transactions show a decrease similar to that for cross-border trade in that year, as services supplied through foreign affiliates fell by 4 percent in 2009 while services purchased from U.S. affiliates fell by 5 percent.

Infrastructure Services

Infrastructure services' value added recovered in 2010 as wages and productivity grew, but employment decreased

The value added by U.S. infrastructure services in 2010 was \$3.8 trillion, equal to 43 percent of total value added by services. From 2005 to 2009, this value added declined at a compound rate of 0.4 percent annually as the financial crisis and ensuing recession weakened demand, but the sector's value added rebounded in 2010, growing by 5.7 percent as the economy improved. Stronger consumer and business spending drove growth in retail (which rose by 10 percent), finance and insurance (7 percent), and wholesale services (4 percent). Distribution services (retail and wholesale) accounted for 40 percent of infrastructure services and finance and insurance accounted for 29 percent in 2010.

Infrastructure services employed 30 million full-time-equivalent employees in 2010. Retail services accounted for 13 million workers, while finance and insurance employed 5.5 million workers. In contrast to professional services, where employment grew by 2.1 percent, infrastructure services employment shrank by 1.5 percent in 2010, following a compound annual decline of 1.3 percent during 2005–09. While employment declined, labor productivity grew; in 2010, infrastructure services was the second most productive U.S. sector (after manufacturing), with an average value added per worker of \$127,396. Labor productivity varied substantially among infrastructure services industries, from under \$70,000 in labor-intensive retail services to over \$375,000 in capital-intensive

utilities. Productivity in infrastructure services grew by over 7 percent in 2010, far exceeding its CAGR of 1 percent during 2005–09. Average wages for infrastructure services workers grew by 3.5 percent in 2010 to \$55,611, exceeding the private sector average (\$51,986) but trailing wages in the manufacturing (\$60,003) and professional services (\$60,864) sectors. Average wages varied from \$32,036 in retail services to \$91,787 in the publishing, utilities, and information and data processing industries.

Affiliate transactions in infrastructure services exceeded cross-border trade in such services in 2009–10

Infrastructure services accounted for 25 percent of total U.S. cross-border services exports and 37 percent of U.S. cross-border services imports in 2010. Exports of such services totaled \$132 billion while imports totaled \$135 billion, resulting in a small cross-border trade deficit. Financial services led U.S. infrastructure services exports and accounted for a large trade surplus, while insurance services made up the largest share of U.S. infrastructure services imports and yielded a large trade deficit.

As in prior years, affiliate transactions accounted for the majority of U.S. trade in infrastructure services. Foreign affiliates supplied \$641 billion of such services in 2009, while purchases of services from U.S. affiliates totaled \$403 billion. This yielded a surplus of \$238 billion, larger than the trade balance of professional services, agriculture, or manufacturing. Infrastructure services accounted for 60 percent of both sales through foreign affiliates and purchases from U.S. affiliates in 2009. Wholesale, finance, and information services accounted for three-quarters (\$489 billion) of total infrastructure services provided through foreign affiliates and for two-thirds (\$277 billion) of total infrastructure services purchased from U.S. affiliates.

Infrastructure services are affected by regulation and liberalization

Regulation is a recurring theme in this report. In general, there is a natural tendency for infrastructure services to be supplied by monopolies or oligopolies, since they often require substantial capital investments, benefit from economies of scale, and have high barriers to entry. This has traditionally motivated governments either to operate them directly or subject them to extensive regulation. However, in some cases regulations can create inefficiencies, and in recent decades there has been a movement towards deregulation, in which government restrictions on economic activity are eased or eliminated to promote competition and attract new market entrants. Higher levels of competition have been associated with greater efficiency in some infrastructure services industries, but the outcomes of liberalization efforts have varied depending on the sequencing of reforms and the amount of stakeholder support. There is generally a correlation between competition, openness, and growth in infrastructure services industries, but there is no universal path by which deregulation, liberalization, and/or privatization lead to greater efficiency. Even after deregulation, governments typically maintain regulatory oversight to address negative side effects of providing the services (externalities) and to meet economic and social objectives.

The outlook for U.S. infrastructure services varies by industry

The prospect for growth in each infrastructure service industry largely depends on overall economic growth, including changes in unemployment, consumer spending, and business investment. However, industry-specific factors such as regulatory reform, technological

innovation, and market access will also have significant impacts. For instance, new regulations, such as Dodd-Frank and Basel III, could have substantial effects on banking, insurance, and securities services, though those effects are as yet unknown pending implementation. In addition, new technologies are expected to be adopted by many infrastructure services industries during the next few years; for example, mobile devices will likely become increasingly important for retailers. Finally, moves to expand market access, including joint ventures and mergers and acquisitions, are likely to proliferate as firms try to reduce costs and enter foreign markets. Access to foreign markets, in particular, will be increasingly important to industries such as banking, logistics, and retail that anticipate faster demand growth in developing countries than in developed countries.

Banking Services

The banking industry continued to recover from the financial crisis

After record losses incurred during the 2007–08 financial crisis, the global banking industry experienced its second straight year of growth in 2011, with revenues growing by 6 percent to \$4.9 trillion. Much of the growth was driven by strong economic activity in Asia, where continued growth in personal income boosted demand for banking services. In comparison, the U.S. and European banking markets grew slowly. Many large U.S. banks registered significant profits in 2011, and only 92 banks were closed by the U.S. Federal Deposit Insurance Corporation that year, compared with 157 during 2010. However, banks are still deleveraging and replenishing the capital lost during the financial crisis, as well as preparing for the implementation of new financial regulations.

The United States maintained a cross-border trade surplus in banking services

The United States maintained a large cross-border trade surplus in credit-related services and other financial services in 2010, with exports rising by 5 percent to \$23 billion and imports rising by 24 percent to \$6 billion. The increase in imports, largely due to growth in the U.S. refinancing market, reversed a decline starting in 2008. The steady growth in exports was partly driven by large U.S. banks marketing banking services in countries where the economic downturn did not have as strong an impact.

Insurance Services

The U.S. insurance market remains the world's largest but grew relatively slowly in 2010

Global insurance premiums grew by 5.6 percent in 2010 to \$4.3 trillion, exceeding the 2005–09 CAGR of 4.5 percent. The United States is the world's largest insurance market, accounting for almost 27 percent of global insurance premiums, but U.S. insurance premiums grew at a CAGR of only 0.4 percent from 2005 to 2010, more slowly than premiums in any other top 10 market (China's grew at a CAGR of 29 percent during this period). The economic downturn limited consumers' ability and willingness to purchase nonmandatory coverage such as life insurance, but raised demand for products such as credit insurance, which protects businesses against customer default. The Dodd-Frank

Act established a new body, the Federal Insurance Office, to prevent systemic crises in the insurance industry. This change may affect life insurers by requiring higher capital reserves and limiting investments, though the impact of this and other new regulations is still uncertain.

Foreign affiliate sales exceeded U.S. cross-border exports of insurance services

The United States maintained a large cross-border trade deficit in insurance services, as 2010 exports totaled \$15 billion while imports stood at \$62 billion. Bermuda was the largest trading partner for both imports and exports of insurance services, likely due to corporate-related insurance trade. U.S. affiliate sales of insurance services greatly exceeded cross-border exports of such services, as affiliates of U.S. firms in overseas markets supplied \$60 billion of insurance services in 2009, exceeding the \$50 billion of such services supplied by foreign-owned U.S. affiliates by a significant and widening margin. While some Bureau of Economic Analysis data were suppressed to preserve confidentiality of figures for individual firms, it is likely that Japan was the top market for sales by U.S.-owned foreign insurance affiliates, despite the fact that Japan's insurance market is generally dominated by the state-owned Japan Post Holdings.

Logistics Services

Logistics firms expand their networks and supply more complex services

The increasing globalization of production and supply chains continued to drive growth in global logistics revenues, which increased from \$417 billion in 2006 to \$551 billion in 2010. Global third-party logistics firms developed industry-specific supply chain expertise and expanded the reach of their transportation networks, and manufacturers outsourced a wider range of supply chain functions to such firms, including repairing laptops and managing the end-to-end transportation and distribution of pharmaceuticals. Although the United States remained the largest logistics market in 2010 with 23 percent of global revenues, this was a decline of 4 percentage points compared to 2006; during this period China and Brazil rapidly gained market share, becoming the second- and seventh-largest logistics markets respectively.

Merchandise trade drives international trade in logistics services

Cross-border trade in logistics services (i.e., air and maritime freight transportation and port services) is highly correlated with merchandise trade, and recent increases in such trade resulted in an 18 percent increase in U.S. exports and imports of logistics services. The United States continued to run a trade deficit in freight transportation and port services, exporting \$36 billion and importing \$47 billion of such services in 2010. Affiliate transactions fell in 2009 as a result of the economic downturn.

Retail Services

Global retail sales grew rapidly as emerging markets gained market share

Global retail sales grew sharply in 2010, rising 9 percent to \$16 trillion. The United States remained the world's largest retail market with \$3 trillion in sales (almost a fifth of the global total), but sales grew faster in developing and emerging countries; Brazil, Russia, India, and China together accounted for 24 percent of total retail sales in 2010, compared to 15 percent in 2005. Retailing over the Internet (e-commerce) is becoming increasingly common. Retailers are building smaller stores in the United States in order to reduce costs and enter city centers, and are using promotions and store brand merchandise to appeal to price-conscious consumers. U.S. retailers are expanding in Latin America, Asia, and Africa, even as some of them close stores in the United States.

Economic conditions impacted the growth of U.S. affiliate sales

The value of services supplied by U.S.-owned foreign affiliates in the retailing industry grew by 5 percent to \$68 billion in 2009, slower than the growth rate of nearly 11 percent in 2008. The slowdown was attributed to relatively weak retail sales growth in major developed-country destinations for U.S. foreign investment in retailing, such as Canada and the United Kingdom. Services supplied by foreign-controlled retailers in the United States shrank for the third consecutive year in 2009 to \$34 billion; however, foreign investment positions in the U.S. retail industry continued to increase, suggesting that the decline was due to slow U.S. retail sales rather than reduced interest of foreign firms in the United States.

Securities Services

Global investment banking revenues remained below their 2007 peak

Global investment banking revenue recovered only slightly after the 2007–08 financial crisis, rising in 2010 but falling back in 2011 to \$81 billion (close to the 2005 level). In 2011, about half of global investment banking revenue was generated in the United States and 30 percent was generated in Europe. Multinational investment banks continued to expand in emerging markets, serving both investors demanding wealth management services and global companies seeking financial assistance in cross-border transactions and mergers and acquisitions. U.S. investment banks remained global leaders: J.P. Morgan, Bank of America Merrill Lynch, Morgan Stanley, and Goldman Sachs were among the five largest investment banks by fees received, and about half of all global securities transactions took place in the United States.

The United States maintained a large trade surplus in securities-related services

The United States has consistently had a large trade surplus in securities-related services, and in 2010 cross-border exports of securities transaction services and management and advisory services totaled \$43.4 billion, while imports totaled \$8.1 billion. Large volumes of securities and securities-related services are traded between countries with well-established financial centers, large issuer and investor bases, and active derivatives

markets, such as the United States, the United Kingdom, France, Japan, and Switzerland. Affiliate trade heavily outweighed cross-border trade: the value of financial services (excluding insurance) sold through U.S.-owned foreign affiliates in 2009 was \$166 billion, 5 percent lower than the 2008 peak, while purchases of such services from foreign-owned U.S. affiliates reached an all-time high of \$97 billion.

Telecommunication Services

Growth in global telecommunications revenues slowed as markets became saturated

Revenues of global landline, wireless, and Internet telecommunications markets grew by 6 percent in 2010 to \$2 trillion. This represented a slowdown in growth compared to the 2005–09 CAGR of 7 percent, as telecommunications markets in both developed and developing countries became increasingly saturated. Despite this market maturity, firms continued to make substantial investments in expanding and upgrading network infrastructure, partly to accommodate growing data traffic. The United States remained the largest market for telecommunications services (accounting for 28 percent of global revenues), followed by China and Japan, and former incumbent operators (i.e., former state-owned or -designated service providers) in the United States, Europe, and Asia (including AT&T, NTT, and Verizon) remained the largest telecommunications firms.

The U.S. trade surplus in telecommunication services was driven by value-added services

The United States had a \$3 billion surplus in cross-border trade of telecommunications services in 2010, with exports growing by 10 percent to \$11 billion and imports growing by 7 percent to \$8 billion. Growth in such exports was mainly driven by value-added services such as satellite broadcasting, business communication, and data network management. The top five cross-border export markets were Brazil, the United Kingdom, Canada, Venezuela, and Argentina, while the top five sources of imports were the United Kingdom, Mexico, the Netherlands, Canada, and Germany. Most telecommunications trade takes place through affiliates of multinational companies, and the United States had a small trade surplus in 2009 affiliate transactions, as sales of foreign affiliates of U.S. parent companies totaled \$32 billion and purchases from U.S. affiliates of foreign parent companies totaled \$31 billion.

Recent USITC Roundtable Discussion

The Commission hosted its fifth annual services roundtable on November 3, 2011, with USITC Chairman Deanna Tanner Okun presiding and USITC Vice Chairman Irving Williamson moderating. Participants from government, industry, and academia discussed a range of issues affecting services trade, including the outcomes and prospects of multilateral trade negotiations, regional trade negotiations, and unilateral liberalization efforts, as well as the challenges and opportunities of achieving regulatory harmonization in services industries. Roundtable participants considered the tradeoffs between broad multilateral negotiations and smaller “coalition-of-the-willing” negotiations, emphasized the impact of clashing regulatory systems on services trade, and concluded with a

discussion of services industries' contribution to employment and global economic activity.

CHAPTER 1

Introduction

This annual report examines U.S. services trade (both in the aggregate and in selected industries), identifies important U.S. trading partners, and analyzes global competitive conditions in selected service industries. This year's report focuses on the following infrastructure services: banking, insurance, logistics, retail, securities, and telecommunications.¹

Data and Organization

The U.S. International Trade Commission (Commission or USITC) draws much of the services trade data used throughout this report from the Bureau of Economic Analysis (BEA) at the U.S. Department of Commerce (USDOC).² These data are supplemented with information from other sources, including individual firms, trade associations, industry and academic journals and reports, electronic media, international organizations, and other government agencies.

This chapter examines the U.S. services sector, global services trade, and U.S. services trade. It looks at both cross-border trade in services from 2005 through 2010 and affiliate sales of services from 2006 through 2009,³ comparing the trade situation in recent years with previous trends. Chapter 2 examines services trade liberalization and trends affecting infrastructure service industries and examines the contribution of these industries to economic output, employment, labor productivity, and trade. Chapters 3 through 8 analyze the banking, insurance, logistics, retail, securities, and telecommunication service industries. These chapters provide an overview of global competitiveness and supply and demand factors, scrutinize recent trends in cross-border trade and/or affiliate transactions, and discuss measures that impede services trade. Finally, chapter 9 summarizes the information and views presented at the fifth annual USITC services trade roundtable, hosted by the Commission in November 2011.

¹ Beginning in 2008, the *Recent Trends* report has examined the professional and infrastructure service subsectors in alternate years. This division allows more detailed analysis of individual industries. Professional services, such as education, healthcare, and legal services, are labor-intensive industries employing highly skilled individuals, and frequently require specialized licenses or training. Infrastructure services, such as banking, insurance, and logistics services, are capital-intensive industries providing critical inputs to industrial activity and economic growth, and are used by every firm regardless of economic sector.

² BEA data are compiled from surveys. For more information, see USDOC, BEA, *Survey of Current Business*, October 2011.

³ Data on affiliate transactions lag those on cross-border services trade by one year. Thus, while analyses of cross-border trade data compare performance in 2010 (the most recent year for which data are available) to trends from 2005 through 2009, analyses of affiliate transactions compare performance in 2009 to trends from 2006 through 2008. Note also that in 2009, BEA changed its method of reporting affiliate trade data. New affiliate data report "services supplied," a measure that better reflects services output than the prior measure, "sales of services." The change is retroactive for data from years 2005–08. For more information, see USDOC, BEA, *Survey of Current Business*, October 2009, 34–36.

The U.S. Services Sector

Service industries account for an overwhelming majority of U.S. production and employment. In 2010, private services-producing industries accounted for 79 percent (or \$8.9 trillion) of total U.S. private industry real gross domestic product (GDP) and 82 percent (or 82.1 million) of U.S. private industry full-time employees, compared to 21 percent and 18 percent, respectively, for the goods-producing sector. Recent trends in the U.S. services sector have mirrored overall trends in the U.S. economy, as average annual increases in services sector GDP, employment, and wages were within 1 percent of the growth rates registered for the United States as a whole from 2005 through 2010.⁴ An overview of production and labor trends in U.S. infrastructure service industries is provided in chapter 2.

Global Services Trade

The United States is highly competitive in the global services market. As the world's top exporter of services, the United States accounted for \$518.3 billion, or 14 percent, of global cross-border commercial services exports in 2010 (figure 1.1).⁵ Other top single-country exporters included Germany and the United Kingdom (each accounting for 6 percent). Although most of the world's top 10 services exporters in 2010 were developed countries, China was the fourth-largest services exporter, and India was the seventh largest. Overall, the top 10 exporting countries accounted for 51 percent of global cross-border services exports in 2010.⁶

The United States was also the world's largest services importer in 2010, with \$358.1 billion, or 10 percent, of global commercial services imports. In that year, Germany was the next largest importer, accounting for 7 percent of such imports, and the top 10 importing countries together accounted for 48 percent of global commercial services imports. China was the third-largest importer of commercial services in 2010, and India was the seventh largest.

The World Trade Organization (WTO) reports that the U.S. services trade surplus in 2010 (\$160.3 billion) was the world's highest, followed by that of the United Kingdom (\$65.9 billion). Saudi Arabia and the United Arab Emirates had the world's largest services trade deficits, with imports exceeding exports by \$40.7 billion and \$29.9 billion, respectively.⁷

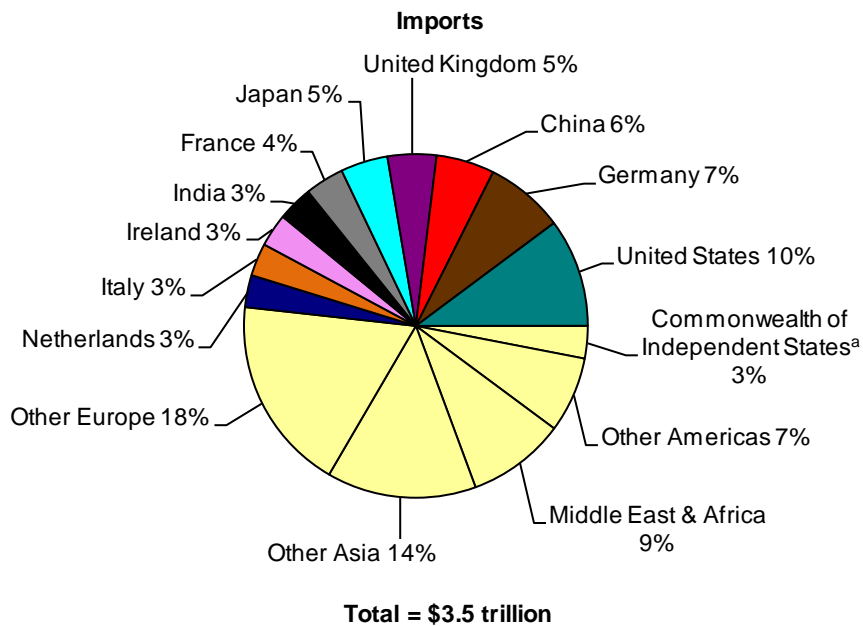
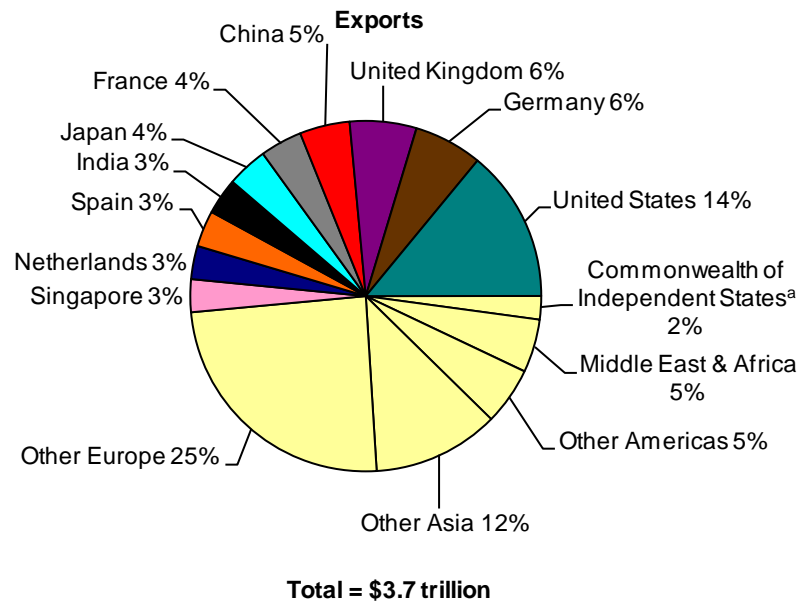
⁴ USDOC, BEA, "Real Value Added by Industry," December 13, 2011; USDOC, BEA, "Full-Time Equivalent Employees by Industry," December 13, 2011; USDOC, BEA, "Table 6.6D," August 8, 2011. Value added is a measure of an industry's contribution to GDP; it is the difference between the value of an industry's gross output and the cost of its intermediate inputs.

⁵ This discussion draws on WTO trade data to help compare U.S. trends with those of other countries. Elsewhere, the report uses BEA data. The term "commercial services," used by the WTO, is roughly equivalent to "private services" used by the BEA: both refer to services offered by the private, rather than the public, sector. However, there are differences between the two values. These differences are the result of a lagged time period used for the WTO estimate and small differences in the activities captured by the two measures. USDOC, BEA representative, telephone interview by USITC staff, February 23, 2012.

⁶ WTO, *International Trade Statistics 2011*, 2011, table A8.

⁷ WTO, *International Trade Statistics 2011*, 2011, table A9.

FIGURE 1.1 Global services: The United States led the world in cross-border exports and imports of services in 2010



Source: WTO, *International Trade Statistics 2011*, 2011, tables A8 and A9.

Notes: Excludes public-sector transactions. Geographic regions are shaded yellow. Figures may not total 100 percent due to rounding.

^aIncludes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, and Ukraine.

U.S. Trade in Services

The BEA annually publishes data on both cross-border trade and affiliate transactions in services, which together account for a substantial portion of the services provided through all four modes of supply specified in the General Agreement on Trade in Services (GATS) (box 1.1). The BEA publishes these data at the highest level of detail that its surveys allow. The agency also publishes quarterly cross-border trade data in highly aggregated form. “Cross-border trade” occurs when suppliers in one country sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. Such transactions appear as imports and exports in a country’s balance of payments. Firms also provide services to foreign consumers through affiliates established in host (i.e., foreign) countries, with the income generated through “affiliate transactions” appearing as direct investment income in the balance of payments report. The channel of delivery used by service providers depends primarily on the nature of the service. For example, retail services are usually supplied through affiliates located close to consumers. Conversely, air and maritime transport services are predominantly supplied to foreign consumers through cross-border trade, as passengers and freight are moved from one country to another. Affiliate transactions are the principal means of providing services to overseas customers, accounting for nearly 68 percent of overall U.S. services trade in 2009 (box 1.2).

BOX 1.1 Services Trade under the General Agreement on Trade in Services

The GATS identifies four modes of supply through which services are traded:

Mode 1 is **cross-border supply**. In this mode, a service is supplied by an individual or firm in one country to an individual or firm in another (i.e., the service crosses national borders). WTO data for this mode of supply do not completely overlap with BEA’s data for cross-border trade (see discussion below).

Mode 2 is **consumption abroad**. In this mode, an individual from one country travels to another country and consumes a service in that country.

Mode 3 is **commercial presence**. In this mode, a firm based in one country establishes an affiliate in another country and supplies services from that locally established affiliate.

Mode 4 is **the temporary presence of natural persons**. In this mode, an individual service supplier from one country travels to another country on a short-term basis to supply a service there—for example, as a consultant, contract employee, or intracompany transferee at an affiliate in the host country.^a

Cross-border trade and affiliate transactions data reported by the BEA do not correspond exactly to the channels of service delivery reflected in the GATS of the WTO.^b The BEA notes that mode 1 and mode 2 transactions, as well as some mode 4 transactions, generally are grouped together in its data on cross-border trade, while mode 3 transactions are included, with some exceptions, in affiliate transactions data.

^a USDOC, BEA, *Survey of Current Business*, October 2009, 40–43, tables 1 and 2.

^b For more information on the four modes of supply under the GATS, see WTO, “Chapter 1: Basic Purpose and Concepts,” n.d. (accessed April 7, 2009).

BOX 1.2 The Rise of Affiliate Transactions

Since 1986, when the U.S. Department of Commerce began collecting statistics on U.S. services trade, the relative importance of cross-border trade and affiliate transactions has shifted significantly.^a In each of the 10 years from 1986 through 1995, U.S. cross-border exports of services exceeded sales by majority-owned foreign affiliates of U.S. firms. Since 1996, however, sales by U.S. firms' foreign affiliates have exceeded cross-border services exports. In 2009, services supplied by U.S. firms' affiliates abroad (\$1.1 trillion) were more than double the value of U.S. cross-border exports of services (\$487.9 billion). Similarly, services supplied to U.S. citizens by foreign-owned affiliates have exceeded cross-border services imports since 1989. In 2009, services supplied to U.S. citizens by the U.S. affiliates of foreign companies (\$668.8 billion) were nearly twice the value of U.S. services imports (\$346.0 billion).^b

The growing predominance of affiliate transactions largely reflects the global spread of service firms, facilitated by liberalization—the removal or lessening of barriers to trade—in investment and services. Liberalization first occurred in developed countries and has occurred more recently in a growing number of low- and middle-income countries.

^a USDOC, BEA, *Survey of Current Business*, October 2006.

^b USDOC, BEA, *Survey of Current Business*, October 2011, 13.

Cross-border Trade, 2010

U.S. exports of private sector services totaled \$530.3 billion in 2010, while U.S. imports totaled \$368.0 billion, resulting in a \$162.2 billion trade surplus (figure 1.2).⁸ Infrastructure services⁹ accounted for 25 percent of exports and 37 percent of imports (figure 1.3).¹⁰ Royalties and license fees (i.e., payments for U.S. intellectual property) were the largest single-category share of U.S. exports in 2010,¹¹ accounting for 20 percent of the total. Travel services were the largest single-category share of U.S. imports in 2010, accounting for 21 percent of the total.¹²

In 2010, U.S. cross-border services exports increased after falling in 2009 as a result of the global recession. U.S. cross-border services exports increased by 9 percent in 2010, compared to a compound annual growth rate (CAGR) of 8 percent during 2005–09.¹³ This increase was spread across service industries, led by industrial engineering (22 percent); passenger fares (18 percent); training services (17 percent); and research, development, and testing (16 percent).

⁸ The \$162.2 billion trade surplus estimated by the BEA differs from the \$160.3 billion WTO estimate presented above in the “Global Services Trade” section. See footnote 5.

⁹ For the purposes of this report, infrastructure services include banking, insurance, securities, transportation, telecommunication, electric power, retail, and wholesale trade services.

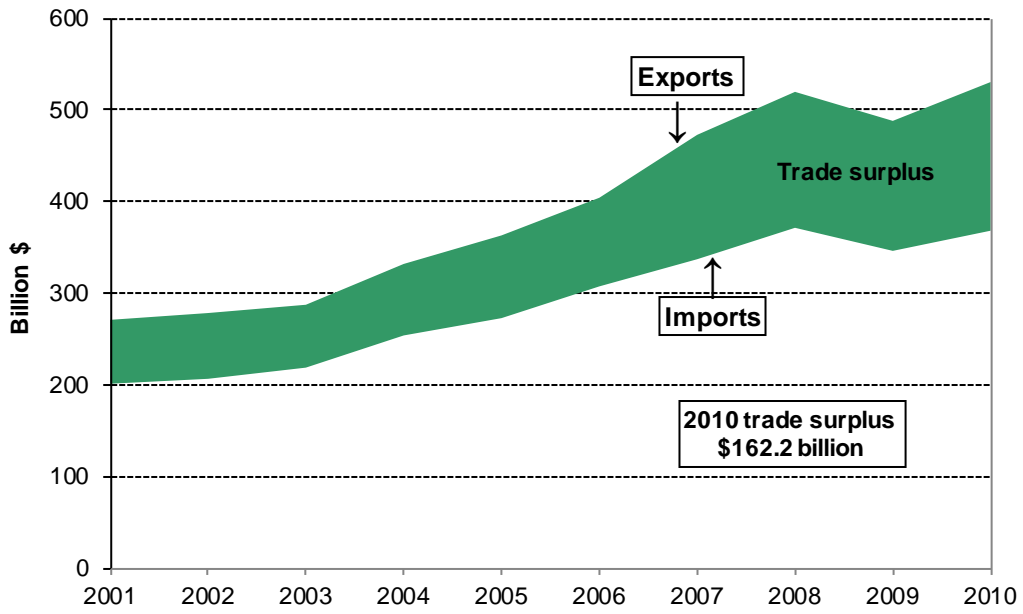
¹⁰ Values are reported before deductions for expenses and taxes, as gross values are most directly comparable across countries, industries, and firms.

¹¹ USDOC, BEA, *Survey of Current Business*, October 2011, 32.

¹² USDOC, BEA, *Survey of Current Business*, October 2011, 32. Travel services are measured through the purchase of goods and services while traveling abroad. Such items include, for example, food, lodging, recreation, local transportation, and entertainment.

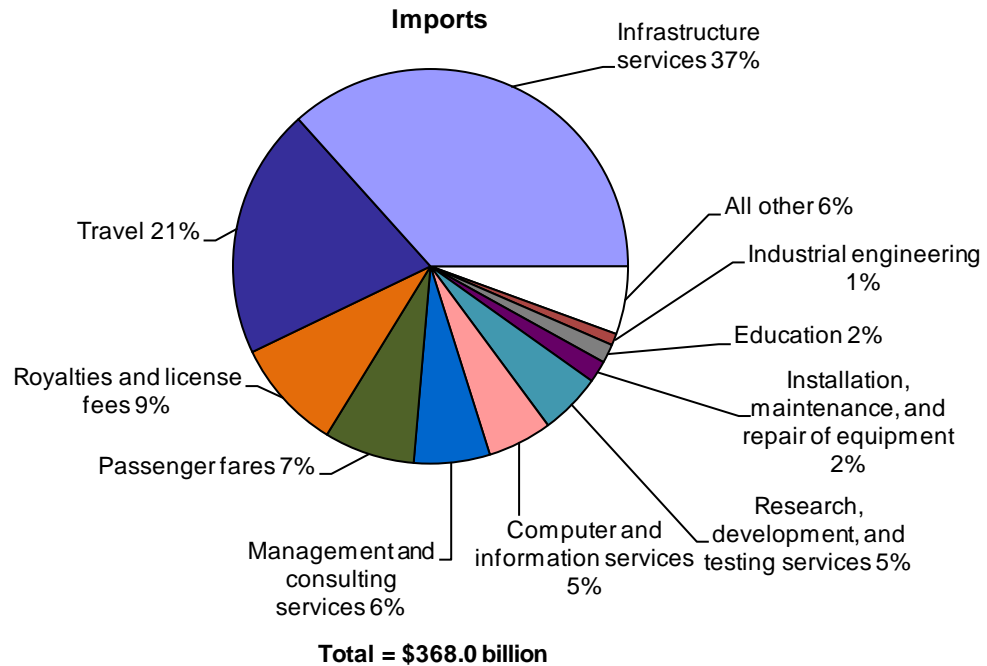
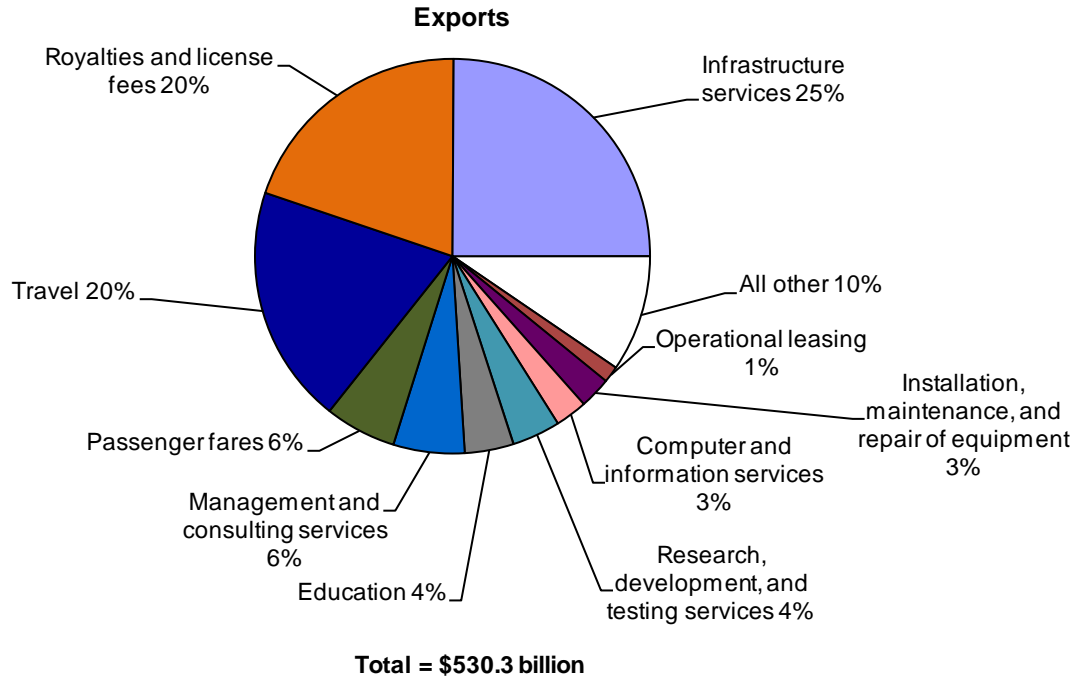
¹³ Cross-border services trade, as reported in the current account, includes both private and public sector transactions. The latter principally reflect operations of the U.S. military and embassies abroad. However, because public sector transactions are not considered to reflect U.S. service industries' competitiveness and may introduce anomalies resulting from events such as international peacekeeping missions, this report will focus solely on private sector transactions, except when noted.

FIGURE 1.2 U.S. services: U.S. cross-border trade in private sector services resulted in a U.S. trade surplus each year during 2001–10



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 32–33, table 1.

FIGURE 1.3 U.S. services: Infrastructure services accounted for a large share of U.S. cross-border exports and imports of services in 2010



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 31–32, table 1.

Note: As discussed in footnote 5, trade data exclude public-sector transactions. Figures may not total 100 percent due to rounding.

The value of U.S. services imports grew by 6 percent in 2010, identical to the CAGR for U.S. services imports from 2005 through 2009. Import growth was particularly high for advertising (39 percent), database and other information services (29 percent), trade-related services¹⁴ (21 percent), and transportation services¹⁵ (20 percent).

As in most previous years, the majority of U.S. service industries registered cross-border trade surpluses in 2010. Royalties and license fees achieved the largest surplus in 2010 (\$72.1 billion), followed by financial services (\$52.6 billion), travel services (\$28.0 billion), education services (\$15.6 billion), and audiovisual services (\$11.9 billion). Service industries that netted cross-border trade deficits in 2010 include insurance services (\$47.2 billion); transportation services (\$11.3 billion); computer and data processing services (\$9.6 billion); and accounting, auditing, and bookkeeping services (\$1.4 billion).

Several U.S. service industries recorded deficits, for a variety of reasons. The deficit in insurance services principally reflects U.S. primary insurers' payments to European and Bermudian reinsurers in return for their assuming a portion of large risks. The deficit in transportation services (i.e., freight transport and port fees) largely reflects the U.S. deficit in manufactured goods trade and the way in which U.S. imports of freight transportation services are measured. For example, Chinese shipments of manufactured goods to the United States typically exceed U.S. shipments of goods to China, and payments to Chinese or other foreign shippers for transporting U.S. merchandise imports are recorded by the BEA as U.S. imports of transportation services. Lastly, the deficit in computer and data processing services largely reflects U.S. firms outsourcing many of these services to Indian providers.¹⁶

A small number of developed countries account for a substantial share of U.S. cross-border services trade. Canada, the United Kingdom, and Japan collectively received 27 percent of total U.S. cross-border services exports in 2010 (10 percent, 9 percent, and 8 percent, respectively). The United Kingdom (11 percent), Canada (7 percent), Japan and Germany (6 percent each), and Switzerland (5 percent) supplied the largest single-country shares of U.S. services imports in 2010. The European Union (EU) accounted for 32 percent of U.S. services exports and 34 percent of U.S. imports in 2010.¹⁷

Cross-border Trade, 2011

Preliminary data for 2011 suggest that the United States' services exports, services imports, and surplus in services trade continued to grow that year. Annual services exports in 2011 exceeded those in 2010 by 11 percent or \$58.5 billion (table 1.1). Annual services imports in 2011 exceeded those in 2010 by about 7 percent, or \$27.2 billion.

¹⁴ According to the BEA, "trade-related services" consist of auction services, Internet or online sales services, and services provided by independent sales agents. USDOC, BEA, *Survey of Current Business*, October 2011, 33.

¹⁵ This encompasses freight transportation and port services, but does not include air passenger transport services (i.e., passenger fares).

¹⁶ USDOC, BEA, *Survey of Current Business*, October 2010, 50–51.

¹⁷ USDOC, BEA, *Survey of Current Business*, October 2011, 34–35.

TABLE 1.1 U.S. private services exports and imports to the world, by category, 2010–11

Service industry	2010	2011	% change
	Million \$		2010–11
Exports			
Business, professional, and technical services	126,296	137,862	9.2
Royalties and license fees	105,583	120,619	14.2
Travel	103,505	116,279	12.3
Financial services	66,387	72,988	9.9
Passenger fares	30,931	36,717	18.7
Education	21,291	22,823	7.2
Port services	20,168	21,309	5.7
Freight	19,768	21,145	7.0
Insurance services	14,605	15,350	5.1
Telecommunications	11,095	12,744	14.9
Other	<u>10,645</u>	<u>10,983</u>	3.2
Total	530,274	588,819	11.0
Imports			
Business, professional, and technical services	90,585	106,766	17.9
Travel	75,507	79,120	4.8
Insurance services	61,767	57,561	-6.8
Freight	37,915	40,340	6.4
Royalties and license fees	33,450	36,581	9.4
Passenger fares	27,279	31,104	14.0
Financial services	13,803	15,070	9.2
Port services	13,288	14,144	6.4
Telecommunications	8,006	7,822	-2.3
Education	5,677	5,970	5.2
Other	<u>759</u>	<u>796</u>	4.9
Total	368,036	395,274	7.4

Source: USDOC, BEA, U.S. International Transactions Accounts Data, March 14, 2012, table 3a.

Note: Data for 2011 are preliminary.

Annual services trade posted a surplus of \$193.5 billion in 2011, or \$31 billion more than in 2010.

Affiliate Transactions

In 2009, due to the global recession, services supplied by U.S.-owned foreign affiliates¹⁸ decreased by 3.6 percent to \$1.1 trillion, in stark contrast to the 12 percent CAGR registered from 2006 through 2008.¹⁹ Infrastructure services accounted for 60 percent²⁰

¹⁸ U.S.-owned foreign affiliates are affiliates owned by a U.S. parent company and located abroad; conversely, foreign-owned U.S. affiliates are affiliates located in the United States and owned by foreign parent companies.

¹⁹ The main source for this section is the USDOC, BEA, *Survey of Current Business*, October 2007–October 2011.

of services supplied by U.S.-owned foreign affiliates in 2009 (figure 1.4). Sales of non-infrastructure services were led by administrative and support services, which accounted for approximately 4 percent of total services supplied by U.S.-owned foreign affiliates. The largest foreign purchasers of services from U.S.-owned affiliates were the United Kingdom (18 percent), Canada (9 percent), and Ireland and Japan (6 percent each). The EU accounted for 47 percent of total services supplied by U.S.-owned affiliates in 2009.²¹

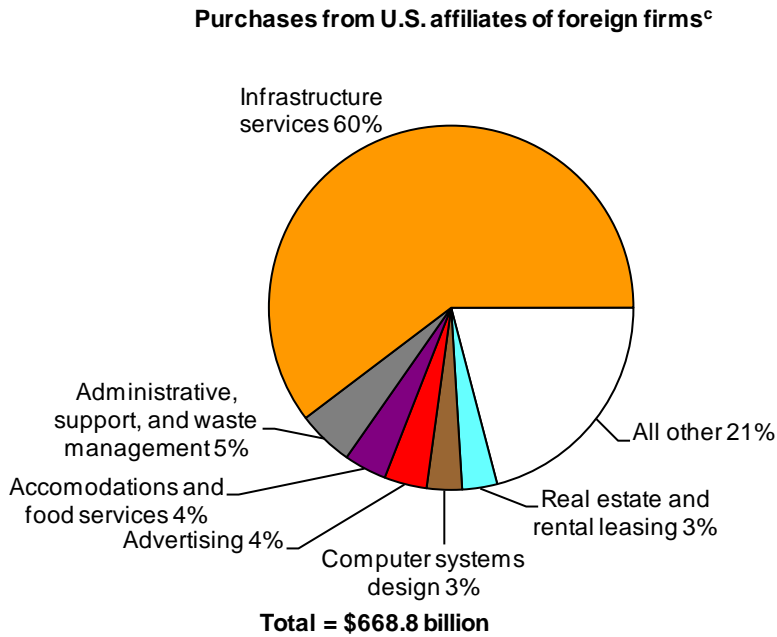
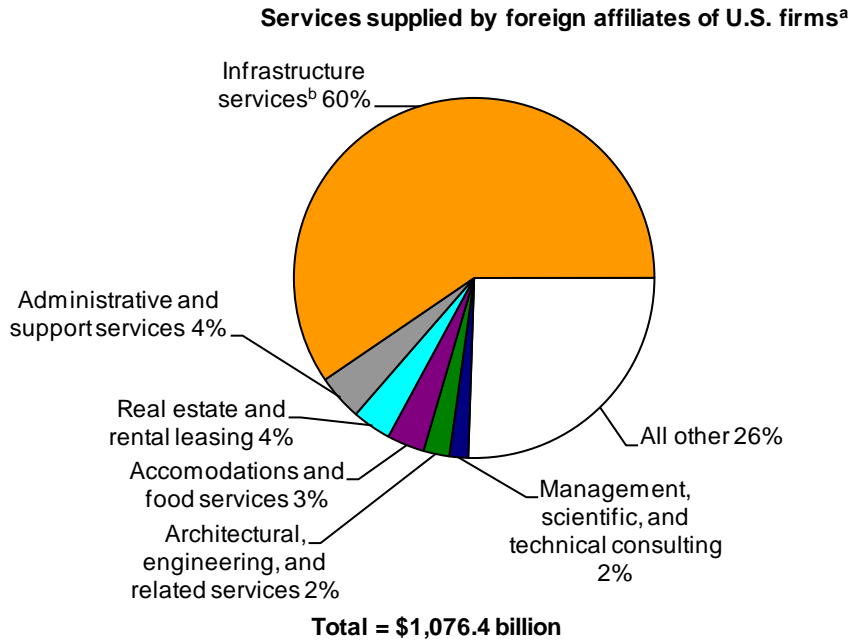
Services supplied by foreign-owned affiliates in the United States decreased by 5 percent in 2009 to \$668.8 billion as the U.S. economy contracted during the first half of the year. This decline contrasted with a 4 percent CAGR from 2006 through 2008. Infrastructure services supplied by foreign-owned U.S. affiliates accounted for 60 percent of total services supplied by such affiliates in 2009.²² Administrative, support, and waste management services, accounting for 5 percent of purchases, were the largest type of non-infrastructure services supplied by foreign-owned affiliates in the United States. By country, the United Kingdom accounted for the biggest share of services supplied by foreign-owned affiliates in 2009 (18 percent), followed by Germany and Japan (13 percent each). Canada and France rounded out the top five with 10 percent each. Overall, 56 percent of services supplied by foreign-owned affiliates were from affiliates of EU-based parent firms.

²⁰ Data for infrastructure services are underreported due to the suppression of data by BEA to avoid disclosure of confidential firm information.

²¹ USDOC, BEA, *Survey of Current Business*, October 2011, tables 8–10.2.

²² See chapter 2 for a discussion of infrastructure services.

FIGURE 1.4 U.S. services: Infrastructure services led services transactions by affiliates in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 54, 56, tables 9.2 and 10.2.

Note: Trade data exclude public sector transactions. Figures may not total 100 percent due to rounding.

^aServices supplied by majority-owned foreign affiliates of U.S. parent firms.

^bData are underreported due to suppression of data by the BEA to avoid disclosure of data of individual companies.

^cServices supplied by majority-owned U.S. affiliates of foreign parent firms.

Bibliography

- U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). “Full-Time Equivalent Employees by Industry.” Interactive tables: Gross Domestic Product by Industry Accounts, December 13, 2011. <http://www.bea.gov/iTable/iTable.cfm?ReqID=5&step=1>.
- . “Real Value Added by Industry.” Interactive tables: Gross Domestic Product by Industry Accounts, December 13, 2011. <http://www.bea.gov/iTable/iTable.cfm?ReqID=5&step=1>.
- . *Survey of Current Business* 86, no. 10 (October 2006).
- . *Survey of Current Business* 88, no. 10 (October 2007).
- . *Survey of Current Business* 88, no. 10 (October 2008).
- . *Survey of Current Business* 89, no. 10 (October 2009).
- . *Survey of Current Business* 90, no. 10 (October 2010).
- . *Survey of Current Business* 88, no. 10 (October 2011).
- . “Table 3a. Private Services Transactions.” U.S. International Transactions Accounts Data, March 14, 2012. http://www.bea.gov/international/bp_web/list.cfm?anon=71®istered=0.
- . Bureau of Economic Analysis (BEA). “Table 6.6D: Wage and Salary Accruals Per Full-Time Equivalent Employee by Industry.” Interactive tables: National Income and Product Accounts, August 8, 2011. <http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=201&ViewSeries=NO&Java=no&Request3Place=N&3Place=N&FromView=YES&Freq=Year&FirstYear=2005&LastYear=2010&3Place=N&Update=Update&JavaBox=no>.
- World Trade Organization (WTO). “Chapter 1: Basic Purpose and Concepts.” General Agreement on Trade in Services Training Module, n.d. http://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s1p1_e.htm (accessed April 7, 2009).
- . *International Trade Statistics 2011*. Geneva: WTO Secretariat, 2011.

CHAPTER 2

Infrastructure Services Overview

Infrastructure services are essential to the efficient functioning of modern economies. They are fundamental inputs to the production of other services and goods, and they facilitate trade and commerce. Firms in all sectors depend on access to reasonably priced, high-quality infrastructure services, such as communications, transportation, and financial services, to maintain or improve their competitive position.¹ Further, infrastructure services trade is associated with GDP growth and welfare gains, and there is a strong and growing body of evidence that liberalizing infrastructure services (i.e., opening them up to competition and reducing trade barriers) can boost efficiency and economic growth both at the sector level and in the broader economy.²

Services Regulation and Liberalization

Regulation is a recurring theme in the following chapters. Certain infrastructure services have natural monopoly or oligopoly structures, in that they operate most efficiently (at the lowest average cost) when provided by a single or small number of suppliers.³ These services generally require large capital investments, benefit from economies of scale, and have high barriers to entry that discourage outside firms from trying to compete. For instance, transportation services rely on costly networks of roads, railways, ports, and airports, while telecommunication services require extensive networks of fixed lines, cell towers, and satellites. The importance of infrastructure services, combined with the desire of monopolists to maximize profits by undersupplying and overpricing them, has traditionally motivated governments to directly operate or extensively regulate infrastructure services.⁴

In some cases, regulations go beyond preventing monopolies and end up protecting incumbents and creating inefficiencies. Additionally, technological innovation has changed the way many services are provided, giving providers new bases for competing with each other. As a result, there has been a movement towards deregulation in recent decades, in which government restrictions on economic activity are eased or eliminated in an effort to promote competition and attract new entrants into the market. Higher levels of competition have been linked to greater efficiency in infrastructure services industries; for example, in the air and maritime transport sector, competition is associated with lower costs and increased capacity.⁵ In the United States, deregulation of the telecommunication sector speeded the commoditization of many telecommunication

¹ Hoekman and Mattoo, "Services Trade and Growth." January 2008, 1.

² Mattoo and Stern, "Overview," 2008, 9–13.

³ Francois and Hoekman, "Services Trade and Policy," 2009, 10.

⁴ Francois and Hoekman, "Services Trade and Policy," 2009, 10; Hoekman and Mattoo, "Services Trade and Growth," January 2008, 27. Retail services do not necessarily require large capital investments, but still may face regulations on store size, operating hours, foreign investment, and other aspects of the industry; see chapter 6 for a discussion of the retail sector.

⁵ De Sousa and Findlay, "Relationship between Liberalization in the Logistics Sector," 252. In air transport, the introduction of competition for intracountry and intraregional air transport routes in East Africa resulted in increased service quality, decreased time and costs of air passenger and freight transport, and increased trade and tourism in the region. Irandu, "Opening African Skies," 2008.

services and led to significantly lower prices (see chapter 8 for a discussion of the telecommunication sector).

However, the historical outcomes of liberalization efforts have varied, depending on factors such as the order in which reforms occur and the amount of stakeholder support. When South Africa tried to liberalize its telecommunication sector by partially privatizing the state-owned incumbent (existing provider), the enterprise became more productive, but prices for consumers did not fall.⁶ When Costa Rica sought to liberalize its telecommunication sector in 2000, both unions and consumers (who anticipated higher prices and poorer service) opposed the reforms, and the government eventually halted the process.⁷ While there is generally a correlation between competition, openness, and growth in infrastructure services industries,⁸ there is no universal path by which deregulation, liberalization, and/or privatization automatically lead to greater efficiency.

Even in infrastructure services industries that have been deregulated, governments often continue their regulatory oversight to address negative externalities (undesirable side effects of supplying the service) and to meet economic and social objectives.⁹ Regulators try to ensure that providers, including monopolists and oligopolists, supply services in sufficient amounts and at fair prices. In particular, they try to ensure that poor and rural consumers have access to essential services such as telecommunications, banking, and insurance.¹⁰ They must also deal with the problem of asymmetrical information in cases when consumers cannot easily judge the quality of a service—for example, by assessing the safety of transportation networks.¹¹ Effective regulatory structures complement increased competition, given that liberalization may not improve access to services in the absence of prudential regulation.¹²

Some countries also set up regulations to monitor and control imports of infrastructure services. Examples include limits or quotas on foreign participation, licensing and certification requirements, and other regulations that prohibit or raise the cost of foreign-supplied services. Regulations that restrict foreign direct investment (FDI) can be a substantial barrier to services trade, as FDI is a key channel through which infrastructure services are provided by foreign suppliers in many countries.¹³ These regulations can be used to protect incumbent providers such as state-owned enterprises from foreign competition.¹⁴ In some cases, such regulations are nontransparent and differ substantially

⁶ Mattoo and Stern, “Overview,” 2008, 13–15. The new entity was granted a five-year monopoly, which may have contributed to the outcome.

⁷ Members of the public noted that liberalization in other Latin American countries often resulted in rate increases. Hoffmann, “Why Reform Fails,” April 2008. Subsequently, Costa Rica liberalized some telecommunication services as part of the Dominican Republic-Central America-United States Free Trade Agreement.

⁸ For financial services, see Eschenbach and Francois, “Financial Sector Competition, Services Trade, and Growth,” 2002.

⁹ Mattoo and Stern, “Overview,” 2008, 15, 17–18.

¹⁰ Mattoo and Stern, “Overview,” 2008, 15–16.

¹¹ Hoekman and Mattoo, “Services Trade and Growth,” January 2008, 28. Information asymmetries arise when certain parties to a transaction have better or more complete information than others. “When such information is costly to obtain and disseminate and consumers have similar preferences about the relevant attributes of the service supplier, the regulation of entry and operations in a sector can increase welfare.” Francois and Hoekman, “Services Trade and Policy,” 2009, 10.

¹² Mattoo and Stern, “Overview,” 2008, 13–14.

¹³ Hoekman and Mattoo, “Services Trade and Growth,” January 2008, 11; Copeland and Mattoo, “The Basic Economics of Services Trade,” 86. Substantial gains are realized from liberalizing FDI. Romdhane, “Liberalizing Trade in Services in Tunisia,” 2011.

¹⁴ Copeland and Mattoo, “The Basic Economics of Services Trade,” 84.

across countries.¹⁵ The following chapters include short discussions of nontariff measures that significantly affect international trade in infrastructure services.

Gross Domestic Product (GDP), Employment, Labor Productivity, and Salaries

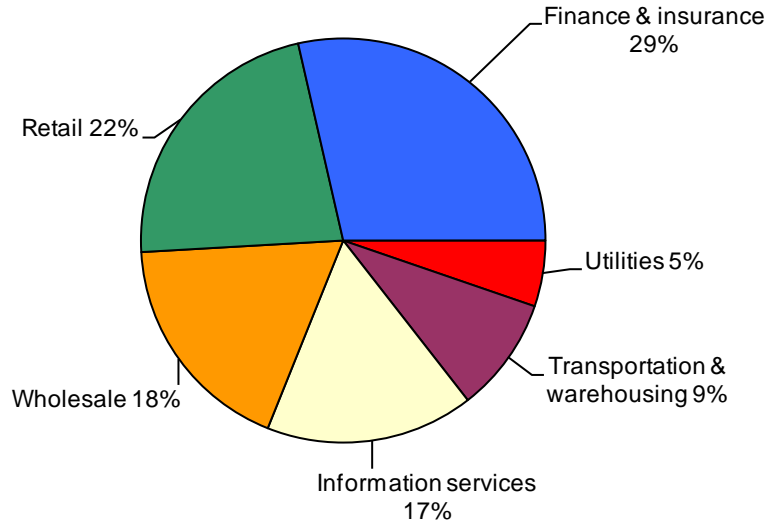
The value added by U.S. infrastructure services in 2010 was \$3.8 trillion, which represented 43 percent of the total value added by services.¹⁶ From 2005 to 2009, the sector's value added declined at a CAGR of -0.4 percent, since the financial crisis and ensuing recession weakened demand for these services in the latter part of the period. In 2010, as the economy improved, infrastructure services' contribution to GDP rebounded: it grew 6 percent, surpassing all other sectors except manufacturing (which expanded by 11 percent). Stronger consumer and business spending in 2010 led to significant growth in several infrastructure services, including retail (which grew by 10 percent), finance and insurance (7 percent), and wholesale services (4 percent). Among all infrastructure services, only the information and data processing industry declined in 2010, after posting positive growth during 2005–09. Distribution services (retail and wholesale) accounted for about 40 percent of infrastructure services' contribution to GDP in 2010 (\$1.6 trillion), followed by finance and insurance (29 percent, or \$1.1 trillion) (figure 2.1). The shares of these industries remained relatively stable from 2005 to 2010.

Infrastructure services accounted for the largest share of U.S. private sector employment in 2010. These services employed 30 million full-time-equivalent employees (FTEs), nearly 30 percent of the total U.S. private sector workforce. Retail services accounted for 12.6 million workers or 42 percent of infrastructure services employment in 2010, followed by finance and insurance (5.5 million) and wholesale services (5.3 million) (figure 2.2). Following the general trend in the economy during 2005–09, infrastructure services employment fell by 1.6 million FTEs (at a compounded annual rate of -1.3 percent) (table 2.1). This represented fewer job losses than in manufacturing (where employment fell by over 2.4 million FTEs), but contrasted dramatically with professional services, which gained over 2 million jobs during the period. The decline in infrastructure services employment was broad, with nearly all sectors shedding employees; the retail sector alone lost over 760,000 jobs during 2005–09 (table 2.2).

¹⁵ Francois and Hoekman, "Services Trade and Policy," 11. Regulations can be nontransparent if produced without industry input, applied unevenly, difficult to understand or comply with, or difficult to find.

¹⁶ USDOC, BEA, "Full-Time Equivalent Employees by Industry," 2011; USDOC, BEA, "Real Value Added by Industry," 2011.

FIGURE 2.1 U.S. infrastructure services: Finance and insurance services had the largest contribution to GDP in 2010

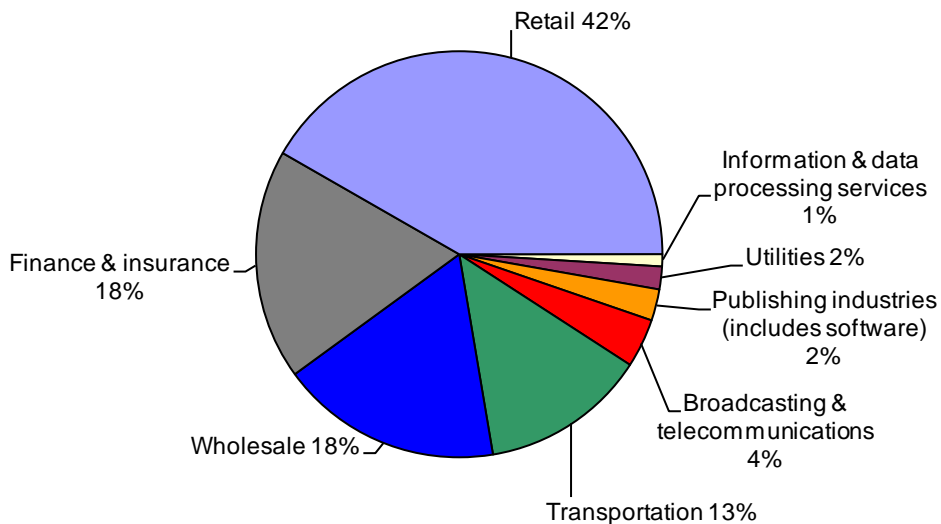


Total infrastructure services GDP = \$3.8 trillion

Source: USDOC, BEA, "Real Value Added by Industry," interactive tables, December 13, 2011 (accessed December 14, 2011).

Note: Figures may not total 100 percent due to rounding.

FIGURE 2.2 U.S. infrastructure services: Retail accounted for the largest share of infrastructure services employment in 2010



Total infrastructure services employment = 30 million workers

Source: USDOC, BEA, "Full-Time Equivalent Employees by Industry," interactive tables, August 8, 2011 (accessed December 5, 2011).

Note: Figures may not total 100 percent due to rounding.

TABLE 2.1 United States: GDP, FTEs, wage and salary accruals, and labor productivity, by goods and service sectors, 2005–10

	2005	2009	2010	Compound annual growth rate, 2005–09 (%)	Percent change, 2009–10
GDP^a (billion \$)					
Private sector	11,037	10,965	11,355	-0.2	3.6
Goods	2,501	2,295	2,422	-2.1	5.6
Manufacturing	1,569	1,444	1,606	-2.1	11.2
Nonmanufacturing	932	851	816	-2.3	-4.1
Services	8,536	8,671	8,936	0.4	3.0
Professional services	2,042	2,196	2,262	1.8	3.0
Infrastructure services	3,689	3,629	3,838	-0.4	5.7
Other services	2,805	2,850	2,843	0.4	-0.3
FTEs (thousands)					
Private sector	105,572	101,349	100,539	-1.0	-0.8
Goods	22,894	19,176	18,458	-4.3	-3.7
Manufacturing	13,954	11,528	11,235	-4.7	-2.5
Nonmanufacturing	8,940	7,648	7,223	-3.8	-5.6
Services	82,680	82,173	82,080	-0.2	-0.1
Professional services	24,334	26,442	26,754	2.1	1.2
Infrastructure services	32,183	30,578	30,125	-1.3	-1.5
Other services	26,163	25,153	25,201	-1.0	0.2
Wage and salary accruals (\$ per FTE)					
Private sector	44,717	50,411	51,986	3.0	3.1
Goods	48,196	55,454	57,385	3.6	3.5
Manufacturing	50,909	57,335	60,003	3.0	4.7
Nonmanufacturing	43,963	52,619	53,308	4.6	1.3
Services	43,753	49,234	50,773	3.0	3.1
Professional services	52,451	59,416	60,864	3.2	2.4
Infrastructure services	48,915	53,744	55,611	2.4	3.5
Other services	29,313	33,048	34,277	3.0	3.7
Labor productivity^b (\$ per FTE)					
Private sector	104,546	108,186	112,937	0.9	4.4
Goods	109,251	119,660	131,217	2.3	9.7
Manufacturing	112,462	125,243	142,937	2.7	14.1
Nonmanufacturing	104,239	111,245	112,986	1.6	1.6
Services	103,239	105,524	108,865	0.5	3.2
Professional services	83,924	83,050	84,541	-0.3	1.8
Infrastructure services	114,629	118,690	127,396	0.9	7.3
Other services	107,193	113,322	112,797	1.4	-0.5

Sources: USDOC, BEA, "Full-Time Equivalent Employees by Industry," interactive tables, December 13, 2011; USDOC, BEA, "Table 6.6D: Wage and Salary Accruals per Full-Time Equivalent Employee by Industry," interactive tables, August 8, 2011; USDOC, BEA, "Table 6.3D: Wage and Salary Accruals by Industry," interactive tables, August 8, 2011; USDOC, BEA, "Real Value Added by Industry," interactive tables, December 13, 2011.

^aReal value added by industry using 2005 chained dollars.

^bLabor productivity, calculated by USITC staff, is GDP by industry divided by the number of FTEs.

TABLE 2.2 United States: GDP, FTEs, wage and salary accruals, and labor productivity, by service industries, 2005–10

	2005	2009	2010	Compound annual growth rate, 2005–09 (%)	Percent change, 2009–10
GDP^a (billion \$)					
Broadcasting & telecommunications	311	359	371	3.6	3.3
Finance & insurance	1,019	1,044	1,112	0.6	6.6
Information & data processing services	71	82	81	3.7	-1.3
Publishing industries (includes software)	150	138	143	-2.0	3.5
Retail	838	790	869	-1.5	10.1
Transportation	370	345	357	-1.7	3.5
Utilities	206	198	205	-0.9	3.3
Wholesale	726	674	700	-1.8	3.9
FTEs (thousands)					
Broadcasting & telecommunications	1,289	1,247	1,168	-0.8	-6.3
Finance & insurance	5,829	5,571	5,527	-1.1	-0.8
Information & data processing services	394	292	290	-7.2	-0.7
Publishing industries (includes software)	855	787	753	-2.1	-4.3
Retail	13,467	12,704	12,561	-1.4	-1.1
Transportation	4,194	4,009	3,976	-1.1	-0.8
Utilities	542	555	546	0.6	-1.6
Wholesale	5,613	5,413	5,304	-0.9	-2.0
Wage and salary accruals (\$ per FTEs)					
Broadcasting & telecommunications	65,935	72,349	74,542	2.3	3.0
Finance & insurance	77,981	84,566	88,118	2.0	4.2
Information & data processing services	76,004	85,005	89,954	2.8	5.8
Publishing industries (includes software)	70,368	85,951	91,787	5.1	6.8
Retail	29,230	31,177	32,036	1.6	2.8
Transportation & warehousing	43,865	48,363	49,859	2.5	3.1
Utilities	77,409	87,764	89,676	3.2	2.2
Wholesale	57,922	64,833	67,187	2.9	3.6
Labor productivity^b (\$ per FTE)					
Broadcasting & telecommunications	241,040	287,570	317,295	4.5	10.3
Finance & insurance	143,436	165,546	170,567	3.6	3.0
Information & data processing services	179,188	280,137	278,276	11.8	-0.7
Publishing industries (includes software)	175,322	175,604	190,040	0.0	8.2
Retail	62,196	62,162	69,190	0.0	11.3
Transportation	88,102	86,131	89,864	-0.6	4.3
Utilities	379,889	357,477	375,458	-1.5	5.0
Wholesale	129,254	124,460	131,957	-0.9	6.0

Sources: USDOC, BEA, "Full-Time Equivalent Employees by Industry," interactive tables, December 13, 2011; USDOC, BEA, "Table 6.6D: Wage and Salary Accruals per Full-Time Equivalent Employee by Industry," interactive tables, August 8, 2011; USDOC, BEA, "Table 6.3D: Wage and Salary Accruals by Industry," interactive tables, August 8, 2011; USDOC, BEA, "Real Value Added by Industry," interactive tables, December 13, 2011.

^aReal value added by industry using 2005 chained dollars.

^bLabor productivity, calculated by USITC staff, is GDP by industry divided by the number of FTEs.

While employment has declined, labor productivity in infrastructure services (measured as output per FTE) has grown in recent years. In 2010, infrastructure services was the second most productive U.S. sector after manufacturing, with an average output per worker of \$127,396 compared to \$142,937 in manufacturing. By contrast, average output per worker in professional services was \$84,541. However, productivity varied substantially among infrastructure services industries: average output per worker ranged from under \$70,000 in labor-intensive retail services to over \$375,000 in capital-intensive utilities. From 2005 to 2009, productivity in the infrastructure services sector grew at a compound annual rate of only 1 percent, reflecting the slight decline in sector output. However, productivity grew by over 7 percent in 2010, second only to manufacturing (14 percent), as GDP increased and the economy showed signs of recovery.

Infrastructure services workers earned an average wage of \$55,611 in 2010, which exceeded the private sector average (\$51,986) but trailed wages in goods manufacturing (\$60,003) and professional services (\$60,864). Average wages varied substantially within the sector. In 2010, average annual wages were \$32,036 in retail services, where many jobs are part-time positions that do not require advanced education or training, compared to roughly \$90,000 in the publishing, utilities, and information and data processing industries, which mostly employ highly skilled workers. During 2005–09, the CAGR of wages in infrastructure services was 2.4 percent, the slowest rate in the economy, though close to the overall average rate of 3 percent. In 2010, average wages rose by 3.5 percent, the second-largest increase after manufacturing (4.7 percent), which corresponded to the gains in productivity and output during the year.¹⁷

U.S. Trade in Infrastructure Services

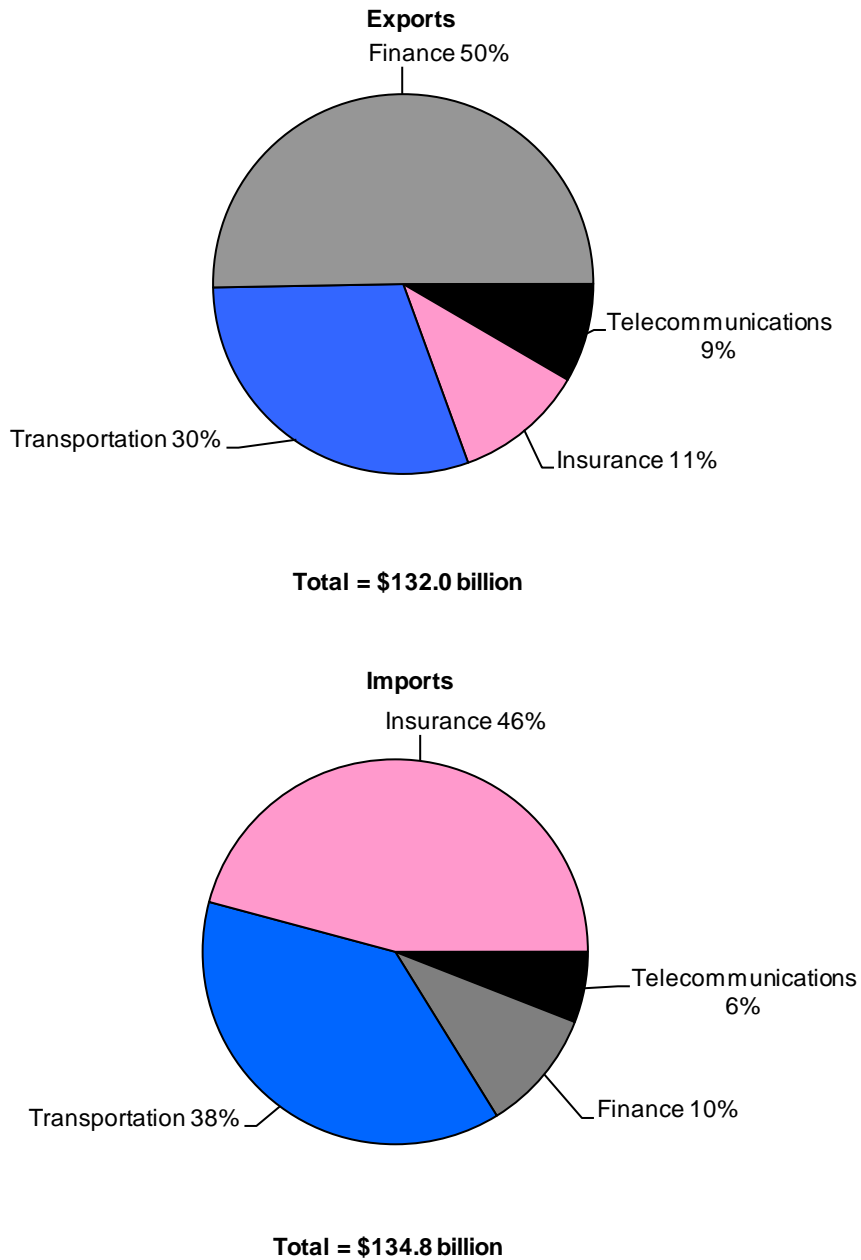
Infrastructure services represented a significant share of U.S. services trade in 2010, accounting for 25 percent of total U.S. cross-border services exports (GATS mode 1) (see box 1.1) and 36.6 percent of U.S. cross-border services imports.¹⁸ The United States posted a small cross-border trade deficit in infrastructure services of \$2.8 billion in 2010, with imports of \$134.8 billion and exports of \$132.0 billion (figure 2.3).

Among the principal infrastructure services subsectors, the trade situation varied substantially. Financial services (including banking and securities services) represented over half of U.S. sector exports (\$66.4 billion) and generated a large trade surplus of \$52.6 billion in 2010. Leading export markets for U.S. financial services were the United Kingdom, Canada, and Japan (table 2.3) (see chapter 3 for a discussion of banking services and chapter 7 for a discussion of securities services). Other leading exports were other transportation services (\$39.9 billion), insurance services (\$14.6 billion), and telecommunications (\$11.1 billion). The United States ran a large trade deficit in insurance services of \$47.2 billion, which represented 46 percent of total infrastructure services imports in 2010. A significant share of U.S. imports of insurance services was reinsurance services supplied by Bermuda (\$28.2 billion), the leading provider of

¹⁷ USDOC, BEA, “Full-Time Equivalent Employees by Industry,” August 5, 2011; USDOC, BEA, “Real Value Added by Industry,” 2011.

¹⁸ USDOC, BEA, *Survey of Current Business*, October 2011, table 1. For the purposes of the cross-border trade discussion, data on infrastructure services include passenger fares and other transportation services, industrial services, financial and insurance services, telecommunications, database and other information services, operational leasing, and trade-related services.

FIGURE 2.3 U.S. infrastructure services: Finance led U.S. cross-border exports and insurance services led U.S. cross-border imports of infrastructure services in 2010



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 31–32, table 1.

Note: Trade data exclude public-sector transactions. Figures may not total 100 percent due to rounding.

TABLE 2.3 U.S. infrastructure services:^a Top five cross-border export and import markets and leading industries, 2010

Rank	Country	Export to country	Exports (million \$)
1	United Kingdom	Financial services	9,348
2	Canada	Financial services	4,702
3	Japan	Financial services	3,059
4	Bermuda	Insurance services	2,735
5	Canada	Insurance services	2,617

Rank	Country	Import from country	Imports (million \$)
1	Bermuda	Insurance services	29,940
2	Switzerland	Insurance services	6,590
3	United Kingdom	Insurance services	5,488
4	United Kingdom	Financial services	4,325
5	Germany	Insurance services	3,050

Source: USDOC, BEA, *U.S. International Trade*, "Table 5 Other Private Services," 2006–2010.

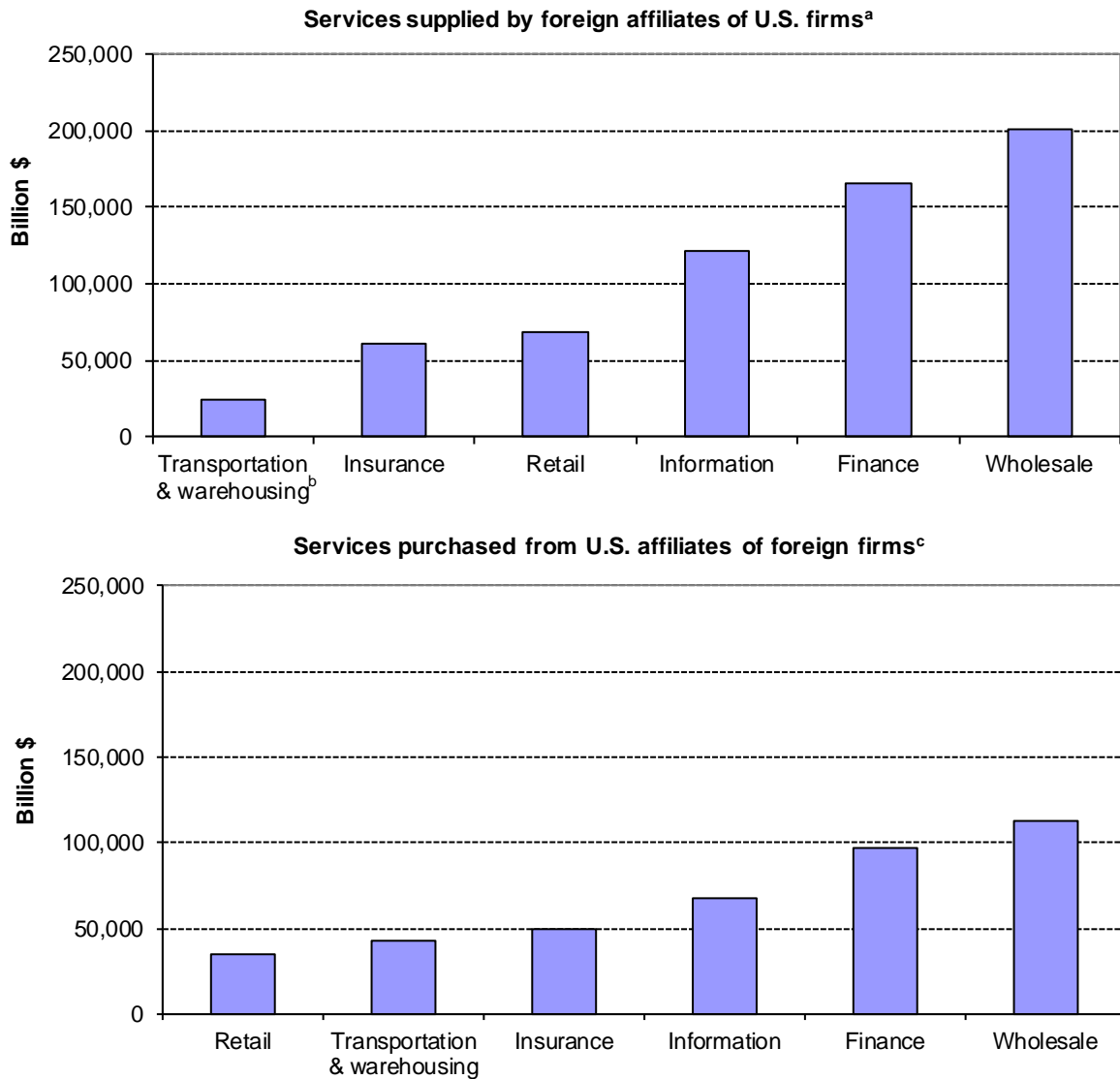
^aData for cross-border trade in infrastructure services are limited. Data for financial services, insurance services, and telecommunication services only were used to produce this table.

insurance services in 2010, along with Switzerland and the United Kingdom (see chapter 4 for a discussion of insurance services).

Affiliate transactions (mode 3) accounted for a substantial majority of U.S. trade in infrastructure services. U.S.-owned foreign affiliates supplied \$641.0 billion of such services in 2009, while the value of services provided by foreign-owned U.S. affiliates was \$403.4 billion. This generated a trade surplus of \$237.6 billion, the largest balance of any sector (including professional services, agriculture, and manufacturing) in the U.S. economy that year.¹⁹ Infrastructure services also accounted for the largest share of affiliate transactions in services. In 2009 about 60 percent of both sales of services by foreign affiliates of U.S. firms and U.S. affiliates of foreign firms were infrastructure services. Wholesale, finance, and information services accounted for three-quarters (\$488.5 billion) of total infrastructure services provided by U.S.-owned foreign affiliates in 2009. These sectors also represented the top three infrastructure services provided by foreign-owned U.S. affiliates, with a value of \$276.6 billion, or over two-thirds, of such transactions in 2010 (figure 2.4).

¹⁹ USDOC, BEA, *Survey of Current Business*, October 2011, table 9.2. Affiliate transactions data for infrastructure services cover wholesale, retail, publishing, telecommunications, broadcasting, Internet service providers, finance and insurance, utilities, and transportation and warehousing.

FIGURE 2.4 U.S. infrastructure services: In 2009, trade in wholesale services led transactions by foreign affiliates of U.S. firms and U.S. affiliates of foreign firms



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 54, 56, tables 9.2 and 10.2.

Note: Trade data exclude public sector transactions.

^a Includes only services supplied by majority-owned foreign affiliates of U.S. parent firms.

^b The global total for transportation and warehousing sales was suppressed. This total represents the data for those countries that were made available.

^c Includes only services supplied by majority-owned U.S. affiliates of foreign parent firms.

Bibliography

- Armstrong, Mark A., and David Sappington. "Regulation, Competition, and Liberalization." *Journal of Economic Literature* 44 (June 2006): 325–66.
- Arnold, Jens, Boutheina Guermazi, and Aaditya Mattoo. "Telecommunications: The Persistence of Monopoly." In *Services Trade and Development: The Experience of Zambia*, edited by Aaditya Mattoo and Lucy Payton, 89–141. New York: Palgrave Macmillan, 2007.
- Ben Romdhane, Saoussen. "Liberalizing Trade in Services in Tunisia: General Equilibrium Effects." *Journal of Economics and International Finance* 3, no. 11 (October 7, 2011): 634–45.
- Copeland, Brian, and Aaditya Mattoo. "The Basic Economics of Services Trade." In *A Handbook of International Trade in Services*, edited by Aaditya Mattoo, Robert M. Stern, and Gianni Zanini, 84–129. Oxford: Oxford University Press, 2008.
- Cowhey, Peter F. and Jonathan D. Aronson. "Trade in Services Communications." In *A Handbook of International Trade in Services*, edited by Aaditya Mattoo, Robert M. Stern, and Gianni Zanini, 389–436 Oxford: Oxford University Press, 2008.
- Dedrick, Jason, Kenneth Kraemer, and Greg Linden. "Who Profits from Innovation in Global Supply Chains? A Study of the iPod and Notebook PCs." Industry Studies Association Working Papers Series, 2008. http://web.mit.edu/is08/pdf/Dedrick_Kraemer_Linden.pdf.
- De Sousa, Dareil, and Christopher Findlay. "Relationship between Liberalization in the Logistics Sector and Trade Facilitation." In *Trade Facilitation beyond the Multilateral Trade Negotiations: Regional Practices, Customs Valuation and Other Emerging Issues*, 245–80. United Nations Economic and Social Commission for Asia and the Pacific, 2008.
- Eschenbach, Felix, and Francois, Joseph. "Financial Sector Competition, Services Trade, and Growth." CEPR Discussion Paper 3573, October 2002. <http://www.cepr.org/pubs/dps/DP3573.asp>.
- Fink, Carsten, Aaditya Mattoo, and Randeep Rathindran. "An Assessment of Telecommunications Reform in Developing Countries." World Bank Policy Research Working Paper 2909, October 2002. <http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-2909>.
- Francois, Joseph F., and Bernard Hoekman. "Services Trade and Policy." CEPR Discussion Paper DP7616, December 2009. <http://ssrn.com/abstract=1533220>.
- Hoekman, Bernard, and Aaditya Mattoo. "Services Trade and Growth." World Bank Policy Research Working Paper 4461, January 1, 2008. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/01/02/000158349_20080102162022/Rendered/PDF/wps4461.pdf.
- Hoffmann, Bert. "Why Reform Fails: The 'Politics of Policies' in Costa Rican Telecommunications Liberalization." *European Review of Latin American and Caribbean Studies* 84 (April 2008): 3–19.

- Irandu, Evaristus M. "Opening African Skies: The Case of Airline Industry Liberalization in East Africa," *Journal of the Transportation Research Forum* 47, no. 1 (Spring 2008): 73–88.
<http://www.trforum.org/journal>.
- Marchetti, Juan A., and Martin Roy. "Services Liberalization in the WTO and PTAs." In *Opening Markets for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*, edited by Juan A. Marchetti and Martin Roy, 61–112. Cambridge: Cambridge University Press, 2008.
- Mattoo, Aaditya, Randeep Rathindran, and Arvind Subramanian. "Measuring Services Trade Liberalization and Its Impact on Economic Growth: An Illustration." World Bank Policy Research Working Paper 2655, August 2001.
- Mattoo, Aaditya, and Robert M. Stern. "Overview." In *A Handbook of International Trade in Services*, edited by Aaditya Mattoo, Robert M. Stern, and Gianni Zanini, 3–47. Oxford: Oxford University Press, 2008.
- Mukherjee, Arpita. "Services Liberalization in PTAs and the WTO: The Experiences of India and Singapore." In *Opening Markets for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*, edited by Juan A. Marchetti and Martin Roy, 600–32. Cambridge: Cambridge University Press, 2008.
- Robert, Maryse, and Sherry Stephenson. "Opening Services Markets at the Regional Level under the CAFTA-DR: The Cases of Costa Rica and the Dominican Republic." In *Opening Markets for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*, edited by Juan A. Marchetti and Martin Roy, 537–72. Cambridge: Cambridge University Press, 2008.
- Shirley, Mary, F.F. Tusubira, Frew Gebreab, and Luke Haggarty. "Telecommunications Reform in Uganda." World Bank Policy Research Working Paper 2864, June 2002. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2002/10/12/000094946_02080604013933/additional/118518322_20041117181544.pdf.
- U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). "Full-Time Equivalent Employees by Industry." Interactive tables: Gross-Domestic-Product-by-Industry Accounts, December 13, 2011. <http://www.bea.gov/iTable/iTable.cfm?ReqID=5&step=1>.
- . "Real Value Added by Industry." Interactive tables: Gross Domestic Product by Industry Accounts, December 13, 2011. <http://www.bea.gov/iTable/iTable.cfm?ReqID=5&step=1>.
- . *Survey of Current Business* 91, no. 10 (October 2011).
- . "Table 6.3D: Wage and Salary Accruals by Industry." Interactive tables: National Income and Product Accounts Table, August 8, 2011.
<http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1>.
- . "Table 6.6D: Wage and Salary Accruals per Full-Time Equivalent Employee by Industry." Interactive tables: National Income and Product Accounts Table, August 8, 2011.
<http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1>.

———. “Table 9: Other Private Services.” In U.S. International Services, 2006–2010.
http://www.bea.gov/international/international_services.htm.

U.S. International Trade Commission Services Roundtable, Washington DC, November 3, 2011.

CHAPTER 3

Banking Services

Summary

In 2011, the global banking industry experienced its second straight year of growth since the end of the global financial crisis. Strong economic activity in Asia drove increased demand for banking services. The U.S. and European banking markets, in contrast, grew slowly due to weak balance sheets, sluggish economic growth, and reduced fee income. Large multinational banks continued to seek growth opportunities in emerging markets, particularly those in Asia.

The United States maintained a cross-border trade surplus in banking services, and services supplied by U.S.-owned affiliates abroad exceeded services purchased from foreign-owned affiliates in the United States. Overall, however, affiliate trade declined in 2009 as developed markets shrank and U.S. multinational banks scaled back foreign operations in an effort to strengthen their positions in the domestic market.

Introduction

For the purpose of this discussion, banking services are fee-based commercial banking services. These include financial management and transaction services; advisory services; custody services; credit card services; and other credit-related services, such as the provision of standby letters of credit for trade financing. Because they are not tracked in U.S. official data, deposit-taking and lending services are excluded from the trade discussion, but they are included in the industry analysis section of this chapter. Fee-based commercial banking services can be traded across borders or sold through affiliates.

Deposit taking and lending generate the majority of banking revenues. Banks actually lose money on deposit taking on its own, due to the costs of setting up and maintaining accounts and the interest paid on balances, but it generates the capital that banks use to invest and make higher-interest loans. Further, banks routinely sell additional products and services such as mortgages, credit cards, and other forms of financing to clients, all of which generate profits. Consumer and commercial deposits account for about 60 percent of industry products and services, while loans to those two groups account for a combined 34 percent.¹

Globally, consumer and retail customers constitute the largest segment of the banking customer base (45 percent), followed by small businesses, corporations, and institutions (35 percent) and government clients (15 percent).² While corporate clients generally conduct higher-value transactions, the sheer volume of retail banking clients accounts for the size of that market segment.

¹ IBISWorld, "Global Commercial Banks," May 16, 2011, 7.

² IBISWorld, "Global Commercial Banks," May 16, 2011, 9.

Competitive Conditions in the Global Banking Services Market

The global banking industry generated an estimated \$4.9 trillion in revenues in 2011, a 6 percent increase over the previous year.³ It was the second consecutive year in which banks worldwide showed collective growth following the 2007–08 global financial crisis, which resulted in record losses for banks, particularly those in Europe and the United States. Extreme fluctuations in the market during 2006–10 had the cumulative effect of shrinking revenues at a compound annual rate of –1.8 percent during that time.⁴

Global industry assets were valued at \$119.5 trillion in 2011, an increase of 5 percent over 2010 levels.⁵ European firms continued to dominate the list of top 10 global banks by assets, with two U.S. banks maintaining a presence (table 3.1). One notable absence on the list is Citigroup, which has long been one of the top 10 banks but fell to number 12 in 2011 after taking substantial write-downs and reorganizing its business lines. Industrial and Commercial Bank of China held the 10th spot, while the other three large state-owned commercial Chinese banks (Bank of China, China Construction Bank, and Agricultural Bank of China) all entered the top 25, reflecting the growing size of these firms.

TABLE 3.1 Banking services: Top 10 global banks by total assets, 2011 (million \$)

Rank	Bank	Country	Total assets
1	BNP Paribas	France	2,671,334
2	Deutsche Bank	Germany	2,547,634
3	Mitsubishi UFJ Financial Group	Japan	2,480,778
4	HSBC Holdings	UK	2,454,689
5	Barclays	UK	2,331,213
6	Crédit Agricole	France	2,313,965
7	Royal Bank of Scotland (RBS)	UK	2,274,767
8	Bank of America	US	2,264,909
9	JP Morgan Chase & Co.	US	2,117,605
10	Industrial and Commercial Bank	China	2,032,196

Source: *The Banker*, “Top 25 Banks in 2011, Top 1000 World Ranking,” January 25, 2012.

In 2011, Europe generated the majority of global bank revenues at 47.4 percent, followed by North America and Asia (22.6 and 16.5 percent, respectively) (figure 3.1). However, an estimated 40 percent of global banking enterprises are located in Asia, while 29 percent are in North America and just 15 percent in Europe.⁶ This reflects the concentrated and saturated nature of the U.S. and European markets, compared to the more fragmented, emerging nature of the developing Asian financial systems.

Banks worldwide began stabilizing in 2010–11. Many of the largest U.S. banks registered significant profits in 2011,⁷ and fewer banks closed—the Federal Deposit Insurance

³ IBISWorld, “Global Commercial Banks,” May 16, 2011, 4.

⁴ USITC calculations based on IBISWorld data.

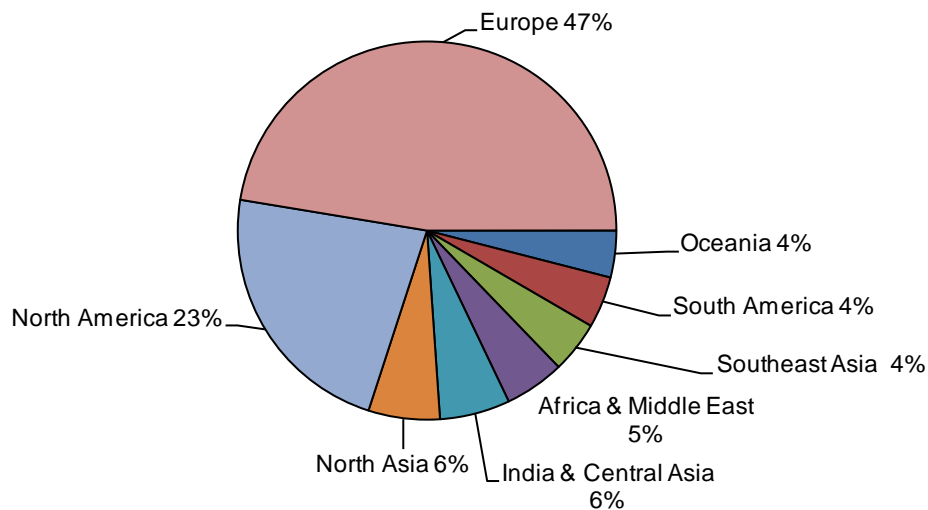
⁵ IBISWorld, “Global Commercial Banks,” May 16, 2011, 4.

⁶ IBISWorld, “Global Commercial Banks,” May 16, 2011, 11–12.

⁷ *The Banker*, “Top 1000 World Banks 2011,” June 30, 2011.

Corporation shuttered 92 institutions that year, compared with 157 during 2010.⁸ However, the banking industry, particularly in the United States and Europe, still faces challenges. Bank failures in the U.S. market are projected to cost about \$45 billion during 2010–14.⁹ This is in addition to the record losses suffered by banks during the peak of the financial crisis in 2008–09. Foreclosure rates have remained persistently high since 2008, representing a continuous stream of losses for banks. It is estimated that write-offs by U.S. banks totaled \$744 billion during the 2008–11 period.¹⁰ U.S. banks also face new regulations under the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act¹¹ that limit transaction fees, raise compliance costs, and expand minimum capital requirements. As a result, banks have in some cases sought to raise customer fees for certain accounts and transactions, and to reduce operating costs through staff cuts and branch closures. Banks are also increasingly outsourcing customer service and data processing (both domestically and abroad), along with higher value-added functions such as accounting and finance, in an effort to free capital. By one estimate, top U.S. banks will outsource about \$5 billion worth of information technology and support projects to India in 2011–12.¹²

FIGURE 3.1 Banking services: Europe and North America held the majority of bank assets in 2011



Source: IBIS World, "Global Commercial Banks," May 16, 2011, 11. Figures may not total 100 percent due to rounding.

There were 55,082 commercial banks worldwide in 2011, down 9.6 percent from 2007.¹³ The global banking industry, while still generally fragmented, has been consolidating for many years. Before the global financial crisis, merger and acquisition (M&A) activity

⁸ Federal Deposit Insurance Corporation, "Bank Failures in Brief," 2010 and 2011.

⁹ EIU, *Country Finance: United States of America*, November 2011, 11.

¹⁰ EIU, *Country Finance: United States of America*, November 2011, 15.

¹¹ Public Law 111-203, 124 Stat. 1375, approved July 21, 2010.

¹² Mergent, *North America: Banking Sectors*, April 2011, 13.

¹³ IBISWorld, "Global Commercial Banks," May 16, 2011, 4.

was high: larger banks merged with smaller counterparts to gain market share in saturated developed-country markets, and they acquired firms in developing-country markets where economic growth is strong, disposable incomes are rising, and populations are underbanked, particularly in rural communities. After the financial crisis, mergers accelerated further as firms sought new growth and as bank failures and divestitures yielded opportunities for healthier banks to make acquisitions at bargain prices. At the same time, banks are beginning to see increased competition from nontraditional financial service providers such as retailers (box 3.1).

BOX 3.1 Retailers increasingly provide financial services

In the wake of the financial crisis, customers in many countries have reportedly become disenchanted with traditional banks.^a At the same time, banks have reduced lending in order to rebuild capital and stem ongoing losses, resulting in credit shortages. As a result of both trends, customers are increasingly seeking banking services from nontraditional providers, particularly large retailers. Retailers have traditionally offered branded credit cards and financing for purchases through partnerships with banks, but some retailers are increasing the scope of financial services that they offer, including services that require banking licenses from regulatory authorities.

For example, since 2007 Walmart has operated its own bank in Mexico, Banco Walmart, offering basic, low-cost banking services to households that do not typically participate in the formal financial system.^b As of March 2011, Banco Walmart had more than 260 branches and collected deposits totaling \$9.4 million. These branches do not necessarily compete directly with larger banking institutions, given their focus on underserved communities, but in other markets the retailer does compete with established banks. For example, Walmart obtained a banking license in Canada in 2010 and is reportedly seeking a share of the country's mortgage and consumer loan market.^c The retailer has not yet secured a banking license in the United States, but it does offer financial services across the country in a partnership with SunTrust bank, and it recently started offering small business loans of up to \$25,000 through its Sam's Club stores.^d

Retailers in the United Kingdom have also begun offering financial services. The country's biggest retailer, Tesco, has had a banking license since 1997, when it launched Tesco Personal Finance in a joint partnership with the Royal Bank of Scotland. In 2008, Tesco bought out the bank's share and outlined larger plans to become "the people's bank."^e The rebranded Tesco Bank has an estimated 6.5 million customer accounts and offers credit cards and savings and loan services, as well as insurance products.^f Smaller retailers have also announced plans to offer financial services in the United Kingdom, but it remains to be seen whether the costs and complexity of establishing banking networks will prove to be a deterrent.

^a Felsted, "Retailers," April 28, 2010.

^b Wal-Mart, "Banco Walmart Opens Its 1 Millionth Account," March 15, 2011.

^c Canada MSN Money, "Will WalMart's Banking Push into Canada Succeed?" June 6, 2010.

^d American Public Media, "Wal-Mart's Bank Ambitions in Mexico," August 6, 2010.

^e Felsted, "Retailers," April 28, 2010.

^f Tesco Bank Web site. http://mediacentre.tescofinance.com/help/about_us/key_facts/ (accessed March 15, 2012).

^f Felsted, "Retailers," April 28, 2010.

Demand and Supply Factors

Economic growth drives demand for banking services in developing Asian countries

As prosperity increases, both corporate and personal wealth tend to rise, creating greater demand for loans (particularly real estate and credit card loans), as well as more sophisticated investment vehicles. Divergence in income growth has caused a geographic

divergence in the growth of demand for banking services, as advanced economies are anticipated to grow by 2.5 percent annually in 2011 and 2012, while emerging and developing economies are expected to grow at an estimated 6.5 percent.¹⁴

In the United States, Europe, and Japan, high unemployment has accompanied slow or flat economic growth in recent years, resulting in lower personal income and reduced demand for most financial services. In much of developing Asia, however, personal incomes have continued to rise steadily, as countries such as China, India, the Philippines, and Indonesia experienced positive economic growth in 2008 and 2009. This income growth is due in large part to China's sustained economic performance, as well as the fact that banks in this region had relatively low exposure to the toxic assets that precipitated the financial downturn. Strong economic growth in these countries contributed to greater demand for banking services and attracted multinational banks. This phenomenon is reflected in the changing shares of global bank loans. In 2006, North America and Western Europe accounted for an estimated 31 and 40 percent of global bank loans, respectively, while Asia and Australasia¹⁵ accounted for 26 percent; however, in 2011, North America and Europe held 29 and 32 percent, and Asia and Australasia had 34 percent.¹⁶ Loan activity is expected to increase in all markets in the coming years, though less so in Western Europe than in North America. However, growth in Asia is projected to continue to outpace growth in developed markets outside Asia, and the region may account for 41 percent of global bank loans by 2015.¹⁷

Availability of capital influences supply of banking services

When banks are profitable and can access large amounts of capital, they are able to lend more money and take bigger risks. Conversely, when access to capital is limited, banks are forced to be more selective in their activities. In the financial crisis, banks incurred significant losses and write-downs due to exposure to bad mortgage-backed assets, which limited their holdings of and ability to borrow capital. Many banks have stabilized their balance sheets and recovered from these losses in the past three years, but their capital supplies have not been fully replenished due to sluggish economic growth. Furthermore, new regulations have raised capital reserve requirements: domestic regulations such as those recently enacted in the United States and Europe, and the anticipated Basel III international standards, significantly increase the amount of reserve capital that banks must hold, with larger institutions required to hold more capital. These obligations ultimately protect consumers but constrain banks' activities to some degree. To illustrate, while demand for banking services has grown rapidly in many Asian markets, several large multinational banks have lessened their exposure in these markets in recent years in order to conserve capital. Bank of America, for example, reduced its stake in China Construction Bank in 2009 from 19.15 percent to 11 percent, raising \$10.1 billion in the process.¹⁸

Regulatory environments affect the way banks do business

In most countries, banking is a highly regulated industry, and government regulations often determine a financial firm's commitment to a given market. In some markets, regulations are nontransparent and may discriminate against foreign firms. In certain

¹⁴ IMF, *World Economic Outlook*, April 2011, xv.

¹⁵ Includes Australia, New Zealand, and neighboring South Pacific islands.

¹⁶ EIU, "World Banks: A Historic Divide," October 15, 2011.

¹⁷ Ibid.

¹⁸ EIU, *Country Finance: China 2011*, August 2011, 13.

cases, such as China, if the market is dynamic, multinational banks may be willing to navigate a complex regulatory environment in exchange for access to a large and increasingly wealthy population. In 2010, the 360 foreign banking institutions in China—including headquarters, branches, and subsidiaries—accounted for just under 2 percent of total assets in the banking system.¹⁹ However, in other cases, the regulatory costs of doing business can outweigh the potential long-term benefits for banks, particularly if there are large, deeply entrenched incumbents and small, less affluent populations.

Since 2008, many countries have imposed new rules to strengthen their banking sectors and avert future financial crises. In the United States, as mentioned earlier, the Dodd-Frank Wall Street Reform and Consumer Protection Act established new requirements that will affect banks' capital and revenues primarily by limiting investment activity, raising reporting and compliance costs, and placing restrictions on fees charged to customers (see box 7.1 in chapter 7). An example is Title VI of the Dodd-Frank Act, known as the Volcker Rule. Intended to keep banks from taking excessive risks, this rule limits the amount of capital that banks can invest in hedge funds and private equity funds (not counting investments made on behalf of customer accounts). The Office of the Comptroller of the Currency estimated that this rule may impose \$1 billion in compliance and capital costs on the industry.²⁰ Further, financial firms determined to be “too big to fail” are required to develop roadmaps for their own liquidation in the event of bankruptcy, a measure intended to avoid Federal bailouts of nonviable firms. Preparing such plans, as well as making required contributions to a liquidation fund, could add more costs.

Other provisions of the Dodd-Frank Act reduce some of the fees that banks can charge. The Durbin amendment, for example, requires the Federal Reserve System to lower interchange fees that banks collect from debit and credit card transactions.²¹ Other measures designed to protect consumers include changes to the way overdraft fees are levied and limits to the late fees and interest rate hikes that credit card companies can charge to customers that miss payments. The combination of new costs and fee reductions resulting from the legislation could affect some banks' ability or willingness to supply certain financial services.

Trade Trends

Cross-border Trade

U.S. cross-border exports²² of banking services (box 3.2) rose by 5.0 percent to \$23.0 billion in 2010 (figure 3.2). While the 2008 financial crisis disrupted the global banking sector, U.S. cross-border exports of banking services still grew at a CAGR of 19.2 percent during 2006–09.²³ This is partly because large U.S. banks continued to market financial management services to clients in countries where the economic

¹⁹ China Banking Regulatory Commission, *Annual Report 2010*, 38 and 152.

²⁰ Brush, “Volcker Rule Will Cost Banks \$1 Billion,” October 28, 2011.

²¹ Standard & Poor's, *Industry Surveys: Banking*, June 23, 2011, 6.

²² Data on cross-border trade in banking services include credit card and other credit-related services and other financial services (which includes securities lending, electronic funds transfer, and other financial services). Data on affiliate transactions are aggregated with securities services as “financial services excluding insurance,” and are examined in chapter 7.

²³ USDOC, BEA, *Survey of Current Business*, October 2011, 20.

downturn did not have as strong an impact. At the same time, cross-border imports of banking services rose to \$5.8 billion in 2010,²⁴ reversing a decline that accompanied the onset of the financial crisis in 2008. This amounted to an increase of 23.8 percent from 2009 levels, a departure from the compound annual decline of 7.8 percent during 2006–09. Imports of other financial services and credit services increased in 2010, largely due to growth in the U.S. refinancing market.²⁵ As a result, the financial services trade balance remained flat in 2009–10, but the CAGR during 2006–09 was 35.2 percent.

BOX 3.2 Understanding BEA data on cross-border trade and affiliate transactions in banking services

BEA data on cross-border trade in banking services are included in its “financial services” category. The financial services data are broken down into four subcategories: (1) securities transactions services, including brokerage services and underwriting and private placement services; (2) management and advisory services, including financial management services and financial advisory and custody services; (3) credit card and other credit-related services (such as the provision of standby letters of credit for trade financing); and (4) other financial services, including securities lending and electronic funds transfer.^a These data exclude both deposit-taking and lending services. Although there is some overlap between securities services and banking services in these data, subcategories 1 and 2 likely comprise predominantly securities services, as these include the traditional investment banking functions of broking, dealing, and underwriting, while subcategories 3 and 4 likely comprise predominantly banking services. Data on total U.S. imports and exports of these services, whether between unrelated parties or between affiliates in a single corporate group, are available beginning in 2006 (older statistics reflect unaffiliated trade only).^b However, in its reporting of U.S. exports and imports by country, the BEA combines the four subcategories into a single category of “financial services,” itself a component of the larger category “Other Private Services” in the International Services Accounts. The BEA captures this data largely through mandatory quarterly and benchmark surveys of business services, supplemented by survey data from U.S. government agencies, private sector sources, and BEA estimates.^c

In addition, the BEA publishes data on financial services (excluding insurance) supplied abroad through foreign affiliates of U.S. majority-owned groups and financial services supplied in the United States by affiliates of foreign-owned corporations. For financial services, as for many other services, direct investment in local affiliates represents a significant avenue for sales in foreign markets. The BEA data include revised measures for sales of affiliates starting in 2004. The data include sales by, and purchases from, firms that primarily provide non-depository credit intermediation and related services; securities, commodity contracts, and other intermediation and related activities; and funds, trusts, and other financial vehicles. Country breakdowns are provided for the financial services category, but the data do not distinguish securities-related services from banking services.^d

^a USDOC, BEA, *Survey of Current Business*, October 2009, 31.

^b USDOC, BEA, *Survey of Current Business*, February 2010, 44.

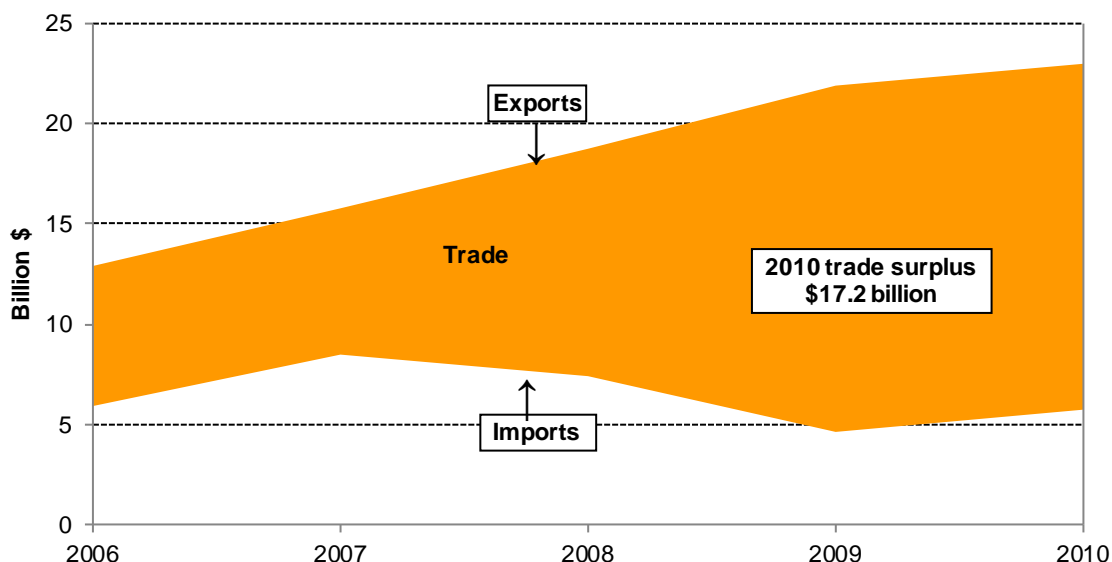
^c USDOC, BEA, *Survey of Current Business*, February 2010, 44.

^d USDOC, BEA, *Survey of Current Business*, October 2009, 37–38.

²⁴ USDOC, BEA, *Survey of Current Business*, October 2011, 21.

²⁵ USDOC, BEA, *Survey of Current Business*, October 2011, 20-21.

FIGURE 3.2 Banking services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2006–10



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 20–21, tables G and H; USDOC, BEA, *Survey of Current Business*, October 2010, 25–25, tables G and H; USDOC, BEA, *Survey of Current Business*, October 2009, 31, table E.

The largest markets for U.S. exports of non-insurance financial services²⁶ in 2010 were the United Kingdom (which purchased \$9.3 billion of such services), Canada (\$4.7 billion), Japan (\$3.1 billion), France (\$2.3 billion), and Australia (\$2.1 billion).²⁷ These figures represent year-on-year increases for all countries except the United Kingdom, reflecting economic recovery in those markets.²⁸ The leading suppliers of such services to the United States in 2010 included the United Kingdom (which sold services valued at \$4.3 billion), Canada (\$958 million), France (\$818 million), Japan (\$735 million), and Germany (\$640 million). Imports from Canada, France, and Japan increased over 2009 levels, while those from the United Kingdom and Germany declined possibly due to increasing financial market challenges in Europe.

Nontariff Measures Affecting Trade

Multinational banks routinely face nontariff barriers when entering foreign markets, especially in certain developing countries that may see their local banks as unprepared to compete with large global banks. Some of the more common measures place limits on branching, form of establishment, licensing, issuing debit and credit cards, and joint

²⁶ Data for cross-border trade in financial services by country are not broken out by industry segment in the same way as the aggregate data. These figures therefore include securities-related services, which are discussed in chapter 7.

²⁷ USDOC, BEA, *Survey of Current Business*, October 2011, 42, 44.

²⁸ The United Kingdom's GDP grew by 1.3 percent in 2010, lagging behind the GDP growth of Australia, Canada, and Japan at 2.7 percent, 3.2 percent, and 4 percent, respectively. While France's GDP growth mirrored that of the United Kingdom at 1.4 percent, its banking industry likely did not have the same scale of exposure to the financial crisis as that of the United Kingdom. USDOC, BEA, *Survey of Current Business*, October 2011, 42, 44.

ventures. Branch networks are critical for banks, as they enable the collection of more deposits, and banks sometimes complain that branching rules in foreign markets are designed to limit their deposit bases and protect domestic banks from competition. For example, foreign banks operating in India are required to submit annual branch expansion proposals, but nontransparent quotas on expansion prevent such plans from being enacted. Only six new foreign branch licenses were granted from April 2009 to March 2010.²⁹ Multinational banks may also encounter obstacles to obtaining licenses. In some cases governments have either limited or stopped issuing new licenses to foreign banks altogether, effectively closing the market to new entrants. Further, restrictions on the legal form of establishment are common; in such cases a bank may be required to incorporate locally, may only be permitted to establish a representative office, or may only be allowed to establish in one form (e.g., only branch offices, no subsidiaries). Such rules can make it difficult for foreign banks to tailor their operations to market conditions and compete with local firms.

Regulations increasingly target electronic transactions. For example, some countries limit the ability of foreign banks (but not domestic banks) to issue credit and debit cards. Such regulations may completely prevent foreign banks from issuing cards, ban them from issuing cards in the target country currency, or delay the approval of cards. Additionally, some countries restrict the operation or establishment of automatic teller machines (ATMs). In some markets, foreign banks are not allowed to operate ATMs, are only allowed to operate a certain number of ATMs, or have to count ATMs as branches (in cases where there is a branch quota).³⁰

Outlook

Global demand for banking services is forecast to increase, but geographic disparities in growth will likely persist as developing economies continue to expand faster than developed markets. Banks anticipate challenges in the coming years as they continue to manage nonperforming assets resulting from the financial crisis, while searching for fresh revenue sources as fee incomes are reduced by new regulations. In an effort to streamline costs, banks will likely stop offering some services and focus on the bread-and-butter activities of deposit taking and lending, while continuing to reduce staff where feasible. Banks also may increasingly outsource certain functions, domestically or abroad, in an effort to free up capital.³¹

²⁹ USTR, *National Trade Estimate Report on Foreign Trade Barriers*, 2011. There were 82,485 bank branches total in India as of March 2009; Reserve Bank of India, *Branch Banking Statistics*, March 2009.

³⁰ USTR, *National Trade Estimate Report on Foreign Trade Barriers*, 2011.

³¹ Mergent, *North America: Banking Sectors*, April 2011, 13.

Bibliography

- American Public Media. *Marketplace*. "Wal-Mart's Bank Ambitions in Mexico," August 6, 2010. <http://www.marketplace.org/topics/world/wal-marts-bank-ambitions-mexico>.
- The Banker*. "Top 25 Banks in 2011: Top 1000 World Ranking," January 25, 2012.
- The Banker*. "Top 1000 World Banks 2011," June 30, 2011.
- Brush, Silla. "Volcker Rule Will Cost Banks \$1 Billion, U.S. Government Says." *Bloomberg News*, October 28, 2011. <http://www.bloomberg.com/news/2011-10-28/volcker-rule-to-cost-banks-1b-u-s-government.html>.
- Canada MSN Money. "Will Wal-Mart's Banking Push into Canada Succeed?" June 6, 2010. <http://www.everydaymoney.ca/2010/06/walmart-makes-banking-push-into-canada.html>.
- China Banking Regulatory Commission. *Annual Report 2010*, n.d. (accessed February 29, 2012). <http://www.cbrc.gov.cn/EngdocView.do?docID=20110419222D1DDDE39BE80AFFEB3FF789309200>.
- Economist Intelligence Unit (EIU). *Country Finance: China*. New York: Economist Intelligence Unit, August 2011.
- . *Country Finance: United States of America*. New York: Economist Intelligence Unit, November 2011.
- . "World Banks: A Historic Divide." New York: Economist Intelligence Unit, October 15, 2011.
- Federal Deposit Insurance Corporation. "Bank Failures in Brief," 2010. <http://www.fdic.gov/bank/historical/bank/2011/index.html>.
- . 2011. <http://www.fdic.gov/bank/historical/bank/2010/index.html>.
- Felsted, Andrea. "Retailers: Trust the Stores to Get Into Banking." *Financial Times*, April 28, 2010. <http://www.ft.com/intl/cms/s/0/27e33e38-50ca-11df-bc86-00144feab49a.html#axzz1pla8w1f1>.
- IBISWorld. "Global Commercial Banks." *IBISWorld Industry Report*, May 16, 2011.
- International Monetary Fund (IMF). *World Economic Outlook*, April 2011. <http://www.imf.org/external/pubs/ft/weo/2011/01/pdf/text.pdf>.
- Mergent. *North America: Banking Sectors*, April 2011.
- Office of the U.S. Trade Representative (USTR). *2011 National Trade Estimate on Foreign Trade Barriers*. Washington, DC: Office of the United States Trade Representative, 2011. <http://www.ustr.gov/about-us/press-office/reports-and-publications/2012-1>.
- Reserve Bank of India. "Branch Banking Statistics." March 2009 (accessed April 12, 2012). <http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Branch%20Banking%20Statistics>.
- Standard & Poor's. *Industry Surveys: Banking*, June 23, 2011.

U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). *Survey of Current Business*, October 2011.

http://www.bea.gov/scb/pdf/2011/10%20October/1011_services%20text.pdf.

———. October 2010. http://www.bea.gov/scb/pdf/2010/10%20October/1010_services.pdf.

———. October 2009. http://www.bea.gov/scb/pdf/2009/10%20October/1009_services_text.pdf.

USTR, *see* Office of the U.S. Trade Representative.

Wal-Mart. “Banco Walmart Opens Its 1 Millionth Account.” Press release, March 15, 2011.

<http://walmartstores.com/pressroom/news/10569.aspx>.

CHAPTER 4

Insurance Services

Summary

The United States is the world's largest insurance market, accounting for almost 27 percent of global insurance premiums. However, U.S. insurance premiums grew at a CAGR of only 0.4 percent from 2005 to 2010, more slowly than premiums in any other top 10 market. A number of factors affect supply and demand for insurance services, such as changes in personal income, investment returns, demographic trends, natural disasters, and government regulation. In recent years, the financial downturn has led to lower demand for life insurance and other non-mandatory insurance products, as well as weak investment returns, decreased willingness to hire or expand operations, and the continuance of low premium rates in the property and casualty segment. Although increasing economic stability and rising interest rates could lead to growth in industry revenues, economic conditions will likely continue to depress investment income and insurance demand in the near term. Additionally, insurers may confront significant compliance costs related to new regulations.

U.S. affiliate sales of insurance services far exceed cross-border exports of such services, and while the United States continues to run a deficit in cross-border trade in insurance services, insurance services provided by the affiliates of U.S. firms in overseas markets exceeded such services supplied by foreign-owned U.S. affiliates by a widening margin. However, a variety of provisions hamper U.S. insurers' ability to participate in foreign markets, such as discriminatory regulation, local partnership requirements, and foreign equity caps. Although recently signed free trade agreements have provisions that may facilitate the operations of U.S. insurance firms in certain countries, there has been little significant liberalization of measures affecting the foreign provision of insurance services in recent years.

Introduction

The insurance industry is a critical component of the global economy, in terms of both its size and its contribution to economic growth and development.¹ The industry underwrites financial risk for life and nonlife (property/casualty) products, and provides many specialty products. The latter include reinsurance (the transferring of risk between insurance companies), marine and transportation insurance (for goods in transit, hulls, aviation, and offshore oil rigs), and brokerage services (the packaging of policies from several underwriters to cover a given risk).

Such activities encourage economic activity by mitigating the potential risks of project failure, lessen social threats by offering discounts for low-risk behavior,² and increase the overall volume of investable funds by pooling the premiums of many smaller

¹ For more information on the relationship between insurance services and development see, for example, UNCTAD, "Trade and Development Aspects of Insurance Services," November 21, 2005. See also USITC, *Property and Casualty Insurance Services*, March 2009.

² Brainard, "What Is the Role of Insurance?" January 1, 2008.

investors.³ Insurance firms' revenues are largely a product of collected premiums and investment income, less claims paid to policyholders.

Competitive Conditions in the Global Insurance Services Market

From 2009 to 2010, global insurance premiums grew by 5.6 percent to \$4.3 trillion, slightly faster than the CAGR of 4.5 percent recorded during 2005 to 2009.⁴ Accelerated growth was principally driven by the life insurance segment of the industry, which accounted for the largest and fastest-growing share of global premiums during 2009 to 2010. Specifically, life insurance premiums grew by 6.4 percent to reach \$2.5 trillion, while nonlife premiums grew by 4.4 percent to \$1.8 trillion.

While 9 of the world's top 10 insurance markets are high-income countries, several middle-income countries account for significant and rapidly growing shares of the global insurance market. The United States is, by far, the world's largest insurance market, having accounted for \$1.2 trillion, or almost 27 percent, of global insurance premiums in 2010 (table 4.1). However, U.S. insurance premiums grew at a CAGR of only 0.4 percent from 2005 to 2010, more slowly than premiums in any other top-10 market. By contrast, China—the only middle-income country among the world's top 10 insurance markets—recorded premium growth of 29.0 percent per year, much higher than the 0.4–9.7 percent growth rates posted in other top 10 insurance markets. Annual premiums have also grown rapidly in several other large middle-income countries during the period, including India (25.6 percent), Brazil (21.8 percent), Russia (18.9 percent) (box 4.1), and South Africa (9.9 percent).⁵

TABLE 4.1 Insurance services: Top 10 insurance markets, by total premiums, 2005–10

Rank	Country	2005	2006	2007	2008	2009	2010	CAGR, ^a
								2005–10
Million \$								
1	United States	1,142,912	1,170,101	1,229,668	1,240,643	1,149,758	1,166,142	0.4
2	Japan	476,481	362,766	424,832	473,197	518,070	557,439	3.2
3	United Kingdom	300,241	311,691	463,686	450,152	312,165	310,022	0.6
4	France	222,220	177,902	268,900	273,007	283,070	280,082	4.7
5	Germany	197,251	94,911	222,825	243,085	239,941	239,817	4.0
6	China	60,131	45,092	92,487	140,818	163,046	214,626	29.0
7	Italy	139,194	89,576	142,328	140,689	169,360	174,347	4.6
8	Canada	78,723	39,212	100,398	105,174	98,496	115,521	8.0
9	South Korea	82,933	72,298	116,990	97,023	96,676	114,422	6.6
10	Netherlands	61,073	62,669	102,831	112,611	108,144	97,057	9.7

Source: III, *Fact Book*, various issues, 2007–2012.

^aCompound annual growth rate.

³ Dickinson, “Encouraging a Dynamic Life Insurance Industry,” n.d. (accessed January 26, 2010).

⁴ USITC staff calculations, based on data published by the Insurance Information Institute (III).

⁵ *Ibid.*

BOX 4.1 The Russian insurance market

Rising demand in an unsaturated market, together with recent insurance sector liberalization, would seem to make Russia particularly attractive to foreign insurance firms looking to expand their operations. However, measures limiting market access, as well as other factors that affect overall market development, continue to limit and discourage foreign participation in Russia's insurance market.

Russia is the 19th-largest insurance market in the world, with total premiums of \$41.6 billion in 2010. From 2005 to 2010, total insurance premiums in Russia increased at an average annual rate of almost 19 percent—much faster than the 5 percent growth rates posted for global insurance premiums and only slightly slower than the 21 to 29 percent growth rates posted for other BRIC countries.^a In addition, growth in Russian insurance premiums reportedly has recovered quickly following the global economic downturn. However, despite rapid growth, Russia accounted for less than 1 percent of global insurance premiums in 2010, and per capita spending on private insurance stands at only \$62 per year.^b The Russian insurance market remains underdeveloped due, in part, to its relatively recent emergence,^c consumer distrust of insurers stemming from scandals and poor service quality, and a long-standing perception of insurance as a tax-like fee on private property.^d Demand for life insurance is particularly low, accounting for only about 2 percent of total Russian insurance premiums in 2010. This is likely because banks currently offer more secure savings vehicles than insurers, and because life insurance—unlike certain types of nonlife insurance—is not required by law. Sustained high inflation has also had a negative effect on the returns of life insurance investments.^e

Although liberalization and market reforms have facilitated foreign participation, only a small number of foreign firms operate in the Russian insurance market.^f These include U.S. firm AIG (a leading participant in Russia's small life insurance market), French firm AXA (which provides property and casualty insurance through its 37 percent stake in Reso-Garantia), and German firm Allianz (which provides life and property and casualty insurance through its holdings in six Russian insurance firms), among others. As part of its scheduled accession to the WTO, Russia liberalized or eliminated several measures that had barred foreign insurers from providing certain types of insurance, such as compulsory medical insurance and life insurance. Further, a substantial increase in the Russian insurance sector's statutory capital requirements—which took effect on January 1, 2012—may force many domestic insurers out of business, to the benefit of foreign insurance providers.^g However, foreign insurers continue to face several obstacles in Russia. Foreign investment in a Russian insurance firm requires the approval of the regulator (the Federal Financial Markets Service); overall foreign equity in the industry is limited to 25 percent; and firms may enter the market only through an EU-based establishment.^h Factors such as fraud, sharp rate decreases,ⁱ continued low demand, and the lack of a strong rule of law may also explain foreign insurers' minimal participation in the Russian market.^j

^a USITC staff calculations, based on data published by the Insurance Information Institute (III).

^b Koshik, "Russian Insurance Market," December 2, 2011.

^c Koshik, "Russian Insurance Market," December 2, 2011.

^d Datamonitor, "Non-Life Insurance in Russia," September 2011, 14; Nikishenkov, "Insuring Russia," February 6, 2012.

^e Koshik, "Russian Insurance Market," December 2, 2011.

^f Top domestic insurance providers in Russia include Sogaz Insurance Group, Ingosstrakh Insurance Company, and Rosgosstrakh, among others. Datamonitor, "Insurance in Russia," September 2011, 20, 23, 24.

^g EIU, *Country Commerce: Russia*, November 2011, 21; and SwissLife, *Russia*, 4.

^h EIU, *Country Commerce: Russia*, November 2011, 20–21.

ⁱ Specifically, certain corporate insurance rates have decreased substantially in recent years, with some Russian insurance firms reportedly sustaining losses in order to gain market advantage. *Russia Briefing*, "Foreign Capital Raises Its Share," February 18, 2011.

^j Koshik, "Russian Insurance Market," December 2, 2011; *Russia Briefing*, "Foreign Capital Raises Its Share," February 18, 2011; industry representative, telephone interview by USITC staff, March 1, 2012.

The world's leading providers of insurance changed little in recent years, as the same companies ranked among the world's top 10 insurance firms in both 2009 and 2010, and seven firms have numbered among the top 10 in most years since 2005 (table 4.2).⁶ Japan Post Holdings—which provides life insurance coverage through its wholly owned subsidiary Japan Post Insurance—was the world's top insurance firm in 2010, with revenues of \$204 billion. The firm has been the world's top insurance provider since 2008, following its privatization in 2005 and its establishment as a distinct subsidiary of Japan Post Holdings in 2006. The Japanese government remains the sole owner of Japan Post Insurance, as plans for an initial public offering were stopped in 2010. However, while this firm dominates the Japanese insurance market, it is unlikely that it significantly influences competition outside its home market, as its business operations are limited to Japan.

TABLE 4.2 Insurance services: Top 10 global insurance companies, by revenue, 2010^a

Rank	Company	Country	Revenues ^b (million \$)	Industry
1	Japan Post Holdings	Japan	203,958	Life/health
2	AXA	France	162,236	Life/health
3	Berkshire Hathaway	U.S.	134,185	Property/casualty
4	Allianz	Germany	127,379	Property/casualty
5	Assicurazioni Generali	Italy	120,234	Life/health
6	American International Group	U.S.	104,417	Property/casualty
7	Aviva	UK	90,211	Life/health
8	Nippon Life Insurance	Japan	78,571	Life/health
9	Munich Re Group	Germany	76,220	Property/casualty
10	Prudential	UK	73,598	Life/health

Source: Insurance Information Institute, World Rankings, 2012.

^aBased on an analysis of companies in the Global Fortune 500. Includes stock and mutual companies.

^bRevenues include premium and annuity income, investment income, and capital gains or losses, but excludes deposits; includes consolidated subsidiaries, but excludes excise taxes.

Two U.S. firms, Berkshire Hathaway and American International Group (AIG), ranked among the top 10 insurance firms in terms of global revenues in 2010. Berkshire Hathaway (which owns GEICO and General Re, among other insurance holdings) consistently ranked among the world's top 10 insurers between 2005 and 2010, and was the world's top property and casualty insurance firm in 2010. AIG, which was the world's sixth largest insurer in 2010, ranked among the top 10 in every year during the period except 2008. (Between FY2007 and FY2008, the company's revenues fell from \$110.1 billion to \$34.9 billion, and the U.S. government extended an \$85 billion line of credit to AIG in exchange for a 79.9 percent company share in an effort to prevent the firm's failure.⁷) Two other U.S. firms—State Farm Insurance Cos. and Liberty Mutual

⁶ AIG, Allianz, Assicurazioni Generali, AXA, Berkshire Hathaway, Munich Re, and Prudential ranked among the world's top 10 insurance firms in at least four of the six years from 2005 through 2010, and four of these firms (Allianz, Assicurazioni Generali, AXA, and Berkshire Hathaway) were among the top 10 in each of these years.

⁷ Luhby, "Fed in AIG Rescue: \$85B Loan," September 17, 2008; Nasdaq, "American International Group, Inc. (AIG) Revenue & Earnings Per Share (EPS)," n.d. (accessed April 19, 2012).

Insurance Group—ranked among the world’s top 10 property and casualty insurers in 2010. No U.S. firms ranked among the world’s top 10 life insurance firms; U.S.-based MetLife was among the top 10 from 2005 to 2008, but fell out of this group when its revenues fell 25 percent in 2009.⁸

Merger and acquisition (M&A) activity increased in 2010, as firms attempted to gain market share in emerging markets, strengthen their presence in established markets, and supply new and higher-quality services to customers. Many of the high-value deals announced during 2010 involved buyers and target firms based in developed countries.⁹ However, expansion into Middle Eastern, Latin American, and Asian countries reportedly also increased, due to these markets’ relatively quick recovery from the global economic downturn and slow growth in mature markets.¹⁰ Examples of such deals include Sampo Japan Insurance Inc.’s acquisition of a majority stake in the Turkish firm Fiba Sigorta AS in 2010 (valued at \$337 million), and Japanese firm Mitsui Sumitomo Insurance Co.’s acquisition of a minority stake in the Takaful¹¹ business of Malaysia-based Hong Leong Assurance BHD in 2011.¹² Agents, brokers, and other distribution firms accounted for 350 of the 721 M&A deals announced in 2010, while in terms of value, life insurance firms accounted for more than half of M&A activity in that year.¹³

Demand and Supply Factors

Economic and Demographic Trends Affect the Composition of Insurance Demand

Several factors shape insurance demand. Because life insurance products tend to be similar, demand for the product offerings of particular firms is often based on price, service quality, and brand awareness.¹⁴ Demand for life insurance also can be affected by

⁸ CNNMoney.com, “Fortune 500 2010,” n.d. (accessed January 30, 2012). The decrease in MetLife’s 2009 overall revenues was largely due to a \$5.1 billion loss in investment revenue, which, in turn, was principally a product of a \$3.2 billion loss in derivatives, which the firm used to mitigate risks such as currency and interest rate fluctuations. MetLife’s revenues recovered in 2010 due, in part, to the firm’s acquisition of American Life Insurance Company (Alico) from AIG in 2010, which expanded MetLife’s global presence, particularly in Japan. MetLife, “MetLife Announces Fourth Quarter and Full Year 2009 Results,” February 2, 2010; MetLife, “MetLife Announces Fourth Quarter and Full Year 2010 Results,” February 9, 2011, 4.

⁹ These include MetLife’s acquisition of Alico (valued at \$16.2 billion), Australian-firm AMP Ltd.’s acquisition of Australia-based AXA Asia Pacific Holdings Ltd. (\$12.8 billion), U.S.-firm Aon Corp.’s acquisition of U.S. firm Hewitt Associates, Inc. (\$4.9 billion), and U.S.-firm Prudential Financial, Inc.’s acquisitions of Japan-based AIG Star Life Insurance Co. Ltd. and AIG Edison Life Insurance Co. (\$4.8 billion), among others. III, *The Insurance Fact Book 2012*, 2012, 20.

¹⁰ Freemantle, “The Insurance Industry,” December 22, 2010.

¹¹ Takaful insurance products are designed to comply with sharia law by employing a pooling system in which risks are shared among customers. By contrast, traditional insurance products enable customers to transfer risk to an insurance firm, and as such may conflict with sharia prohibitions against gambling and interest earnings. Investopedia, “Takaful” (accessed April 11, 2012); Bhatti, “The Growing Importance of Takaful Insurance,” September 23, 2011, 2.

¹² Bureau van Dijk, ORBIS Companies database; EIU, “Malaysia Insurers,” April 18, 2011; NKSJ Holdings, “Acquisition of Shares in Turkish Non-Life Insurance Company,” June 15, 2010.

¹³ III, *The Insurance Fact Book 2012*, 2012, 20.

¹⁴ IBISWorld, “Life Insurance & Annuities in the US,” July 2011, 25.

the investment performance of these products as compared to other savings vehicles.¹⁵ One recent study suggests that demand for nonlife insurance coverage may be affected by cultural differences between countries, such as the extent of perceived economic and political inequality, individualism, tolerance for uncertainty, and predominant religious beliefs.¹⁶

Property and casualty insurance—particularly auto, property, and business insurance—is often required by law or deemed necessary by policyholders. Demand for many types of property and casualty insurance is therefore typically steady, with policy renewals accounting for the vast majority of increases in insurance exposure in these business segments. However, price considerations can lead consumers to increase or decrease coverage levels or deductibles, and factors that affect consumer perceptions of risk, such as severe weather events, may raise demand for certain types of insurance.¹⁷

In recent years, decreases in personal income following the financial crisis have significantly reduced demand for certain types of insurance. High unemployment and a struggling housing market have lessened consumers' ability or willingness to buy insurance coverage, particularly life insurance, annuities, and other nonmandatory insurance products.¹⁸ For example, sales of individual life insurance products fell 15 percent in 2009. While such sales rebounded the following year, growing by 4 percent, average policy face values¹⁹ fell 4 percent from 2009 levels as customer willingness to spend large sums on individual policies remained low.²⁰ Job losses have also limited the volume of life insurance and other coverage that is distributed through the workplace.²¹ By contrast, continued economic uncertainty has increased demand for products such as credit insurance, which protects businesses against customer default.²²

Demographic trends, particularly population aging and relatively low marriage rates, have cut into the demand for certain types of insurance coverage, particularly in the life insurance segment of the industry. Longer lifespans and declining marriage rates and birthrates have all led insurers to decrease their traditional emphasis on products that pay survivor benefits and focus more on retirement products.²³ For example, among individuals in their 20s and 30s (Generation Y), a weak economy has reportedly contributed to historically low marriage rates, and these factors have made traditional life insurance products both less affordable and less necessary.²⁴ Hence the marketing of life insurance products to younger consumers often stresses relatively low-cost term

¹⁵ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 18. For example, permanent life insurance policies—such as whole life and variable life policies—include an account on which policyholders may earn interest or dividends, and annuities, which earn interest and provide customers with a guaranteed income. III Web site, <http://www.iii.org/articles/what-are-different-types-permanent-policies.html> (accessed February 28, 2012); III Web site, <http://www.iii.org/articles/what-is-an-annuity.html> (accessed February 28, 2012).

¹⁶ Sojung and Lemaire, "The Impact of Culture on the Demand for Non-Life Insurance," 2011.

¹⁷ IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 17–18.

¹⁸ Deloitte, "2012 Global Insurance Outlook," n.d., 12 (accessed January 25, 2012); Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 10–12; IBISWorld, "Life Insurance & Annuities in the US," July 2011, 18; IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 18.

¹⁹ "Face value" refers to the amount of coverage that an insurance policy provides, while "cash surrender value" is the amount that an insured will receive upon surrendering or canceling the policy. IRMI Web site, <http://www.irmi.com/online/insurance-glossary/default.aspx> (accessed March 1, 2012).

²⁰ Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 10–12.

²¹ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 18.

²² Hawthorne, "Demand for Credit Insurance Product Grows," July 5, 2011.

²³ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 18.

²⁴ Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 4.

coverage.²⁵ At the same time, demand for annuities and other products that contribute to retirement savings has risen among older consumers.²⁶ These trends have led insurers to increase their focus on retirement-planning products and develop new investment vehicles for the baby boom generation, such as products that offer lifetime income guarantees.²⁷ The aging of the population may also increase demand for property and casualty insurance, as disposable income and holdings of insurable assets typically grow throughout an individual's lifetime,²⁸ and for long-term care policies.²⁹

Insurance supply is affected by overall economic conditions, regulatory change, the frequency of catastrophes, and changing business models

The weak economic climate has affected insurers' investment returns and employment levels which, in turn, have lessened firms' willingness to establish or expand operations.³⁰ In the property and casualty insurance industry, lower insurance demand, together with a surplus of underwriting capacity, has intensified competition and has compelled insurance firms to keep premium rates low, thus undermining industry revenues.³¹ By contrast, the life insurance market, excepting the group life segment, has become less price competitive in recent years, enabling firms to raise prices and restore capital holdings that were depleted as a result of defaults, credit downgrades, and other factors that marred insurer balance sheets during the financial crisis.³² Nonetheless, higher costs, increased risk, and the current lack of high-yield investment vehicles (which limits insurers' ability to offer products yielding high interest) have also led life insurers around the world to modify product lines or reduce new business in certain product segments, such as variable annuities,³³ and return their focus to non-variable wealth accumulation products.³⁴ In both the life and property and casualty segments of the industry, reduced interest rates, a high rate of delinquencies on debt instruments (such as loans), and other equity market factors have depressed investment income, which accounts for a significant share of industry revenues.³⁵

Changes in regulations and standards have a significant effect on insurers; as such changes may necessitate new business strategies, impact capital accumulation or product offerings, or involve other adjustment costs.³⁶ As noted in chapters 3 and 7, one of the most notable developments in recent years is the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank),³⁷ which was designed to reduce systemic risk in the financial sector. Although this law has begun to take effect, the extent of its

²⁵ Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 4.

²⁶ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 18.

²⁷ Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 4.

²⁸ IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 18.

²⁹ III, "Long-Term Care Insurance," n.d. (accessed January 25, 2012).

³⁰ Deloitte, "2012 Global Insurance Outlook," n.d., 12 (accessed January 25, 2012).

³¹ Ernst & Young, "U.S. Property/Casualty Insurance Industry," January 2011, 2; Standard & Poor's, *Industry Surveys: Insurance: Property-Casualty*, September 22, 2011, 8–9.

³² Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 19–20.

³³ Variable annuities offer policyholders a guaranteed minimum return regardless of market performance. Since the 2008 market downturn, many insurance firms have raised variable annuity prices, lowered benefits, or stopped providing such products. Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 20.

³⁴ Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 20; industry representative, telephone interview by USITC staff, March 1, 2012.

³⁵ For example, investment income accounts for approximately 28 percent of life insurers' revenues. IBISWorld, "Life Insurance & Annuities in the US," July 2011, 7.

³⁶ Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 2.

³⁷ Public Law 111-203, 124 Stat. 1375, approved July 21, 2010.

impact on insurers remains unclear.³⁸ Other changes that are expected to affect insurance firms' operations in the near future include revised accounting standards, a National Association of Insurance Commissioners (NAIC) initiative on reserves, and Europe's Solvency II guidelines.³⁹

Property and casualty insurers' ability to supply affordable coverage is heavily influenced by natural and manmade disasters, as actual and potential losses from such events have a substantial impact on insurers' capital stock, insurers' willingness to provide coverage in certain locations, and the price of such coverage. Global insurance losses from natural and manmade disasters were \$43 billion in 2010, higher than losses in the previous year (\$27 billion), but in line with average annual losses during the preceding 10 years.⁴⁰ However, growing asset values and urban and coastal population densities have contributed to an upward trend in insured losses.⁴¹ Earthquakes, for example, have accounted for a large and growing share of insured losses⁴² as urban population growth has increased the assets and the number of people that can be affected by a single event.⁴³ One industry representative argues that globalization has contributed to the growth in catastrophe-related insurance losses, as insurers' international business increasingly extends to markets where they are less familiar with catastrophe risks.⁴⁴ In response to the increase in losses from natural and manmade disasters, credit-rating agencies have compelled insurers to increase their surplus holdings, which provide a cushion against losses, but may impair their ability to write policies.⁴⁵

In addition, changes in business models, customer buying patterns, and technology have affected the way insurance is supplied. A growing share of insurance is sold by banks and brokerages, which leverage the efficiency and reach of their distribution networks.⁴⁶ The workplace has become an increasingly important venue for the sale of a wide range of insurance products, such as dental, auto, and homeowners' insurance, among others. This arrangement benefits insurer firms (due to economies of scale and access to a relatively young and healthy client base), employers (which may be perceived as providing enhanced employee benefits), and consumers (who may prefer the convenience or perceived security associated with purchasing insurance at work).⁴⁷ One firm sells insurance through auto dealerships, bundling coverage in a vehicle's overall purchase price.⁴⁸ In addition, insurers are using Internet sites and other technologies to increase the speed and efficiency of business transactions.⁴⁹

³⁸ The possible implications of the Dodd-Frank Act are discussed in more detail in the "Outlook" section of this chapter, and additional details of the Act are provided in box 7.1.

³⁹ These regulatory guidelines are described in the "Outlook" section of this chapter.

⁴⁰ Swiss Re, "Natural Catastrophes and Man-Made Disasters in 2010," 2011, 1; III, "Catastrophes: Global," n.d. (accessed January 26, 2012).

⁴¹ IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 12.

⁴² In 2010, about 30 percent of catastrophe-related insurance losses were the result of earthquakes. Swiss Re, "Natural Catastrophes and Man-Made Disasters in 2010," 2011, 1, 14.

⁴³ Swiss Re, "Natural Catastrophes and Man-Made Disasters in 2010," 2011, 1.

⁴⁴ Ladbury, "New Approach Needed to Cope with the Global Economy," February 13, 2012.

⁴⁵ IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 12.

⁴⁶ Financial services firms outside of the insurance industry have been permitted to supply insurance since the Glass-Steagall Act was revoked in 1999. Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 17.

⁴⁷ Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 17.

⁴⁸ This program's compliance with insurance regulations has been questioned. Deloitte, "2012 Global Insurance Outlook," n.d., 12 (accessed January 25, 2012).

⁴⁹ Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 3.

Insurance firms are also developing new products for emerging niche markets, as well as redesigning existing lines to distinguish their product offerings. For example, insurers are beginning to offer policies that address new concerns, such as green building,⁵⁰ decreasing home values, cyber-liability, and nanotechnology, among others. Some auto insurance providers offer cheaper insurance rates to drivers that allow companies to monitor their driving habits electronically.⁵¹ For example, customers that opt for the Progressive Snapshot program (offered in 20 states) or the Allstate Drive Wise program (offered in Illinois) can qualify for discounts as high as 30 percent based on their speed, braking, and mileage patterns.⁵² Similarly, State Farm is expanding its Drive Safe & Save program (offered in eight states) to provide discounts based on a growing number of driver behaviors.⁵³

Trade Trends

Cross-border Trade

The United States continues to have a significant trade deficit in insurance services, although it shrank slightly between 2009 and 2010 due to a small decrease in U.S. imports of such services (box 4.2). In 2010, U.S. exports of insurance services totaled \$14.6 billion while imports stood at \$61.8 billion, resulting in a trade deficit of \$47.2 billion (figure 4.1). U.S. exports of insurance services rose by 1.2 percent from 2009 to 2010, much slower than the CAGR of 17.5 percent posted during 2005–09. By comparison, U.S. insurance services imports fell by 2.9 percent from 2009 to 2010, following a CAGR of 22.0 percent between 2005 and 2009. This decrease in imports is largely due to a decline in U.S. premium payments to foreign reinsurers. One source reports that several factors, such as high levels of surplus capital and relatively low insurance losses, led to a decline in renewal rates for reinsurance policies in 2010.⁵⁴

⁵⁰ “Green building” means carrying out activities integral to a structure’s life cycle (including construction, deconstruction, maintenance, and design, among others) in an environmentally friendly and resource-conscious way. EPA, “Green Building: Basic Information,” December 22, 2010 (accessed April 13, 2012). Standard building insurance does not always cover risks specifically associated with green building. For example, green building insurance may cover the cost of renovating a building to meet changing green certification standards (which can determine eligibility for tax incentives or reduced loan rates).

⁵¹ Deloitte, “2012 Global Insurance Outlook,” n.d., 12 (accessed January 25, 2012).

⁵² CarInsuranceList.com, “Save Money with Driver Monitoring Programs,” January 12, 2011.

⁵³ The Drive Safe & Save program, which was originally based on mileage, has begun to monitor and base discounts on additional behaviors such as braking, speed, and acceleration, among others. As of January 2012, the expanded program was available only in Illinois. State Farm Web site, http://www.statefarm.com/insurance/auto_insurance/drive-safe-save/drive-safe-save.asp (accessed January 25, 2012); Meier, “Let State Farm Spy on Your Driving,” August 7, 2011.

⁵⁴ GCCapitalIdeas.com, “Global Reinsurance Outlook,” December 30, 2010.

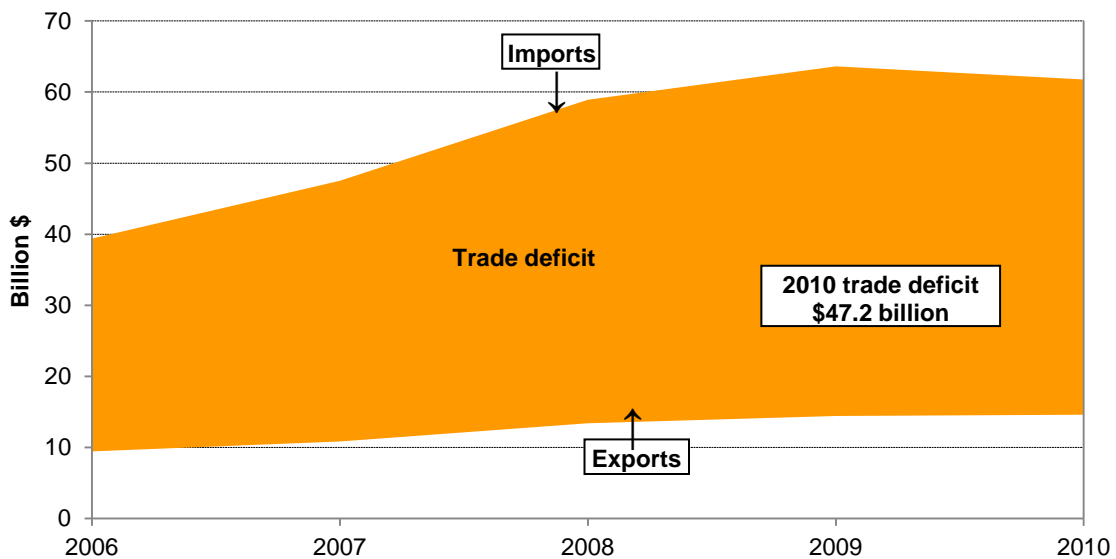
BOX 4.2 Understanding BEA data on cross-border trade and affiliate transactions in insurance services

The BEA publishes discrete cross-border trade data for “primary and other insurance” (principally life and property/casualty insurance) and reinsurance.^a BEA data on cross-border trade in insurance services are the sum of premium income (adjusted for “normal” losses), investment income, and auxiliary services. BEA estimates of “normal” losses—which are subtracted from total premiums—are derived by averaging the difference between total premiums and losses over a certain period of years.^b These data also incorporate an estimate of the investment income that insurance firms derive from their technical reserves (insurance premium supplements).^c Auxiliary services include earnings from the provision of actuarial, agency and brokerage, claims adjustment, and salvage administration services, as well as agents’ commissions.^d

In 2008, the BEA changed the way it calculates affiliate transactions in insurance services. Beginning with data for the year 2004, the BEA revised its estimates of affiliate transactions in the insurance industry to reflect “services supplied through affiliates” rather than “sales of services,” creating a new measure that is more similar to output than sales value. Much like cross-border trade data for this industry, affiliate transactions data derived using this approach reflect sales (adjusted by “normal” losses) and incorporate premium supplements.^e

^a USDOC, BEA, *Survey of Current Business*, October 2007, 130–32.
^b USDOC, BEA, *Survey of Current Business*, October 2007, 99.
^c USDOC, BEA, “Catalog of Major Revisions,” June 3, 2009.
^d USDOC, BEA, *Survey of Current Business*, October 2007, 99.
^e USDOC, BEA, *Survey of Current Business*, October 2008, 18–19, 34–35.

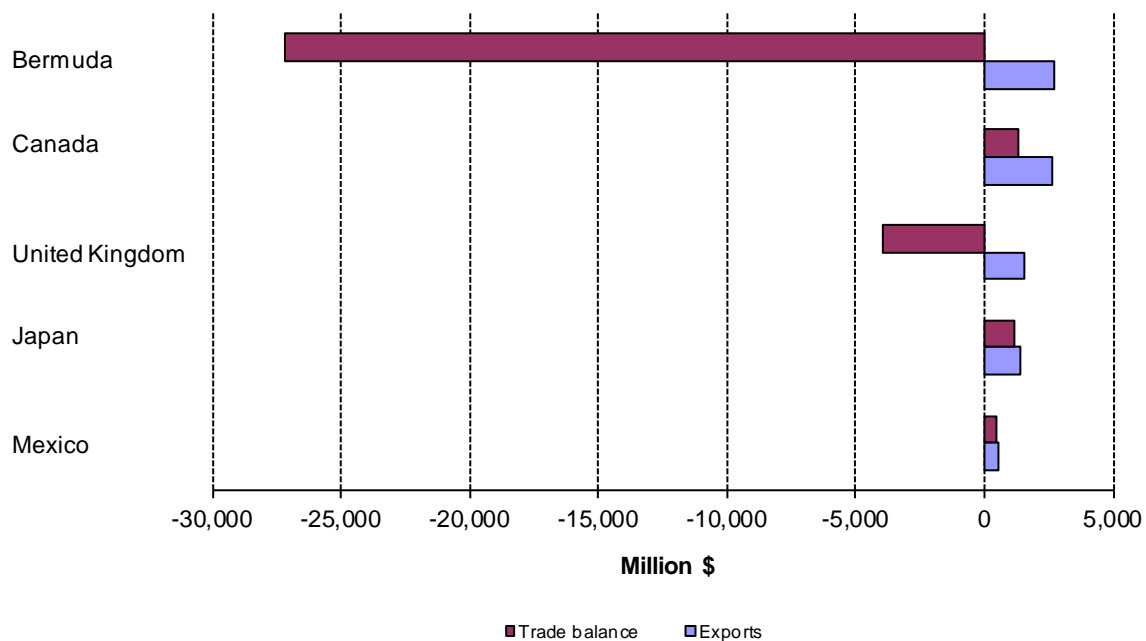
FIGURE 4.1 Insurance services: U.S. cross-border trade in private-sector services resulted in a U.S. trade deficit each year during 2006–10



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 32–33, table 1.

In 2010, Bermuda was the United States' top export market for insurance services, accounting for \$2.7 billion, or 18.7 percent, of such exports and surpassing Canada, which was the United States' top export market from 2006 to 2009 (figure 4.2).⁵⁵ This may be due, in part, to U.S. exports of corporate-related insurance to Bermuda; unlike exports to other markets, these exports remained strong during the global economic downturn.⁵⁶ Canada fell to second place with 17.9 percent of U.S. insurance services exports in 2010, while the United Kingdom and Japan ranked third and fourth respectively, accounting for 10.7 and 9.6 percent of such exports (figure 4.3). All three of these countries also ranked among the top four markets for such exports throughout 2005–09. Mexico, which accounted for almost 4 percent of exports in 2010, became the fifth-largest market for U.S. insurance services exports in that year due to a 32 percent average annual decline in exports to Switzerland between 2008 and 2010. This decrease affected exports of both insurance and reinsurance, and may be attributable to the economic downturn and the acquisition of U.S. firm 21st Century by Swiss-owned Zurich Financial Services in 2009 (which impacted the volume of cross-border insurance services transactions between the two countries), among other factors.

FIGURE 4.2 Insurance services: U.S. cross-border insurance trade yielded significant deficits with Bermuda and the United Kingdom in 2010

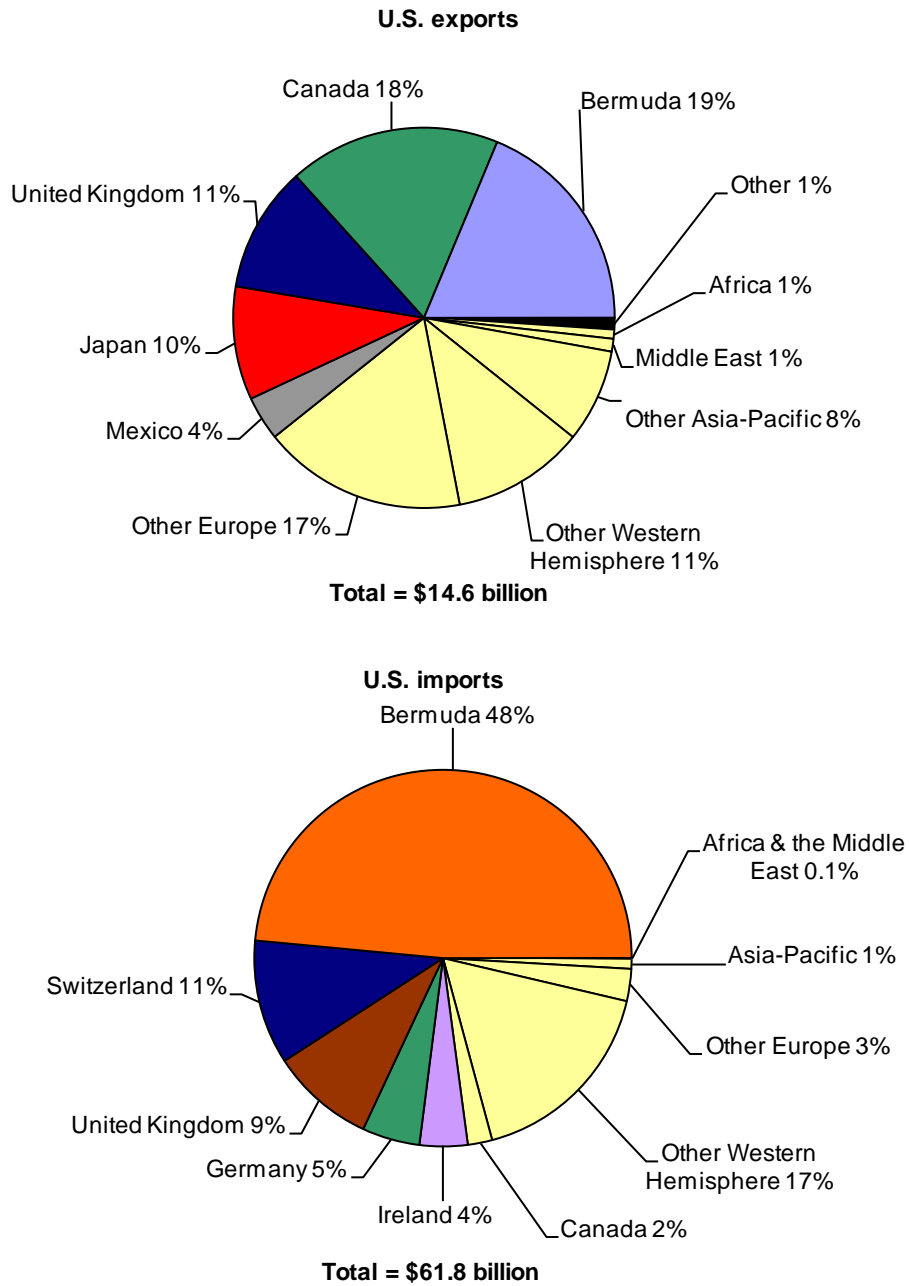


Source: USDOC, BEA, *Survey of Current Business*, table 5.2, October 2011, 44–45.

⁵⁵ A large volume of insurance business is conducted in Bermuda due to that country's accommodating regulatory structure, lack of income tax, stable monetary and political environments, well-developed infrastructure, and educated labor force, among other factors. Cummins, "The Bermuda Insurance Market," May 6, 2008, 1.

⁵⁶ Ludolph, "U.S.-Bermuda Economic Relations: Economic Impact Study, 2010," September 2011, 8.

FIGURE 4.3 Insurance services: Bermuda and Canada were the top markets for U.S. exports, while Bermuda supplied the most insurance services imports in 2010



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 44–45, table 5.2.

Note: Geographic regions are shaded in yellow. Figures may not total 100 percent due to rounding.

In 2010, the top five source countries for U.S. imports of insurance services were Bermuda (which accounted for 49 percent of U.S. insurance services imports in that year), Switzerland (11 percent), the United Kingdom (9 percent), Germany (5 percent), and Ireland (4 percent). The United States posted substantial insurance services deficits with each of these countries, principally due to U.S. reinsurance services imports from these markets. Reinsurance services accounted for more than 67 percent of insurance services imports from the United Kingdom, and over 93 percent of such imports from each of the other top-five source countries. These five countries are global leaders in the reinsurance segment. One reason is that 6 of the world's top 10 reinsurance firms are based in these markets, including Munich Re and Hanover Re (Germany), Swiss Re Group (Switzerland), Lloyd's of London (UK), and Partner Re Ltd. and Everest Re Group Ltd. (Bermuda). Further, Ireland's favorable tax environment, EU membership, proximity to London's financial markets, and large supply of experienced professional services providers have made that country a particularly welcoming market to reinsurers, and a large share of the world's top reinsurance providers have established operations in that country.⁵⁷

Affiliate Transactions

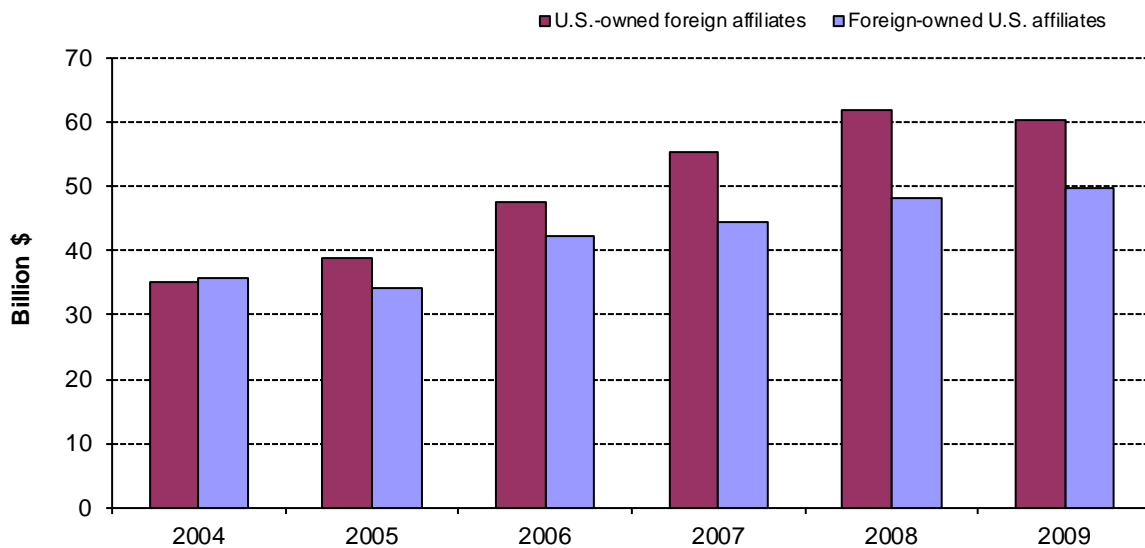
In the previous decade, services supplied by U.S.-owned foreign affiliates grew rapidly before registering a small decline due to the global economic downturn. From 2004 to 2008, insurance services supplied by U.S.-owned affiliates increased at a CAGR of 15 percent before decreasing by 2 percent during 2008–09, when they fell to \$60.4 billion (figure 4.4). Services supplied by foreign-owned U.S. affiliates posted relatively slower growth from 2004 to 2008, increasing at a CAGR of 8 percent per year. However, unlike U.S.-owned affiliate sales abroad, sales by foreign-owned affiliates in the United States continued to grow during 2008–09, increasing by 3 percent to \$49.9 billion. As a result of these trends, U.S.-owned foreign affiliates' sales surpassed services supplied by foreign-owned U.S. affiliates in 2005, and by a widening margin until 2009, before this margin decreased by over \$3 billion during 2009–10.

Japan was likely the top market for sales by U.S.-owned foreign insurance affiliates during the years under review. Although data on sales in Japan were suppressed in order to avoid disclosure of information on individual firms, Japan accounted for the largest share (21 percent) of services provided by U.S.-owned foreign affiliates in 2008. The United Kingdom, Canada, and Germany also accounted for substantial shares of U.S.-owned foreign affiliate sales, with 17 percent, 9 percent, and 3 percent, respectively, in 2009. Despite Japan's high share of U.S. foreign affiliate sales, it is unlikely that U.S. firms play a significant role in Japan's insurance market. Foreign participants account for a small share (approximately 6 percent) of the non-life segment of the Japanese insurance market,⁵⁸ and Japan's life insurance market is dominated by Japan Post Holdings.

⁵⁷ William Fry, "Reinsurance: Ireland," 2010; DIMA, "Ireland's International Re/Insurance Market Factsheet," 2010.

⁵⁸ Debari and Tan, "Foreign Insurance Companies in Japan?" June 13, 2011.

FIGURE 4.4 Insurance services: Services supplied by U.S.-owned foreign affiliates exceeded services supplied by foreign-owned U.S. affiliates beginning in 2005



Source: USDOC, BEA, *Survey of Current Business*, various issues.

By contrast, foreign firms are key market players in the UK insurance industry, with firms such as AXA (France), Zurich Insurance (Switzerland), and Allianz (Germany) accounting for substantial shares of the market. Although data are not available on U.S.-owned firms' overall share of the UK market, U.S.-firm AIG ranks among the United Kingdom's top 10 providers of property and casualty insurance, accounting for almost 2 percent of revenues in that market segment.⁵⁹

Available data indicate that Canada, Germany, and Switzerland accounted for substantial shares—18 percent, 15 percent, and 13 percent, respectively—of services supplied by foreign-owned U.S. affiliates in 2009.⁶⁰ It is likely that Canada's share of the U.S. insurance market has further increased due to the \$1.4 billion acquisition of U.S.-firm Zenith National Insurance Corp. by Canadian-owned Fairfax Financial Holdings Ltd. in May 2010.⁶¹

⁵⁹ IBISWorld, "General Insurance in the UK," March 2011, 19.

⁶⁰ Data for certain key markets were suppressed in order to avoid disclosure of information for specific firms. Most notably, BEA did not publish 2008 or 2009 data for France (which is home to AXA, the world's second-largest life insurance firm in 2010), or the Netherlands (which is home to Aegon, the world's seventh-largest life insurance firm). III, *The Insurance Fact Book 2012*, 2012, 5.

⁶¹ III, *The Insurance Fact Book 2012*, 2012, 20; Zenith, "Fairfax Receives Regulatory Approval for Acquisition of Zenith," May 19, 2010.

Nontariff Measures Affecting Trade

A variety of provisions limit U.S. insurers' ability to participate in foreign markets, particularly cumbersome regulations, local partnership requirements, and foreign equity caps. Although strong regulations are necessary for the efficient operation of the insurance industry, the recent financial crisis has been followed by a significant increase in both domestic and overseas regulation.⁶² Insurers are concerned that the large volume of new regulations may create high compliance costs and hinder trade. Additionally, the impact of regulation on competitiveness has become a top industry concern as liberalization has eliminated many market access and national treatment barriers.⁶³

Although markets are largely open, certain countries still maintain measures that apply specifically to foreign insurance suppliers, including limits on the size and form of a firm's market presence. India and China limit foreign equity in insurance firms to 26 and 50 percent, respectively. Several sources indicate that China maintains a number of measures that disadvantage foreign firms; for example, China applies different branching rules to foreign firms, and limits the types of investments in which foreign insurers can engage.⁶⁴ Several foreign firms have reportedly exited the Chinese market due to frustration with that country's bureaucratic obstacles.⁶⁵ Other barriers that insurers face in overseas markets include privacy measures that may affect the cross-border flow of customer data, market participation by state-owned insurance firms (such as the postal insurers in Japan and Korea), nationality requirements, provisions requiring insurers to place all or part of their reinsurance business with local firms, and prohibitions on participating in certain market segments.⁶⁶

During the past five years, there have been some efforts to liberalize measures affecting the foreign provision of insurance services. In February 2012, China announced that it will remove its restriction on foreign participation in the third-party liability auto market.⁶⁷ Additionally, recently enacted free trade agreements with Colombia, Korea, Panama, and members of the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) contain provisions that may make it easier for U.S. insurance firms to operate in these countries. For example, as a result of its commitments under CAFTA-DR, Costa Rica opened its insurance market in 2010 following 84 years of monopoly provision of such services.⁶⁸ At the same time, liberalization through the WTO has not progressed; in fact, a few countries have established measures that further restrict the foreign provision of insurance services. Notably, both Argentina and Brazil established measures in 2011 that prohibit firms established in those countries from

⁶² *Commercial Risk Europe*, "Global Programmes 2011," n.d. (accessed February 17, 2012); industry representative, telephone interview with USITC staff, February 16, 2012.

⁶³ Industry representative, telephone interview by USITC staff, February 16, 2012; industry representative, telephone interview by USITC staff, March 1, 2012.

⁶⁴ USTR, *2011 National Trade Estimate on Foreign Trade Barriers*, 2011, 73; industry representative, telephone interview by USITC staff, March 1, 2012.

⁶⁵ Industry representative, telephone interview by USITC staff, March 1, 2012.

⁶⁶ Industry representatives, telephone interview by USITC staff, February 13, 2012; industry representative, telephone interview by USITC staff, February 16, 2012; industry representative, telephone interview by USITC staff, March 1, 2012; USTR, *2011 National Trade Estimate on Foreign Trade Barriers*, 2011.

⁶⁷ Bull, "China Agrees to Open Up Auto Insurance Market," February 14, 2012.

⁶⁸ Industry representative, telephone interview by USITC staff, March 1, 2012; and USTR, *2012 National Trade Estimate*, 114.

reinsuring with overseas companies, and Argentina passed a resolution requiring insurance firms that operate in that country's market to repatriate overseas investments.⁶⁹

Outlook

The near-term outlook for the U.S. insurance industry is unclear, as persisting economic uncertainty, imminent regulatory changes, catastrophe trends, and increased consolidation may have a substantial—but unknown—effect on insurers. Low interest rates, equity market volatility, high unemployment, and other economic factors will likely continue to weigh down investment income, life insurance demand, and property and casualty insurance premiums through 2012.⁷⁰ If the economy continues to stabilize and interest rates rise, insurance revenues will likely grow during the next five years in both the life and the property and casualty segments of the industry. Higher employment would boost demand for commercial coverage, such as workers' compensation insurance, while a recovery in the housing market would increase demand for title insurance and benefit the investment income of U.S. life insurers, which typically maintain substantial holdings of mortgage-backed securities.⁷¹

Several significant and interrelated regulatory changes will likely present challenges to insurers in the next five years, as compliance with new regulations may entail significant costs, redirect management focus, and impair insurers' ability to operate in certain market segments.⁷² Dodd-Frank introduces federal regulation of insurance firms that are systemically important and that own thrifts or banks, and establishes the Federal Insurance Office (FIO) which will monitor and coordinate policy for the insurance industry and examine insurance-related issues.⁷³ Although Dodd-Frank was signed into law in 2010, the impact of FIO oversight remains unclear.⁷⁴ The FIO currently has a small staff, and its initial report on insurance law modernization was delayed past its January 21, 2012, deadline.⁷⁵ While Dodd-Frank could subject life insurers to new obligations—such as higher capital requirements, investment limitations, and greater prudential standards—the law is expected to have little effect on property and casualty insurers.⁷⁶

⁶⁹ Comité Européen des Assurances (CEA), "Insurers Highlight Danger of Brazilian Protectionism," January 1, 2012; Amaral, "Argentina Raises Trade Barriers and Forces Insurers to Repatriate Assets," November 4, 2011; Industry representatives, telephone interview by USITC staff, February 13, 2012; Industry representative, telephone interview by USITC staff, February 16, 2012; Industry representative, telephone interview by USITC staff, March 1, 2012.

⁷⁰ Ernst & Young, "U.S. Life Insurance Industry Outlook," December 2011, 1; Ernst & Young, "U.S. Property-Casualty Insurance Outlook," December 2011, 1.

⁷¹ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 10; IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 10.

⁷² Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 3.

⁷³ Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111-203 (July 21, 2010); Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 4–5; Ernst & Young, "U.S. Life Insurance Outlook," January 2011, 3.

⁷⁴ Ernst & Young, "U.S. Property-Casualty Insurance Outlook," December 2011, 2.

⁷⁵ At the time of writing, this report had not yet been released. U.S. Department of the Treasury, Web site, n.d. (accessed March 1, 2012); Ha, "Federal Insurance Office Says Overdue Regulation Report Still Weeks Away," February 2, 2012; industry representative, telephone interview by USITC staff, February 13, 2012.

⁷⁶ Standard & Poor's, *Industry Surveys: Insurance: Life & Health*, April 14, 2011, 4–5; Standard & Poor's, *Industry Surveys: Insurance: Property-Casualty*, September 22, 2011, 14.

The EU's Solvency II requirements, which are scheduled to take effect in 2013, are intended to guarantee that all insurers in the European market hold adequate capital reserves. These requirements will impose compliance costs on U.S. insurers with European operations,⁷⁷ and may affect insurers' pricing strategies and product offerings. Solvency II could also intensify competition in the global insurance market or alter the expectations of rating agencies as these standards become increasingly widespread in EU and non-EU markets.⁷⁸ These standards have already influenced the development of the NAIC revised guidelines on reserve requirements, which NAIC plans to complete in 2012.⁷⁹ Additionally, the International Accounting Standards Board and the Financial Accounting Standards Board are establishing new accounting standards that would alter the way insurance policies are valued and require greater transparency in insurers' financial statements. These changes may increase the complexity of insurers' financial statements—particularly among property and casualty insurers, for whom one-time events can have a major impact on financial results—and may impact the formation and cost of new products.⁸⁰

Catastrophes will continue to have a substantial but unpredictable impact on property and casualty insurers. Globally, insured losses from natural and manmade disasters increased from \$152 billion in 2010 to \$380 billion in 2011,⁸¹ and average yearly losses increased from \$75 billion during 1981–2010 to \$113 billion during 2001–10.⁸² The cost of such events is expected to grow as an increasing number of people live in disaster-prone areas.⁸³ Additionally, rising temperatures associated with climate change may raise flooding and wildfire risks in certain areas, increasing the risk of property loss.⁸⁴ At the same time, recent mitigation efforts may lessen the costs of future catastrophes. For example, some U.S. states have taken steps towards improving building standards, and demand for homes that have been strengthened against disasters has grown in the wake of Hurricane Katrina.⁸⁵

The industry also anticipates increases in both mergers and acquisitions and globalization. M&A activity is expected to increase moderately, particularly in overseas markets, as firms attempt to become more competitive by achieving greater economies of scale.⁸⁶ Such activity is often faster and less expensive than “organic” growth, and may be motivated by recent drops in the value of insurance company shares, which can

⁷⁷ Solvency II includes provisions for determining the equivalence of third-country regulatory regimes, thus harmonizing the treatment of insurers from particular countries across all EU member states. Lloyd's, “Solvency II Explained,” August 7, 2009, Web page, n.d. (accessed January 20, 2010); and Europa, “‘Solvency II:’ Frequently Asked Questions (FAQs),” press release, July 10, 2007, (accessed January 21, 2010).

⁷⁸ KPMG, “Solvency II,” July 2011, 1-2; Ernst & Young, “U.S. Life Insurance Outlook,” January 2011, 3.

⁷⁹ Ernst & Young, “U.S. Life Insurance Industry Outlook,” December 2011, 1; Ernst & Young, “U.S. Life Insurance Outlook,” January 2011, 3.

⁸⁰ III, “Accounting: International Standards and Solvency II,” n.d. (accessed February 6, 2012); Ernst & Young, “U.S. Life Insurance Outlook,” January 2011, 3.

⁸¹ The earthquake and subsequent tsunami that struck Japan in March 2011 accounted for \$210 billion, or about 55 percent, of overall global losses from natural and man-made losses in 2010. III, “Catastrophes: Global,” n.d. (accessed April 12, 2012).

⁸² III, “Catastrophes: Global,” n.d. (accessed January 26, 2012).

⁸³ III, “Catastrophes: Insurance Issues,” February 2012.

⁸⁴ III, “Climate Change: Insurance Issues,” October 2011.

⁸⁵ III, “Catastrophes: Insurance Issues,” February 2012; Swiss Re, “Natural Catastrophes and Man-Made Disasters in 2010,” 2011, 1.

⁸⁶ IBISWorld, “Life Insurance & Annuities in the US,” July 2011, 12; industry representative, e-mail message to USITC staff, February 17, 2012.

effectively reduce the price of acquisitions.⁸⁷ However, it is also possible that low share values will discourage M&A activity by decreasing the value of the assets available to purchasing firms.⁸⁸ Increasing globalization will likely be spurred by U.S. market saturation, new opportunities in emerging markets, and risk diversification efforts.⁸⁹

⁸⁷ Standard & Poor's, *U.S. Property/Casualty Insurance 2012 Outlook*, December 1, 2011; Deloitte, *2012 Global Insurance Outlook*, 2012, 6.

⁸⁸ Industry representative, e-mail message to USITC staff, February 17, 2012.

⁸⁹ IBISWorld, "Life Insurance & Annuities in the US," July 2011, 12; IBISWorld, "Property, Casualty, and Direct Insurance in the US," August 2011, 28.

Bibliography

- Amaral, Rodrigo. "Argentina Raises Trade Barriers and Forces Insurers to Repatriate Assets." *Commercial Risk Europe*, November 4, 2011. <http://www.commercialriskeurope.com/cre/1027/143/Argentina-raises-trade-barriers-and-forces-insurers-to-repatriate-assets/>.
- Bhatty, Ajmal. "The Growing Importance of Takaful Insurance," September 23, 2011. <http://www.oecd.org/dataoecd/23/29/46116115.pdf>.
- Brainard, Lael. "What Is the Role of Insurance in Economic Development?" *Zurich Report*, January 1, 2008. http://zdownload.zurich.com/main/reports/What_is_the_role_of_economic_development.pdf.
- Bull, Alister. "China Agrees to Open Up Auto Insurance Market." *Insurance Journal*, February 14, 2012. <http://www.insurancejournal.com/news/national/2012/02/14/235420.htm>.
- Bureau van Dijk. ORBIS Companies Database (accessed March 1, 2012).
- CarInsuranceList.com. "Save Money with Driver Monitoring Programs," January 12, 2011. <http://www.carinsurancelist.com/save-money-with-driver-monitoring-programs.htm>.
- Comité Européen des Assurances (CEA). "Insurers Highlight Danger of Brazilian Protectionism." Press release, January 1, 2012. http://www.insuranceeurope.eu/uploads/Modules/Newsroom/120113-insurers_highlight_danger_of_brazilian_protectionism.pdf.
- Commercial Risk Europe*. "Global Programmes 2011: In Search of Nirvana," n.d. <http://www.commercialriskeurope.com/uploads/files/special-reports/Global-Programmes-2011.pdf> (accessed February 17, 2012).
- CNNMoney.com. "Fortune 500 2010," n.d. <http://money.cnn.com/magazines/fortune/fortune500/2010/snapshots/2358.html> (accessed January 30, 2012).
- Cummins, J. David. "The Bermuda Insurance Market: An Economic Analysis." www.bermuda-insurance.org, May 6, 2008. <http://www.bermuda-insurance.org/pdf-downloads/CumminsReport08.pdf>.
- Datamonitor. "Insurance in Russia," September 2011.
- . "Non-Life Insurance in Russia," September 2011.
- Debari, Tomoki, and Daniel Tan. "Foreign Insurance Companies in Japan—Possible Reforms?" *Corporate LiveWire*, June 13, 2011. <http://www.corporatelivewire.com/top-story.html?id=35>.

- Deloitte. “2012 Global Insurance Outlook: Generating Growth in a Challenging Economy Takes Operational Excellence and Innovation,” n.d. http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/FSI/US_FSI_Global%20Insurance%20Outlook%202012_011312.pdf (accessed January 25, 2012).
- Dickinson, Gerry. “Encouraging a Dynamic Life Insurance Industry: Economic Benefits and Policy Issues.” OECD Directorate for Financial and Enterprise Affairs, n.d. <http://www.oecd.org/dataoecd/40/11/1857811.pdf> (accessed January 26, 2010).
- Dublin International Insurance & Management Association Ltd. (DIMA). “Ireland’s International Re/Insurance Market Factsheet 2010.” Fact sheet, 2010. [http://www.captive.com/assoc/dima/DIMA%20market%20factsheet%20November%202010%20\(2\).pdf](http://www.captive.com/assoc/dima/DIMA%20market%20factsheet%20November%202010%20(2).pdf).
- Economist Intelligence Unit (EIU). *Country Commerce: Russia*. New York: Economist Intelligence Unit, November 2011.
- . “Malaysia Insurers: Mitsui Sumitomo Acquires 35% Stake in Hong Leong Takaful Unit.” *Financial Services Briefing & Forecasts*, April 18, 2011. http://www.eiu.com/index.asp?layout=ib3Article&article_id=578010642&country_id=1600000160&pubtypeid=1132462498&industry_id=710001071&category_id=
- Environmental Protection Agency (EPA). “Green Building: Basic Information,” December 22, 2010. <http://www.epa.gov/greenbuilding/pubs/about.htm>.
- Ernst & Young. “U.S. Life Insurance Industry Outlook,” December 2011.
- . “U.S. Life Insurance Outlook: Driving Growth in a Year of Uncertainty,” January 2011.
- . “U.S. Property/Casualty Insurance Industry,” January 2011.
- . “U.S. Property-Casualty Insurance Outlook,” December 2011.
- Europa. “‘Solvency II’: Frequently Asked Questions (FAQs).” Press release, July 10, 2007. <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/286&format=HTML&aged=0&language=EN&guiLanguage=en>.
- Freemantle, Thomas. “The Insurance Industry: Mergers and Acquisitions 2010.” *International Insurance News*, December 22, 2010. <http://www.globalsurance.com/blog/the-insurance-industry-mergers-and-acquisitions-2010-273920.html>.
- GCCapitalIdeas.com. “Global Reinsurance Outlook: Points of Inflection, Positioning for Change in a Challenging Market; Executive Summary,” December 30, 2010. <http://www.gccapitalideas.com/2010/12/30/global-reinsurance-outlook-points-of-inflection-positioning-for-change-in-a-challenging-market-executive-summary/>.
- Ha, Young. “Federal Insurance Office Says Overdue Regulation Report Still Weeks Away.” *Insurance Journal*, February 2, 2012. <http://www.insurancejournal.com/news/national/2012/02/02/233870.htm>.

- Hawthorne, Robert. "Demand for Credit Insurance Product Grows As Fears about Economy Linger." *MyNewMarkets.com*, July 5, 2011. <http://www.mynewmarkets.com/articles/180940/demand-for-credit-insurance-product-grows-as-fears-about-economy-linger>.
- IBISWorld. "General Insurance in the UK." *IBISWorld Industry Report*, March 2011.
- . "Life Insurance & Annuities in the US." *IBISWorld Industry Report*, July 2011.
- . "Property, Casualty, and Direct Insurance in the US." *IBISWorld Industry Report*, August 2011.
- Insurance Information Institute (III). "Accounting: International Standards and Solvency II," n.d. http://www.iii.org/issue_updates/proposed-international-standards.html (accessed February 6, 2012).
- . "Catastrophes: Global," n.d. http://www.iii.org/facts_statistics/catastrophes-global.html (accessed January 26, 2012, and April 12, 2012).
- . "Catastrophes: Insurance Issues," February 2012. http://www.iii.org/issues_updates/catastrophes-insurance-issues.html.
- . "Climate Change: Insurance Issues," October 2011. http://www.iii.org/issues_updates/climate-change-insurance-issues.html.
- . *International Insurance Fact Book 2012*, n.d. <http://www2.iii.org/international-insurance-fact-book/web-extras/download-by-chapter.cfm> (accessed January 17, 2012).
- . "Long-Term Care Insurance," n.d. http://www.iii.org/facts_statistics/long-term-care-insurance.html (accessed January 25, 2012).
- . "What Are the Different Types of Permanent Policies?" n.d. <http://www.iii.org/articles/what-are-different-types-permanent-policies.html> (accessed February 28, 2012).
- . "What is an Annuity?" n.d. <http://www.iii.org/articles/what-is-an-annuity.html> (accessed February 28, 2012).
- . *The Insurance Fact Book 2012*. New York: Insurance Information Institute, 2012.
- . *The Insurance Fact Book 2011*. New York: Insurance Information Institute, 2011.
- . *The Insurance Fact Book 2010*. New York: Insurance Information Institute, 2010.
- . *The Insurance Fact Book 2009*. New York: Insurance Information Institute, 2009.
- . *The Insurance Fact Book 2008*. New York: Insurance Information Institute, 2008.
- . *The Insurance Fact Book 2007*. New York: Insurance Information Institute, 2007.
- Investopedia. "Takaful." <http://www.investopedia.com/terms/t/takaful.asp> (accessed April 11, 2012).
- Koshik, Paul. "Russian Insurance Market—Decay or Good Prospects?" *Insurance Insight*, December 2, 2011. <http://www.insuranceinsight.eu/insurance-insight/feature/2129731/russian-insurance-market-decay-prospects>.

- KPMG. “Solvency II: Issues for the U.S. Insurance Market,” July 2011.
http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/insurance-briefing/Documents/KPMG_Insurance%20Briefing_Solvency%20II.pdf.
- Ladbury, Adrian. “New Approach Needed to Cope with the Global Economy—Van Santen.” *Commercial Risk Europe*, February 13, 2012. <http://www.commercialriskeurope.com/cre/1206/56/New-approach-needed-to-cope-with-the-global-economy-Van-Santen/>.
- Lloyd’s. “Solvency II Explained,” August 7, 2009.
http://www.lloyds.com/News_Centre/Features_from_Lloyds/News_and_features_2009/Market_news/Solvency_II_explained.htm.
- Ludolph, Charles M. “U.S.-Bermuda Economic Relations: Economic Impact Study, 2010.” Prepared for Business Bermuda by Albright Stonebridge Group, Washington, DC, September 2011.
<http://www.mondovisione.com/assets/files/2011-Business-Bermuda-Economic-Impact-Study.pdf>.
- Luhby, Tami. “Fed in AIG Rescue: \$85B Loan.” CNNMoney.com, September 17, 2008.
<http://money.cnn.com/2008/09/16/news/companies/AIG/>.
- Mahoney, John. “The Role of Insurance in Global Financial Stability—A Supervisor’s Perspective.” Swiss Re Centre for Global Dialogue, September 20, 2010.
http://cgd.swissre.com/global_dialogue/topics/regulating_systemic_risk/The_role_of_insurance_in_global_financial_stability_A_supervisors_perspective.html (accessed February 22, 2012).
- Meier, Fred. “Let State Farm Spy on Your Driving, Get Cheaper Insurance.” *USA Today*, August 7, 2011.
<http://content.usatoday.com/communities/driveon/post/2011/08/let-state-farm-spy-on-your-driving-get-cheaper-insurance/1> (accessed January 25, 2012).
- MetLife. “MetLife Announces Fourth Quarter and Full Year 2009 Results.” Press release, February 2, 2010. <http://investor.metlife.com/phoenix.zhtml?c=121171&p=irol-newsArticle&ID=1382029&highlight=>.
- . “MetLife Announces Fourth Quarter and Full Year 2010 Results.” Press release, February 9, 2011. <http://www.metlife.com/assets/cao/pr/MetLife4Q2010RIs2-9.pdf>.
- Nasdaq, “American International Group, Inc. (AIG) Revenue & Earnings Per Share (EPS),” n.d.
<http://www.nasdaq.com/symbol/aig/revenue-eps> (accessed April 19, 2012).
- Nikishenkov, Oleg. “Insuring Russia.” *Moscow News*, February 6, 2012.
<http://themoscownews.com/business/20120206/189433257.html>.
- NKSJ Holdings. “Acquisition of Shares in Turkish Non-Life Insurance Company,” June 15, 2010.
http://www.nksj-hd.com/doc/pdf/e_news2010/e_20100615_1.pdf.
- Office of the U.S. Trade Representative (USTR). *2011 National Trade Estimate on Foreign Trade Barriers*. Washington, DC: Office of the United States Trade Representative, 2011.
<http://www.ustr.gov/about-us/press-office/reports-and-publications/2012-1>.
- . *2012 National Trade Estimate on Foreign Trade Barriers*. Washington, DC: Office of the United States Trade Representative, 2012.
http://www.ustr.gov/sites/default/files/NTE%20Final%20Printed_0.pdf.

- Russia Briefing*. “Foreign Capital Raises Its Share in Russian Insurance Market,” February 18, 2011.
<http://russia-briefing.com/news/foreign-capital-raises-its-share-in-russian-insurance-market.html/>.
- Sojung, Carol Park, and Jean Lemaire. “The Impact of Culture on the Demand for Non-Life Insurance.” Working paper, The Wharton School, University of Pennsylvania, 2011.
<http://statistics.wharton.upenn.edu/documents/research/WP2011-02-Lemaire.pdf>.
- Standard & Poor’s. *Industry Surveys: Insurance: Life & Health*, April 14, 2011.
- . *Insurance: Property-Casualty*, September 22, 2011.
- . *U.S. Property/Casualty Insurance 2012 Outlook: Still Stable for Personal Lines and Negative for Commercial Lines*, December 1, 2011.
<http://www.standardandpoors.com/ratings/articles/en/us/?articleType=HTML&assetID=1245325866103>.
- Swiss Life. *Russia*. Employee Benefits Reference Manual. 2012.
http://www.swisslife.com/content/dam/id_corporateclients/downloads/ebrm/Russia.pdf, (accessed June 25, 2012).
- Swiss Re. “Natural Catastrophes and Man-Made Disasters in 2010: A Year of Devastating and Costly Events.” *Sigma*, No. 1/2011. Zurich: Swiss Reinsurance Company Ltd., 2011.
- . “The Role of Insurance in Global Financial Stability,” July 15, 2010.
http://cgd.swissre.com/global_dialogue/news/The_Role_of_Insurance_in_Global_Financial_Stability_news.html.
- U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). “Catalog of Major Revisions to the U.S. International Accounts,” June 3, 2009.
- . *Survey of Current Business*, 91, no. 10 (October 2011).
- . *Survey of Current Business*, 88, no. 10 (October 2008).
- . *Survey of Current Business*, 87, no. 10 (October 2007).
- U.S. Department of the Treasury, Web site, n.d. <http://www.treasury.gov/about/organizational-structure/offices/Pages/federal-Insurance.aspx> (accessed March 1, 2012).
- U.S. International Trade Commission (USITC). *Property and Casualty Insurance Services: Competitive Conditions in Foreign Markets*. USITC Publication 4068. Washington, DC: USITC, March 2009.
- USTR, *see* Office of the U.S. Trade Representative.
- United Nations Conference on Trade and Development (UNCTAD). “Trade and Development Aspects of Insurance Services and Regulatory Frameworks,” November 21, 2005.
http://www.unctad.org/en/docs/ditctncd200515_en.pdf.
- William Fry. “Reinsurance: Ireland.” Fact sheet, 2010.
<http://www.williamfry.ie/Libraries/test/Reinsurance-Ireland-2.sflb.ashx>.

Zenith. "Fairfax Receives Regulatory Approval for Acquisition of Zenith." Press release, May 19, 2010.
http://www.thezenith.com/contact/financial/pressreleases/presspdfs/2010_05_19_fairfax_approval.pdf.

CHAPTER 5

Logistics Services

Summary

Global logistics revenues grew by nearly one-third during 2006–10 to reach \$551 billion, as manufacturers continued to outsource a wider range of supply chain functions to third-party logistics (3PL) firms. Although the United States remained the largest logistics market in 2010, accounting for 23 percent of global revenues, this share declined by 4 percentage points during 2006–10. By contrast, logistics revenues in the fast-growing economies of Brazil and China rose sharply during the period, indicating an upward trend in logistics demand in these markets. In recent years, all of the leading global 3PL firms have developed industry-specific supply chain expertise and expanded the reach of their transportation networks to improve their competitiveness.

Trade in logistics services consists primarily of cross-border transactions (i.e., in air and maritime freight transportation and port services), which are correlated with merchandise trade. In 2010, U.S. exports and imports of logistics services rose by nearly 18 percent, prompted by the large increase in U.S. merchandise trade. Affiliate transactions also grew during the 2006–10 period, and continue to account for a growing proportion of logistics services trade. Despite the potential for increased trade in logistics services, especially in emerging markets, significant infrastructure and regulatory barriers remain in place.

Introduction

Logistics services are a collection of activities that oversee the end-to-end transport of raw, intermediate, and final goods between suppliers, producers, and consumers.¹ These services typically include freight forwarding; multimodal transport (i.e., transport by air, ship, truck, or rail); warehousing and storage; tracking and tracing; and customs brokerage. They also include other value-added services, such as order fulfillment, product repair, and supply chain management.² Firms may outsource some or all of these activities to third-party logistics service providers (3PLs) in order to focus on their core competencies and reduce costs, removing the need to develop in-house logistics capacity.³ Firms thus gain a competitive advantage by using the resources and expertise of a 3PL.⁴ Each firm makes an individual decision as to which and how many logistics functions to outsource, ranging from the low-value-added functions (e.g., warehousing and storage) to the strategic (e.g., supply chain management).⁵ In some cases, a firm may

¹ USITC, *Logistic Services*, 2005, 2-1. Certain services may be transported by logistics firms as well, including architectural plans, legal briefs, and franchising materials.

² “Supply chain management” refers to the design and management of transportation and distribution networks, and may include software implementation and inventory management.

³ Bolumole, “The Supply Chain Role of Third-Party Logistics Providers,” 2001, 90.

⁴ Zacharia, Sanders, and Nix, “The Emerging Role of the Third-Party Logistics Provider,” 2011, 41. In its annual report, UPS characterizes its customers’ decision to outsource supply chain functions as part of an effort “to streamline and gain efficiencies [in their operations], to improve service, to support new business models and to strengthen their balance sheets.” UPS, *UPS 2010 Annual Report*, 2010, 4.

⁵ Bhatnagar and Viswanathan, “Re-engineering Global Supply Chains,” 2000, 13–34.

contract with multiple 3PLs to provide an array of services, although it can be more expensive to manage a network of service providers.⁶

Most firms outsource some portion of their logistics needs to 3PL firms. For instance, although large multinational firms such as Procter & Gamble, Wal-Mart, and Toyota have sophisticated in-house logistics operations, they still use 3PL providers for some services due to capacity and cost considerations.⁷ By contrast, other firms, such as U.S. heavy equipment manufacturer Caterpillar, have in-house logistics arms large enough to function as 3PL service suppliers to external clients. For the most part, however, the logistics industry comprises dedicated logistics services firms, ranging from small companies offering a few “bread and butter” services (e.g., freight forwarding, warehousing, and trucking services) to large, integrated service providers such as DHL and UPS. In many cases, these large providers started as freight transportation firms and, over time, added logistics and supply chain management capabilities.

The competitive landscape for 3PL firms has changed significantly within the past decade due to the rapid globalization of production and supply chains.⁸ As a result, the role of 3PLs has shifted: instead of interacting with a fixed group of suppliers, producers, and consumers, 3PLs increasingly coordinate a constantly changing mix of supply chain participants. Hence, successful 3PLs are those with the capacity to design and manage their customers’ supply chains and the ability to connect those supply chains to complex, global IT and transportation networks.⁹ These networks facilitate the transport of goods between any two geographic points in an efficient and seamless manner.¹⁰ At the same time, traditional logistics functions such as trucking and warehousing services have become commoditized; consequently, customers are less willing to pay a premium for these services (figure 5.1).¹¹

Competitive Conditions in the Global Logistics Services Market

In 2010, global revenues for the logistics services industry totaled \$550.9 billion, compared to \$417.1 billion in 2006.¹² The United States is by far the largest market for logistics service providers, although growth in the U.S. 3PL market has been tempered by

⁶ Armstrong & Associates, Inc., “3PL Customers Report Identifies Service Trends,” 2009; Zacharia, Sanders, and Nix, “The Emerging Role of the Third-Party Logistics Provider,” 2011, 42.

⁷ Zacharia, Sanders, and Nix, “The Emerging Role of the Third-Party Logistics Provider,” 2011, 40.

⁸ Kleindorfer, Wind, and Gunther, “Network Orchestration,” 2009, 300–302. Michael Porter recognized that supply chains “deliver not only products but value,” thus giving rise to the term “value chain.”

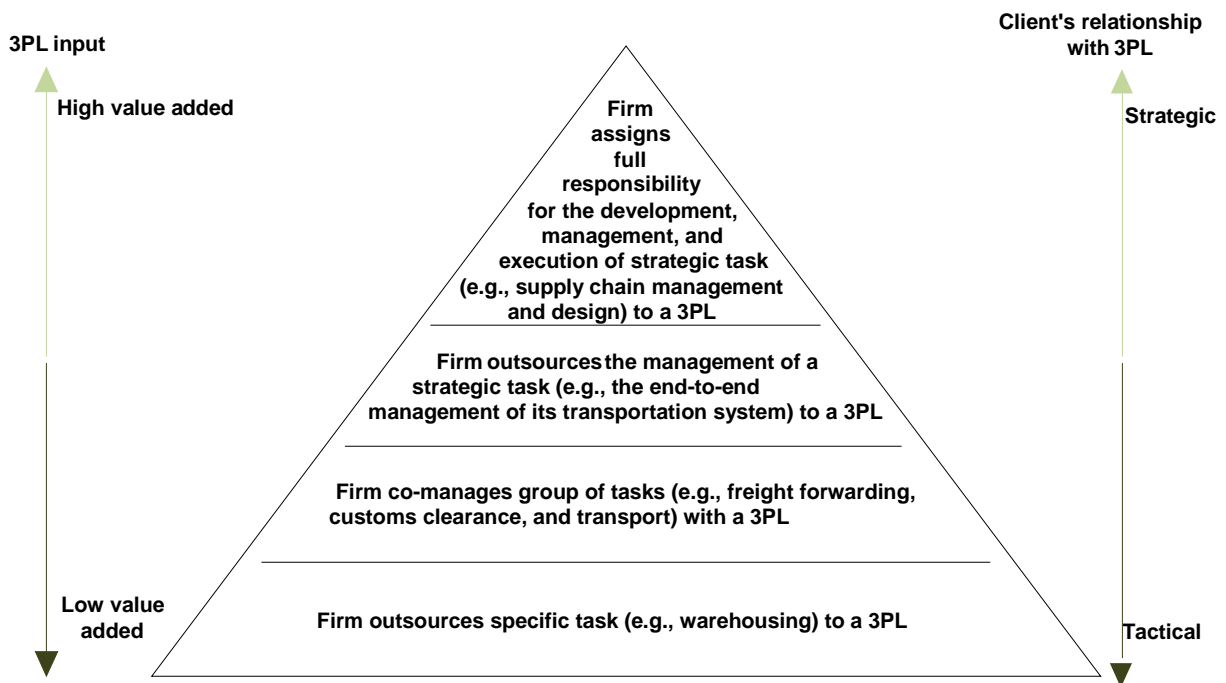
⁹ Zacharia, Sanders, and Nix, “The Emerging Role of the Third-Party Logistics Provider (3PL) as an Orchestrator,” 2011, 40. The authors discuss a company’s “need to coordinate, communicate, and collaborate” with other members of the supply chain to remain competitive. They also discuss the role of 3PL firms as serving as an “orchestrator” to carry out these activities.

¹⁰ While transportation infrastructure serves as the backbone of a 3PL’s services network, the seamless operation of that network is enabled by sophisticated IT systems that permit a 3PL to monitor and control the movement of goods throughout the supply chain. In addition, a successful 3PL has the ability to “plug into” the network of another transport provider (e.g., a commercial airline or maritime shipping firm) when its own transportation network does not have sufficient reach. Stefansson, “Collaborative Logistics Management and the Role of Third-Party Service Providers,” 2006, 70.

¹¹ Manatayev, “Commoditization of the Third-Party Logistics Industry,” 2003, 45.

¹² Armstrong & Associates, Inc. “Global Logistics Estimates—2007,” July 2007; Armstrong & Associates, “Global 3PL Market Size Estimates,” n.d.

FIGURE 5.1 Logistics services: Scope of 3PL engagement with client varies



Source: Adapted from "The Emerging Role of the Third-Party Logistics Provider (3PL) as an Orchestrator," *Journal of Business Logistics*, 2011.

the recent economic downturn.¹³ In 2010, the revenues of U.S. logistics firms reached \$127 billion, accounting for 23 percent of global logistics revenues, down from 27 percent in 2006 (table 5.1). By contrast, China, which ranked 2nd in logistics revenues (\$74.5 billion), accounted for nearly 14 percent of the global total, up from 9 percent in 2006. Brazil also increased its status as a supplier of logistics services, moving in rank from 10th place in 2006 to 7th place in 2010. Among leading logistics markets, Brazil achieved the third-largest absolute dollar increase in revenues (after China and the United States) during the 2006–10 period: its revenues rose from \$7.8 billion to \$19.9 billion.¹⁴

¹³ Butcher, "The State of Logistics," June 23, 2011.

¹⁴ Armstrong & Associates, "Global Logistics Estimates—2007," July 2007; Armstrong & Associates, "Global 3PL Market Size Estimates," n.d. (accessed November 14, 2011).

TABLE 5.1 Logistics services: Top 10 countries by global revenues, 2010

Rank	Country	3PL revenues (\$ billion)	Percent of total global 3PL revenues
1	United States	127.3	23.0
2	China	74.5	13.5
3	Japan	41.8	7.6
4	Germany	27.8	5.0
5	France	24.0	4.4
6	Italy	20.5	3.7
7	Brazil	19.9	3.6
8	United Kingdom	19.1	3.5
9	Canada	13.1	2.4
10	Australia	12.8	2.3
	Total	380.8	69.0

Source: Armstrong & Associates, Inc., "Global 3PL Market Size Estimates," n.d.
<http://www.3plogistics.com/3PLmarketGlobal.htm> (accessed November 14, 2011).

Logistics costs, calculated as a percentage of GDP, are another way to gauge the competitiveness of a country's logistics sector (table 5.2). Generally, as countries become more developed, their logistics sectors become more efficient and their logistics expenditure ratios decrease. Conversely, a high expenditure ratio indicates inefficiencies in a country's logistics market that may result from inadequate transportation infrastructure, a poor customs environment, or lack of expertise in logistics management.¹⁵ In 2010, U.S. logistics costs accounted for 8.3 percent of the country's GDP. By this measure, the United States is nearly the most efficient logistics market in the world (edged out slightly by the Netherlands, whose ratio was 8.1 percent).

TABLE 5.2 Logistics costs as a percentage of GDP for top 10 global logistics markets in 2010, and percentage change for 2006–10

Rank	Country	Logistics expenditure ratio (percent)		2006–10 change (percentage points)
		2006	2010	
1	United States	9.9	8.3	(1.6)
2	China	21.0	18.1	(2.9)
3	Japan	8.7	8.7	—
4	Germany	8.0	8.3	0.3
5	France	9.5	9.2	(0.3)
6	Italy	10.6	9.4	(1.2)
7	Brazil	14.9	11.6	(3.3)
8	United Kingdom	10.0	8.5	(1.5)
9	Canada	10.4	9.9	(0.5)
10	Australia	N/A	10.5	---
	World average	11.5	11.1	(0.4)

Source: Armstrong & Associates, Inc., "Global 3PL Market Size Estimates," n.d.
<http://www.3plogistics.com/3PLmarketGlobal.htm> (accessed November 14, 2011).

Conversely, the logistics expenditure ratios of Brazil (11.6 percent), China (18.1 percent), and India (13.0 percent) in 2010 were higher than the global average of 11.1 percent. Nonetheless, logistics costs in these and other emerging economies decreased notably in the last five years. Policy reforms and infrastructure improvements may be partially responsible for this decline. In countries where logistics costs fell most dramatically

¹⁵ PricewaterhouseCoopers, *Transportation & Logistics 2030*, 2010, 31.

during 2006–10, especially Brazil and China, logistics revenues increased significantly, suggesting a strong relationship between efficiency and market size.

The leading logistics providers in 2010 were a diverse set of firms in terms of geographical base, core business, name recognition, and ownership structure. In that year, German- and U.S.-based firms topped the list of the 10 largest global 3PL providers (table 5.3).

TABLE 5.3 Top 10 global 3PL firms by revenue, 2010

Rank	Company	Country	Revenues (\$ million)	Parent company (if subsidiary of larger firm)	Core business of firm or firm's parent
1	DHL Supply Chain & Global Forwarding	Germany	30,486	Deutsche Post	Postal services
2	Kuehne + Nagel	Germany	19,476	—	Freight forwarding
3	DB Schenker Logistics	Germany	18,999	Deutsche Bahn	Rail transportation
4	Nippon Express	Japan	18,450	—	Express delivery
5	C.H. Robinson Worldwide	United States	9,274	—	Contract logistics
6	CEVA Logistics	Netherlands	9,091	—	Contract logistics
7	UPS Supply Chain Solutions	United States	8,670	UPS	Express delivery
8	DSV	Denmark	7,587	—	Road transportation; freight forwarding; and contract logistics
9	Panalpina World Transport	Switzerland	6,887	—	Freight forwarding
10	Hyundai GLOVIS	Korea	6,303	Hyundai Motor Corporation	Automobile manufacturing

Source: Armstrong & Associates, “A&A’s Top 50 Global Third-Party Logistics Provider (3PL) List,” n.d. (accessed November 14, 2011).

Note: A state-owned Chinese transportation services firm, Sinotrans, ranked 11th after Hyundai GLOVIS, with revenues of \$6.286 billion in 2010.

Two of the top three German firms are government-affiliated: DHL Supply Chain & Global Forwarding is a subsidiary of express services firm, DHL, which is owned by Germany’s national postal agency, Deutsche Post; and DB Schenker Logistics is a subsidiary of the government rail transportation entity, Deutsche Bahn. The largest U.S. 3PL in 2010 was C.H. Robinson Worldwide, a non-asset-based logistics firm (i.e., it does not own transportation equipment). Although its name is less recognizable than DHL or UPS, C.H. Robinson has a more than 100-year history in the logistics industry and currently operates in over 200 countries worldwide. CEVA Logistics, a Netherlands-based 3PL, is also a non-asset-based logistics firm, and was formed in 2007 as a joint venture between U.S. air freight forwarder, EGL, and the Dutch firm TNT Logistics. German-based Kuehne + Nagel and the Swiss firm Panalpina are well-established international freight forwarders with strong ties to the maritime transport industry. GLOVIS is the logistics arm of Korea’s leading automobile manufacturer, Hyundai. In addition to serving the automobile industry, the company provides logistics services for

heavy goods such as steel, rail cars, and construction equipment. GLOVIS operates in 10 countries outside of Korea, including the United States, Canada, China, and India.¹⁶

In recent years, leading global logistics firms have developed supply chain management capabilities that moved from the periphery to the core of companies' service offerings. For example, Panalpina increasingly provides customers with strategic plans to optimize the flow of goods within their supply chains, and implements such plans using Panalpina's network of transportation and IT services providers.¹⁷ Kuehne + Nagel leverages its experience in transportation management by offering customized logistics services that extend along the value chain from resource procurement to aftermarket services.¹⁸ UPS has established a consulting practice to provide clients with both customized and off-the-shelf products for supply chain design, and as a result, supply chain management services have become an integral and growing part of the company's business.¹⁹

Demand and Supply Factors

Globalization of supply chains increases demand for high-value logistics services

The globalization of manufacturing has been one of the largest demand drivers for logistics services in recent years. Illustratively, the global volume of merchandise exports grew by more than 50 percent between 2000 and 2010, in part reflecting increased international trade in manufactured parts and components.²⁰ Globalization not only means that suppliers, producers, and consumers reside in separate geographic locations, but that these locations are subject to change depending on resource availability, manufacturers' costs, and consumer trends. Such fluid supply chains are challenging to manage and require a high level of logistics expertise and network capabilities that often only the largest multinational firms possess.²¹ For example, Caterpillar's global footprint includes more than 100 manufacturing plants, 70 parts distribution centers, and 4,000 independent dealers in nearly every country worldwide. By managing its own geographically dispersed value chain, the company has developed sophisticated supply chain expertise, which it has developed into a separate logistics business.²²

However, most manufacturing firms increase efficiencies in their global supply chains by outsourcing logistics functions to 3PLs that provide holistic services, thereby increasing the demand for these services. For instance, in 2000, General Motors (GM) formed a joint venture with U.S. logistics provider CNF to create software that enables GM to monitor costs at key nodes in its value chain, including procurement, distribution, and

¹⁶ Hyundai GLOVIS Company website. http://www.glovis.net/Eng/about/company_idea.asp (accessed December 9, 2011).

¹⁷ Panalpina Company Web site, <http://www.panalpina.com/content/www/global/en/home.html> (accessed December 12, 2011).

¹⁸ Kuehne + Nagel Company Web site, <http://www.kn-portal.com/industry/> (accessed December 12, 2011).

¹⁹ UPS Company Web site, <http://www.ups-scs.com/consulting/demand.html> (accessed December 12, 2011).

²⁰ WTO, "Trade Growth to Ease in 2011," April 7, 2011. For instance, in 2010, exports of automotive parts and components accounted for nearly 40 percent of total exports of automotive products (including vehicle exports) by countries in Asia, and roughly 35 percent of such exports from Europe.

²¹ Fung, Fung, and Wind, *Competing in a Flat World*, 2009, 4–8.

²² Deloitte Research, "Mastering Complexity in Global Manufacturing," 2003, 26–27.

sales and marketing. Where costs are high, the program helps GM reconfigure its global supply chain network for greater efficiency.²³ Similarly, in 2003, the Japanese electronics firm Hitachi hired UPS to design and implement a global distribution system for its hard drives that involved moving the company's disparate inventory and account data to a single IT platform.²⁴

In emerging markets, demand for logistics services is increasing

As emerging markets mature, they increasingly demand logistics services. Significant emerging markets include the BRIC economies (Brazil, Russia, India, and China) as well as Mexico, South Korea, Thailand, Turkey, and the United Arab Emirates (UAE).²⁵ GDP growth in many of the emerging economies has exceeded GDP growth in major developed countries in recent years, and it is forecast to continue to do so through 2015.²⁶ The primary driver of such growth—an increase in the domestic production of goods and services—presents significant potential for the expansion of these countries' logistics sectors as more imports, exports, and domestically produced goods are being moved to, from, and within these markets.²⁷ For example, Thailand has become an important location for many of the world's largest manufacturers: computer firms Apple and Dell produce hard disk drives in Thailand,²⁸ while Japanese automobile manufacturers Honda, Mitsubishi, and Toyota produce automotive parts there. Rising demand for logistics services in these markets has led to an expanded supply of such services. Netherlands-based CEVA Logistics reportedly has 48 warehousing and distribution facilities located near Bangkok, and global maritime firms Maersk (Denmark) and NYK (Japan) provide container shipping services between Thailand and its trading partners.²⁹

In many emerging economies, however, the domestic logistics sector remains highly fragmented, even when significant infrastructure improvements have been made. In these markets, small logistics firms supply individual services such as trucking and warehousing, but there is little coordination among service providers. For example, in Vietnam, there are reportedly more than 800 separate firms that supply shipping, trucking, and customs clearance services, many of which are characterized as “mom-and-pop” operations with as few as five employees.³⁰ The underdeveloped nature of the logistics industry in Vietnam, and in some other emerging countries, means that providers

²³ Deloitte & Touche, “Unlocking the Value of Globalisation,” 2005, 17; Con-way, Inc., company Web site. http://www.con-way.com/en/about_con_way/history/ (accessed December 13, 2011). CNF was renamed Con-Way, Inc. in 2006. Con-way, Inc. is the parent company of global 3PL firm Menlo Worldwide Logistics.

²⁴ UPS Supply Chain Solutions, “Hitachi GST Streamlines Global Distribution Network,” 2004. UPS also consolidated Hitachi's 72 distribution facilities for its hard disk drives (some of which were acquired from IBM) into 52 facilities.

²⁵ Armstrong & Associates, “Global Logistics Estimates—2007,” July 2007, 2; Armstrong & Associates, “Global 3PL Market Size Estimates,” n.d. (accessed November 14, 2011). For example, between 2006 and 2010, logistics revenues in Brazil rose 61 percent; in China 100 percent; in India 44 percent; and in Mexico 31 percent.

²⁶ *Logistics Week*, “DHL Breaks Down Barriers to Emerging Market Growth,” October 13, 2010.

²⁷ PricewaterhouseCoopers, *Transportation & Logistics 2030*, 2010, 36.

²⁸ In 2002, the value of U.S. imports from Thailand was roughly \$15 billion; by 2011, it was nearly \$25 billion, with computer accessories, peripherals, and parts accounting for 13 percent of such imports. USDOC, U.S. Census Bureau, “Trade in Goods with Thailand,” n.d. (accessed February 10, 2012); USDOC, U.S. Census Bureau, “U.S. Imports from Thailand,” n.d. (accessed February 10, 2012).

²⁹ King, “Supply Chain Under Water,” 2011, 12–14.

³⁰ Transport Intelligence, *Vietnam Logistics 2009*, 2009, 6; Johnson, “Vietnam on the Verge,” *American Shipper*, December 2007.

in these markets are unable to achieve the network and scale economies necessary to drive down domestic logistics costs.³¹

3PLs continue to develop industry-specific expertise to supply a diverse client base

3PLs establish practice areas that reflect the principal industries of their clients in order to provide more valuable supply chain services. For example, Panalpina has developed expertise in the automotive, healthcare, high-tech, retail, and oil and gas industries.³² Similarly, UPS's supply chain management services focus on the industrial manufacturing, computer, pharmaceutical, and biotechnology industries, among others (box 5.1).³³ In some cases, the industry expertise developed by 3PLs permit them to partner with client firms. For instance, Toshiba hired UPS to perform repairs on the company's laptop computers in an effort to improve the timeliness of Toshiba's aftermarket service: UPS accepts broken computers at its retail outlets, forwards the computers to a facility near its Louisville hub for repair, and then ships the computers directly back to customers.³⁴ Using their sector-specific knowledge, 3PLs also adapt logistics processes to clients in a range of industries. For example, CEVA Logistics developed a standardized process for transporting component parts and finished goods from suppliers to producers, aimed at minimizing transit time between locations, and adapted this supply chain management tool to customers in the automotive, energy, and high-tech industries.

Network capabilities of 3PLs grow in importance as new "hotspots" for logistics activity emerge

The ability of 3PL firms to effectively supply services to their global clients is also determined by the size and scope of 3PLs' transportation networks. The transportation networks of large, asset-based 3PL firms generally consist of a major air hub connected to a collection of smaller, regional air hubs, often supported by ground transportation fleets. Over the years, these networks have grown in size and geographic scope to include multiple locations abroad. For example, in addition to its global hub in Louisville, Kentucky, UPS has 10 air hub facilities worldwide, including a newly established intra-Asia hub based in Shenzhen, China.³⁵ Likewise, FedEx has 9 domestic and international air hubs—including those in Paris (France) and Dubai (UAE)—that each connect to the company's main hub in Memphis, Tennessee.³⁶

As noted, the globalization of manufacturing activity has stimulated the demand for cross-border logistics services; in turn, 3PLs' global network expansion has facilitated the geographic fragmentation of the manufacturing base. In recent years, certain countries have emerged as new "hotspots" of both manufacturing and logistics activity—China and India are two prominent examples, but Saudi Arabia, Turkey, and Vietnam are also

³¹ Dobberstein, Neumann, and Zils, "Logistics in Emerging Markets," 2005, 16.

³² Panalpina Company Web site, <http://www.panalpina.com/content/www/global/en/home.html> (accessed January 10, 2012).

³³ UPS Company Web site, <http://ups-scs.com/solutions> (accessed January 10, 2012).

³⁴ *Business Today*, "A Happy Marriage," December 11, 2011.

³⁵ UPS Web site, <http://www.pressroom.ups.com/Fact+Sheets/UPS+Fact+Sheet> (accessed January 18, 2012).

³⁶ FedEx Express, "Fact Sheet," September 2011.

BOX 5.1 3PL firms become important players in the healthcare industry

In recent years, the logistics requirements of the healthcare industry have grown in complexity, stimulated in part by the global activities of large biotechnology and pharmaceutical companies. According to one study, an individual healthcare service provider spends an average of \$100 million a year, or approximately one-third of its annual operating budget, on supply-chain-related expenses. Many of the leading global logistics firms—including UPS, DHL, and FedEx—provide services to a range of healthcare clients and have developed a portfolio of logistic and supply chain services tailored specifically to healthcare providers. In addition to biotechnology and pharmaceuticals, 3PL firms have established practice areas related to medical devices and hospital services.^a

Logistics firms principally provide warehousing, distribution, and inventory management services to their healthcare clients, with a particular emphasis on temperature-controlled or cold chain supply. However, the role of logistics firms in the healthcare industry has gradually deepened, as healthcare companies shed in-house distribution and warehousing assets in favor of outsourcing logistics management functions to 3PL firms. For example, UPS manages the distribution, transportation, and warehousing of pharmaceutical products manufactured by U.S. firm Merck both in the United States and in foreign markets such as Brazil and China. The UPS warehousing facilities used by Merck adhere to the U.S. Food and Drug Administration's temperature and environmental guidelines for the storage of vaccines and other specialized pharmaceuticals.^b Currently, UPS has 30 healthcare distribution facilities worldwide.^c Similarly, DHL, through its contract logistics subsidiary Exel, manages product distribution for U.S. pharmaceutical company Bristol-Myers Squibb, including finished goods, pharmaceuticals used in clinical trials, and products for export. Four of Exel's 14 logistics hubs are dedicated to serving clients in the healthcare and life sciences industries.^d

Other examples of services provided by 3PL firms to healthcare clients include the implementation of RFID-enabled^e inventory management systems to track equipment use within a hospital, and packaging and quality inspection services for medical device manufacturers.^f 3PL firms are also increasingly performing quality assurance and regulatory compliance tasks, especially for their biotechnology and pharmaceutical clients.^g

^a UPS, "Supply Chain Solutions for Healthcare Providers," 2005, 2; Nachtmann and Pohl, "The State of Healthcare Logistics," July 2009, 5.

^b UPS, "UPS and Merck Expand Their Distribution and Logistics Agreement," June 28, 2011. Other U.S. and foreign government regulations that pertain to the transport, storage, and distribution of pharmaceuticals and that a logistics services provider like UPS would follow include those under the U.S. Food and Drug Administration, the U.S. Drug Enforcement Agency, Health Canada, and the European Medicines Agency (EMA). UPS, "Pharmaceuticals and Biotech," n.d. (accessed January 24, 2012).

^c UPS, "UPS to Acquire Italian Pharma Logistics Company Piefte," December 1, 2011.

^d FiercePharma Manufacturing, "BMS Offloads U.S. Distribution to Exel," March 29, 2011; Pharmaceutical Commerce, "Exel Wins Bristol-Myers Squibb's 3PL Services Contract," April 8, 2011.

^e "RFID" refers to a radio frequency identification system. RFID uses a wireless radio to read and transmit data (over a distance of several yards) that is stored on an electronic tag attached to a warehouse item.

^f UPS, "Supply Chain Solutions for Healthcare Providers," 2005, 6; Federal Express, "Supply Chain Customer Success Story," n.d. (accessed January 17, 2011).

^g UPS, "UPS to Acquire Italian Pharma Logistics Company Piefte," December 1, 2011.

among such hotspots. For instance, Turkey and Vietnam are growing centers of textile and other manufacturing operations as well as transportation gateways for the larger economies of the European Union and China, respectively.³⁷ Similarly, Saudi Arabia is now home to nearly 2,700 manufacturing companies and is also a gateway for goods transported between Asia, Africa, and Europe.³⁸ 3PL firms DHL and Kuehne + Nagel are already present in Saudi Arabia, Turkey, and Vietnam, and other large logistics firms are likely to follow.³⁹

³⁷ Transport Intelligence, "Agility Emerging Markets Logistics Index 2011," January 2011, 17–18.

³⁸ Transport Intelligence, "Agility Emerging Markets Logistics Index 2011," January 2011, 18; *Saudi Airlines Cargo News*, "Saudi Airlines Cargo Hikes Investments in Domestic Hubs," 2010, April 3, 2011.

³⁹ Deutsche Post DHL, *Annual Report 2010*, 2010, 218–21; Cuthbert, "Saudi Arabia—The Land of Logistics Opportunity," November 27, 2011.

Trade Trends

Cross-border Trade

In 2010, U.S. exports of freight transportation and port services (box 5.2) reached \$36.0 billion and U.S. imports equaled \$47.4 billion, yielding a U.S. trade deficit of \$11.4 billion (figure 5.2). Prompted by the beginning of the recovery from the economic downturn, U.S. exports in 2010 increased by 13.6 percent over the previous year—far faster than the 2.9 percent CAGR recorded during 2005–09. The increase in U.S. exports of freight transportation and port services in 2010 is consistent with an increase in U.S. merchandise exports, which rose by 21 percent to nearly \$1.3 trillion in the same year.⁴⁰ However, U.S. imports of freight and port transportation services rose even faster than exports of such services, increasing by 21.3 percent in 2010, compared to a compound annual decrease of 6.1 percent during 2005–09. As with exports, the large increase in U.S. imports of freight transportation and port services in 2010 reflects a sizable increase in U.S. merchandise imports—23 percent—compared to 2009.⁴¹

BOX 5.2 An explanation of BEA data on cross-border trade and affiliate transactions in logistics services

Official data on cross-border trade in logistics services are unavailable. Therefore, data on trade in air and maritime freight transportation services and port services are used as proxies, since they account for a substantial portion of trade in logistics services. Cross-border trade in air and maritime freight transportation and port services stems from merchandise trade, and thus tends to expand and contract in tandem with merchandise trade.

Cross-border trade in air and maritime freight transportation services can be broken down into two components:

- Exports of air and maritime freight transportation services refer to the transport of U.S. merchandise on U.S. air or ocean carriers to foreign destinations or between foreign ports.
- Imports of air and maritime freight transportation services refer to the transport of merchandise to the United States by foreign air and ocean carriers.

Similarly, U.S. exports of port services reflect the value of goods (except fuel) and services procured by foreign carriers at U.S. ports, while imports of port services reflect the value of goods and services procured by U.S. carriers at foreign ports.^a

Due to the absence of official data on logistic services affiliates, data on transportation and warehousing affiliates serve as proxies. However, the BEA estimates include sales of all services by transportation and warehousing affiliates, not just those pertaining directly to transportation and warehousing. For 2005, the BEA reported that certain foreign affiliates were reclassified from the manufacturing sector to the transportation and warehousing sector because of changes in the composition of their principal activities. The reclassification therefore increased BEA's figures for sales of services overall in 2005, in particular for sales of services by transportation and warehousing affiliates.

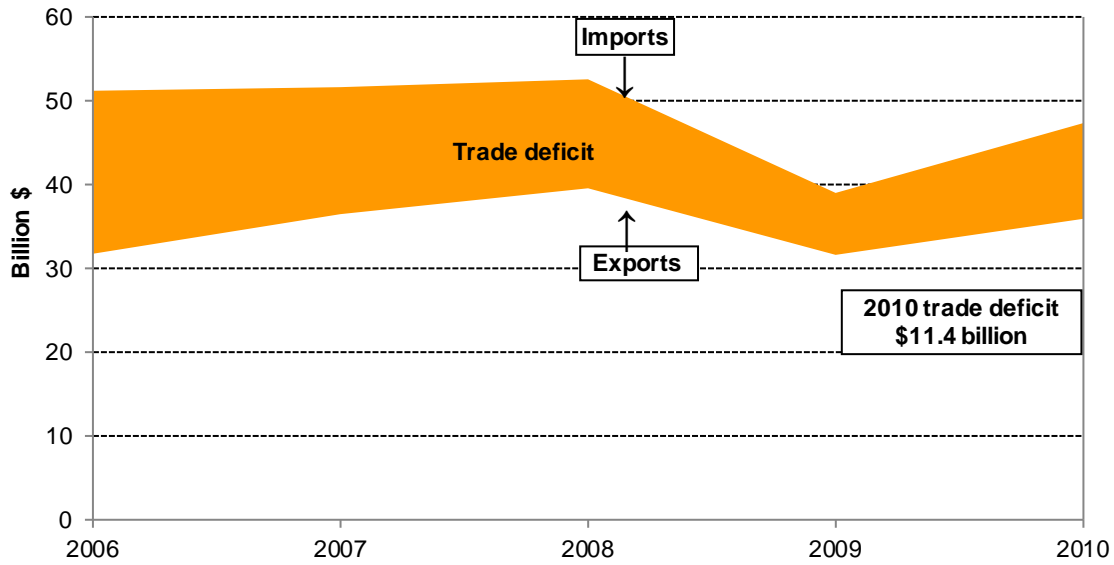
Source: BEA, *Survey of Current Business*, 2007, 96; BEA *Survey of Current Business*, 2011, 17–18, 27.

^a In 2011, the BEA reported that transactions between the U.S. postal service and foreign postal entities for the cross-border delivery of letters, printed matter, and parcels were reclassified from U.S. government miscellaneous services to freight transportation services. This reclassification was done as part of a larger effort by BEA to more closely align government services with the type of activity performed. The reclassification resulted in an increase in exports and imports of private freight transportation services in 2011.

⁴⁰ WTO, "Trade Growth to Ease in 2011," April 7, 2011.

⁴¹ Ibid.

FIGURE 5.2 Logistics services:^a U.S. cross-border trade in logistics services resulted in a U.S. trade deficit each year during 2006–10



Source: USDOC, BEA, “Detailed Statistics for Cross-border Trade,” January 25, 2012.

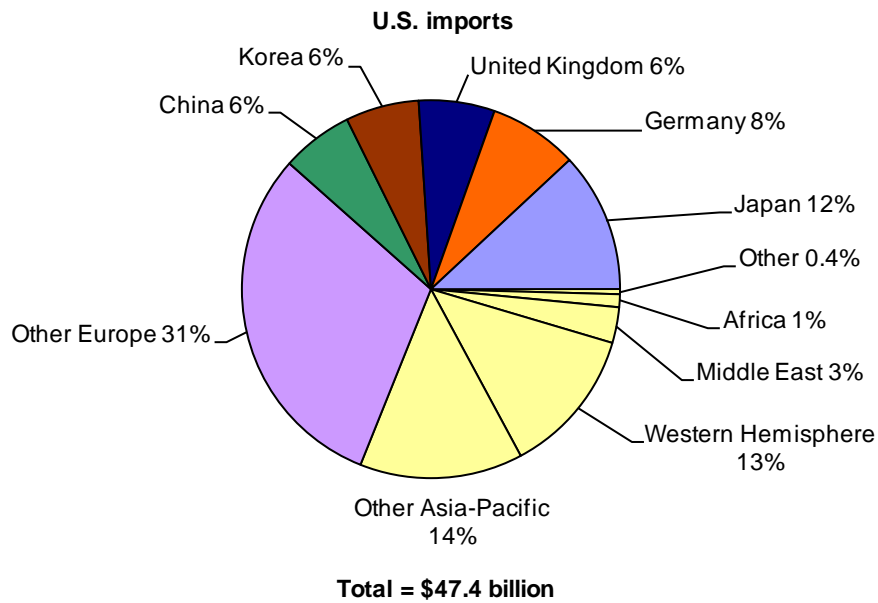
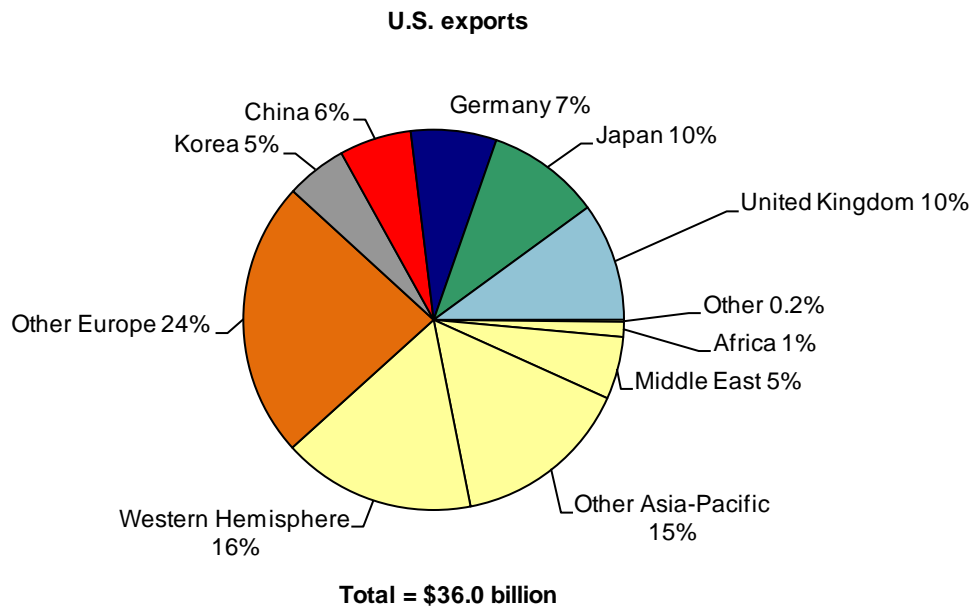
^a Logistics services include ocean and air freight and ocean and airport services.

The leading recipient countries for U.S. exports of freight transportation and port services in 2010 were the United Kingdom, accounting for 10 percent of total U.S. exports, followed by Japan (9.6 percent), Germany (7.3 percent), China (6.1 percent), and Korea (5.2 percent) (figure 5.3). In 2010, China ranked first and Japan, Germany, the United Kingdom, and Korea ranked fourth through seventh, respectively, among the top 10 countries for U.S. merchandise exports.⁴² At the same time, the United States posted a deficit with each of these countries in freight transportation and port services; the largest U.S. deficits were with Japan (\$2.2 billion) and Korea (\$1.1 billion) (figure 5.4). In particular, U.S. imports of ocean freight services from Japan rose 37 percent in 2010; those from Korea rose by 32 percent. These increases were likely driven in part by growth in U.S. imports of automobiles and heavy machinery from these countries.

Japan was the leading source of U.S. imports of freight transportation and port services in 2010, accounting for 11.9 percent of total U.S. imports, followed by Germany (7.6 percent), the United Kingdom (6.5 percent), Korea (6.3 percent), and China (6.1 percent). U.S. imports of freight transportation and port services from China increased by a combined total of nearly 40 percent. The increase in U.S. logistics imports from China was due to a significant rise in the provision of air freight services (57.4 percent) and ocean freight services (43.7 percent) by logistics firms located in China, a result of expanding U.S.–China merchandise trade. By contrast, U.S. imports of freight transportation and port services from Germany and the United Kingdom increased

⁴² USITC, *Shifts in U.S. Merchandise Trade 2010*, 2011, US.9. See “TABLE US.3 All merchandise sectors: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2006–10.”

FIGURE 5.3 Logistics services:^a The United Kingdom was the top market for U.S. exports, while Japan was the leading source of U.S. imports in 2010

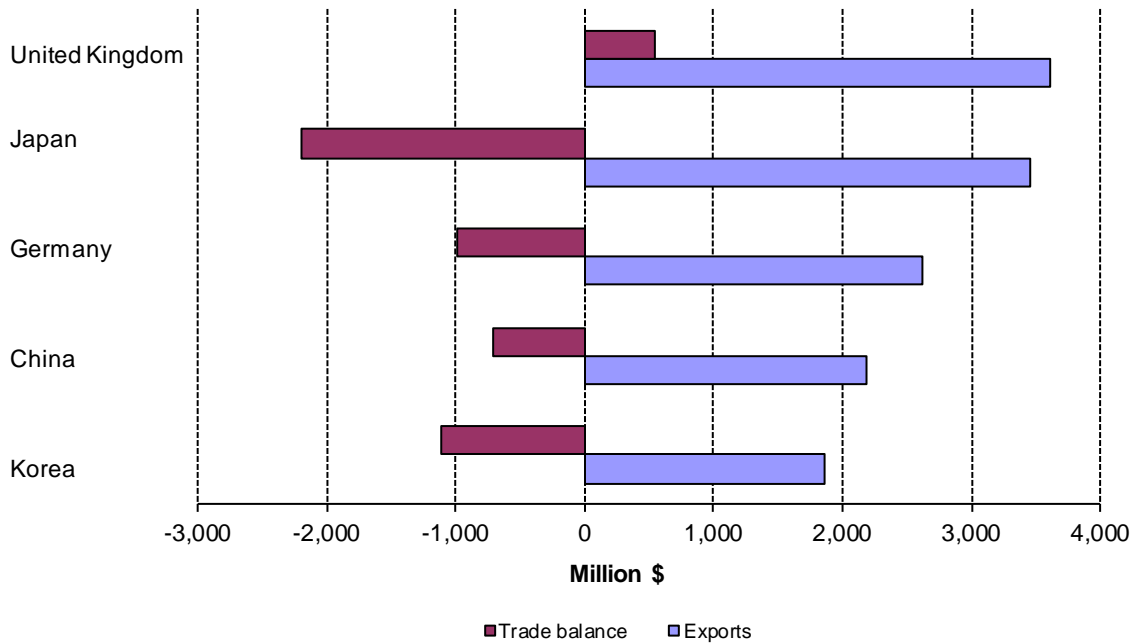


Source: USDOC, BEA, "Detailed Statistics for Cross-border Trade," January 25, 2012.

Note: Geographic regions are shaded in yellow. Figures may not total 100 percent due to rounding.

^a Logistics services include ocean and air freight and ocean and airport services.

FIGURE 5.4 Logistics services:^a Among the top five U.S. trading partners in logistics services, the United Kingdom was the only country with which the United States posted a trade surplus in 2010



Source: USDOC, BEA, *U.S. International Services*, “Detailed statistics for cross-border trade: 3. Travel, passenger fares, and other transportation,” found at http://www.bea.gov/international/international_services.htm, January 25, 2012.

^aLogistics services include air and maritime freight transportation and port services.

at the relatively slower rate of 15.5 percent each, driven principally by growth in imports of ocean freight services.

Affiliate Transactions

Total sales for foreign affiliates of U.S. transportation and warehousing companies were not reported in 2009 to avoid disclosure of individual company data.⁴³ However, available data indicate that such sales were at least \$44.3 billion.⁴⁴ At the same time, total purchases from U.S. affiliates of foreign transportation and warehousing companies in 2009 equaled \$42.6 billion. Available data indicate that the top five markets for foreign affiliate sales in 2009 were the United Kingdom (\$5.4 billion), Germany (\$4.0 billion), the Netherlands (\$2.5 billion), France (\$2.1 billion), and Switzerland (\$1.5 billion). Foreign affiliate sales in the United Kingdom and Germany fell by a combined total of

⁴³ Foreign affiliates are U.S. parent firms’ majority-owned nonbank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms’ majority-owned nonbank affiliates in the U.S. market.

⁴⁴ BEA, *Survey of Current Business*, October 2011, 54; *Survey of Current Business*, October 2009, 61. These data include countries within Europe, Latin America, and the Asia Pacific region, but do not include Canada, for which information on foreign affiliate sales to U.S. entities is unavailable. The latest year for which Canadian affiliate sales are available is 2006. In that year, such sales equaled \$4.7 billion, or nearly 13 percent of total sales by foreign transportation and warehousing affiliates.

17 percent in 2009, likely the result of reduced trade flows during the economic downturn which dampened demand for logistics services.⁴⁵

In 2009, purchases from U.S. affiliates of foreign transportation and warehousing companies decreased by 13 percent over the previous year, compared to a CAGR of 9.5 percent during 2004–08.⁴⁶ According to available data, purchases from U.S. transportation and warehousing affiliates were primarily from those with parents in Germany (\$10.3 billion), the United Kingdom (\$6.3 billion), and Japan (\$3.1 billion). The high volume of purchases from U.S. affiliates of German firms likely reflects the activity of German-based logistics firms DHL, Kuehne + Nagel, and DB Schenker in the U.S. market. Overall, purchases from U.S. affiliates of Europe-based companies fell by 17.3 percent in 2009, and purchases from U.S. affiliates with parents in the Asia-Pacific region decreased by 15.7 percent. These decreases were offset slightly by purchases from U.S. affiliates with parents in Canada, which rose by 2.2 percent in 2009.

Nontariff Measures Affecting Trade

Global 3PL firms typically operate in a large number of countries where they are subject to government policies on foreign direct investment, cargo security, licensing, and air traffic rights. Such policies influence where logistics firms set up local ventures, how they operate, and what services they provide. Policies that limit air transportation rights or foreign direct investment in particular undercut the ability of 3PL firms to serve new markets or to expand service in countries where they are already present. For example, U.S. logistics firms may be unable to provide air freight or air express services to a country with which the United States does not have a bilateral air transport agreement.⁴⁷ In addition, the frequency and scope of such service may be limited in countries with which the United States does not maintain “open skies” agreements that permit unrestricted air service.⁴⁸

Some countries also place restrictions on commercial establishment (GATS mode 3) by foreign logistics firms. For example, before its accession to the WTO, China enforced joint venture requirements on foreign firms supplying road freight transport services, storage and warehousing services, freight forwarding services, and courier services.⁴⁹ However, the Chinese government eliminated joint venture requirements on these entities in 2006 and now permits wholly foreign-owned enterprises in logistics services.⁵⁰ Similarly, Vietnam removed joint venture requirements on express delivery firms as of January 2012, permitting 100 percent foreign ownership of such entities.⁵¹ In Mexico,

⁴⁵ BEA, *Survey of Current Business*, October 2011, 55–56. Data on foreign affiliate sales in Switzerland for 2008 are unavailable.

⁴⁶ BEA, *Survey of Current Business*, October 2011, 55–56; BEA, *Survey of Current Business*, October 2006, 72.

⁴⁷ As of August 1, 2011, the United States had concluded bilateral air transport agreements with 130 countries.

⁴⁸ USDOT, “International Issues,” n.d. (accessed January 20, 2012). Open skies agreements enable airlines to serve the other party to the agreement without restrictions found in Bermuda I and Bermuda II bilateral air transport agreements. The latter agreements restrict the frequency with which airlines can fly to and from destinations located in the signatory countries, the type of aircraft they may deploy, and the cities they may serve.

⁴⁹ WTO, “The People’s Republic of China,” February 14, 2002.

⁵⁰ KPMG, “Logistics in China,” 2008.

⁵¹ USTR, “2012 National Trade Estimate Report on Foreign Trade Barriers,” 404, (accessed April 11, 2012).

joint venture requirements on foreign firms providing freight transportation services were phased out in 2004. However, port services firms must still receive government approval to establish companies in which foreign investment exceeds 49 percent.⁵²

The operation of 3PL firms in developing and emerging markets may also be limited by lack of access to adequate transportation infrastructure (i.e., roads, railways, and air and sea ports) and poor customs environments. For instance, India's road network is in disrepair, and it has relatively few major airports and seaports.⁵³ Moreover, India's burdensome customs procedures add inefficiency to the country's supply chain operations.⁵⁴ As a result, India's logistics costs are higher than the global average, in part reflecting the physical and bureaucratic challenges faced by 3PL firms such as DHL and FedEx that operate in the Indian market.⁵⁵

In the past, multilateral services negotiations under the WTO addressed some of the above issues, although such negotiations are currently at a standstill. Previous WTO efforts under the GATS focused on developing a checklist for logistics services, and setting milestones for WTO members to eliminate restrictions on each of the services identified in the checklist.⁵⁶ More recent WTO negotiations have focused on revising the text of customs-related provisions under Articles V, VIII, and X of the General Agreement on Trade and Tariffs.⁵⁷ In addition, logistics services may be one of several sectors targeted for plurilateral negotiations among WTO members in the absence of further progress under the GATS. However, while the United States, the European Union and other economies may favor plurilateral negotiations, emerging economies such as Brazil, China, and India have indicated that they prefer a broader multilateral forum, thus adding uncertainty to the future of liberalization efforts.⁵⁸

Outlook

The growth in merchandise trade has accelerated the globalization of supply chains. Goods now cross borders several times during the production process, and this has led to an increase in the demand for logistics services.⁵⁹ Large 3PL firms have responded to

⁵² "Mexico Foreign Investment Law," <http://www.mexicolaw.com/LawInfo26.htm> (accessed June 26, 2012).

⁵³ Hamm and Lakshman, "The Trouble with India," March 19, 2007.

⁵⁴ Dobberstein, Neumann, and Zils, "Logistics in Emerging Markets," 2005, 16; Arvis et. al., *Connecting to Compete*, 2010, 8. The World Bank's logistics performance index (LPI) indicates that, in 2010, India ranked 47th out of 155 countries in terms of the efficiency of its logistics sector, far below developed economies but still within the top third of all countries included in the index.

⁵⁵ PricewaterhouseCoopers, *Transportation & Logistics 2030*, 2010, 36; Armstrong & Associates, "Global 3PL Market Size Estimates," n.d. (accessed November 14, 2011). In 2010, India spent 13.0 percent of its GDP on logistics-related costs. This number was higher than the average logistics expenditure ratio among all countries in 2010, 11.1 percent.

⁵⁶ UNCTAD, "Negotiations on Transport and Logistics Services," 2006. Core logistics services identified in the checklist include "services auxiliary to all modes of transport," such as "cargo handling services" (CPC 7411); "storage and warehousing services" (CPC 742); and "transport agency services" (CPC 748). In addition, freight transport services and wholesale and retail distribution services, among others, were identified in the checklist as related but non-core logistics services.

⁵⁷ Global Express Association (GEA), "Position Paper," August 2011; Global Facilitation Partnership for Transportation and Trade, "WTO Trade Facilitation Negotiations," December 26, 2011. GATT Article V pertains to "Freedom of Transit [of goods]"; Article VIII, to "Fees and Formalities Connected with Importation and Exportation"; and Article X, to "Publication and Administration of Trade Regulations."

⁵⁸ Pruzin, "U.S. in Initial Talks," January 19, 2012.

⁵⁹ WTO, "Trade Growth to Ease in 2011," April 7, 2011.

globalization by extending the geographic reach of their information and transportation networks, as well as by developing industry expertise so that they can offer more valuable supply chain services to their customers. Specialization and network expansion will likely remain trends for the foreseeable future as competition within the logistics industry intensifies.⁶⁰ At the same time, developing and emerging economies will likely continue to increase their demand for logistics services, as manufacturing and consumer activity in these countries grow.⁶¹ Significant logistics barriers in these markets remain, however, especially those related to infrastructure, commercial establishment, and customs administration. Some have suggested that, given the stalemate on logistics services liberalization under the GATS, the best prospect for removing some of these barriers may be through bilateral or plurilateral negotiations, as mentioned above. However, other barriers (such as inadequate transportation infrastructure) may be best addressed through unilateral efforts.⁶²

⁶⁰ UPS, *UPS 2010 Annual Report*, 3–7, 12.

⁶¹ *Logistics Week*, “DHL Breaks Down Barriers to Emerging Market Growth,” October 13, 2010.

⁶² Pruzin, “U.S. in Initial Talks,” January 19, 2012; Mukherjee and Miglani, “Non-Tariff Barriers in the Transport and Logistics Sectors,” August 2010, 12–20. See chapter 9 for a discussion of plurilateral, bilateral, and unilateral liberalization.

Bibliography

- Armstrong & Associates, Inc. "3PL Customers Report Identifies Service Trends, 3PL Market Segment Sizes and Growth Rates." Press release, 2009. http://www.3plogistics.com/PR_3PL_Customers-2009.htm.
- . "A&A's Top 50 Global Third-Party Logistics Provider (3PL) List: Largest 3PLs Ranked by 2010 Logistics Gross Revenue," n.d. http://www.3plogistics.com/Top_50_Global_3PLs.htm (accessed November 14, 2011).
- . "Global 3PL Market Size Estimates," n.d. <http://www.3plogistics.com/3PLmarketGlobal.htm> (accessed November 14, 2011).
- . "Global Logistics Estimates—2007," July 2007.
- Arvis, Jean-François, Monica Alina Mustra, Lauri Ojala, Ben Shepherd, and Daniel Saslavsky. *Connecting to Compete: Trade Logistics in the Global Economy*. Washington, DC: The World Bank, 2010. http://siteresources.worldbank.org/INTTLF/Resources/LPI2010_for_web.pdf.
- Bhatnagar, Rohit, and S. Viswanathan. "Re-engineering Global Supply Chains: Alliances between Manufacturing Firms and Global Logistics Services Providers." *International Journal of Physical Distribution & Logistics Management* 30, no. 1, 2000.
- Bolumole, Yemisi A. "The Supply Chain Role of Third-Party Logistics Providers." *The International Journal of Logistics Management* 12, no. 2 (2001).
- Business Today*. "A Happy Marriage: Partnership with UPS Enabled Toshiba to Speed Up Laptop Repair Service," December 11, 2011. <http://businesstoday.intoday.in/story/innovation-toshiba-ups/1/20185.html>.
- Butcher, David. "The State of Logistics." *ThomasNet News*, June 23, 2011. <http://news.thomasnet.com/IMT/2011/06/23/2011-state-of-logistics-cscmp-report-findings/>.
- Cuthbert, Jon. "Saudi Arabia—The Land of Logistics Opportunity." *arabianSupplyChain.com*, November 27, 2011. <http://www.arabiansupplychain.com/article-6787-saudi-arabia--the-land-of-logistics-opportunity/1/print/>.
- Deloitte & Touche. "Unlocking the Value of Globalisation," 2005. <http://www.deloitte.com/assets/Dcom-Canada/Local%20Assets/Documents/Unlock.pdf>.
- Deloitte Research. "Mastering Complexity in Global Manufacturing," 2003. http://www.deloitte.com/view/en_GX/global/insights/deloitte-research/2d61c5275d0fb110VgnVCM100000ba42f00aRCRD.htm.
- Deutsche Post DHL. *Annual Report 2010*, 2010. http://www.dp-dhl.com/content/dam/Investors/Publications/DPDHL_Annual_Report_2010.pdf.
- Dobberstein, Nikolai, Carl-Stefan Neumann, and Markus Zils. "Logistics in Emerging Markets." *McKinsey Research in Brief*, no. 1 (2005). <http://mkqpreview1.qdweb.net/PDFDownload.aspx?ar=1557>.

- Federal Express. "Fact Sheet, FedEx Express: International," n.d. <http://news.van.fedex.com/files/1109%20FedEx%20Express%20Worldwide%20Fact%20Sheet.pdf> (accessed January 18, 2012).
- . "FedEx Supply Chain Customer Success Story: Medical Device Hearing Solutions," n.d. <http://images.fedex.com/us/healthcare/pdf/FedExSupplyChainMedDeviceSuccess.pdf> (accessed January 17, 2011).
- FiercePharma Manufacturing*. "BMS Offloads U.S. Distribution to Exel," March 29, 2011. <http://www.fiercepharmamanufacturing.com/story/bms-offloads-us-distribution-exel/2011-03-29>.
- Fung, Victor K., William K. Fung, and Yoram (Jerry) Wind. *Competing in a Flat World: Building Enterprises for a Borderless World*. Upper Saddle River, NJ: Wharton School Publishing, 2009.
- Global Express Association (GEA). "Position Paper on the Current WTO Draft Consolidated Negotiating Text on Trade Facilitation." TN/TF/W/165/rev. 10, August 2011.
- Global Facilitation Partnership for Transportation and Trade. "WTO Trade Facilitation Negotiations," December 26, 2011. <http://www.gfptt.org/entities/TopicProfile.aspx?tid=38355869-d2ba-427a-bfe8-1c29cefb97f> (accessed January 23, 2012).
- Hamm, Steve, and Nandini Lakshman. "The Trouble with India." *Business Week*, March 19, 2007. http://www.businessweek.com/print/magazine/content/07_12/b4026001.htm?chan=gl.
- Johnson, Eric. "Vietnam on the Verge." *American Shipper*, December 2007. http://www.business-in-asia.com/news/jan2009_news.html.
- King, Mike. "Supply Chain under Water." *Journal of Commerce*, November 21, 2011.
- Kleindorfer, Paul R., Yoram (Jerry) Wind, and Gunther, Robert E. "Network Orchestration: Creating and Managing Global Supply Chains without Owning Them." Chap. 17 in *The Network Challenge: Strategy, Profit, and Risk in an Interlinked World*. Upper Saddle River, NJ: Wharton School Publishing, 2009.
- KPMG. "Logistics in China," 2008. http://www.kpmg.com.cn/en/virtual_library/Property_Infrastructure/LogisticsChina.pdf.
- Logistics Week*. "DHL Breaks Down Barriers to Emerging Market Growth," October 13, 2010. <http://logisticsweek.com/news/2010/10/dhl-breaks-down-barriers-to-emerging-market-growth/>.
- Manatayev, Yerlan Yergalievich. "Commoditization of the Third-Party Logistics Industry." M.A. thesis, Massachusetts Institute of Technology (MIT), 2003.
- Mukherjee, Arpita, and Smita Miglani. "Non-Tariff Barriers in the Transport and Logistics Sectors: India." European Business and Technology Centre, August 2010. http://ebtc.eu/pdf/Tariff_Barriers_in_the_Transport_and_Logistics_Sector_India.pdf.
- Nachtmann, Heather, and Edward A. Pohl. "The State of Healthcare Logistics: Cost and Quality Improvement Opportunities." Center for Innovation in Healthcare Logistics, July 2009, 5. http://cihl.uark.edu/UA-001_CIHL_Brochure_FINAL_KKMC_web2.pdf.

- Office of the United States Trade Representative (USTR). *2012 National Trade Estimate Report on Foreign Trade Barriers*. <http://www.ustr.gov/sites/default/files/Vietnam.pdf>.
- Pharmaceutical Commerce. "Exel Wins Bristol-Myers Squibb's 3PL Services Contract," April 8, 2011. <http://www.pharmaceuticalcommerce.com/frontEnd/main.php?idSeccion=1628>.
- PricewaterhouseCoopers. *Transportation & Logistics 2030 Volume 3, Emerging Markets—New Hubs, New Spokes, New Industry Leaders?* 2010. http://www.pwc.com/gx/en/transportation-logistics/tl2030/emerging-markets/new-hubs_new-spokes_new-industry-leaders.jhtml.
- Pruzin, Daniel. "U.S. in Initial Talks on Launching Services Plurilaterals outside of Doha." *International Trade Daily*, January 19, 2012.
- Saudi Airlines Cargo News. "Saudi Airlines Cargo Hikes Investments in Domestic Hubs to SR67.6M," April 2011. http://saudiacargo.com/april-2011_news.php.
- Stefansson, Gunnar. "Collaborative Logistics Management and the Role of Third-Party Service Providers." *International Journal of Physical Distribution & Logistics Management* 36, no. 2 (2006).
- Transport Intelligence. "Agility Emerging Markets Logistics Index 2011," January 2011. http://www.agilitylogistics.com/EN/Documents/Agility_Downloads/2011_Emerging_Markets_Logistics_Index.pdf.
- . *Vietnam Logistics 2009*, February 2009.
- United Nations Conference on Trade and Development (UNCTAD). "Negotiations on Transport and Logistics Services: Issues to Consider." UNCTAD/SDTE/TLB/2005/3, 2006.
- UPS. "Pharmaceuticals and Biotech," n.d. <http://www.ups.com/content/us/en/bussol/browse/industries/pharma-biotech-store.html>. (accessed January 24, 2012).
- . "Supply Chain Solutions for Healthcare Providers: Part 2—Supply Chain Improvement Opportunities," UPS Supply Chain White Paper, 2005.
- . *UPS 2010 Annual Report*, 2010. <http://www.investors.ups.com/phoenix.zhtml?c=62900&p=irol-reportsannual>.
- . "UPS and Merck Expand Their Distribution and Logistics Agreement." Press release, June 28, 2011. <http://www.ups.com/content/cn/en/about/news/20110630.html>.
- . "UPS to Acquire Italian Pharma Logistics Company Pieffe." Press release, December 1, 2011. <http://pressroom.ups.com/Press+Releases/Archive/2011/Q4/UPS+to+Acquire+Italian+Pharma+Logistics+Company+Pieffe>.
- UPS Supply Chain Solutions. "Hitachi GST Streamlines Global Distribution Network," 2004. http://www.ups-scs.com/solutions/case_studies/cs_hitachi.pdf.
- U.S. Department of Commerce. Bureau of Economic Analysis (BEA). "Detailed Statistics for Cross-border Trade: Travel, Passenger Fares, and Other Transportation," U.S. International Services, http://www.bea.gov/international/international_services.htm (accessed January 25, 2012).

- . *Survey of Current Business* 86, no. 10 (October 2006).
- . *Survey of Current Business* 87, no. 10, October 2007.
- . *Survey of Current Business* 89, no. 10, October 2009.
- . *Survey of Current Business* 91, no. 10, October 2011.
- U.S. Department of Commerce. U.S. Bureau of the Census. “Trade in Goods with Thailand.” n.d. <http://www.census.gov/foreign-trade/balance/c5490.html> (accessed February 10, 2012).
- . “U.S. Imports from Thailand by 5-digit End-Use Code, 2002–2011,” n.d. <http://www.census.gov/foreign-trade/statistics/product/enduse/imports/c5490.html> (accessed February 10, 2012).
- U.S. Department of Transportation (USDOT), Office of the Assistant Secretary for Aviation and International Affairs. “International Issues,” n.d. <http://ostpxweb.dot.gov/aviation/intlaffairs.htm#bilateral> (accessed January 20, 2012).
- U.S. International Trade Commission (USITC), *Logistic Services: An Overview of the Global Market and Potential Effects of Removing Trade Impediments*, USITC Publication 3770. Washington, DC: USITC, 2005.
- . *Shifts in U.S. Merchandise Trade*, USITC Publication 4245. Washington, DC: USITC, 2011.
- USTR, *see* Office of the U.S. Trade Representative.
- World Trade Organization (WTO). “The People’s Republic of China: Schedule of Specific Commitments.” GATS/SC/135, February 14, 2002.
- . “Trade Growth to Ease in 2011 but Despite 2010 Record Surge, Crisis Hangover Persists.” Press release, April 7, 2011. http://www.wto.org/english/news_e/pres11_e/pr628_e.htm.
- Zacharia, Zach G., Nada R. Sanders, and Nancy W. Nix. “The Emerging Role of the Third-Party Logistics Provider (3PL) as an Orchestrator.” *Journal of Business Logistics* 32, no. 1 (2011).

CHAPTER 6

Retail Services

Summary

Retailing is one of the principal commercial activities in most economies and accounts for more than a tenth of all employment in the United States. Global retail sales grew by 9.0 percent in 2010 after falling amid the economic downturn in 2009. The United States remained the world's largest retail market in 2010, but sales grew faster in developing and emerging countries such as China and Brazil. Around the world, retailing over the Internet (e-commerce) is growing rapidly, and traditional "brick-and-mortar" retailers are strengthening their online presence. Retailers are building smaller stores in the United States in order to reduce costs and enter new markets, such as city centers; in Europe, they are using low-cost store brands to appeal to pinched consumers. Meanwhile, faster-growing developing countries are central to multinational retailers' growth strategies. U.S. retailers are expanding in Latin America, Asia, and Africa, even as some of these same companies close stores in the United States.

Services supplied by U.S.-owned foreign affiliates in the retailing industry grew in 2009, but more slowly than in previous years: weak retail sales affected the leading destinations for U.S. foreign investment in retailing, including Canada and the United Kingdom. Services supplied by foreign-owned retailers in the United States shrank in 2009 for the third straight year amid the broader slowdown in U.S. retail sales, although foreign firms continued to invest. Numerous countries maintain barriers to foreign investment in retailing, including India's ban on foreign ownership in multibrand retailing and an opaque economic needs test in Vietnam. Bilateral and regional trade agreements have sometimes proven useful for easing such barriers. Going forward, retail sales will likely continue to grow more quickly in developing countries than in developed ones, while sales via mobile devices will grow around the world.

Introduction

Retailing is the final stage in the merchandise distribution process. Retailers buy goods from manufacturers or wholesalers, then resell them in small quantities to individual consumers. They operate via fixed points of sale (i.e., physical stores) or through other channels, such as catalogs, television, direct selling (e.g., door-to-door sales), and the Internet (e-commerce).¹ When shoppers make a retail purchase, they are paying for both the merchandise and the distributive services associated with it. These services include transporting the merchandise to the point of sale, maintaining inventories, and providing information about the merchandise.²

Retailing accounts for a substantial share of output and employment in many countries. In the United States in 2011, the retail industry employed 14.7 million people (11.1 percent

¹ U.S. Census Bureau, "2007 NAICS Definition: Sector 44–45; Retail Trade" (accessed November 8, 2011).

² Betancourt, *The Economics of Retailing and Distribution*, 2004, 19–23.

of nonfarm employment)³ and accounted for 6.1 percent of value added as a share of GDP (\$884.9 billion).⁴ Demand for retail services depends on broader factors in the economy, such as the rate at which consumers' incomes are growing and their willingness to consume (which in turn depends on their expectations about future income and the performance of the economy). Retailers' ability to supply their services depends on the quality of infrastructure, such as transport networks for moving merchandise to stores or warehouses; access to real estate suitable for store sites; the availability of workers to staff the stores; and policies and regulations, such as rules on store size, operating hours, and prices. Additional factors affect supply and demand for retailing via e-commerce, including consumers' access to broadband Internet and the tax treatment of online transactions versus in-store ones (see "Demand and Supply Factors" later in this chapter).

Competitive Conditions in the Global Retail Services Market

Global retail sales totaled \$16.2 trillion in 2010, an increase of 9.0 percent from 2009. This exceeded the average annual rate of growth over the 2004–09 period (7.2 percent) and represented a sharp turnaround from 2008–09, when sales declined by 3.4 percent.⁵ The United States was the world's largest retail market in 2010, with sales totaling \$3.0 trillion—almost a fifth of the global total (figure 6.1).⁶ But this represented a decline in share compared to 2005, when the United States accounted for nearly a quarter of global sales. Over this period, emerging markets grew in importance at the expense of the traditional leaders in the developed world. In 2005, the BRIC countries (Brazil, Russia, India, and China)⁷ accounted for 15 percent of global retail sales; by 2010 their share had grown to 24 percent. Over the same period, the share of the G7 group of industrialized countries⁸ fell from 52 percent to 42 percent.⁹ These trends coincided with a period of rapid economic growth in developing countries: in 2005–10, their average annual GDP growth rate was 5.5 percentage points higher than in developed ones.¹⁰ The world's top 10 retail firms in 2009 (the most recent year for which data were available) were all headquartered in Europe or the United States (table 6.1). All except two of them—the United States' Kroger and Target—also operated in countries outside their home markets.

³ Retailing accounted for 12.9 percent of employment in service industries. USDOL, BLS, Employment, Hours, and Earnings—National Database. Seasonally adjusted statistics; figures quoted are for December 2011.

⁴ USDOC, BEA, "Value Added by Industry" (accessed November 8, 2011, and December 2, 2011).

⁵ Planet Retail database (accessed August 22, 2011).

⁶ In 2005, Russia was the 11th largest retail market, accounting for 2.3 percent of global sales.

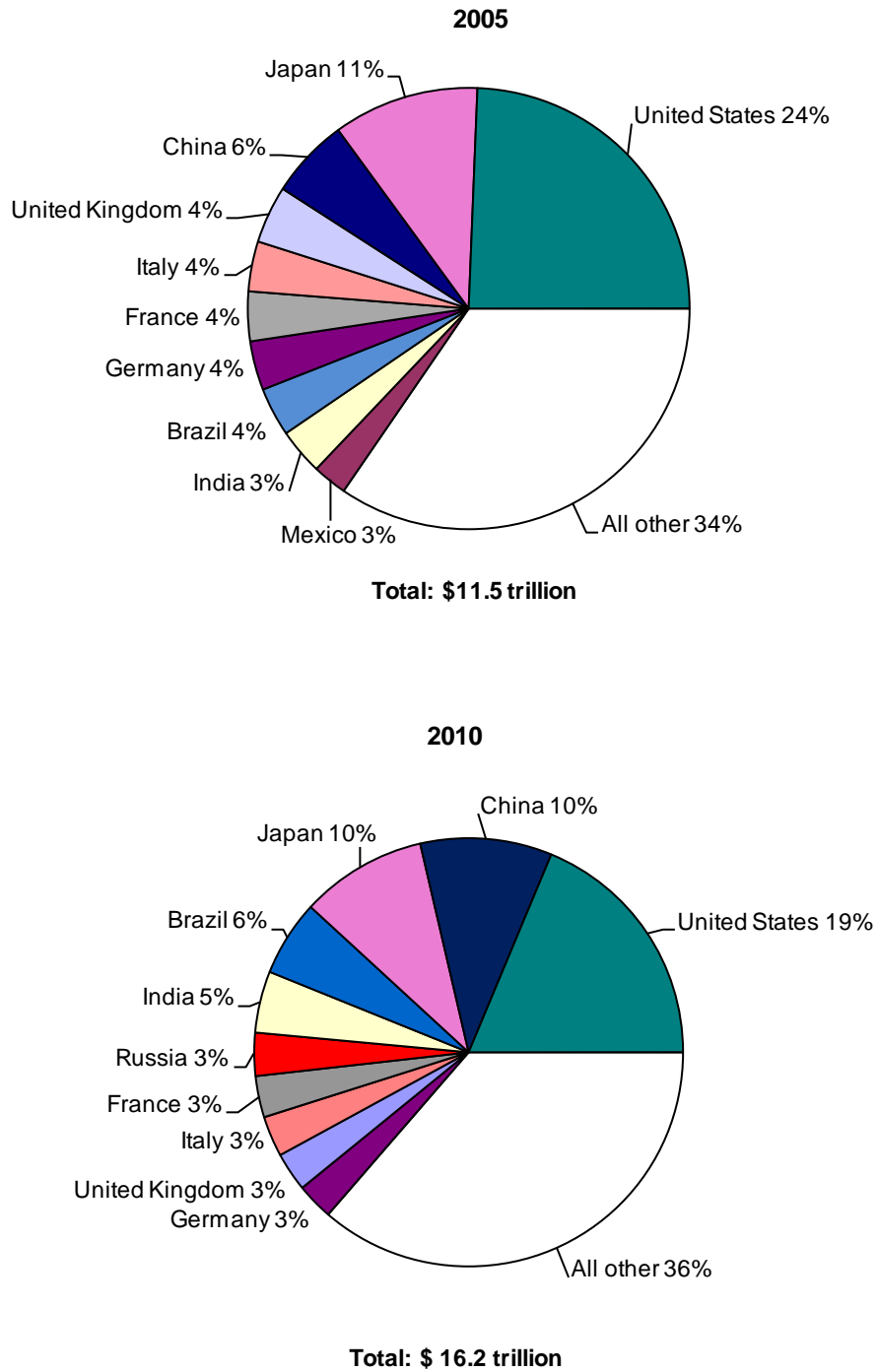
⁷ The term "BRIC" originated in O'Neill, "Building Better Global Economic BRICs," November 2001.

⁸ Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

⁹ Planet Retail database (accessed August 22, 2011).

¹⁰ World Bank, World Development Indicators database. Calculated using constant local currencies. The "developed" group includes the countries classified by the World Bank as "High Income: OECD," (i.e., high-income members of the Organisation for Economic Co-operation and Development), while "developing" includes those countries classified as "Low and Middle Income."

FIGURE 6.1 Retail services: Although the United States still held the largest share of global retailing revenues from 2005 to 2010, the share going to the BRIC countries (Brazil, Russia, India, and China) rose during that period



Source: Planet Retail database (accessed August 22, 2011).

Note: Figures may not total 100 percent due to rounding.

TABLE 6.1 Top 10 retailers, by global retail sales, 2009

Company	Country ^a	Global retail sales (US\$ billion) ^b	Number of countries ^c
Walmart	United States	405.0	15
Carrefour	France	119.9	35
Metro	Germany	90.9	33
Tesco	United Kingdom	90.4	14
Schwarz Group	Germany	77.2	25
Kroger	United States	76.7	1
Costco	United States	69.9	9
Aldi	Germany	^d 67.7	18
Home Depot	United States	66.2	5
Target	United States	63.4	1

Sources: Deloitte, “Leaving Home,” January 2011; Planet Retail database (accessed September 28–29, 2010).

^a Country represents location of headquarters.

^b Some figures are adjusted from those reported by companies to exclude nonretail sales.

^c Hong Kong is counted within China; Puerto Rico is counted within the United States. Taiwan is counted as a separate country.

^d Estimate.

Demand and Supply Factors

Growth of e-commerce drives integration of online and in-store sales channels

The growth of retail sales over the Internet (e-commerce) over the past decade has been one of the most notable trends in the global retail industry (box 6.1). Online outlets offer consumers more choices and information, which may lead to greater competition, lower prices, and increased demand. It also may enable retailers to increase sales via an expanded base of potential customers.

In the United States, year-on-year growth of e-commerce has exceeded growth of overall retail sales in every quarter since the fourth quarter of 2000 (the first period for which data are available). E-commerce accounted for an all-time high of 4.8 percent of U.S. retail sales in the fourth quarter of 2011.¹¹ The expansion of U.S. e-commerce has been facilitated by the growth of broadband Internet infrastructure, which makes it faster and easier for consumers to connect to retailers’ Web sites. In addition, online retailers enjoy a de facto exemption from sales taxes¹² and avoid store construction and maintenance expenses. As a result, they can offer competitive prices despite the extra costs of shipping to consumers.

¹¹ U.S. Census Bureau, “Quarterly Retail E-Commerce Sales, 4th Quarter 2011,” February 16, 2012. The figure quoted in the text is a seasonally adjusted preliminary estimate.

¹² The United States Supreme Court’s *Quill Corp. v. North Dakota* decision (1992) prevents states from forcing firms without a “nexus” (physical presence) in a state to collect state sales taxes. However, states such as New York have sought to increase tax collections from online retailers via more expansive definitions of “nexus.” Such efforts have led to legal disputes between the states and online retailers. At the time of the writing of this report, the U.S. Congress was considering a bill that would require online retailers across the United States to collect state sales taxes (Hines, “Internet Sales Tax,” December 1, 2011; *New York Times*, “Amazon v. the States,” March 17, 2011).

BOX 6.1 Cross-border e-commerce emerges as an avenue for entering new markets

Researchers and statistical agencies frequently downplay suggestions that cross-border retailing is important. For example, a 2005 study into the tradability of various services defined retailing as primarily nontradable,^a and as recently as November 2010, one study claimed that “there is little evidence to indicate that B2C (business to consumer) e-commerce involving conventional physical products has been viewed strategically by the retail TNCs [transnational corporations] as a low cost or ‘virtual’ form of international market entry.”^b The BEA does not publish separate statistics on cross-border retail trade (see box 6.2).^c

Yet a growing body of evidence suggests that retailers are increasingly using international e-commerce to enter new markets. Since 2009, several multinational retailers have unveiled strategies to expand sales via the Internet in markets where they do not have physical stores. For example, Gap announced in August 2010 that it would make international shipping available to 65 countries by the end of the year, including several countries where it did not have stores. The company’s president described the strategy as “an efficient way to reach new international customers and test the waters for our brands.”^d The U.S. department store Nordstrom only has physical stores in the United States, but offered shipping to 41 other countries as of December 2011,^e and the department store John Lewis, which only has stores in the United Kingdom, offered shipping to 33 other countries as of December 2011.^f

The expansion of cross-border e-commerce is due to a number of factors. First, it offers retailers a relatively low-risk way to pursue new growth opportunities. They can explore new markets without making large upfront investments in store construction and personnel. Secondly, the expansion of broadband service worldwide has created a larger pool of potential customers. Finally, retailers have access to specialized service providers that can help them design and implement their international e-commerce strategies. One example is the U.S. consulting firm FiftyOne. Its clients include many of the best-known names in U.S. retail, including Nordstrom, Sears, Aéropostale, and Macy’s. FiftyOne’s services include customization of Web sites for shoppers in different countries; calculation of prices in various currencies, factoring in duties, taxes, and exchange rates; and shipping of merchandise to international customers from a hub in the United States.^g

^a Jensen and Kletzer, “Tradable Services,” September 2005, 9.

^b Wrigley and Lowe, “The Globalization of Trade in Retail Services,” November 17, 2010, 29.

^c Borga, “Improved Measures of U.S. International Services,” March 2, 2008, 24–25.

^d Gap Inc., “Gap Inc. Expands E-commerce Reach,” August 12, 2010.

^e Nordstrom Company Web site, <http://shop.nordstrom.com/c/international-shopping?origin=footer&previousUrl=http%3A%2F%2Fshop.nordstrom.com%2F> (accessed December 5, 2011). Hong Kong and Taiwan are counted as individual countries.

^f John Lewis Company Web site, http://www.johnlewis.com/Help/Help.aspx?HelpId=55&intcmp=HP_header_international_021211 (accessed December 5, 2011).

^g FiftyOne Company Web site, <http://www.fiftyone.com> (accessed December 5, 2011).

E-commerce is also growing rapidly outside the United States: in Korea, e-commerce grew sevenfold between 2001 and 2010, and in Australia, such transactions grew eightfold from 2001 to 2008. The growth of e-commerce has been especially impressive in China, where e-commerce sales totaled ¥476 billion (\$70.2 billion) in 2010, nearly quadruple the total in 2008 (¥128 billion). China has the second-largest population of Internet shoppers in the world (145 million, compared to 170 million in the United States). One study projects that the number of Internet shoppers in China will increase by more than 30 million per year through 2015, by which time China will be the world’s leading market for e-commerce sales.¹³

The influence of the Internet on retail sales is even greater than these figures suggest. When consumers make purchases in physical stores, they increasingly research merchandise online before or during their shopping trips, often using mobile devices such as smartphones and tablet computers (“m-commerce” or mobile commerce). One senior

¹³ Boston Consulting Group (BCG), *The World’s Next E-commerce Superpower*, November 2011, 5–7.

U.S. retail executive estimated that consumers use the Web to do research for more than half of their significant purchases,¹⁴ including comparing prices across retailers.¹⁵ E-commerce's growth has forced traditional brick-and-mortar retailers to shift their business models. Many have sought to become "multichannel" retailers with integrated physical and Web operations. For example, a growing number of retailers (such as the U.S. department store chain JCPenney) allow customers to order online and pick up their orders in-store,¹⁶ while the department stores Sears and Kohl's have in-store kiosks where customers can order directly from the companies' Web sites. Others are integrating online and physical channels at the level of individual sales staff: outdoor apparel retailer Moosejaw recently equipped employees with iPod Touch devices that they use to research customers' past purchases, generate product recommendations, and complete sales with attached credit card readers.¹⁷

Retailers in developed countries adjust to sluggish economic conditions

In 2009, retail sales in the G7 countries (Canada, France, Germany, Japan, the United Kingdom, and the United States) declined for the first time since 2001, as weak economic conditions lowered consumer confidence and disposable incomes. While sales growth in these countries turned positive (3.3 percent) in 2010, it remained below its average annual growth rate of 5.7 percent between 2003 and 2008,¹⁸ amidst high unemployment and fears of a return to recession.¹⁹ The 2011 holiday shopping season in the United States yielded some tentative signs of recovery, with sales during the period increasing by an estimated 3.8 percent over the previous year. Yet some observers suggested that the economy's entrenched weaknesses might render such growth unsustainable.²⁰

Retailers in developed countries have taken a number of steps to adjust to these difficult conditions, such as adopting smaller store formats and expanding their private label (store brand) offerings. In the United States, retailers in categories ranging from electronics (e.g., Best Buy) to office supplies (Staples)²¹ to department stores (Bloomingdale's) are building smaller stores, which reduce costs for real estate, inventory, and labor (as fewer staff are required).²² The smaller formats have an additional advantage: they are easier to set up in large cities. "Big-box" retailers such as Walmart and Target have typically built their stores in suburban areas where land is less expensive than in central cities. As a result, markets for big-box retailing in cities are less saturated than in suburban areas, making the cities attractive targets for growth. For example, Target plans to open scaled-

¹⁴ John Donahoe, President and Chief Executive Officer of eBay, quoted in Gaudin, "Online and Offline Commerce on Cusp," October 19, 2011.

¹⁵ A growing literature examines the effects of online retailing on prices. While studies find that consumers are highly sensitive to prices online (i.e., the price elasticity of demand for products sold online is high), demand on some retail sites may be more elastic than others (Chevalier and Goolsbee, "Measuring Prices and Price Competition Online," 2003, 220). In addition, some online retailers use "obfuscation" strategies to increase sales of higher-priced items, such as advertising low-quality merchandise at very low prices, but drawing consumers' attention to higher-priced merchandise once they enter the retailers' Web sites (Ellison and Ellison, "Search, Obfuscation, and Price Elasticities on the Internet," October 2007, 8-9).

¹⁶ JCPenney Company Web site, <http://www.jcpenney.com/jcp/default.aspx> (accessed November 2, 2011).

¹⁷ Enright, "Shrinking to Survive," September 30, 2011.

¹⁸ Planet Retail database (accessed August 22, 2011).

¹⁹ Conference Board, "Consumer Confidence Survey," October 25, 2011.

²⁰ National Retail Federation, "National Retail Federation Upgrades Holiday Forecast," December 15, 2011; O'Donnell, "Higher Holiday Sales Come with Caveat," December 27, 2011.

²¹ Poggi, "The Great Retail Shrinkage," June 23, 2011.

²² Clifford, "In These Lean Times, Even Stores Shrink," November 9, 2010.

down stores in Chicago, Los Angeles, San Francisco, and Seattle in 2012,²³ and Walmart has announced plans for six stores in Washington, DC (its first in the city).²⁴ There has been opposition to some of these projects, with some community leaders arguing that the big-box retailers pose a threat to smaller retailers and do not pay high enough wages. In contrast, supporters argue that the stores will bring jobs, investment, and lower-priced merchandise to struggling neighborhoods. The weak economy appears to be strengthening public sentiment in favor of the projects.²⁵

In Europe, private labels were growing more popular even before the recession,²⁶ and retailers have continued to turn to them for growth. One study found that private label brands gained market share in 18 European countries in 2010.²⁷ Private label products typically sell for less than comparable brand-name goods, making them especially appealing to consumers during difficult economic times. Retailers like them, too, because they yield greater margins per sale than brand-name goods.²⁸ In the United Kingdom, traditional grocery market leaders such as Tesco and Sainsbury have broadened their offerings of private label merchandise in order to compete with the increasingly popular “hard discounters,”²⁹ such as the German-owned Aldi and Lidl chains. For example, in 2011, Sainsbury introduced a line of private-label refrigerated Mexican food, featuring items such as chicken quesadillas and fajita kits.³⁰

Private labels have also grown more popular in the United States, for grocery as well as other market segments. For example, U.S. department stores such as Macy’s, Bloomingdale’s, and Saks Fifth Avenue have recently expanded their private label apparel offerings. They have developed these products in-house as well as through exclusive partnerships. An example of the latter is Macy’s Material Girl line, developed in cooperation with the entertainer Madonna.³¹

Large retailers focus expansion efforts on developing and emerging countries

In recent years large multinational retailers have focused increasingly on establishing and expanding operations in certain developing and emerging countries. These retailers have been attracted to the fast growth of personal income and consumer spending in these countries, as well as the opportunity to establish an early presence in less saturated markets.³² This trend predates the recent economic downturn. Retail sales in the BRIC countries grew at an average annual rate of 12.9 percent between 2000 and 2007, compared to 4.6 percent in the G7—a differential that caused many large retailers to devote more attention to emerging countries. The gap grew wider between 2007 and

²³ Wohl, “U.S. Stores Shrink,” October 27, 2011.

²⁴ Walmart, “Walmart Announces New Stores,” November 15, 2011.

²⁵ Clifford, “Wal-Mart Gains in Its Wooing of Chicago,” June 24, 2010.

²⁶ Matlack and Tiplady, “The Big Brands Go Begging,” March 21, 2005.

²⁷ Private Label Manufacturers Association (PLMA), “PLMA’s 2011 Private Label Yearbook,” n.d. (accessed November 10, 2011).

²⁸ Retailers either produce store-brand merchandise in-house or contract with firms that specialize in producing such goods. Merchandise produced through these methods is typically cheaper for retailers than comparable merchandise produced by brand-name manufacturers. PLMA, “What Are Store Brands?” n.d. (accessed November 10, 2011).

²⁹ The term hard discounter connotes that a retailer competes especially aggressively on price across merchandise categories. One source defines a hard discounter as “a retailer that pushes prices even lower than traditional discounters.” Ewing et al., “The Next Wal-Mart?” April 26, 2004.

³⁰ *Store Brands Decisions*, “Sainsbury’s Launches Private Label,” September 13, 2011.

³¹ Pasquarelli, “Private Labels Are Back in Fashion,” May 29, 2011; Material Girl Collection Web site, http://materialgirlcollection.com/feb_2011/spring_2012/ (accessed April 13, 2012).

³² Deloitte, “Leaving Home,” January 2011, G8; A.T. Kearney, “Retail Global Expansion,” 2011.

2010; retail sales growth averaged 14.9 percent per year in the BRICs, compared to 1.5 percent in the G7.³³

Developing and emerging countries figure prominently in U.S. retailers' growth strategies. For example, in 2011, clothing retailer Gap opened its first store in Latin America (Chile), announced that it would enter Colombia and Panama in 2012, and described plans to triple its stores in China between January 2012 and 2013. (By contrast, by the end of 2013, it plans to close 189 stores in the United States, where it was struggling even before the recession.)³⁴ During the same year, Walmart completed a high-profile takeover of Massmart, a South African retailer that operates in 13 African countries.³⁵

However, retailers from the United States and other developed countries have also suffered setbacks in emerging countries. For example, Best Buy closed its stores in China in 2011 after struggling to compete against better-known chains,³⁶ and Swedish home furnishings retailer IKEA halted expansion outside Moscow in Russia in 2009 due to what it described as endemic corruption affecting the permitting process. (In some cases, countries use opaque procedures to protect domestic retailers from foreign competition—see “Nontariff Measures Affecting the Retailing Industry” later in this chapter.) However, IKEA's experience in Russia also exemplifies the enduring attractiveness of the emerging economies to retailers: IKEA resumed expansion in Russia outside Moscow in 2011 after clearing the bureaucratic bottlenecks.³⁷

While multinational retailers have grown increasingly active in developing and emerging countries, they continue to pursue growth opportunities in developed ones. For example, Target, which presently operates stores only in the United States, bought real estate in Canada in 2011 that will allow it to open 100 to 150 stores there in 2013 and 2014.³⁸ Target believes its high brand recognition among Canadians will enable it to succeed there; the company's research showed that 10 percent of Canadians shopped at Target stores in the United States in 2010.³⁹ Japan's Fast Retailing opened two of its Uniqlo apparel stores in New York City in 2011 as part of an aggressive plan to grow around the world. The company seeks to fill a niche for basics such as T-shirts and sweaters that are well-made and stylish but affordable.⁴⁰

³³ Planet Retail database (accessed August 22, 2011).

³⁴ D'Innocenzio, “Gap Closing about Fifth of U.S. Stores,” October 13, 2011; Associated Press, “Gap Plans Stores in Chile, Panama, Colombia,” October 12, 2011.

³⁵ Walmart, “Wal-Mart Stores, Inc. Data Sheet,” October 19, 2011; Walmart, “The South African Competition Tribunal Approves Merger,” May 31, 2011.

³⁶ *Bloomberg*, “Best Buy Shuts China Stores,” February 22, 2011. However, Best Buy did continue to operate its Five Star chain of stores, which it purchased in 2006.

³⁷ Meyer, “Russia Repels Retailers,” March 2, 2011; *RT*, “Ikea Ufa Opens Up,” August 25, 2011.

³⁸ Target, “Target Corporation to Acquire Interest in Canadian Real Estate,” January 13, 2011.

³⁹ Zimmerman and Talley, “Target Is Going Abroad,” January 14, 2011.

⁴⁰ Thau, “Can Uniqlo's Clever Clothes Refashion the U.S. Retail Market?” October 29, 2011.

Trade Trends

Affiliate Transactions

U.S.-owned foreign affiliates supplied retail services (box 6.2) worth an estimated \$67.9 billion in 2009, an increase of 4.6 percent over the previous year, but a sharp slowdown from growth of nearly 11 percent in 2008 (figure 6.2).⁴¹ This slowing of growth reflects the broader slowdown of retail sales in developed countries in 2009. Countries in this group are some of the United States' most important foreign markets, including Canada, which accounted for 27.9 percent of U.S. retailers' services supplied via affiliates in 2009. Other leading markets include the United Kingdom, Japan, and Germany (figure 6.3).⁴²

Canada has long been a leading foreign destination for U.S. retailers because of its proximity and its cultural and economic ties to the United States, but its share of affiliate sales has dropped since 2007, when it had 30.8 percent of U.S.-owned retailers' affiliate sales. This reflects the increasing importance of emerging markets such as Brazil, China, and Mexico to U.S. retailers (see "Competitive Conditions" in this chapter). In Brazil and China, U.S. retailers face strong competition from domestic retailers and multinationals from other countries. For example, in Brazil, Walmart competes in the grocery market with France's Carrefour and Casino, the Netherlands' Makro, Chile's Cencosud, and the domestic retail cooperative Coop. In China, U.S. retailers across market segments (e.g., grocery, apparel, electronics, and home improvement) compete with firms from a variety of European and Asian countries as well as domestic firms. In contrast, U.S. multinational retailers face less competition from other multinationals in Mexico, where they enjoy the advantages of proximity and the two countries' extensive commercial links. Walmart, Best Buy, and The Home Depot are among the prominent U.S. retail chains active in the Mexican market.⁴³

U.S. firms have dedicated an increasing amount of capital to retail operations abroad over the past decade. U.S. direct investment abroad in retailing more than doubled between 2000 and 2010, growing from \$23.6 billion to \$52.8 billion. The growth of non-store retailing operations abroad was particularly striking: direct investment in such businesses grew twentyfold over the period, and equaled 45 percent of all U.S. direct investment in retailing in 2010, compared to 5 percent in 2000.⁴⁴ The rapid growth of nonstore retailers likely reflects the international expansion of online retailers such as Amazon.com, which had "fulfillment centers" and other physical facilities in 14 countries outside the United States as of January 2012 (see "Competitive Conditions").⁴⁵

⁴¹ Growth in 2008 was similar to that in 2007 (9.6 percent) and 2006 (8.4 percent). However, in 2005—the first year for which year-on-year comparison data are available—growth totaled 36.2 percent. The reason for the large jump in 2005 is unclear, but it may have been due in part to Walmart's entry into five Central American countries in September of that year. USDOC, BEA, "Supplemental Detail: Table 9" and "Table 9"; Walmart, "Wal-Mart Stores Inc. Data Sheet," January 16, 2012.

⁴² BEA publishes data for only eight individual countries. Several important markets (e.g., Brazil and China) are not broken out separately.

⁴³ Deloitte and STORES Media. "Global Powers of Retailing," January 2012.

⁴⁴ USDOC, BEA, Operations of Multinational Companies Database (accessed January 30, 2012).

⁴⁵ Amazon Web site, <http://www.amazon.com/Locations-Careers/b?ie=UTF8&node=239366011> (accessed January 30, 2012).

BOX 6.2 Understanding BEA data on retail services

For its statistics on affiliate sales in the retail industry, the BEA examines the full range of industry segments, including general merchandise stores; stores specializing in specific merchandise categories (e.g., furniture, electronics, clothing, and sporting goods); and non-store retailers (e.g., telemarketers, online retailers, and vending machine operators). The BEA does not report separate data for cross-border supply of retailing services via e-commerce (“Mode 1” trade under the GATS). Instead, the value of such services is subsumed within the data for merchandise imports and exports.^a Retail purchases by consumers outside their home country (“Mode 2” trade under the GATS) are counted within BEA’s travel accounts, but are not disaggregated from other types of travel expenditures.

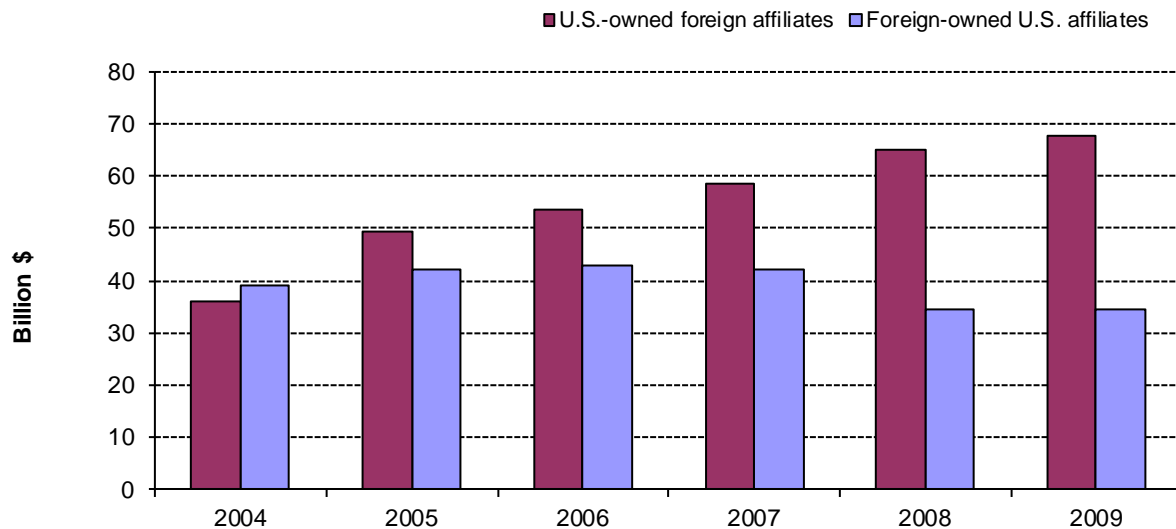
In 2008, the BEA introduced a major change in the way it calculates affiliate transactions in retail services, and revised its estimates of such transactions beginning in 2002 for foreign-owned affiliates and 2004 for U.S.-owned affiliates. Previously, the BEA reported only retailers’ “sales of services,” which included secondary services sold at an explicit price (e.g., an electronics retailer’s sales of repair services) but not service attributes whose prices are usually bundled into the price of merchandise (e.g., customer service, the assortment of goods offered, and information about the goods).^b For the revised measure, the BEA collects data on retail affiliates’ sales, cost of goods sold, and beginning- and end-of-year inventories. It then calculates trade margins that capture the value of retail services associated with merchandise sales.^c These adjustments led to a significant increase in BEA’s estimates of affiliate activity in the retailing industry. To understand why, one can return to the example of electronics retailers: instead of simply reflecting their sales of specific services, the data now incorporate a portion of every merchandise transaction as retailing “services supplied.”

^a Borga, “Improved Measures of U.S. International Services,” March 2, 2008, 24–25.

^b Borga, “Supplemental Estimates of Insurance, Trade Services, and Financial Services,” October 2007, 109–110.

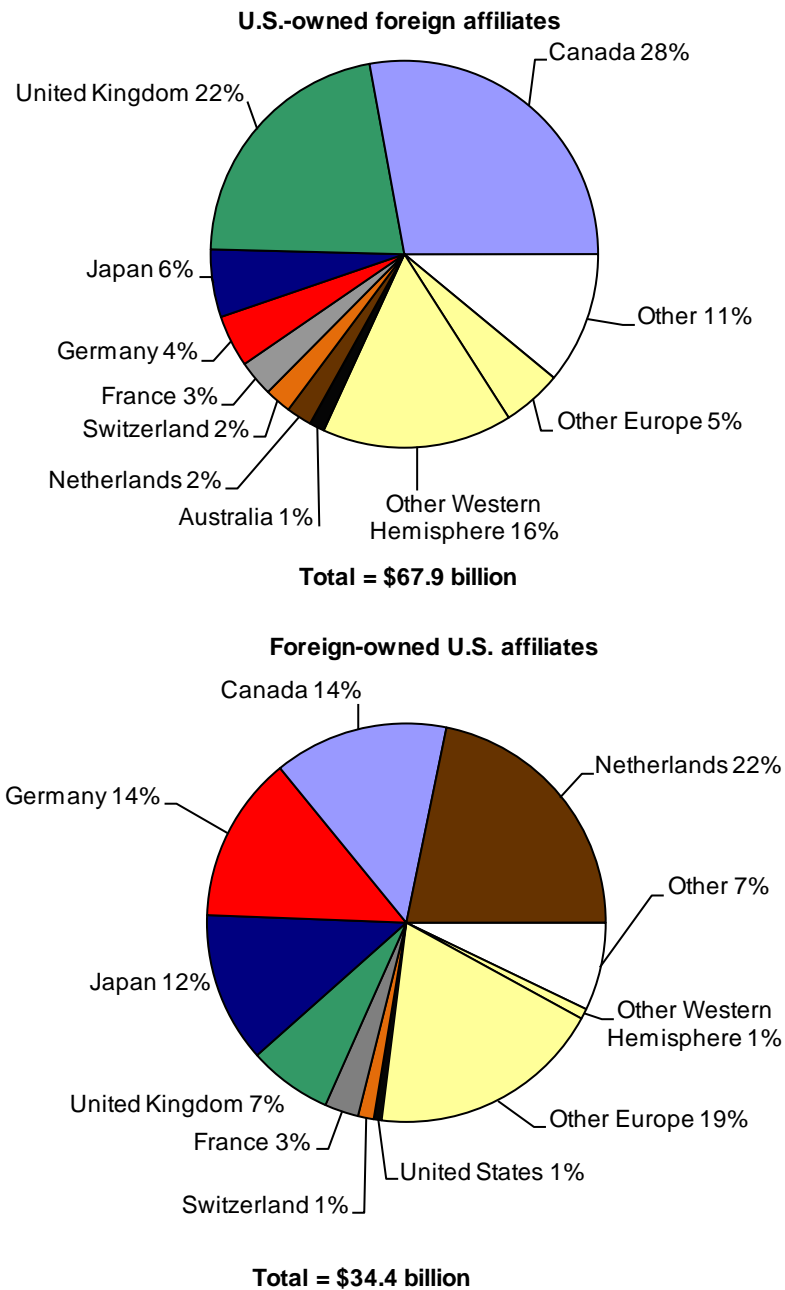
^c BEA representative, e-mail message to USITC staff, February 22, 2010. Data from the U.S. Census Bureau is used to calculate margins in instances where the requisite data are not available from BEA’s surveys.

FIGURE 6.2 Retail services: Services supplied by U.S.-owned foreign affiliates grew faster than retailing services supplied by foreign-owned U.S. affiliates in recent years



Sources: USDOC, BEA, “Supplemental Detail: Table 9,” “Supplemental Detail: Table 10,” “Table 9,” “Table 10.”

FIGURE 6.3 Retail services: Canada and the United Kingdom accounted for nearly half of the retailing services supplied by U.S.-owned foreign affiliates in 2009, while more than one-fifth of all retailing services supplied by foreign-owned U.S. affiliates in 2009 involved affiliates from the Netherlands



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 54 and 56, tables 9.2 and 10.2.

Note: Geographic regions are shaded in yellow. Figures may not total 100 percent due to rounding. These graphs show ownership by ultimate beneficial owner of affiliates. Unlike the foreign parent, the ultimate beneficial owner of a U.S. affiliate may be located in the United States.

Foreign firms' retail affiliates in the United States supplied services worth \$34.4 billion in 2009, a decline of 0.2 percent over 2008. This was the third consecutive year in which foreign retailers' U.S. affiliate sales fell, although the drop was far less steep than the 18.2 percent decline in 2008. These declines in services supplied did not coincide with a decrease in foreign direct investment in the U.S. retail industry: after dropping slightly in 2007, foreign firms' direct investment positions rose in each subsequent year through 2009.⁴⁶ This suggests that the decline in services supplied was due to sluggish sales rather than a lessening of foreign firms' interest in the United States.

U.S. affiliates of Europe-based retailers accounted for 65 percent of the sales of U.S. affiliates of foreign firms in 2009. European firms own numerous grocery chains in the United States: for example, the Netherlands' Ahold owns Stop & Shop and Giant, Germany's Aldi owns the U.S. supermarket chain of the same name, and the United Kingdom's Tesco owns Fresh & Easy. However, Europe's share of affiliate sales is down slightly from 2006, when it was 70 percent. Over the same period, Japan's share increased from 7 percent to 12 percent. The Japanese company Seven & i Holdings controls one of the United States' largest convenience store chains, 7-Eleven.⁴⁷

Nontariff Measures Affecting Trade

Most measures that explicitly restrict foreign participation in the retail industry are targeted at the establishment of "commercial presence" in the form of brick-and-mortar stores, or "Mode 3" trade under the GATS. While few countries fully prohibit foreign participation in some or all retail segments, there is a notable exception: India, which does not allow foreign direct investment in establishments selling more than one brand of merchandise. This restriction has prevented multinational operators of general merchandise stores, such as Walmart and Carrefour, from establishing retail outlets in the country.⁴⁸

Several other countries restrict foreign ownership in retailing without banning it outright. For example, Malaysia caps foreign ownership at 70 percent, while Saudi Arabia limits it to 75 percent. In Thailand, foreign ownership is not permitted in retail investments under 100 million baht (\$3.1 million) unless special permission is granted.⁴⁹ Vietnam allows 100 percent ownership of retail businesses, but all requests to build stores after the first outlet are subject to an "economic needs test" with unclear criteria.⁵⁰

⁴⁶ USDOC, BEA, Operations of Multinational Companies database (accessed December 21, 2011).

⁴⁷ Seven & i Holdings Company Web site, <http://www.7andi.com/en/company/group.html> (accessed June 25, 2012).

⁴⁸ However, foreign direct investment is permitted in wholesaling, and both Walmart and Carrefour have opened wholesale "cash & carry" stores in India that are open to business and institutional customers. The Indian government announced a plan to open multibrand retailing to foreign investment in November 2011, only to suspend these plans due to intense opposition from small shopkeepers and their allies in parliament. MacAskill and Goyal, "Singh's Retail Retreat," December 8, 2011.

⁴⁹ World Bank, Investing Across Borders Database. Currency conversion using OANDA, Currency Converter database.

⁵⁰ The relevant regulation states that "The establishment of retail sales outlets in addition to the first retail sales outlet... shall depend on the number of retail sales outlets, market stability, population density in the province or city where the retail sales outlet is to be set up, and consistency of the investment project with the master plan of such province or city." Yet the regulation does not describe how regulators will determine whether the criteria are satisfied. Socialist Republic of Vietnam, Ministry of Trade, Circular No. 09-2007-TT-BTM, July 17, 2007, http://www.itpc.gov.vn/investors/how_to_invest/law/2008-09-25.304363/mldocument_view/?set_language=en (accessed April 19, 2012).

Most Organisation for Economic Co-operation and Development (OECD) countries do not explicitly ban foreign participation in retail, but many of these countries have regulations that may affect foreigners' willingness to invest, such as restrictions on the hours or days that stores may be open, permitting processes that are more burdensome for larger stores, and limitations on the times when discounts may be offered. For example, in France, openings on Sundays are limited, proposed stores over 1,000 square meters in surface area require special authorization, and sales may take place only at certain times of year.⁵¹

Retailing is underrepresented in countries' multilateral trade commitments. As of January 2008, 54 WTO members had made commitments in retail services.⁵² The majority of these commitments contain no limits on market access and national treatment,⁵³ but some of the countries with the most notable barriers to foreign activity (e.g., India) have not made retailing commitments. In light of the prolonged impasse in the WTO's Doha Round of trade negotiations, the organization's most fruitful avenue for liberalization has arguably been the accession process: every new member since the Kyrgyz Republic (which acceded in December 1998) has made commitments in retailing, with the exception of Samoa.⁵⁴ While some of these countries allowed some foreign direct investment in retailing before accession, their GATS commitments gave investors more certainty that such policies would remain in place.

In some instances, countries have made commitments on retailing in their bilateral and regional trade agreements that are more liberal than their WTO commitments. One recent example is the United States-Panama Trade Promotion Agreement, signed by President Obama in October 2011. Panama has a general ban on foreign participation in retailing, but this agreement creates an exception for U.S. retailers.⁵⁵

Outlook

Industry observers suggest that growth conditions in the global retailing industry are likely to remain more challenging in developed than developing countries in the near future, with conditions particularly difficult in Western Europe.⁵⁶ In the largest retail markets in that region (France, Germany, Italy, and the United Kingdom), the International Monetary Fund projects slow economic growth or declines and little change in unemployment in 2012,⁵⁷ which will likely continue to depress consumer confidence and spending.

⁵¹ Ministère de l'Économie, de l'Industrie et de l'Emploi, [Ministry of the Economy, Industry, and Employment of France,] "La Loi de Modernisation," 2008.

⁵² By comparison, 133 members had made commitments for hotels and restaurants and 104 had done so for banking (note: the figures quoted here count as one member the 12 European countries that were party to the original "European Communities" GATS schedule). WTO, Services Database (the database has not been updated since 2008).

⁵³ A limitation on national treatment reserves the member's ability to treat foreign services and service suppliers less favorably than domestic services and service providers. WTO, "Guide to Reading the GATS."

⁵⁴ WTO Secretariat representative, e-mail to USITC staff, January 7, 2012; WTO, "Schedules of Commitments" (accessed January 2012).

⁵⁵ United States-Panama Trade Promotion Agreement, Side Letter on Retail Sales. The agreement had not yet entered into force as of June 2012.

⁵⁶ EIU, *Industries in 2012*, 2011, 9.

⁵⁷ IMF, "World Economic Outlook," September 2011, 78.

Analysts project that U.S. retail sales will grow more slowly in 2012 than in 2011, but faster than in Western Europe, due in part to economic growth that is expected to exceed that in the large Western European countries.⁵⁸ Higher-income Americans are expected to support healthy sales among luxury retailers, while discounters will benefit from shoppers with strained budgets hunting for bargains.⁵⁹

Retailers will continue to focus on growing sales in developing and emerging countries in 2012, particularly in China. The luxury market there is expected to continue growing robustly.⁶⁰ Multinational retailers' interest in India may depend on whether the government loosens its restrictions on foreign direct investment. In Brazil, slower economic growth in 2011 may lead to slower retail sales going forward, although some observers believe that policy measures such as a minimum wage increase and relaxed credit regulations will support consumer spending in 2012.⁶¹

Mobile devices are expected to continue growing in importance as channels for retail sales in the coming years, as the use of smartphones and tablet computers increases in developed and developing countries alike.⁶² Continued economic weakness in developed countries may also boost mobile commerce, as customers seek to find the best deals using their mobile devices.⁶³

⁵⁸ IMF, "World Economic Outlook," September 2011, 75; *Kiplinger*, "Economic Outlook," December 14, 2011; EIU, *Industries in 2012*, 2011, 9.

⁵⁹ Aseada, "Retailing: General," November 24, 2011, 9.

⁶⁰ *FashionNetAsia.com*, "China," June 14, 2011.

⁶¹ Arcentales, Carvalho, and Volberg, "Country Commentary," November 28, 2011.

⁶² Reda, "Predictions 2012," December 2011; EIU, "Industries in 2012," 9.

⁶³ EIU, "Industries in 2012," 9.

Bibliography

- Arcentales, Luis, Arthur Carvalho, and Daniel Volberg. "Country Commentary: 2012 Outlook." *Morgan Stanley Research: This Week in Latin America*, November 28, 2011.
<http://www.emta.org/keyviews.aspx>.
- Aseada, Jason. "Retailing: General." *Standard & Poor's Industry Surveys*. New York: Standard & Poor's, November 24, 2011.
<http://www.netadvantage.standardandpoors.com/NASApp/NetAdvantage/showIndustrySurvey.do?code=reg> (registration required).
- Associated Press. "Gap Plans Stores in Chile, Panama, Colombia." *Bloomberg Businessweek*, October 12, 2011. <http://www.businessweek.com/ap/financialnews/D9QARAE00.htm>
- A.T. Kearney. "Retail Global Expansion: A Portfolio of Opportunities; The 2011 A.T. Kearney Global Retail Development Index." A.T. Kearney, 2011.
<http://www.atkearney.com/index.php/Publications/retail-global-expansion-a-portfolio-of-opportunities2011-global-retail-development-index.html>.
- Betancourt, Roger R. *The Economics of Retailing and Distribution*. Cheltenham, UK: Edward Elgar, 2004.
- Birchall, Jonathan. "Walmart Gears Up for Global Online Push." *Financial Times*, January 29, 2010.
http://www.ft.com/cms/s/0/9f944f78-0c67-11df-a941-00144feabdc0.html?nclick_check=1
(registration required).
- Bloomberg*. "Best Buy Shuts China Stores to Focus on More Profitable Brand," February 22, 2011.
<http://www.bloomberg.com/news/2011-02-22/best-buy-s-china-stores-shut-as-retailer-focuses-on-more-profitable-brand.html>.
- Borga, Maria. "Improved Measures of U.S. International Services: The Cases of Insurance, Wholesale and Retail Trade, and Financial Services." Paper prepared for the NBER-CRIW Conference on International Services Flows, Bethesda, Maryland, April 28–29, 2006 (version dated March 2, 2008).
- . "Supplemental Estimates of Insurance, Trade Services, and Financial Services Sold through Affiliates." *Survey of Current Business* 87, no. 10 (October 2007).
<http://www.bea.gov/scb/toc/1007cont.htm>.
- Boston Consulting Group (BCG). *The World's Next E-commerce Superpower: Navigating China's Unique Online-Shopping Ecosystem*. Boston: BCG, November 2011.
<http://www.bcg.com/documents/file91905.pdf>.
- Chevalier, Judith, and Austan Goolsbee. "Measuring Prices and Price Competition Online: Amazon.com and BarnesandNoble.com." *Quantitative Marketing and Economics* 1 (2003): 203–22.
- Clifford, Stephanie. "Wal-Mart Gains in Its Wooing of Chicago." *New York Times*, June 24, 2010.
<http://www.nytimes.com/2010/06/25/business/25walmart.html>.
- . "In These Lean Times, Even Stores Shrink." *New York Times*, November 23, 2010.
<http://www.nytimes.com/2010/11/10/business/10small.html?pagewanted=>

- Conference Board. "Consumer Confidence Survey: The Conference Board Consumer Confidence Index Declines." News release, October 25, 2011. <http://www.conference-board.org/data/consumerconfidence.cfm> (link now leads to a more recent news release).
- Deloitte. *Leaving Home: Global Powers of Retailing 2011*. London: Deloitte, January 2011. https://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Consumer%20Business/GlobPowDELOITTE_14%20Jan.pdf.
- Deloitte and STORES Media. "Global Powers of Retailing Top 250." *Stores*, January 2012. <http://www.stores.org/STORES%20Magazine%20January%202012/global-powers-retailing-top-250> (accessed June 25, 2012).
- D'Innocenzio, Anne. "Gap Closing about Fifth of U.S. Stores, Expanding in China." *USA Today*, October 13, 2011. <http://www.usatoday.com/money/industries/retail/story/2011-10-13/gap-closings-china-expansion/50764116/1>.
- Economist Intelligence Unit (EIU). *Industries in 2012*. New York: Economist Intelligence Unit, 2011. http://www.eiu.com/public/topical_report.aspx?campaignid=Industries2012 (registration required).
- Ellison, Glenn, and Sarah Fisher Ellison. "Search, Obfuscation, and Price Elasticities on the Internet." Massachusetts Institute of Technology faculty working paper, October 2007. <http://econ-devel.mit.edu/files/3199>.
- Enright, Allison. "Shrinking to Survive." *Internet Retailer*, September 30, 2011. <http://www.internetretailer.com/2011/09/30/shrinking-survive?p=1>.
- Ewing, Jack, Andrea Zammert, Wendy Zellner, Rachel Tiplady, Ellen Groves, and Michael Eidam. "The Next Wal-Mart?" *BusinessWeek*, April 26, 2004. http://www.businessweek.com/magazine/content/04_17/b3880010.htm.
- FashionNetAsia.com*. "China: The Country to Become the World's Largest Luxury Goods Market by 2012," June 14, 2011. <http://www.fashionnetasia.com/en/IndustryNews/DailyHeadline/Detail.html?id=2849>.
- Gap Inc. "Gap Inc. Expands E-Commerce Reach from One to Sixty-Five Countries by Year End." News release, August 12, 2010. http://www.gapinc.com/content/gapinc/html/media/pressrelease/2010/med_pr_GIDinternational08122010.html.
- Gaudin, Sharon. "Online and Offline Commerce on Cusp of a Convergence." *Computerworld*, October 19, 2011. http://www.computerworld.com/s/article/9220986/Online_and_offline_commerce_on_cusp_of_a_convergence.
- Hines, Alice. "Internet Sales Tax: Democrats, Republicans Support Closing Loophole." *Huffington Post*, December 1, 2011. http://www.huffingtonpost.com/2011/12/01/internet-sales-tax-bill_n_1123024.html.
- International Monetary Fund (IMF). *World Economic Outlook: Slowing Growth, Rising Risks*. Washington: IMF, September 2011. <http://www.imf.org/external/pubs/ft/weo/2011/02/index.htm>.

- Jensen, J. Bradford, and Lori G. Kletzer. "Tradable Services: Understanding the Scope and Impact of Services Offshoring." Institute for International Economics Working Paper Series WP 05–9, September 2005. <http://www.piie.com/publications/wp/wp05-9.pdf>.
- Kiplinger. "Economic Outlook," December 14, 2011. http://www.kiplinger.com/businessresource/economic_outlook (accessed January 2012).
- Koncz-Bruner, Jennifer, and Anne Flatness. "U.S. International Services: Cross-Border Trade in 2010 and Services Supplied Through Affiliates in 2009." *Survey of Current Business* 91, no. 10 (October 2011). http://www.bea.gov/scb/pdf/2011/10%20October/1011_services%20text.pdf.
- MacAskill, Andrew, and Kartik Goyal. "Singh's Retail Retreat Marks 'Nail in the Coffin' for India Market Opening." *Bloomberg*, December 8, 2011. <http://mobile.bloomberg.com/news/2011-12-07/singh-s-retail-retreat-a-nail-in-the-coffin-for-india-opening>.
- Matlack, Carol, and Rachel Tiplady. "The Big Brands Go Begging in Europe." *BusinessWeek*, March 21, 2005. http://www.businessweek.com/magazine/content/05_12/b3925071_mz054.htm.
- Meyer, Henry. "Russia Repels Retailers as Ikea Halt Curtails Medvedev Goal." *Bloomberg*, March 2, 2011. <http://www.bloomberg.com/news/2011-03-01/russia-repels-retailers-as-ikea-halt-curtaills-medvedev-bric-goal.html>.
- Ministère de l'Économie, de l'Industrie et de l'Emploi. [Ministry of the economy, industry, and employment of France.] "La Loi de Modernisation de l'Économie" [The law on modernization of the economy], 2008. <http://www.minefe.gouv.fr/lois/lme.html>.
- Moody, Andrew. "B&Q, Home Depot Find the Going Tough." *China Daily*, April 6, 2009. http://www.chinadaily.com.cn/business/2009-04/06/content_7651845.htm.
- National Retail Federation. "National Retail Federation Upgrades Holiday Forecast, Expects Sales to Rise 3.8 Percent to \$469.1 Billion." News release, December 15, 2011. http://www.nrf.com/modules.php?name=News&op=viewlive&sp_id=1278.
- New York Times*. "Amazon v. the States," March 17, 2011. <http://www.nytimes.com/2011/03/18/opinion/18fri3.html>.
- OANDA. Currency Converter database. <http://www.oanda.com/currency/converter/> (accessed January 10, 2012).
- . Historical Exchange Rates database. <http://www.oanda.com/currency/historical-rates/> (accessed December 2, 2011).
- O'Donnell, Jayne. "Higher Holiday Sales Come with Caveat." *USA Today*, December 27, 2011. <http://www.usatoday.com/money/industries/retail/story/2011-12-23/retail-holiday-sales/52196132/1>.
- Organisation for Economic Co-operation and Development (OECD). "The Future of the Internet Economy: A Statistical Profile; June 2011 Update." Prepared for the OECD high-level meeting on "The Internet Economy: Generating Innovation and Growth," Paris, June 28-29, 2011. http://www.oecd.org/document/28/0,3746,en_21571361_47081080_47122524_1_1_1_1,00.html.

- O'Neill, Jim. "Building Better Global Economic BRICs." Goldman Sachs Global Economics Papers 66, November 2001. <http://www2.goldmansachs.com/our-thinking/brics/brics-reports-pdfs/build-better-brics.pdf>.
- Pasquarelli, Adrienne. "Private Labels Are Back in Fashion." *Crain's New York Business*, May 29, 2011. <http://www.crainsnewyork.com/article/20110529/SMALLBIZ/305299979>.
- Planet Retail. Planet Retail Database. www.planetretail.net (accessed various dates) (subscription required).
- Poggi, Jeanine. "The Great Retail Shrinkage: Will Smaller Stores = Higher Profits?" *The Street*, June 23, 2011. <http://www.thestreet.com/story/11133719/3/the-great-retail-shrinkage-will-smaller-stores-equal-higher-profits.html>.
- Private Label Manufacturers Association (PLMA). "PLMA's 2011 Private Label Yearbook: Private Label Sales Keeps Climbing, Posts Market Share Gains in 18 Countries" (sic). News release, n.d. http://www.plmainternational.com/pressupdate/pressupdate_new02.asp?language=en (accessed November 10, 2011).
- . "What Are Store Brands?" n.d. <http://plma.com/storeBrands/facts11.html> (accessed November 10, 2011).
- Reda, Susan. "Predictions 2012." *Stores*, December 2011. <http://www.stores.org/STORES%20Magazine%20December%202011/predictions-2012>.
- RT. "Ikea Ufa Opens Up after the Long Wait," August 25, 2011. <http://rt.com/business/news/ikea-ufa-mega-store-133/>.
- Store Brands Decisions*. "Sainsbury's Launches Private Label Mexican Food Line," September 13, 2011. <http://www.storebrandsdecisions.com/news/2011/09/13/sainsburys-launches-private-label-mexican-food-line>.
- Target. "Target Corporation to Acquire Interest in Canadian Real Estate from Zellers Inc., a Subsidiary of Hudson's Bay Company, for C\$1.825 Billion." News release, January 13, 2011. <http://investors.target.com/phoenix.zhtml?c=65828&p=irol-newsArticle&ID=1515822&highlight=>.
- Thau, Barbara. "Can Uniqlo's Clever Clothes Refashion the U.S. Retail Market?" *DailyFinance*, October 29, 2011. <http://www.dailyfinance.com/2011/10/29/can-uniqlos-clever-clothes-refashion-the-u-s-retail-market/>.
- U.S. Census Bureau. "Quarterly Retail E-Commerce Sales, 4th Quarter 2011." February 16, 2012. http://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf.
- . "2007 NAICS Definition: Sector 44–45; Retail Trade." <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=44&search=2007%20NAICS%20Search> (accessed November 8, 2011).
- U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). Operations of Multinational Companies Database (accessed various dates) (later renamed the Direct Investment & Multinational Companies database, http://www.bea.gov/iTable/index_MNC.cfm).

- . “Supplemental Detail: Table 9. Services Supplied to Foreign Persons by U.S. MNCs through Their MOFAs, 2004–05.” U.S. International Services database. http://www.bea.gov/international/xls/tab9_supp.xls (accessed April 20, 2012).
- . “Supplemental Detail: Table 10. Services Supplied to U.S. Persons by Foreign MNCs through Their MOUSAs, 2002–05.” U.S. International Services database. http://www.bea.gov/international/xls/tab10_supp.xls (accessed April 20, 2012).
- . “Table 9. Services Supplied to Foreign Persons by U.S. MNCs through Their MOFAs, 2006–09.” U.S. International Services database. http://www.bea.gov/international/xls/tab9_a.xls (accessed April 20, 2012).
- . “Table 10. Services Supplied to U.S. Persons by Foreign MNCs through Their MOUSAs, 2006–09.” U.S. International Services database. http://www.bea.gov/international/xls/tab10_a.xls (accessed April 20, 2012).
- . “Value Added by Industry, Gross Output by Industry, Intermediate Inputs by Industry, the Components of Value Added by Industry, and Employment by Industry.” http://www.bea.gov/industry/gdpbyind_data.htm (accessed March 13, 2012).
- U.S. Department of Labor (USDOL). Bureau of Labor Statistics (BLS). Employment, Hours, and Earnings—National database (accessed April 12, 2012). <http://www.bls.gov/ces/#data>.
- Walmart. “The South African Competition Tribunal Approves Merger and Accepts Conditions Proposed by Walmart and Massmart.” News release, May 31, 2011. <http://walmartstores.com/pressroom/news/10609.aspx>.
- . “Walmart Announces New Stores at Skyland & Fort Totten Square.” News release, November 15, 2011. <http://www.walmartwashingtondc.com/walmart-announces-new-stores-at-skyland-fort-totten-square/>.
- . “Wal-Mart Stores, Inc. Data Sheet—Worldwide Unit Details, September 2011,” October 19, 2011. <http://walmartstores.com/pressroom/news/10731.aspx>.
- . “Wal-Mart Stores, Inc. Data Sheet—Worldwide Unit Details, December 2011,” January 16, 2012. <http://walmartstores.com/pressroom/news/10798.aspx>.
- Wohl, Jessica. “U.S. Stores Shrink, Get Make-overs to Boost Sales.” Reuters, October 27, 2011. <http://www.reuters.com/assets/print?aid=USN1E79O0A520111027>.
- World Bank. Investing Across Borders database. <http://iab.worldbank.org/> (accessed December 27, 2011).
- . World Development Indicators database. <http://databank.worldbank.org/ddp/home.do> (accessed November 4, 2011).
- World Trade Organization (WTO). “Guide to Reading the GATS Schedules of Specific Commitments and the List of Article II (MFN) Exemptions.” http://www.wto.org/english/tratop_e/serv_e/guide1_e.htm (accessed April 13, 2012).
- . “Schedules of Commitments and Lists of Article II Exemptions.” http://www.wto.org/english/tratop_e/serv_e/serv_commitments_e.htm (accessed January 2012).

———. “Services Database.” <http://tsdb.wto.org/> (accessed April 13, 2012).

———. “Working Party Seals the Deal on Russia’s Membership Negotiations.” News release, November 10, 2011. http://www.wto.org/english/news_e/news11_e/acc_rus_10nov11_e.htm.

Wrigley, Neil, and Michelle Lowe. “The Globalization of Trade in Retail Services.” Report commissioned by the OECD Trade Policy Linkages and Services Division for the OECD Experts Meeting on Distribution Services, Paris, November 17, 2010. http://www.oecd.org/document/33/0,3746,en_2649_36344374_46259617_1_1_1_1,00.html.

Zimmerman, Ann, and Karen Talley. “Target Is Going Abroad—to Canada.” *Wall Street Journal*, January 14, 2011. <http://online.wsj.com/article/SB10001424052748703583404576079690417970136.html>.

CHAPTER 7

Securities Services

Summary

Roughly half of all transactions in global securities markets take place in the United States, and U.S. securities firms dominate in the provision of securities trading and investment banking services around the world. During the first nine months of 2011, U.S. firms occupied the top four positions in the global rankings of fees earned from investment banking activities.¹ Investment banking revenues are generally correlated with growth in the global economy as well as company share prices.² While the global bond markets are suffering the effects of uncertainty over European sovereign debt, and equity markets continue to struggle to make long-term gains due to low investor confidence, somewhat higher levels of corporate lending and merger and acquisition (M&A) activity are underpinning demand for securities services.³ Regulatory authorities around the world continue to make progress towards establishing tighter regulatory regimes, but uncertainty about future regulation may also dampen financial services innovation.⁴

Large volumes of securities and securities-related services are traded between countries with well-established financial centers, such as the United States, the United Kingdom, Japan, and Switzerland, where there are large issuer and investor bases as well as active derivatives markets. In 2008–10, the United States consistently achieved a trade surplus in securities-related services.

Introduction

Securities are financial instruments—e.g., stocks and shares in companies and government as well as corporate bonds—that may be bought and sold in various capital markets. They are the means by which capital is transferred from savers to users of capital. A variety of services exist to manage and trade in these essential financial tools, including investment banking (mainly debt and equity underwriting and financial advisory services, especially for M&A activity), securities dealing and brokering, proprietary trading, and asset management services. Investment banks broker and make markets in securities of all types, including derivative securities. As corporate finance advisors, investment banks help companies raise capital by underwriting equity or debt issues, locating potential private equity investors, and arranging M&A transactions. Before the impact of new regulation in recent years, investment banks also earned significant profits by investing their own equity capital (so-called “proprietary trading”). Asset management firms are fund managers for institutional investors such as pension funds and insurance companies, as well as for individuals seeking to invest their savings in mutual funds and other savings vehicles that enable them to access global stock and bond markets.

¹ Thomson Reuters, “Global Investment Banking Review,” 2011, 5.

² Standard & Poor’s, *Industry Surveys: Investment Services*, October 27, 2011, 3.

³ Thomson Reuters, “Global Investment Banking Review,” 2011, 3–5.

⁴ Lambe, “2011: Goodbye and Good Riddance?” December 1, 2011.

Securities-related services are often provided by intermediaries between securities issuers (companies, governments, and state-owned enterprises) and securities investors (individuals and institutional investors, such as mutual funds, pension funds, and insurance companies). The major providers of these services are large global investment banks such as Goldman Sachs, Morgan Stanley, and J.P. Morgan, although the industry also comprises many smaller firms and is only moderately concentrated.⁵ Given the high volatility of earnings in this industry, many firms are part of larger “universal banks” that also provide commercial banking and/or retail banking services. Examples include Bank of America Merrill Lynch and Citigroup in the United States, and UBS, Deutsche Bank, and Barclays abroad. The main consumers of core investment banking services are industrial and natural resource companies, insurance companies, pension funds and other institutional investors, and government and municipal agencies, while small businesses and private individuals use the portfolio management services provided by investment banks’ asset management arms.

In 2011, about half of global investment banking revenue was generated in the United States, about 30 percent in Europe, about 10 percent in Asian developed markets, and the remaining 10 percent in emerging economies.⁶ This geographic breakdown of investment banking revenue reflects the relative size of financial markets around the world. For example, the total assets of mutual funds (important investment and savings avenues for individuals) under management in the United States represented 48 percent of the global total at the end of 2010, while 32 percent of the total was under management in Europe and 20 percent was under management in the rest of the world.⁷ Looking at trading volumes in global equity markets, the breakdown is similar: in 2010, trading in U.S. stocks accounted for 48 percent of global equity market trading volume, Japanese trading accounted for 7 percent, UK trading accounted for 5 percent, and other developed markets accounted for 20 percent, with 21 percent of global equity market trading taking place in emerging markets.⁸

Competitive Conditions in the Global Securities Services Market

The 2008 financial crisis was a watershed for the securities industry, resulting in significant industry consolidation and government intervention. The subprime-mortgage crisis in the United States and the banking crisis in Europe caused investors to lose confidence and global securities markets to fall sharply.⁹ Investors withdrew funds from capital markets around the world, making it difficult for banks and companies to refinance or replace capital lost from write-downs of asset values. The ensuing global economic downturn brought most corporate finance transactions to a near halt as equity valuations suffered from falls in share prices. Derivatives trading also contracted sharply

⁵ IBISWorld, “Global Investment Banking and Brokerage,” June 22, 2011, 9.

⁶ Investment banking fees earned in Japan during the period represented 5 percent of the total while fees earned in Oceania represented 3 percent. IBISWorld, “Global Investment Banking and Brokerage,” June 22, 2011, 10; Thomson Reuters, “Global Investment Banking Review,” 2011, 3–4.

⁷ Investment Company Institute, *2011 Investment Company Factbook*, 2011, 23.

⁸ SIFMA, *Fact Book 2011*, 2011, 97.

⁹ Walsh, “Remarks before the Special Seminar on International Finance,” November 16, 2011, 2.

with the collapse of the mortgage-backed securities market.¹⁰ As investment banks' balance-sheet risks grew to unsustainable levels, the industry consolidated; for example, J.P. Morgan Chase took over Bear Stearns, Merrill Lynch was acquired by Bank of America, and, after its collapse, Lehman Brothers' U.S. and foreign operations were acquired by Barclays and Nomura.¹¹

The U.S. government stabilized the financial system by using the Troubled Asset Relief Program to purchase deeply discounted assets from banks, thereby shoring up their balance sheets.¹² Although the U.S. monetary authorities allowed Lehman Brothers to fail and orchestrated the acquisition of other investment firms by healthier banks, significant support was extended by the U.S. government to several of the largest U.S. banks, such as Bank of America and Citibank.¹³ At the same time, in Europe, several governments also assumed ownership stakes in some of their largest financial institutions, and in Japan, the government launched a large asset-relief program to bolster its banking system.¹⁴

Both revenues and profits of securities firms around the world plummeted in 2008, and the industry has recovered only slightly in the years since. Before the crisis, investment banks typically achieved a return on equity¹⁵ of around 20 percent, but in the current market environment these rates have been roughly halved as banks have increased their equity capital and reduced their leverage.¹⁶ Investment banking fee revenue rose in 2010, but fell back in 2011 to \$81 billion worldwide, close to the 2005 level (figure 7.1).¹⁷

Reflecting the United States' large share of the global investment banking market, U.S. firms dominate in global rankings of investment banks by fees received (table 7.1). In the Americas,¹⁸ the five largest U.S. investment banks (J.P. Morgan, Bank of America Merrill Lynch, Morgan Stanley, Goldman Sachs, and Citibank) earned 35 percent of total fees in 2011, and smaller top-20 U.S. firms accounted for another 5 percent of total fee

¹⁰ A derivative is a financial instrument whose value is tied to the price of an underlying security (for example, a U.S. Treasury bond) or to another financial price (such as a foreign-exchange rate). Mortgage-backed securities are asset-backed securities created by grouping pools of mortgage loans to make the financial commitments between home buyers and mortgage lenders into tradable instruments. Derivatives are further discussed in the "Demand and Supply Factors" section.

¹¹ IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 4.

¹² The U.S. Treasury invested \$245 billion to support U.S. banks during the crisis, part of the \$475 billion total authorized Troubled Asset Relief Program spending. As of August 31, 2011, the government had recovered \$256 billion through repayments, dividends, interest, warrant sales, and other income, exceeding the original investment by \$11 billion. U.S. Treasury, OFS, "TARP: Three Year Anniversary Report," October 2011, 3-4.

¹³ IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 24-26.

¹⁴ IBISWorld, "Global Investment Banking and Brokerage," June 22, 2011, 9, 35-37.

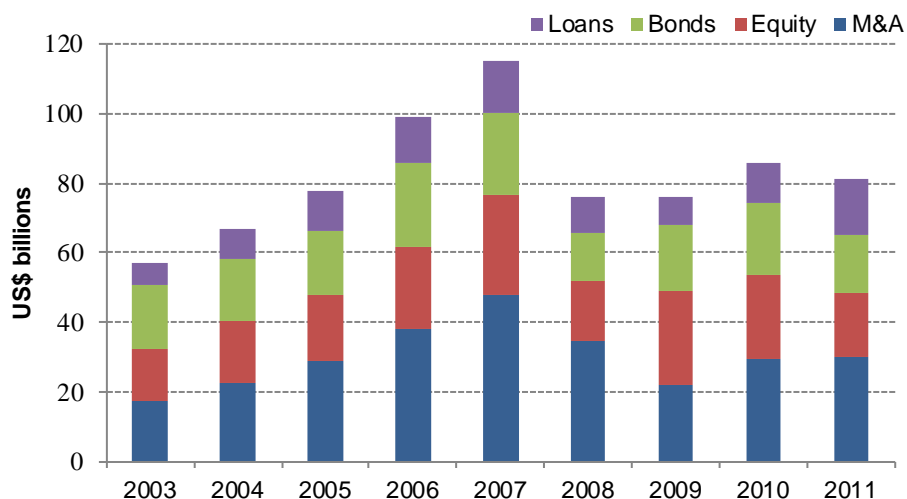
¹⁵ Return on equity, calculated as net income divided by average shareholders' equity, is a common measure of profitability for financial institutions. A bank's tier 1 equity capital consists of its common stock outstanding plus retained earnings and may also include any nonredeemable preferred stock that is outstanding. A bank's "leverage" refers to the ratio of total assets to tier 1 equity capital, indicating the degree to which investments are financed with equity rather than debt. IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 20.

¹⁶ Jenkins, Masters, and Braithwaite, "The Hunt for a Common Front," December 13, 2011, 2; Bohme et al., "Day of Reckoning?" September 2011, 21.

¹⁷ IBISWorld, "Global Investment Banking and Brokerage," June 22, 2011, 11; Thomson Reuters, "Global Investment Banking Review, 2011," 3; *Economist*, "Global Investment Banking Fees," October 8, 2011.

¹⁸ This includes the United States (81 percent of the regional total) and Canada (12 percent of the regional total), as well as markets in the Caribbean and in Central and South America. Thomson Reuters, "Global Investment Banking Review," 2011, 4.

FIGURE 7.1. Securities services: Global investment banking fees remain below their 2007 peak



Source: Thomson Reuters, "Global Investment Banking Review," 2011.

TABLE 7.1 Global investment banking: Top banks, 2011

Rank	Firm	Country	Fees (million \$)	Market share (percent)
1	J.P. Morgan	United States	5,467	6.8
2	Bank of America Merrill Lynch	United States	4,925	6.1
3	Morgan Stanley	United States	4,104	5.1
4	Goldman Sachs & Co.	United States	3,981	4.9
5	Credit Suisse	Switzerland	3,429	4.2
6	Citi	United States	3,310	4.1
7	Deutsche Bank AG	Germany	3,224	4.0
8	Barclays Capital	United Kingdom	2,843	3.5
9	UBS	Switzerland	2,387	2.9
10	Wells Fargo & Co.	United States	1,576	1.9
11	RBC Capital Markets	Canada	1,438	1.8
12	BNP Paribas SA	France	1,424	1.8
13	HSBC Holdings PLC	United Kingdom	1,274	1.6
14	RBS	United Kingdom	1,228	1.5
15	Mizuho Financial Group	Japan	964	1.2

Source: Thomson Reuters, "Global Investment Banking Review," 2011, 5.

earnings.¹⁹ U.S. investment banks also have significant revenue and market share in most capital markets outside the United States, after expanding internationally in recent years.

The five major firms generate up to half of their revenue outside the United States,²⁰ with a 20 percent market share in Europe, a 17 percent market share in Japan, and a 13 percent

¹⁹ Thomson Reuters, "Global Investment Banking Review," 2011, 9.

²⁰ IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 20.

market share in the Asia-Pacific region excluding Japan. However, in geographic regions with strong, well-established financial sectors, local banks usually play the largest role. In Europe, Deutsche Bank is ranked first, and together the top 20 ranked European firms earned 39 percent of total fees in 2011. In Japan, Japanese banks dominate even more noticeably, with those in the top 20 earning almost two-thirds of total fees in 2011.²¹

Demand and Supply Factors

Emerging markets' demand for securities services is growing, while demand for securities services in developed markets is likely to remain constrained

Foreign and domestic investors and corporations operating in emerging markets are underpinning worldwide demand for securities services, and global investment banks are looking to these markets for future revenue growth.²² The significant business opportunities for global investment banks in emerging economies are illustrated by the fact that financial markets in these countries have grown faster than the countries' GDPs in recent years. Between 2005 and 2010, while nominal GDP roughly doubled in emerging markets, mutual funds and equity market capitalization both tripled, and contracts traded on derivatives exchanges increased fivefold. Domestic bond issuance and borrowing from international banks also doubled over the period.²³

Many multinational companies see opportunities for new business in emerging markets, where there is relatively strong economic growth and significant ongoing investment in new infrastructure. They are moving to increase their presence in these markets by setting up local affiliates or acquiring local enterprises. In a recent survey, 81 percent of industrial company respondents said that expanding their geographical presence would be their primary rationale for M&A transactions in 2012, and close to two-thirds list Latin America, China, and India as the most attractive regions for corporate growth.²⁴ These activities require corporate finance advisory services, such as advising on negotiations with potential local partners, assisting in the establishment of local affiliates or joint ventures, and raising capital. Leading investment banks also see opportunities in emerging markets to help introduce foreign investment funding to local projects. For example, Morgan Stanley Infrastructure Partners (one of the U.S. investment bank's private equity arms) is reportedly in talks to invest in road projects in India, where the government has undertaken an ambitious highway development program.²⁵

Global investment banks have expanded in major emerging economies such as China, India, and Brazil in order to increase their participation in those countries' domestic securities markets as well as to assist global companies making cross-border transactions. In China, where foreign investment banks operate through minority stakes in joint ventures, UBS, Goldman Sachs, and Deutsche Bank are the leading foreign firms, although their combined share of the domestic capital markets business remains limited.²⁶ Foreign investment banks provide a range of services to the Chinese market, such as share brokerage, corporate finance advice, foreign exchange, commodities and

²¹ European market rankings include investment banking activities in Europe, Middle East, and Africa. Thomson Reuters, "Global Investment Banking Review: Full Year 2011," 9.

²² IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 11.

²³ *TheCityUK*, "Financial Services in Emerging Economies," June 2011.

²⁴ Freeman Consulting, "2012 Outlook for Investment Banking Services," September 30, 2011, 15–18.

²⁵ Menon, "Money Matters," February 14, 2012.

²⁶ Wang, Xu, and Yip, "China's Changing Wholesale Landscape," March 2011.

derivatives trading, debt underwriting, and asset management.²⁷ For example, foreign firms' investment management arms are doing more business in China as affluent Chinese increasingly shift their savings from property and cash into wealth management products.²⁸ In India, where foreign banks' rupee-denominated assets are relatively limited, foreign banks have concentrated on providing securities services, where they have a comparative advantage; foreign banks have roughly a 60 to 75 percent market share in M&A and in sales and trading in equity capital markets products.²⁹ In both China and India, however, the domestic bond market is restricted and relatively undeveloped, implying that securities firms are limited in their ability to provide debt capital markets products (such as interest rate swaps).³⁰

At the same time, demand for securities services in developed markets is likely to remain constrained by the slow global economic recovery and high levels of individual debt. Core activities such as underwriting, M&A advice, and the arrangement of initial public offerings are now only beginning to recover from the lows seen in 2008–09 as investor confidence remains weak and capital for underwriting new deals remains restricted.³¹ Companies that might normally need securities services in the course of investing and expanding their business are still wary of increasing their risk exposure and are therefore hoarding cash. Individuals' concerns about unemployment and high indebtedness are restricting demand for mortgages, which in turn reduces activity in the markets for mortgage-backed securities. However, not all securities services were affected by the downturn in the same way. For example, even in the midst of the financial crisis, securities brokerage activity (in which investment banks' fees are related to the number and size of securities trades) did not decline like other investment banking activities because the extreme volatility in bond and share prices led to a high volume of transactions.³²

Investment banks are scaling back product offerings in capital markets and increasing provision of investment management services

The European sovereign debt crisis, increased regulation, and the need to recapitalize their balance sheets has led many investment banks to scale back their product offerings in capital markets (such as debt securitizations) and to provide more investment management services instead. Because wealth managers trade on behalf of their clients and do not own the securities portfolios under management, regulators do not require securities firms to back up this activity by allocating large amounts of reserve capital to it. In contrast, investment banks have to reserve significant amounts of capital to support share underwriting, corporate lending, or sales and trading of equities, bonds, and derivatives, as these activities involve holding large trading positions in the normal course of business. When banks refocus their business away from trading and towards wealth management, they reduce risk and bolster their capital base.³³

²⁷Jenkins, Rabinovitch, and Leahy, "Ambitions Thwarted by Red Tape and Competition," September 13, 2011; SIFMA, "Reform in China: Overview," n.d. (accessed November 22, 2011).

²⁸Jacob, Rahul, "Chinese Head to Wealth Managers," September 5, 2011.

²⁹Lal and Tahilyani, "Wholesale Banking in India," March 2011, 6.

³⁰Hart, "Working Out a Competitive Edge," January 3, 2012; Menon, "Money Matters," February 14, 2012; TheCityUK, "Financial Services in Emerging Economies," June 2011, 4–5.

³¹Freeman & Co. LLC, "Securities Industry Focus," October 2011, 7.

³²IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 13.

³³Simonian, "Swiss Banks Turn Focus to Wealth Management," November 23, 2011.

As global stock prices recovered after 2009, asset management activities provided a growing source of revenue for firms. Fees charged for asset management services are typically a percentage of the value of assets under management, so firms' revenues from this activity increase when asset prices (especially share prices) rise overall.³⁴ In 2010, an increase in performance fees earned by financial management firms likely explains the higher receipts for management and advisory services seen in the U.S. data on cross-border trade in financial services.³⁵

Since 2010, the rate of asset write-downs by banks has slowed and bank balance sheets have strengthened (often with government help). However, in countries which are recovering from a sharp collapse in property prices, banks have limited ability to make new loans because of the increase in capital they need to reserve, owing to the overhang of property assets in a "negative equity" or "underwater" position (in which the outstanding balance on the loan exceeds the value of the property).³⁶ At the same time, due to the Eurozone crisis, many European banks holding sovereign debt obligations have seen these assets fall sharply in value despite the European Union's rescue packages for Greece, Ireland, and Portugal. As a result, European banks have been lowering risk exposure and preserving capital by reducing their sovereign and interbank lending, which has led to tighter credit markets both locally and around the world.³⁷

Stronger regulatory oversight is being implemented around the world, increasing the cost of capital for securities firms

Global regulators are carrying out a wide range of banking sector reforms as they try to reduce systemic risks to the world financial system, limit the chances of a major financial institution failing, and protect governments from having to bail out such institutions if they do fail. For example, regulators are tightening capital requirements, which prescribe the amount of capital that financial institutions must hold for a given level of risk exposure. The cornerstone of this effort is a new market-risk framework issued by the Basel Committee on Banking Supervision, known as "Basel III," which doubles or triples regulatory capital requirements for many securities market activities. Other important measures include higher charges for counterparty credit risk and more stringent liquidity and funding requirements.³⁸

The Group of Twenty (G20) nations agreed to the Basel Committee's proposals in November 2010. These countries have made concurrent efforts at the national and regional levels. The United States' Dodd-Frank Act of 2010³⁹ tightened minimum capital requirements for all major banks and securities firms (box 7.1), and the EU's Capital Requirement Directive, along with national proposals from the Swiss government, the UK's Independent Commission on Banking, and others, made similar reforms. It is still unclear exactly how these national regulations will interact with the phase-in of the Basel III regime, but the United States and other G20 countries are coordinating their reform

³⁴ IBISWorld, "Investment Banking and Securities Dealing in the U.S.," September 2011, 4–11.

³⁵ USDOC, BEA, "U.S. International Services," October 2011, 20.

³⁶ Standard and Poor's, *Industry Surveys: Investment Services*, October 27, 2011, 4–5; UK Financial Services Authority, *Prudential Risk Outlook 2011*, 2011, 62–66.

³⁷ Lambe, "2011: Goodbye and Good Riddance?" December 1, 2011; Jenkins and Stabe, "EU Banks Slash Sovereign Holdings," December 9, 2011; Jenkins, Masters, and Barker, "EU Banks Could Shrink to Hit Capital Rules," October 12, 2011.

³⁸ Bohme et al., "Day of Reckoning?" September 2011, 1.

³⁹ Public Law 111-203, 124 Stat. 1375, approved July 21, 2010.

BOX 7.1 The Dodd-Frank Act of 2010 fundamentally redefined financial regulation in the United States

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) was signed into law on July 21, 2010, and implementation of its regulations, policies, and guidance is ongoing. It includes several measures of “macro-prudential regulation”—rules aimed at reducing overall risk to the financial system and therefore the risk of another severe disruption to the economy. Financial institutions identified as large enough to have systemic influence are subject to tighter supervision by the Federal Reserve Board and stricter risk-based capital and liquidity requirements, as well as new limits on leverage.^a Among other things, these measures attempt to establish an orderly process for a nonbank financial institution, such as an investment bank, to be wound up in the case of bankruptcy, thus removing the moral hazard problem of being “too big to fail.”

The Dodd-Frank Act also increases regulation and supervision of individual firms in order to prevent excessive risk taking. The new rules for securitizations require that the originating bank retain a percentage of the underlying assets (with the exact percentage being related to the quality of the underlying asset) to ensure that originators have “skin in the game.”^b The so-called Volcker Rule prohibits (with some exceptions) depository institutions from engaging in proprietary trading—that is, taking speculative market positions for the bank’s own account and not for the benefit of clients—or from investing in a hedge fund or private equity fund.^c This is a return to the policy of putting constraints on what activities banks may undertake, embodied in the Glass-Steagall Act of 1933 until the law was reinterpreted in 1996–97 and then repealed in 1999.

In another set of measures designed to limit trading risks, the Dodd-Frank Act increases regulation of derivatives trading. In order to increase transparency in the market, trading in many derivatives will now be subject to mandatory clearing through regulated exchanges.^d Also, “over-the counter” (OTC) derivatives will be regulated for the first time and will have new reporting and registration requirements.

^a Webel, “The Dodd-Frank Wall Street Reform and Consumer Protection Act,” July 29, 2010, 1.

^b The bank which first extends the loans being securitized remains exposed to some extent to the risk of nonpayment by the borrowers. Webel, “The Dodd-Frank Wall Street Reform and Consumer Protection Act,” July 29, 2010, 8.

^c Federal Reserve Bank of Philadelphia, “The Proposed Implementation of the Volcker Rule,” 2011, 2; Ryan, “Financial Services Regulatory Highlights,” 2010, 5. This idea was originally proposed by former U.S. Federal Reserve Chairman Paul Volcker.

^d Ryan, “Financial Services Regulatory Highlights,” 2010, 4; PricewaterhouseCoopers, “A Closer Look,” July 2011, 2.

efforts.⁴⁰ Nevertheless, the reform process is complex and will take years to complete, during which time there will be uncertainty about the details and implementation of the new rules.⁴¹

These higher capital requirements and liquidity ratios may limit the future profitability of firms’ trading activities, especially trading in longer-maturity instruments such as bonds and asset-backed debt securitizations.⁴² One study points to higher capital costs from new regulations as the chief factor reducing profit in securities business activities. Certain investment banking activities, such as structured credit and interest-rate derivatives trading, are likely to be particularly affected, as these activities require that more capital be set aside for them than for stockbroking or fund management. As a result, securities firms may decide to scale back on providing these types of products.⁴³ Most firms are already adopting a more conservative approach to lending and trading, holding more capital relative to their risk exposures, even though many of the new minimum capital guidelines have not yet been finalized. This may help to explain the fall in profits

⁴⁰ Ryan, “Financial Services Regulatory Highlights,” 2010, 1–5.

⁴¹ Barfield, *A Practitioner’s Guide to Basel III and Beyond*, January 2011, chapter 1, 1–4; Walsh, OCC, “Remarks before the Special Seminar on International Finance,” November 16, 2011, 4.

⁴² Standard and Poor’s, *Industry Surveys: Investment Services*, October 27, 2011, 9.

⁴³ Bohme et al., “Day of Reckoning?” September 2011, 1.

experienced by securities firms in 2011.⁴⁴ Over time, the prospect of lower profitability may discourage new suppliers from entering the industry.

Besides launching stricter capital requirements, both U.S. and European regulators are introducing regulations aimed at making trading in derivatives markets more transparent and orderly. Derivatives are financial instruments whose value reflects that of an underlying security (such as a U.S. Treasury bond, company share, or mortgage-backed security), or another financial price (such as an interest rate or spot foreign exchange rate). Credit derivatives are contracts that transfer credit risk, for example by promising a payment in case of a loan default or other credit event.⁴⁵ In the years leading up to the financial crisis, derivatives markets grew rapidly but were opaque and largely unregulated. One lesson learned by national regulators during the crisis was that the risks associated with complex, structured financial products were far greater than market participants had supposed.⁴⁶ As a result, regulatory authorities in several countries are now putting new rules into effect to discourage securities firms from developing or holding large amounts of complex, difficult-to-value derivatives.

Like the United States, the EU is increasing derivatives regulation in order to reduce systemic risks, via the mandatory clearing requirements imposed by the European Markets Infrastructure Regulation. In late 2011, the European Commission amended and extended the Markets in Financial Instruments Directive (MiFID). Under the proposed new regulations (“MiFID II”), trading of many types of derivative contracts will now have to go through central clearing via an exchange, instead of through two-party OTC trades in which many parties are indirectly exposed to the risk of default of other market participants.⁴⁷ The new derivatives trading regulations are likely to force a major change in the business model adopted by securities firms because a central clearing structure implies higher liquidity and funding costs, as well as lower profit margins from reduced trading opportunities.⁴⁸ These developments will affect all the major global investment banks, as they all have large trading operations in London and elsewhere in Europe.⁴⁹

Additionally, some governments have restricted the types of activities in which deposit-taking financial institutions may engage, to keep retail and commercial banking services from being damaged by volatility in a bank’s capital markets businesses. Efforts in the United States to separate securities trading and traditional banking activities (using the “Volcker Rule” discussed in box 7.1) are being mirrored abroad, although the methods of implementation differ.⁵⁰ For example, the UK Independent Commission on Banking has proposed a system to “ring-fence” the activities of retail and commercial banks—i.e., separate them from investment banking activities—in order to protect deposit-taking banks from being bankrupted by the failure of their investment banking subsidiaries.

⁴⁴ Lambe, “2011: Goodbye and Good Riddance?” December 1, 2011; Freeman & Co. LLC, “Securities Industry Focus,” October 2011, 10.

⁴⁵ U.S. Treasury, OCC, “Quarterly Report on Bank Trading and Derivatives Activities,” 2011, 1. (accessed February 2, 2012). Derivative transactions are typically structured as a “swap” (an agreement to exchange one series of cashflows for another over the life of the transaction), an “option” (a right but not an obligation to trade an underlying security at a future date at a pre-arranged price), or some combination of the two. The majority of derivatives traded are interest-rate related products; these comprised 82 percent of total derivatives traded in the third quarter of 2011 by U.S. banks, while credit derivatives comprised 6.3 percent.

⁴⁶ Walsh, OCC, “Remarks before the Center for the Study of Financial Innovation,” June 21, 2011, 3.

⁴⁷ OTC trading between individual broker-dealers is a market in which London in particular has achieved global dominance. Deloitte, “MiFID II: The Deloitte Perspective,” December 1, 2011.

⁴⁸ Bohme et al., “Day of Reckoning,” September 2011, 1.

⁴⁹ City of London, “Research and Statistics FAQ,” n.d. (accessed March 20, 2012).

⁵⁰ Walsh, OCC, “Remarks before the Special Seminar on International Finance,” November 16, 2011, 5; Walsh, OCC, “Remarks before the Centre for the Study of Financial Innovation,” June 7, 2011, 5.

These measures imply that investment banks in the United Kingdom, including wholly owned subsidiaries of large universal banks, will not enjoy the tacit guarantee of government support they relied on previously.⁵¹ Switzerland has addressed the issue in a different way, by imposing capital requirements on Swiss banks substantially above internationally agreed minimums, rather than changing the structure or permissible activities of Swiss banks.⁵² As a result, with government encouragement, both UBS and Credit Suisse, which are based in Switzerland, plan to reduce their exposure to risk by scaling back their investment banking operations and focusing more on wealth management.⁵³

Trade Trends

Cross-border Trade

Although the global financial crisis and the ensuing economic downturn caused cross-border trade in financial services to contract sharply, over the past several years the United States has consistently had a large trade surplus in securities-related services and in securities themselves (box 7.2). In 2010, the United States exported \$15.5 billion of securities transaction services (including brokerage, underwriting, and private placement services) and \$27.9 billion of management and advisory services (including asset management, financial advisory, and custody services), totaling \$43.4 billion of securities services exports (figure 7.2).⁵⁴ The United States imported \$4.0 billion of transaction services and \$4.1 billion of management and advisory services in 2010, totaling \$8.1 billion of securities services imports. Cross-border trade in securities services in 2010 yielded a \$35.4 billion surplus.

Both exports and imports of securities services jumped in 2007 before declining in 2008 and 2009. Securities services imports continued to fall in 2010, declining 10 percent, while securities services exports rose 7 percent. These latest year-on-year changes may be compared to a 2006–09 CAGR of 5 percent for exports and 1 percent for imports.⁵⁵

The trends in international trade in securities services move in parallel with the pattern of cross-border purchases of long-term securities,⁵⁶ although trade in securities demonstrates a markedly higher volatility. Because investment banks (or the capital markets arms of larger, universal banks) play an intermediary role, providing market liquidity and facilitating the transfer of securities between buyers and sellers, their revenue from the provision of dealing and brokerage services is related to the volume of securities transactions. The value of securities services provided cross-border is therefore likely to

⁵¹ Wallace, “Vickers Report Leaves Investment Banking Shrouded in Uncertainty,” December 1, 2011.

⁵² Walsh, OCC, “Remarks before the Special Seminar on International Finance,” November 16, 2011, 6.

⁵³ Simonian, “Swiss Lawmakers Put Banks in Spotlight,” June 7, 2011; Simonian, “Swiss Banks Turn Focus to Wealth Management,” November 23, 2011.

⁵⁴ USDOC, BEA, “Additional Detail on Financial Services Transactions, 2006–2010,” n.d.; USDOC, BEA, “Additional Detail on Financial Services Transactions, 1994–2005,” n.d. (accessed February 23, 2012).

⁵⁵ Country market breakdowns specifically for securities services trade flows are not available, except at the aggregated “financial services” level (see chapter 3). USDOC, BEA, “U.S. International Services,” October 2011, 20–21.

⁵⁶ Securities with maturities of greater than 12 months, such as Treasury bonds and other government bonds.

BOX 7.2 Understanding data on cross-border trade and affiliate transactions in securities services

BEA data on cross-border trade in securities services are included in its “financial services” category. The financial services data are broken down into four subcategories: (1) securities transactions services, including brokerage services and underwriting and private placement services; (2) management and advisory services, including financial management services and financial advisory and custody services; (3) credit card and other credit-related services (such as the provision of standby letters of credit for trade financing); and (4) other financial services, including securities lending and electronic funds transfer.^a These data exclude both deposit-taking and lending services. Although there is some overlap between securities services and banking services in these data, subcategories 1 and 2 likely comprise predominantly securities services, as these include the traditional investment banking functions of broking, dealing, and underwriting, while subcategories 3 and 4 likely comprise predominantly banking services. Data on total U.S. imports and exports of these services, whether between unrelated parties or between affiliates in a single corporate group, are available beginning in 2006 (older statistics reflect unaffiliated trade only).^b However, in its reporting of U.S. exports and imports by country, the BEA combines the four subcategories into a single category of “financial services,” itself a component of the larger category “Other Private Services” in the International Services Accounts. The BEA captures this data largely through mandatory quarterly and benchmark surveys of business services, supplemented by survey data from U.S. government agencies, private sector sources, and BEA estimates.^c

In addition, the BEA publishes data on financial services (excluding insurance) supplied abroad through foreign affiliates of U.S. majority-owned groups and financial services supplied in the United States by affiliates of foreign-owned corporations. For financial services, as for many other services, direct investment in local affiliates represents a significant avenue for sales in foreign markets. The BEA data include revised measures for sales of bank affiliates starting in 2004. The data include sales by, and purchases from, entities that primarily provide nondepository credit intermediation and related services; securities, commodity contracts, and other intermediation, and related activities; and funds, trusts, and other financial vehicles. Country breakdowns are provided for the financial services category, but the data do not distinguish securities-related services from banking services.^d

The U.S. Treasury reports data on international trade in securities, which give insight into the likely volume of services provided in order to execute these transactions. The U.S. Treasury’s Treasury International Capital (TIC) data reporting system measures gross U.S. purchases of foreign long-term securities (government and corporate bonds and company stocks) and gross foreign purchases of U.S. long-term securities, in terms of the market value of portfolio holdings. Specifically, the TIC system records monthly and quarterly cross-border data as reported by banks and broker dealers, annual surveys of cross-border holdings of short- and long-term securities, and quarterly positional data reported by other financial institutions.^e

^a USDOC, BEA, *Survey of Current Business*, October 2009, 31.

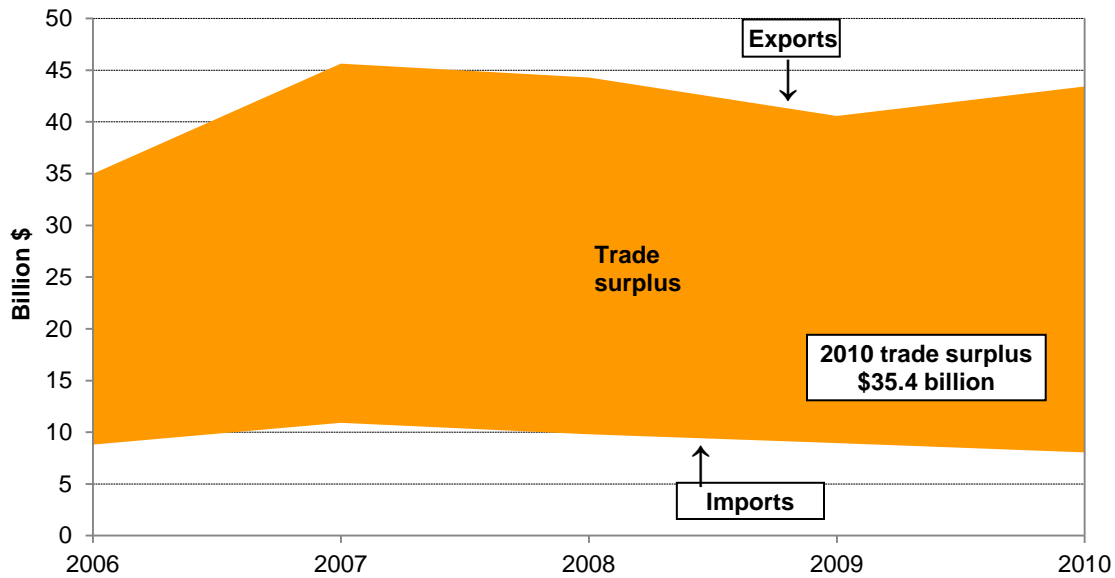
^b USDOC, BEA, *Survey of Current Business*, February 2010, 44.

^c *Ibid.*

^d USDOC, BEA, *Survey of Current Business*, October 2009, 37–38.

^e Bertaut, “Understanding U.S. Cross-Border Securities Data,” 2006, A60; U.S. Treasury, “U.S. Transactions with Foreigners in Long-Term Securities by Type and Country,” n.d. (accessed January 19, 2012).

FIGURE 7.2 Securities services: U.S. cross-border trade in securities services resulted in a U.S. trade surplus each year during 2006–10

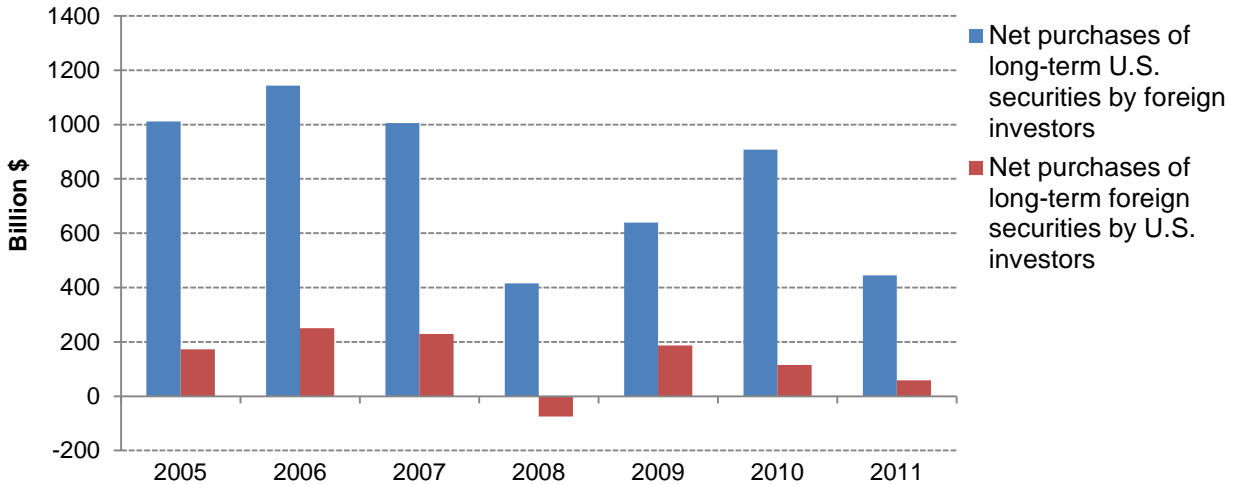


Source: USDOC, BEA, *Survey of Current Business*, October 2011, 20–21, tables G and H, USDOC, BEA, *Survey of Current Business*, October 2010, 25–25, tables G and H, and USDOC, BEA, *Survey of Current Business*, October 2009, 31–32, tables E and F.

be related to the volume of cross-border securities transactions, although the value of the services will be only a small percentage of the transaction value. As data on securities traded cross-border are captured much more quickly than services trade data—the U.S. Treasury’s TIC data is released each month for the prior month—this provides the most timely indication of trends in the trade of securities services. As mentioned above, the United States has maintained a surplus in securities trade, and therefore securities services trade, over a long period, although this surplus has narrowed recently to its lowest level in the 2005–11 period (figure 7.3). Foreign net purchases of U.S. long-term securities totaled \$908 billion in 2010, moving in the direction of the highs seen in 2005–07, but then fell back in 2011 to \$445 billion. Net purchases of foreign securities by U.S. investors decreased to \$115 billion in 2010 from \$187 billion in 2009, and fell further in 2011 to \$58 billion. However, the total value of securities traded cross-border recovered to \$70 trillion in 2011, up significantly from the 2009 level of \$51 trillion, but still below the 2008 peak of \$76 trillion.⁵⁷

⁵⁷ U.S. Treasury, “U.S. Transactions with Foreigners in Long-Term Securities,” n.d. (accessed February 28, 2012).

FIGURE 7.3. Securities services: The U.S. showed a cross-border trade surplus in purchases of long-term securities during 2005–11



Source: U.S. Treasury, “U.S. Transactions with Foreigners in Long-term Domestic and Foreign Securities,” n.d. (accessed January 19, 2012).

Large volumes of securities and securities-related services are traded between countries with well-established financial centers, large issuer and investor bases, and active derivatives markets, such as the United States, the United Kingdom, France, Japan, and Switzerland. Small-economy countries with major financial sectors, such as the Cayman Islands, Bermuda, Luxembourg, and Ireland, also figure prominently because, as in the United Kingdom, financial institutions in these locations often play a custodial role for third-country purchases of U.S. securities.⁵⁸ The United Kingdom also has a long history of direct investment in the United States and plays a leading role in the global insurance industry.⁵⁹ These factors help to explain why in 2009–10 the United Kingdom had the largest share of international activity in U.S. equities, with about 14 percent of foreign gross activity in U.S. company shares, and was the leading recipient of U.S. activity in foreign equities, with over 30 percent of U.S. gross activity in foreign stocks.⁶⁰ A significant share of international trading in company shares also takes place between the United States and the Latin America and Caribbean region,⁶¹ which is likely related to the “custodial bias” referred to above, as well as the very large reinsurance trade flows between the United States and Bermuda, and the large number of entities whose equity

⁵⁸ For example, an investment bank in the United Kingdom would purchase a U.S. Treasury bond for deposit in a customer’s UK securities account, although the customer is located in a third country. This “custodial bias” contributes to the large recorded foreign holdings of U.S. securities in major financial centers, such as Belgium, the Caribbean banking centers, Luxembourg, Switzerland, and the United Kingdom. U.S. Treasury, “FAQs: Questions on Country Classification in TIC Data,” n.d. (accessed January 23, 2012).

⁵⁹ In 2010, only 2 of the top 10 global insurance brokers by revenues were based outside the United States, and both of these were based in the United Kingdom. A similar pattern is seen for reinsurance brokers, where 3 of the top 10 were based in the United States and 7 were based in the United Kingdom. III, 2012 *Financial Services Fact Book*, 198–99.

⁶⁰ SIFMA, *Factbook 2011*, 2011, 99–101.

⁶¹ *Ibid.*

has been issued in offshore locations such as Bermuda and the Cayman Islands (see chapter 4).⁶²

Affiliate Transactions

Banks provide securities and other financial services to foreign markets far more through local affiliates than through cross-border trade. Financial services, excluding insurance, supplied to foreign persons by U.S. multinational corporations (MNCs) through their majority-owned affiliates in foreign markets totaled \$165.9 billion in 2009, the latest year for which data are available. This was down 5 percent from the cyclical peak in 2008, but still above prior-year totals. Growth in U.S.-owned foreign affiliate sales of financial services during 2004–08 was 23 percent on an annualized basis, illustrating the market power of U.S. investment and commercial banks. Financial services, excluding insurance, supplied to U.S. persons by U.S.-based affiliates of foreign MNCs totaled \$97.0 billion in 2009, up 2 percent from the year before and the highest level achieved to date. Growth in sales of financial services of foreign-owned U.S. affiliates was 11 percent on an annualized basis during 2004–08, before the effects of the global financial crisis were fully felt. Given the importance of London as a global financial center, especially for securities and derivatives trading, it is not surprising that close to 40 percent of U.S.-owned foreign affiliates' sales of financial services have consistently been located in the United Kingdom, with another 20 percent located in other European markets. In the U.S. market, sales of financial services (excluding insurance) by UK majority-owned affiliates represented over 30 percent of total foreign affiliate sales, with another 40 percent coming from affiliates of MNCs based in other European countries.

Nontariff Measures Affecting Trade

Around the world, providers of securities firms face barriers to cross-border and affiliate trade. The complex regulatory landscape described above represents a significant nontariff impediment to trade. Securities firms also face limits on foreign ownership and joint venture participation, visa restrictions on employees and clients, and other hindrances to doing business.

In an effort to counterbalance these measures, countries negotiate financial services liberalization on a multilateral basis at the WTO, or as part of bilateral free trade agreements. However, many also undertake liberalization efforts on a unilateral basis, motivated by the prospect of greater economic growth stemming from increased integration with global capital markets. In Europe, beginning in 2007, the MiFID allowed investment firms established in any member state to operate in all other member states, with the goal of reducing barriers to the flow of capital within the EU. The directive has reportedly increased the entry of multinational trading companies in the EU.⁶³

Since 2003, the Chinese government has allowed a limited and gradual opening of the local securities markets to foreign participants through its Qualified Foreign Institutional Investor (QFII) program.⁶⁴ The QFII program enables foreign securities firms to trade in

⁶² In 2010, 2 of the top 10 global reinsurance firms by revenues were based in Bermuda. III, 2012 *Financial Services Fact Book*, 2012, 198; Bertaut, "Understanding Cross-Border Securities Data," 2006, A66.

⁶³ WTO, Trade Policy Review Board (TPRB), *WTO Trade Policy Review*, June 8, 2009, 139.

⁶⁴ Wang, "Foreign Investment in Securities in China," June 19, 2009.

public share markets, including the domestic renminbi-denominated A-share market, public debt markets, and certain derivatives markets (for example, QFIIs are allowed to trade stock index futures as of May 4, 2011). Such trading, however, is subject to government approval, specified lock-up periods, and strict investment quotas.⁶⁵ In addition, China has started to open its markets to foreign asset management firms. In May 2011, at the annual China-U.S. Strategic and Economic Dialog summit, China promised that it would amend relevant regulations to allow qualified locally incorporated foreign banks to enjoy the same rights as domestic banks to distribute mutual funds and to obtain custody licenses for mutual funds.⁶⁶

However, the degree of foreign participation in China's securities markets remains small.⁶⁷ Foreign investments in financial companies (except for financial leasing companies) such as banks and securities firms are categorized by the government as "restricted" and therefore subject to stricter government scrutiny and administrative requirements. "Restricted" investments may require central government approval as well as local approvals, and may be denied at the discretion of the approving authorities.⁶⁸ Finally, China limits foreign participation in joint-venture securities companies, though in May 2012 the foreign ownership cap was raised from 33 percent to 49 percent.⁶⁹

Outlook

Increased regulatory oversight in the investment banking sector is likely to have wide-ranging effects. Investment banks' profitability will likely decline as a result of stricter regulatory capital requirements and new rules for exchange clearing of derivatives. Also, any forced separation of retail banks and investment banks will increase the cost of capital for investment banks, as they will likely suffer significant downgrades in their perceived creditworthiness with their removal from a steady deposit base.

Most countries are moving towards implementing the Basel III risk-based capital framework for banks in a reasonably well coordinated fashion. However, regulatory reform of the financial sector is not progressing evenly around the world, with some countries or regions moving more quickly than others in some areas, such as derivatives market regulation, or choosing to implement regulations in excess of the minimum guidelines agreed by the G20. Industry studies have found that both regulatory burdens and legal risk drive activity towards competing locations,⁷⁰ and banks are likely to review the physical location of their activities as well as their product mix.⁷¹ Even where firms remain stationary, profitability might suffer if they have trouble passing on higher costs to their clients, who can easily turn to providers based in a different country with less

⁶⁵ Robinson, Egbert, and Wang, "China: Developments in Chinese Securities Regulation," July 6, 2011.

⁶⁶ *Future of US China Trade.Com*, "U.S.-China Strategic & Economic Dialogue," n.d. (accessed January 27, 2012); U.S. Treasury, "The 2011 U.S.-China Strategic and Economic Dialogue," May 10, 2011.

⁶⁷ In 2010, there were 130 foreign commercial banks operating in China through local branches or locally incorporated foreign subsidiaries. Their combined assets totaled RMB1.742 trillion, equivalent to 1.6 percent of total bank assets in China. The World Bank, "China Financial Sector Assessment," November 2011, 25, table 4.

⁶⁸ Deemer, "China Amends Foreign Investment Policy," January 18, 2012.

⁶⁹ U.S. Treasury, "U.S. Fact Sheet—Economic Track of the Fourth Meeting of the U.S.-China Strategic and Economic Dialogue," May 4, 2012.

⁷⁰ SIFMA, "Global Competitiveness: Overview," (accessed November 22, 2011); Wallace, "Vickers Report Leaves Investment Banking Shrouded in Uncertainty," December 1, 2011.

⁷¹ Walsh, OCC, "Remarks before the Special Seminar on International Finance," November 16, 2011, 4-7.

costly regulation.⁷² Regulatory arbitrage—i.e., firms’ strategic response to costs imposed by regulation—is therefore an issue for all countries with major financial centers. Differences in regulatory emphasis and uneven implementation of financial reform might induce migration of certain financial activities from North America to Europe or to Asia, a development that would significantly change the pattern of global trade in securities services. Reforms are being pursued concurrently in all major financial centers, however, which suggests that a full-scale realignment in the global securities industry is not likely to take place as the result of regulatory changes alone.⁷³

⁷² Wallace, “Vickers Report Leaves Investment Banking Shrouded in Uncertainty,” December 1, 2011. For example, UBS has reportedly threatened to move its investment banking operations out of Zurich if certain regulatory initiatives on the quality of capital are enacted by the Swiss parliament. Simonian, “Swiss Lawmakers Put Banks in Spotlight,” June 7, 2011.

⁷³ Walsh, OCC, “Remarks before the Special Seminar on International Finance,” November 16, 2011, 8.

Bibliography

- Barfield, Richard, ed. *A Practitioner's Guide to Basel III and Beyond*. PricewaterhouseCoopers LLP and Thomson Reuters, January 2011. http://www.pwc.com/en_GX/gx/financial-services/pdf/Introduction-and-chapters-final.pdf.
- Bertaut, Carol. "Understanding U.S. Cross-Border Securities Data." *Federal Reserve Bulletin*, 2006. <http://www.federalreserve.gov/pubs/bulletin/2006/crossbordersecurities/default.htm>.
- Bertaut, Carol, and Laurie Pounder. "The Financial Crisis and Cross-Border Financial Flows." *Federal Reserve Bulletin*, November 2009. <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/frbulnov2009.pdf>.
- Bohme, Markus, Daniele Chiarella, Philipp Harle, Max Neukirchen, Thomas Poppensieker, and Anke Raufuss. "Day of Reckoning? New Regulation and Its Impact on Capital-Markets Businesses." McKinsey&Company, September 2011.
- City of London. "Research and Statistics FAQ," n.d. http://www.cityoflondon.gov.uk/Corporation/LGNL_Services/Business/Business_support_and_advice/Economic_information_and_analysis/Research+and+statistics+FAQ.htm#internationalbanking (accessed March 20, 2012).
- Deemer, Paul C. "China Amend Foreign Investment Policy: New Foreign Investment Industry Guidance Catalogue." Vinson & Elkins LLP, January 18, 2012. http://www.velaw.com/resources/pub_detail.aspx?id=20405 (accessed January 26, 2012).
- Deloitte. Financial Services Group. "United Kingdom: MiFID II: The Deloitte Perspective," December 1, 2011. http://www.deloitte.com/view/en_GB/uk/industries/financial-services/94997ca784fc3310VgnVCM1000001a56f00aRCRD.htm (accessed January 31, 2012).
- Economist*. "Global Investment Banking Fees," October 8, 2011. <http://www.economist.com/node/21531506>.
- Federal Reserve Bank of Philadelphia. "The Proposed Implementation of the Volcker Rule." *Banking Legislation and Policy* 30, no. 3 (Third Quarter 2011). <http://www.phil.frb.org/research-and-data/publications/banking-legislation-and-policy/2011/blpq311.pdf>.
- Freeman & Co. LLC. "Securities Industry Focus," Issue 12, October 2011. <http://www.freeman-co.com>.
- Freeman Consulting Services and Thomson Reuters. "2012 Outlook for Investment Banking Services." *Third Annual Survey of Corporate Decision-Makers*, September 30, 2011. http://www.freeman-consultingservices.com/images/uploads/publications/2012_Outlook_for_IB_Services.pdf.
- Future of US China Trade.Com*. "U.S.-China Strategic & Economic Dialogue: Joint U.S.-China Commitments," n.d. <http://www.futureofuschinatrade.com/article/us-china-strategic-economic-dialogue-joint-fact-sheet> (accessed January 27, 2012).
- Hart, Joanne. "Working Out a Competitive Edge in the Chinese Onshore Bond Market." *The Banker*, January 3, 2012. <http://www.thebanker.com/World/Asia-Pacific/China/Working-out-a-competitive-edge-in-the-Chinese-onshore-bond-market>.

- IBISWorld. "Global Investment Banking and Brokerage: J5521-GL." *IBISWorld Industry Report*, June 22, 2011.
- . "Investment Banking and Securities Dealing in the U.S." *IBISWorld Industry Report 52311*, September 2011.
- Insurance Information Institute (III). *2012 Financial Services Fact Book*. New York: Insurance Information Institute, 2012.
- Investment Company Institute. *2011 Investment Company Factbook*. 51st ed. Investment Company Institute, 2011. <http://www.icifactbook.org>.
- Jacob, Rahul. "Chinese Head to Wealth Managers." *Financial Times*, September 5, 2011. <http://blogs.ft.com/beyond-brics/2011/09/05/wealth-management-services-seduce-chinese-savers/>.
- Jenkins, Patrick, Brooke Masters, and Alex Barker. "EU Banks Could Shrink to Hit Capital Rules." *Financial Times*, October 12, 2011. <http://www.ft.com/intl/cms/s/0/f2e62f82-f4f2-11e0-9023-00144feab49a.html> (fee required).
- Jenkins, Patrick, Brooke Masters, and Tom Braithwaite. "The Hunt for a Common Front." *The FT's Year in Finance*. Financial Times Special Report, December 13, 2011. <http://www.ft.com/intl/cms/s/0/90e77ab6-2030-11e1-9878-00144feabdc0.html#axzz1pfx9qApu> (fee required).
- Jenkins, Patrick, Simon Rabinovitch, and Joe Leahy. "Ambitions Thwarted by Red Tape and Competition." *Financial Times*, September 13, 2011. <http://www.ft.com/intl/cms/s/0/7521ecd4-de0a-11e0-a115-00144feabdc0.html#axzz1fJz4nP3b> (fee required).
- Jenkins, Patrick, and Martin Stabe. "EU Banks Slash Sovereign Holdings." *Financial Times*, December 9, 2011. <http://www.ft.com/intl/cms/s/0/a6d2fd4e-228f-11e1-acdc-00144feabdc0.html> (fee required).
- Lal, Akash, and Naveen Tahilyani. "Wholesale Banking in India: The Next Frontier." *McKinsey Quarterly*, March 2011. https://www.mckinseyquarterly.com/Financial_Services/Wholesale_banking_in_India_The_next_frontier_2762#footnote2.
- Lambe, Geraldine, "2011: Goodbye and Good Riddance?" *The Banker*, December 1, 2011. <http://www.thebanker.com>.
- Menon, Rekha. "Money Matters: The Financing of India's Infrastructure Boom." *fDi Magazine*, February 14, 2012. <http://www.fdiintelligence.com/Locations/Money-matters-the-financing-of-India-s-infrastructure-boom>.
- Murray, Justin, and Marc Labonte. "Foreign Holdings of Federal Debt." Congressional Research Service Report RS22331, March 25, 2011.
- Orzag, Peter. Congressional Budget Office (CBO). "Foreign Holdings of U.S. Government Securities and the U.S. Current Account." CBO Statement to the U.S. House of Representatives, the Committee on the Budget, June 26, 2007. <http://www.cbo.gov/doc.cfm?index=8264&type=0>.

- PricewaterhouseCoopers LLP. "A Closer Look: The Dodd-Frank Wall Street Reform and Consumer Protection Act—Implications of Derivatives Regulation and Changing Market Infrastructure for Nonfinancial Companies," July 2011. <http://www.pwcregulatory.com>.
- Robinson, Keith, Karl Egbert, and Henry Wang. "China: Developments in Chinese Securities Regulation." *Dechert LLP Financial Services Quarterly Report—Asia*, July 6, 2011. <http://www.mondaq.com/x/137802/Financial+Services/Developments+In+Chinese+Securities+Regulation>.
- Ryan, Daniel. "Financial Services Regulatory Highlights: Financial Regulatory Reform—The New Architecture—Will It Be a Global Footprint?" PricewaterhouseCoopers LLP, 2010. <http://www.pwcregulatory.com>.
- Securities Industry and Markets Association (SIFMA). *Fact Book 2010*. New York: SIFMA, 2010.
- . *Fact Book 2011*. New York: SIFMA, 2011.
- . "Global Competitiveness: Overview," n.d. <http://www.sifma.org/issues/cross-border-trade-and-policy/global-competitiveness/overview/> (accessed November 22, 2011).
- . "Reform in China: Overview," n.d. <http://www.sifma.org/issues/cross-border-trade-and-policy/reform-in-china/overview/> (accessed November 22, 2011).
- Simonian, Haig. "Swiss Banks Turn Focus to Wealth Management." *Financial Times*, November 23, 2011. <http://www.ft.com/intl/cms/s/0/9a61e5a0-15df-11e1-a691-00144feabdc0.html#axzz11AmfyJwV> (accessed January 31, 2012; fee required).
- Simonian, Haig. "Swiss Lawmakers Put Banks in Spotlight." *Financial Times*, June 7, 2011. <http://www.ft.com/intl/cms/s/0/1c01358a-911e-11e0-9668-00144feab49a.html#axzz11AmfyJwV> (accessed January 31, 2012; fee required).
- Standard and Poor's. *Industry Surveys: Investment Services*. October 27, 2011.
- TheCityUK. "Financial Services in Emerging Economies." *Economic Trend Series*, June 2011. <http://www.thecityuk.com> (accessed November 23, 2011).
- Thomson Reuters. "Global Investment Banking Review: First Nine Months 2011." 2011. http://dmi.thomsonreuters.com/Content/Files/3Q11_Global_IB_Review.pdf (accessed November 30, 2011).
- . "Global Investment Banking Review: Full Year 2011," 2011. http://dmi.thomsonreuters.com/Content/Files/Global_IB_Review_Full%20Year_2011.pdf (accessed February 22, 2012).
- UK Financial Services Authority. *Prudential Risk Outlook 2011*. London: Financial Services Authority, 2011. <http://www.fsa.gov.uk/pubs/other/pro.pdf> (accessed February 23, 2012).
- U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). International Services. "Additional Detail on Financial Services Transactions, 2006–2010," n.d. http://www.bea.gov/international/international_services.htm#detailedstatisticsfor (accessed February 23, 2012).

- . International Services. “Additional Detail on Financial Services Transactions, 1994–2005,” n.d. http://www.bea.gov/international/international_services.htm#detailedstatisticsfor (accessed February 23, 2012).
- . *Survey of Current Business* 91, no. 10 (October 2011). “U.S. International Services: Cross-Border Trade in 2010 and Services Supplied through Affiliates in 2009. Table G: Other Private Services Receipts.” http://www.bea.gov/scb/pdf/2011/10%20October/1011_services%20text.pdf.
- . *Survey of Current Business* 89, no. 10 (October 2009). “U.S. International Services: Cross-Border Trade in 2010 and Services Supplied Through Affiliates in 2007. Table G: Other Private Services Receipts.” http://www.bea.gov/scb/pdf/2009/10%20October/1009_services_text.pdf#page=16.
- U.S. Department of the Treasury (U.S. Treasury). “FAQs: Questions on Country Classification in TIC Data,” n.d. <http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticfaq2.aspx#q10> (accessed January 23, 2012).
- . “Major Foreign Holders for Treasury Securities,” n.d. <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt> (accessed January 23, 2012).
- . “Securities (a), U.S. Transactions with Foreigners in Long-Term Securities by Type and Country,” global(set of all countries).xls, n.d. <http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/ticsec.aspx> (accessed January 19, 2011, and February 28, 2012).
- . “The 2011 U.S.-China Strategic and Economic Dialogue U.S. Fact Sheet—Economic Track,” May 10, 2011. <http://www.treasury.gov/press-center/press-releases/Pages/TG1172.aspx>.
- . “U.S. Fact Sheet—Economic Track of the Fourth Meeting of the U.S.-China Strategic and Economic Dialog (S&ED),” May 4, 2012. <http://www.treasury.gov/press-center/press-releases/Pages/tg1568.aspx>.
- . Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System. *Report on Foreign Portfolio Holdings of U.S. Securities as of June 2010*, April 2011. <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/shla2010r.pdf>.
- . Office of the Comptroller of the Currency (OCC). “Quarterly Report on Bank Trading and Derivatives Activities, Third Quarter 2011.” <http://www.occ.treas.gov/topics/capital-markets/financial-markets/trading/derivatives/dq311.pdf> (accessed February 2, 2012).
- . Office of Financial Stability. “Troubled Asset Relief Program: Three Year Anniversary Report,” October 2011. http://www.treasury.gov/initiatives/financial-stability/briefing-room/reports/agency_reports/Documents/TARP%20Three%20Year%20Anniversary%20Report.pdf (accessed June 27, 2012).
- Wallace, Paul, “Vickers Report Leaves Investment Banking Shrouded in Uncertainty.” *The Banker*, December 1, 2011. <http://www.thebanker.com/World/Western-Europe/UK/Vickers-report-leaves-investment-banking-shrouded-in-uncertainty?ct=true>.
- Walsh, John. Office of the Comptroller of the Currency (OCC), U.S. Treasury. “Remarks before the Centre for the Study of Financial Innovation, London,” June 21, 2011. <http://www.occ.gov/news-issuances/speeches/2011/pub-speech-2011-78.pdf> (accessed February 2, 2012).

- . “Remarks before the Special Seminar on International Finance, Tokyo, Japan.” November 16, 2011. <http://www.occ.gov/news-issuances/speeches/2011/pub-speech-2011-135.pdf> (accessed February 2, 2012).
- Wang, Kelly. “Foreign Investment in Securities in China.” MMLC Group—MMLC Murphy Wang, June 19, 2009. <http://www.hg.org/article.asp?id=6551>.
- Wang, Yi, Jun Xu, and Anna Yip. “China’s Changing Wholesale Landscape.” *McKinsey Quarterly*, March 2011. https://www.mckinseyquarterly.com/Financial_Services/Chinas_changing_wholesale_landscape_2744.
- Webel, Baird. “The Dodd-Frank Wall Street Reform and Consumer Protection Act: Issues and Summary.” CRS Report for Congress R41350, July 29, 2010. <http://www.ilsdc.org/attachments/files/232/CRS-R41350.pdf>.
- The World Bank. “China Financial Sector Assessment.” *Financial Sector Assessment Program, a Joint Initiative of the World Bank and the IMF*. SecM2011-0492, November 2011. <http://www.worldbank.org/content/dam/Worldbank/document/WB-Chinas-Financial-Sector-Assessment-Report.pdf> (accessed January 29, 2012).
- World Trade Organization (WTO). Trade Policy Review Board (TPRB). *WTO Trade Policy Review: Report by the Secretariat; European Communities*. WT/TPR/S/214/Rev.1, June 8, 2009.
- Xinhua News Agency. “More Participation Allowed in Securities Firms,” December 29, 2007. <http://www.china.org.cn/english/business/237495.htm>.

CHAPTER 8

Telecommunication Services

Summary

Over the past five years, the global telecommunications market has expanded at a moderate pace, with the United States accounting for the largest share of global revenues. Wireless services held the largest share of the world market in 2010, and have been the main driver of that market's growth in recent years. The largest service providers worldwide tend to be the former incumbent telecommunication operators in Asia, Europe, and North America. In most countries, the primary basis for competition is price, although handset subsidies, product differentiation, and customer service are also important factors. Major industry trends include ongoing network construction, growing merger and acquisition activity, and cost-reduction efforts, particularly the growing use of network sharing agreements.

The United States kept its trade surplus in telecommunication services in 2010, as U.S. exports continued to exhibit strong, albeit slowing, growth. Affiliate transactions remained the predominant mode of international trade in telecommunication services, and the value of services supplied by U.S.-owned foreign affiliates in 2009 was more than three times the value of cross-border exports of U.S. telecommunication services that year. Over the next few years, the global telecommunication services market is expected to grow steadily, driven by the global economic recovery and robust demand for high-bandwidth services. Carriers are expected to continue efforts to cut costs and streamline operations, and to boost revenue and subscriber growth through both domestic and international mergers and acquisitions.

Introduction

Telecommunication services encompass basic and value-added services. Basic telecommunication services involve the end-to-end transmission of voice or data information from senders to receivers. The most widely used basic services are landline and mobile telephone calls and Internet access services; others include facsimile (fax) services and enterprise data services.¹ Value-added telecommunication services add value to basic telecommunication services by enhancing their form or content, or by offering ways to store or retrieve information. Examples include voice mail, e-mail, online data processing, and online data storage and retrieval.² Subscribers can also use telephone handsets to access other value-added services, thereby increasing service providers' revenues. Common examples include short message services (text messages), multimedia message services (e.g. sending digital photographs between mobile telephone handsets), and mobile telephone Internet access services.

¹ These include frame relay, asynchronous transfer mode, virtual private network, and private leased-line services, all of which support voice or data transmission within firms.

² WTO, "Coverage of Basic Telecommunication and Value-Added Services," n.d. (accessed December 14, 2011).

With the advent of “smart phones,” particularly Apple’s iPhone, new varieties of value-added services have emerged, aided by the development of software tools (“applications” or “apps”) that are designed for use with mobile handsets. In addition to the hundreds of thousands of smart phone applications currently in existence, new apps are released almost continuously. Common applications allow users to play games, read news stories, recommend restaurants, monitor weather forecasts and stock prices, and conduct basic banking operations.

Competitive Conditions in the Global Telecommunication Services Market

The global telecommunication services market, measured by revenues derived from landline, wireless, and Internet services,³ was valued at about \$1.9 trillion in 2010. Overall, the global market grew by 5.9 percent in 2010, slightly slower than the 6.6 percent CAGR of 2005–09.⁴ All three market segments (landline, wireless, and Internet) showed slowing growth or declines in 2010. Revenues in the global landline segment, for example, fell by approximately 0.4 percent in 2010, following declines of 0.2 percent and 4.1 percent in 2008 and 2009, respectively. The global landline market experienced essentially no growth during 2005–10, largely due to two factors: declining average revenue per line and shrinking subscriber numbers, both of which stem from ongoing substitution of mobile devices for fixed ones in many countries. Although the wireless segment grew by 9.3 percent in 2010, largely due to a recovery in spending tied to improvements in the global economy, this fell short of the 12 percent CAGR during 2005–09. Slower growth reflected high wireless penetration levels, which already approach or even exceed 100 percent (due to users purchasing multiple phones and Subscriber Identity Module, or SIM, cards) in many developed and developing countries. Similarly, global Internet revenues grew by 6 percent in 2010, substantially slower than the CAGR of 11 percent during 2005–09. Slowing growth in this market over the past three years, particularly in the broadband segment, stemmed from global economic weakness and increasing market maturity.⁵

The size of a country’s telecommunication services market is highly correlated with its GDP, and the list of the world’s top 20 markets is dominated by large economies in Asia, Europe, and North America. In 2010, the United States was the largest country market in the global telecommunication services industry, accounting for 28 percent of total global revenues. Other large telecommunication services markets included China (8 percent), Japan (5 percent), Germany (5 percent), and the United Kingdom (5 percent) (table 8.1). These five countries were also the largest telecommunication services markets in 2005. China, however, rose from fifth place to second place from 2005 to 2010, achieving a CAGR of 20 percent in its wireless services market for those years. The 10 largest country markets represented about 50 percent of the global telecommunication services market in 2010, while the 20 largest markets represented 78 percent.

³ Internet services include both dial-up and broadband Internet services.

⁴ Market- and country-level revenue statistics used in this section were calculated by Commission staff using data reported by the Telecommunications Industry Association (TIA). TIA, *TIA’s 2011 Market Review and Forecast*, 2011.

⁵ Hot Telecom, *Global Telecom Market Status and Forecast Report 2010–2015*, July 2011, 6.

TABLE 8.1 Telecommunication services: Top 20 global telecommunications markets, by revenue and share of global revenues, 2010

Rank	Country	Revenues (million \$)	Share of global revenues (%)
1	United States	558,016	28.1
2	China	149,418	7.5
3	Japan	97,536	4.9
4	Germany	96,258	4.9
5	United Kingdom	94,296	4.0
6	Brazil	66,594	3.4
7	Italy	64,462	3.2
8	France	58,337	2.9
9	South Korea	41,144	2.1
10	Canada	40,714	2.1
11	Spain	40,038	2.0
12	India	37,302	1.9
13	Russia	36,630	1.8
14	Mexico	32,751	1.7
15	Philippines	26,184	1.3
16	Ukraine	25,568	1.3
17	Australia	23,166	1.2
18	Saudi Arabia	20,853	1.1
19	Taiwan	19,614	1.0
20	Vietnam	18,787	0.9
	Total (Top 20)	1,547,668	78.0

Source: TIA, *TIA's 2011 Market Review and Forecast*, 2011.

The largest global telecommunication service firms, measured by revenue, tend to be the former telecommunication services incumbents (holders of government monopolies) in the United States, Europe, and Asia; prominent examples include AT&T, NTT, Verizon, Deutsche Telekom, Telefónica, and France Télécom (table 8.2). Overall, the global telecommunication services industry displays a relatively low level of concentration, with the largest four companies accounting for 22 percent of total global revenues in 2010. Such low concentration stems in large part from the fragmented structure of the global telecommunication services industry, in which most telecommunication services companies earn a large share of their revenues by providing services domestically. Those carriers that operate outside their home countries tend to focus on only one or two countries, or in some cases regions. Exceptions include France Télécom and Vodafone, each of which has interests of one form or another in more than 30 countries. Other companies that operate in several regions include Etisalat (United Arab Emirates), MTN (South Africa), Saudi Telecom (Saudi Arabia), Telefónica (Spain), and Vimpelcom (Russia) (table 8.3).

As noted above, telecommunication services fall into three broad segments: landline services, wireless services, and Internet access services. Landline service, mainly the traditional voice telephone call, has been the primary telecommunications service for more than a century; in 2010, it still accounted for 55 percent of global revenues.⁶ In contrast, wireless voice services, which emerged as a broad-based, commercially viable choice in the mid-1990s, have experienced rapid worldwide adoption, growing to represent 36 percent of global revenues by the end of 2010.⁷ In less than 20 years, wireless voice services have grown from a niche service offered only in select developed countries to one that is widely available, even in many of the world's poorest countries.

⁶ TIA, *TIA's 2011 Market Review and Forecast*, 2011.

⁷ Ibid.

TABLE 8.2 Telecommunication services: Top 15 global telecommunication services firms, by revenue and employees

Rank	Company	Country	Revenue (million \$)	Net income (million \$)	Net profit margin (%) ^a	Employees
1	AT&T	United States	124,174	20,162	16.2	206,590
2	NTT	Japan	118,502	8,072	6.8	219,343
3	Verizon	United States	106,474	10,209	9.6	194,400
4	Deutsche Telekom	Germany	83,585	2,357	2.8	246,777
5	Telefónica	Spain	81,330	13,487	16.6	285,106
6	China Mobile	China	73,551	18,194	24.7	164,336
7	Vodafone	United Kingdom	70,148	12,031	17.2	83,862
8	France Télécom	France	60,931	5,098	8.4	161,392
9	América Móvil	Mexico	49,205	8,006	16.3	148,058
10	KDDI	Japan	39,496	2,934	7.4	18,418
11	Telecom Italia	Italy	36,919	4,792	13.0	84,200
12	Softbank	Japan	34,247	2,823	8.2	21,799
13	China Telecom	China	33,622	2,428	7.2	312,322
14	Sprint	United States	32,535	(3,461)	(10.6)	40,000
15	BT	United Kingdom	30,693	2,299	7.5	92,600

Source: Total Telecom, Global 100, October 2011, 14–16.

Note: The end of the financial year is March 31, 2011, for BT, KDDI, NTT, Softbank, and Vodafone. For all other companies, the end of the financial year is December 31, 2010. Revenues were translated from foreign currencies to U.S. dollars at the exchange rate prevailing on the last day of each company's financial year.

^aNet profit margin, calculated as net income/revenues, reports the profit available to shareholders, in percentage terms, after all expenses of the firm have been deducted; net income includes noncash expenses like depreciation and amortization.

TABLE 8.3 Telecommunication services: Telecommunication services firms' regional presence, selected, 2011

Americas	Africa	Asia	Western Europe	Eastern Europe	Middle East
América Móvil	Airtel	Airtel	BT	Deutsche	Batelco
Cable & Wireless	Etisalat	Digicel	Deutsche Telekom	Telekom	Etisalat
Digicel	France Télécom	Etisalat	France Télécom	France Télécom	France Télécom
France Télécom	MTN	France Télécom	Global Crossing	MTS	MTN
Global Crossing	Millicom	Hutchison	Hutchison	Tele2	Saudi Telecom
Millicom	Orascom	NTT	Tele2	Telefónica	Vodafone
Nextel	Saudi Telecom	Orascom	Telecom Italia	Telenor	Wataniya
Orascom	Vodafone	Singtel	Telefónica	TeliaSonora	Zain
Telecom Italia	Wataniya	Saudi Telecom	Telenor	Vimpelcom	
Telefónica	Vimpelcom	Telenor	TeliaSonora	Vodafone	
Vimpelcom		Vimpelcom	Vodafone		
		Vodafone	Vimpelcom		

Source: Hot Telecom, Global Telecom Market Status and Forecast Report, 2010–2015, July 2011, 19.

Internet access services, which allow users to connect to the Internet from their home, office, or public locations, experienced mainstream adoption starting in the mid-1990s, but represented only 9 percent of global revenues by the end of 2010.⁸ Although such services have grown very rapidly in developed countries, low levels of personal computer ownership and low landline penetration have hampered adoption in developing countries.

In many countries, the price of telecommunication services is the primary basis of competition, largely due to the undifferentiated nature of such services. Intense industry competition and several years of global economic weakness have accelerated the

⁸ Ibid.

commoditization of many services, particularly wireless voice services and entry-level broadband services. In the wireless segment, for example, carriers offer similar services and geographic coverage in most country markets. As a result, consumers focus heavily on service pricing and frequently switch carriers on the basis of price, a phenomenon referred to as “churn.”⁹

To acquire and “lock in” customers, telecommunication carriers in many countries offer subsidized mobile handsets (cell phones), subject to the customer signing a one-year or, increasingly common, two-year contract. The handset subsidy is recovered over the duration of the contract. Many carriers also develop complex pricing packages that make it harder to compare services, thereby dissuading customers from switching to a competing carrier.¹⁰

Service is another important factor in the telecommunications industry. In the wireless segment, service coverage, defined as the percentage of the population covered by a carrier’s network, can be a critical competitive factor. Wireless carriers are also expected to provide enough network capacity, a particularly important issue with the ever-wider deployment of high-bandwidth, third generation (3G) services; insufficient bandwidth can lead to dropped mobile telephone calls, slow download speeds, and other network quality issues. In the Internet segment, service levels are typically defined in terms of download speeds and monthly limits on downloaded data. High-income users, for example, often demand services that require fast download speeds and high monthly download limits. Service quality is also important, as consumers and businesses expect static-free telephone calls and minimal interruptions to their Internet access.¹¹

Product differentiation on the basis of innovation is also an important competitive factor. In the telecommunications industry, product innovation typically requires companies to quickly incorporate the latest technologies and value-added features into products and services. Over the past few years, for example, wireless companies have completed 3G, 3.5G, and 4G (fourth generation) network upgrades, adopted Smart SIM technology, and rolled out ever-better mobile telephone handsets capable of Internet and television services. In the Internet segment, service providers have innovated by expanding service offerings, particularly Voice over Internet Protocol services and long distance calling minutes, as well as bundling Internet services with other telecommunication services. Many service providers also adopt innovative branding and marketing strategies to stand out from the competition.¹²

Demand and Supply Factors

Telecom Carriers Focus on Network Construction

Although rising levels of subscriber penetration have resulted in flat or declining rates of growth in fixed, wireless, and Internet market segments worldwide, most telecommunication companies have invested heavily over the past several years to

⁹ IBISWorld, “Global Wireless Telecommunication Carriers,” October 14, 2011, 15; IBISWorld, “Global Internet Service Providers,” May 31, 2011, 14.

¹⁰ IBISWorld, “Global Wireless Telecommunication Carriers,” October 14, 2011, 15.

¹¹ IBISWorld, “Global Internet Service Providers,” May 31, 2011, 14; IBISWorld, “Global Wireless Telecommunication Carriers,” October 14, 2011, 15.

¹² IBISWorld, “Global Internet Service Providers,” May 31, 2011, 15; IBISWorld, “Global Wireless Telecommunication Carriers,” October 14, 2011, 15–16.

expand and update their networks and thereby increase their capacity to supply telecommunication services (box 8.1). In developed countries, the growing use of smart phones and, increasingly, Internet tablets—particularly Apple’s popular iPad—has caused a surge in data traffic which, in turn, has driven network development. As a result, over the past decade carriers have almost continuously upgraded their wireless networks from the second generation (2G and 2.5G) technologies prevalent during most of the 2000s to 3G technologies and above. In many developing countries, extensive network construction stemmed less from the need to accommodate surging data traffic than from the need to address strong latent demand for basic voice services resulting from decades of underdeveloped landline networks. Although many developing countries have constructed 3G networks over the past several years, such networks were often built to meet the huge demand for bandwidth stemming from rapid growth of first-time subscribers, as opposed to users of high-end, 3G services. Many mobile carriers have also taken steps to develop 4G networks, typically using Long Term Evolution technologies (a standard for high-speed wireless communications). By early 2012, more than 30 carriers had completed 4G networks and launched commercial services, although more than 100 deployments were still under development. In many cases, operators see 4G networks as a means of alleviating network congestion on overloaded 3G networks, rather than as a means of increasing revenue.¹³

Network construction has been fueled by both technology trends and public policy initiatives. For example, many carriers have rolled out networks capable of delivering all voice, data, and Internet services over one simplified network using Internet Protocol technologies (so-called “All-IP Networks”), as opposed to the plethora of networks and technologies that the industry has used for decades. This will allow the carriers to expand capacity and simplify network architectures. Additionally, national broadband plans developed by regulators and policymakers are stimulating network construction around the world. These plans, which aim to increase broadband access and adoption in rural and underdeveloped areas, are often cornerstones of countries’ economic and development policies. Such efforts have led governments not only to mobilize private capital but also to subsidize network construction on an unprecedented scale. A large number of countries are developing national broadband plans, including Australia, Austria, Brazil, Botswana, Canada, France, Germany, Italy, Malaysia, Morocco, Singapore, South Africa, Uganda, the United Kingdom, and the United States.¹⁴

¹³ EIU, *Industries 2012*, 2011, 16.

¹⁴ Pyramid Research, *Top Trends in the Global Communications Industry*, October 2011, 8; TIA, *TIA’s 2011 Market Review and Forecast*, 2011, 1-50 to 1-58.

BOX 8.1 International submarine cables

Over the past six years, the submarine cable industry has grown dramatically in terms of both active systems and lit capacity^a as existing cable systems have been upgraded and 49 new commercial networks have been launched. Such large-scale investment and construction has been driven by a surge in demand for Internet and broadband services, with total demand for international bandwidth growing by approximately 600 percent during 2006–10. Demand has grown most rapidly in emerging markets, with the capacity of systems connecting Africa, Latin America, and the Middle East collectively growing by more than 80 percent per year during this period. By contrast, international bandwidth usage in Europe grew by 63 percent per year during the period, while usage in the United States and Canada together grew by about 54 percent per year.^b

During 2006–10, approximately \$6.5 billion was invested in upgrades and new construction.^c The cost of building a new submarine cable system varies widely, from less than \$100 million for small regional systems to nearly a billion dollars for intercontinental systems, depending on system length, network configuration, the number of landing stations, and other factors. For example, the Lion 2 cable system, connecting two islands—Madagascar and Réunion—in the Indian Ocean, is estimated to cost around \$74 million, whereas the estimated costs of the West African Cable System and the Africa Coast to Europe cables, both running from South Africa to Europe, are \$600 million and \$700 million respectively.^d

Despite strong demand for international bandwidth, the flood of capacity entering the market has put downward pressure on prices. On average, bandwidth prices have fallen by about 25 percent per year over the past couple of years, with transpacific and transatlantic 10G wavelengths^e among the cheapest routes on a price-per-mile basis, and Miami-São Paulo and Hong Kong-Tokyo among the most expensive.^f

Although prices vary by circuit size, geographic location, route competition, activation schedule, and other factors, prices for high-capacity circuits have declined more rapidly than those for smaller circuits. Price drops are expected to continue. According to one estimate, the average cost of an annual lease for a 10G wavelength between Hong Kong and Tokyo will fall by 61 percent over the next three years, from \$509,000 in 2011 to \$197,000 in 2014. As demand for bandwidth grows, bandwidth buyers purchase greater amounts of bandwidth, with volume discounts pushing unit prices down even further.^g Over the next few years, industry observers expect the bulk of submarine cable construction to shift away from heavily built regions like Asia, Africa, and the Middle East towards South America, which has experienced little construction activity over the last several years. Construction of new cables to diversify routes and reduce latency will likely continue in many regions worldwide.^h

^a The term “lit capacity” refers to fiber optic cable strands which have been activated (by installing transmission equipment at both ends of the strand) and are capable of carrying telecommunications traffic. Fiber optic strands are frequently left dormant (“dark”) until sufficient demand justifies activation.

^b *Capacity Magazine*, “Analysis,” May 9, 2011.

^c *Capacity Magazine*, “Analysis,” May 9, 2011.

^d Joanne Taaffe, “Submarine Cable Networks,” *Total Telecom*, February 2011, 6; Orange, “France Telecom-Orange Sign Agreement,” September 23, 2010.

^e An optical wavelength capable of transmitting telecommunications traffic at a rate of 10 gigabits per second is referred to as a 10G wavelength.

^f *Capacity Magazine*, “Analysis,” May 9, 2011.

^g TeleGeography, “New Cables and Falling Prices,” February 29, 2012.

^h *Capacity Magazine*, “Analysis,” May 2011.

Merger and Acquisition Activity Resumes

Following the 2007–08 financial crisis, merger and acquisition (M&A) activity in the telecommunications industry slowed dramatically. Over the past couple of years, however, telecom M&A activity has picked up again as confidence in the economy and stock market has improved, a trend which has changed the roster of suppliers in the industry (table 8.4). In addition to consolidation deals within countries, many M&A agreements have taken place across borders, as large, multinational telecommunications firms sought to maintain revenue growth by acquiring existing companies (or boosting

existing ownership positions) in high-growth emerging markets.¹⁵ In 2010, for example, India's Bharti Airtel Limited purchased the African operations of Kuwait's Zain Group, acquiring mobile operations in 17 African countries for approximately \$11 billion. In the United States, the \$10.6 billion purchase of Qwest by rival CenturyLink was completed in 2011. UK-based Vodafone Group also closed a deal in 2011, paying \$5.5 billion to buy out its joint venture partner (Essar) in mobile operator Vodafone Essar Limited.¹⁶

TABLE 8.4 Telecommunication services: Selected mergers and acquisitions, 2009–11

Announced	Completed	Activity	Value (billion \$)
Q1 2011	Q1 2012: withdrawn	AT&T (U.S.) enters into agreement to purchase T-Mobile (U.S.); deal blocked by the U.S. Department of Justice and the U.S. Federal Communications Commission	39.0 (Withdrawn)
Q2 2011	Q4 2011	Level 3 (U.S.) acquires Global Crossing (U.S.)	3.0
Q2 2011	Q2 2011	Vimpelcom (Russia) increases ownership position in GTel (Vietnam) from 40% to 49%	0.2
Q2 2011	Q2 2011	Vodafone (UK) buys out joint venture partner (Essar; India) in Vodafone Essar (India)	5.5
Q1 2011	Q4 2011	PLDT (Philippines) acquires 51.6% of Digitel (Philippines)	1.7
Q1 2011	Q3 2011	América Móvil (Mexico) buys wireless operations in El Salvador and Honduras from Digicel (Ireland)	
Q1 2011	Q2 2011	France Télécom (France) secures 20% indirect stake in Korek Telecom (Iraq)	0.2
Q4 2010	Q2 2011	Cable & Wireless (UK) purchases 51% stake in Bahamas Telecom Company (Bahamas) from the government of the Bahamas	0.2
Q4 2010	Q4 2010	Telekom Austria (Austria) acquires remaining 30% stake in Velcom (Belarus)	0.5
Q2 2010	Q2 2011	CenturyLink (U.S.) and Qwest (U.S.) merge	10.6
Q1 2010	Q2 2010	Bharti Airtel (India) acquires the African operations of Zain Group (Kuwait) after two failed bids by MTN Group (South Africa)	10.7
Q1 2010	Q1 2010	STT (Singapore) acquires 33% stake in U Mobile (Malaysia)	0.3
Q4 2009	Q4 2010	Vimpelcom (Russia) and Kyivstar (Ukraine) merge	22.0
Q3 2009	Q3 2009	Sprint Nextel (U.S.) increases ownership position in Virgin Mobile USA to 100%	0.5
Q2 2009	Q3 2009	Etisalat (Egypt) acquires 100% of Tigo (Sri Lanka) from Millicom International Cellular (Luxembourg)	0.2
Q2 2009	Q2 2009	Vodafone (UK) purchases 70% stake in Ghana Telecom (Ghana)	0.9
Q2 2009	Q2 2009	Batelco (Bahrain) acquires initial 36.9% stake in S-Tel (India)	0.2
Q2 2009	Q2 2009	AT&T (U.S.) buys fixed-line assets from Verizon (U.S.) in rural areas in 18 U.S. states	2.4
Q2 2009	Q2 2009	France Télécom (France) lifts stake in Orange España (Spain) from 81.6% to 99.85%	1.8
Q1 2009	Q3 2009	Maroc Télécom (Morocco) purchases 51% of former monopoly operator SOTELMA (Mali)	0.4

Source: TeleGeography, Worldwide Telecoms M&A Timeline, GlobalComms Database, 2012.

¹⁵ Hot Telecom, *Global Telecom Market Status and Forecast Report 2010–2015*, 2011, 15–17.

¹⁶ TeleGeography, *World Telecoms M&A Timeline*, GlobalComms Database, 2012.

Tight Margins Motivate Carriers to Adopt Network Sharing Arrangements

Over the past five years, wireless carriers in a growing number of countries have adopted network sharing agreements. Such arrangements, which involve two or more carriers sharing mobile network components, have become increasingly common in both developed and developing countries as they allow telecommunication services suppliers to reduce operating costs, minimize capital spending, expand network coverage, speed time to market, and respond to environmental and universal service regulations.¹⁷ According to one estimate, network sharing can reduce network construction costs by 16–20 percent, with accumulated savings running into the billions of dollars.¹⁸ Recent examples of network sharing deals include a 2010 joint venture between two Polish telecom companies, TPSA and PTC, in which the firms share mobile network infrastructure and radio frequencies. TPSA and PTC expect to save hundreds of millions of dollars over the next five years.¹⁹ In 2011, Irish carriers O2 Ireland and eircom announced plans to share their mobile networks by consolidating existing sites and jointly building new ones. O2 and eircom plan to share site equipment, power supplies, technology, and transmission equipment; both companies also plan to contribute staff to roll out and maintain their tower networks.²⁰

Trade Trends

Cross-border Trade

In 2010, U.S. exports of telecommunication services (box 8.2) totaled \$11.1 billion, while imports totaled \$8.0 billion, yielding a trade surplus of about \$3.1 billion (figure 8.1).²¹ Exports increased by 10 percent in 2010, slower than the CAGR of 20 percent recorded during 2005–09.²² Telecommunication exports rose mainly due to an increase in intrafirm receipts by U.S. parent companies from their foreign affiliates. Strong growth in such receipts over the past several years were largely due to a surge in value-added services, including satellite broadcasting, business communication, and data network management services. Such affiliated services now account for more than half of all telecommunication receipts.²³

¹⁷ Middleton, “Share and Share Alike,” December 16, 2009; Rubenstein, “Technology Trends: Mobile Network Sharing,” July 25, 2009; *Economist*, “Sharing the Load,” March 26, 2009.

¹⁸ KPMG, “Tower Operators Are Learning to Compete,” September 20, 2011.

¹⁹ Reuters, “TPSA, TPA Sign Infrastructure Deal,” December 17, 2010.

²⁰ Lennighan, “Irish Mobile Operators in Network Sharing Deal,” *Total Telecom*, April 6, 2011.

²¹ USDOC, BEA, *Survey of Current Business*, October 2011, 20–21, Table G and Table H.

²² USDOC, BEA, *Survey of Current Business*, October 2011, 20, Table G.

²³ USDOC, BEA, *Survey of Current Business*, October 2011, 20.

BOX 8.2 Understanding BEA data on cross-border trade and affiliate transactions in telecommunication services

The BEA's data on cross-border trade in telecommunication services cover receipts and payments between U.S. and foreign telecommunication companies for the following services: message telephone services, telex, telegram, and other jointly provided basic services; private leased channel services; value-added services; support services; and reciprocal exchanges.^a These figures are collected quarterly via Form BE-125 and reported on a gross basis.^b Trade data by service type, however, are not available, as companies are instructed to report such data for the above-listed categories in the aggregate. In addition, the BEA periodically conducts benchmark surveys using Form BE-120, with the last such survey occurring in 2006. In 2006, following the introduction of revised forms BE-120 and BE-125, the BEA began collecting and reporting data for both affiliated and unaffiliated telecommunication transactions. Before 2006, the BEA collected only unaffiliated cross-border telecommunications trade data.^c Within the telecommunications industry, affiliated transactions represent trade within multinational telecommunication services companies—specifically, trade between U.S. parent companies and their foreign affiliates, and vice versa. By contrast, unaffiliated transactions represent trade with foreign partners that neither own, nor are owned by, a U.S. telecommunication services company.^d

To survey services supplied through affiliates, the BEA collects data for the U.S. affiliates of foreign companies using forms BE-12 (Benchmark Survey) and BE-15 (Annual Survey) and for foreign affiliates using forms BE-10 (Benchmark Survey) and BE-11 (Annual Survey). Unlike cross-border data, which is collected by service type, affiliate data are collected and published according to the primary industry of the affiliate.^e The BEA's *Survey of Current Business* reports on services supplied through telecommunication affiliates in three broad industry categories: wireline telecommunication carriers, wireless telecommunications carriers (except satellite), and other telecommunication services.^f

^a USDOC, BEA, Form BE-125 (1-2010), "Quarterly Survey of Transactions in Selected Services and Intangible Assets with Foreigners," 17. As mentioned earlier, value-added (enhanced) services are defined as telecommunication services that add value or function above and beyond the telecommunications transport services that deliver the value-added service to end users. Such services can include (1) e-mail, voice mail, code and protocol processing, and management and operations of data networks; (2) fax services and video conferencing; (3) Internet connections (online access service, including Internet backbone, router services, and broadband access services); (4) satellite broadcasting, business communication, and paging services provided by satellite connections; and (5) telephony, interactive voice response, virtual private networking, remote access service, and voice over Internet protocol services. Support services involve the maintenance and repair of telecommunications equipment and ground station services. Reciprocal exchanges include transactions involving barter.

^b BEA representative, e-mail message to USITC staff, March 23, 2010. For example, if Company A in the United States owes Company B in France \$100 million, and Company B owes Company A \$20 million, Company A would report a receipt (export) of \$20 million and a payment (import) of \$100 million.

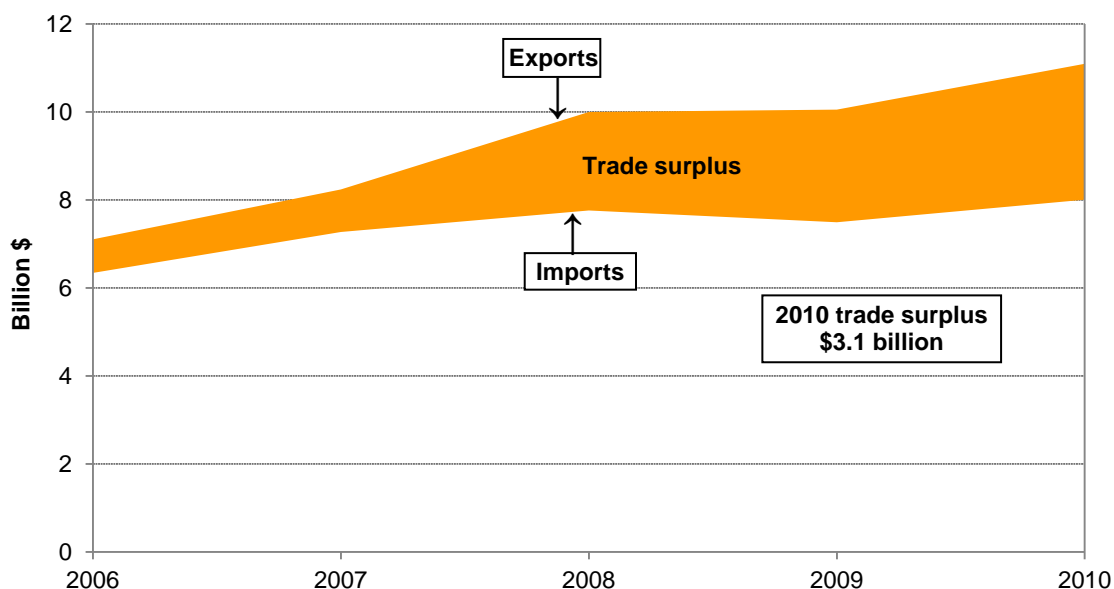
^c BEA representative, various e-mail messages to USITC staff, March 12–23, 2010. For more information on affiliated/unaffiliated transactions pertaining to telecommunication services, see table 1, "Trade in Services, 1998–2008," footnote 7 in DOC, BEA, *Survey of Current Business*, October 2009, 41.

^d USDOC, BEA, *Survey of Current Business*, October 2009, 29.

^e BEA representative, e-mail message to USITC staff, March 12, 2010.

^f USDOC, BEA, *Survey of Current Business*, October 2009, 22–64.

FIGURE 8.1 Telecommunication services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2006–10



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 32–33, table 1.

In 2010, U.S. imports of telecommunication services increased by 7 percent, slower than the 14 percent CAGR from 2005–09.²⁴ This slower growth represents efforts by U.S. carriers to reduce fees and payments to their foreign counterparts, including ongoing activities aimed at reducing mobile termination rates.²⁵ In 2010, the top five cross-border export markets for U.S. telecommunication services were Brazil (which accounted for 20 percent of the total), the United Kingdom (16 percent), Canada (6 percent), Venezuela (6 percent), and Argentina (5 percent) (figure 8.2). In that same year, the top sources of U.S. telecommunication services imports were the United Kingdom (which accounted for 22 percent of the total), Mexico (7 percent), the Netherlands (7 percent), Canada (6 percent), and Germany (3 percent). The United States maintained bilateral surpluses vis-à-vis its top five telecom markets in 2010 (figure 8.3).

Affiliate Transactions

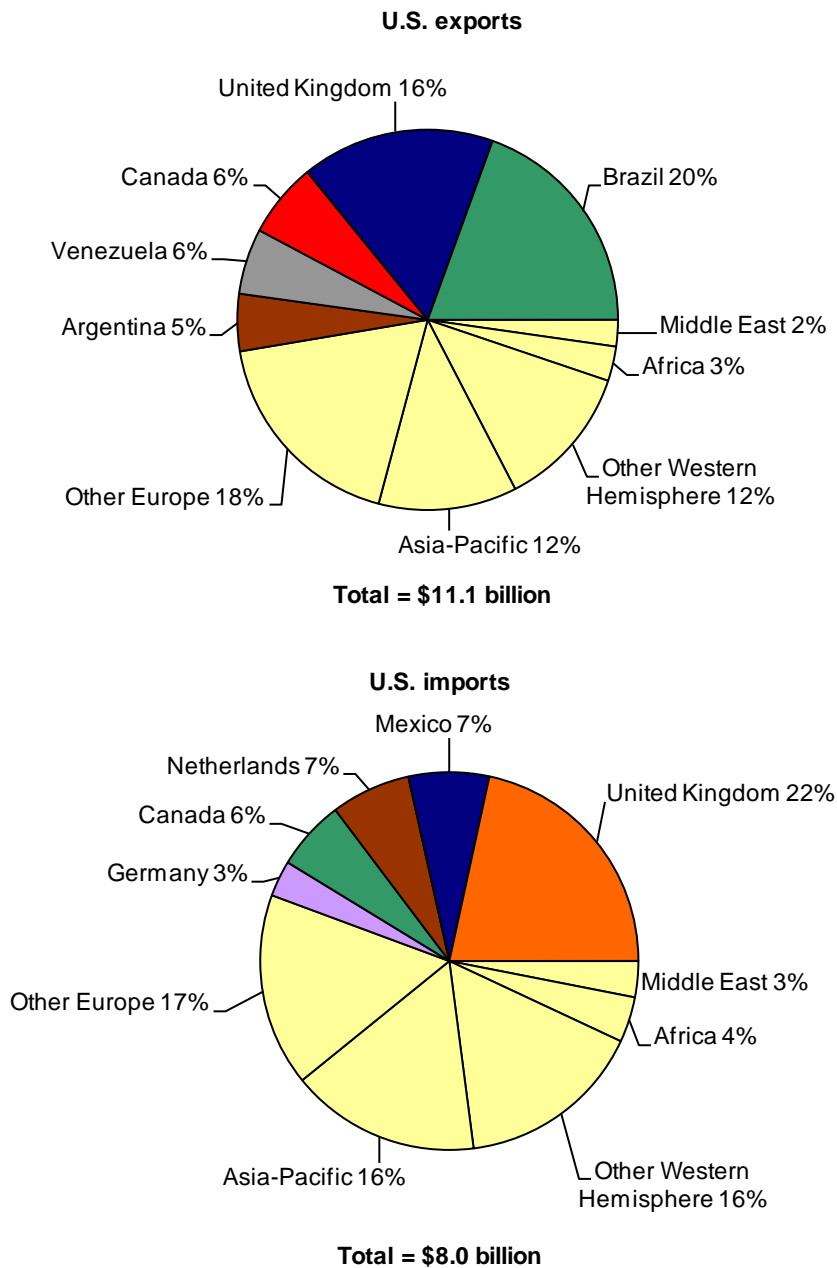
International trade in telecommunication services occurs predominantly through the affiliates of multinational companies, although data on such transactions are frequently suppressed to avoid disclosing services supplied by individual companies.²⁶ In 2009, sales by U.S. foreign affiliates totaled \$31.7 billion, 47 percent higher than such sales in 2006 (such data are unavailable for 2007 and 2008). Overall, U.S. foreign affiliate sales

²⁴ USDOC, BEA, *Survey of Current Business*, October 2011, 21, Table H.

²⁵ USTR, *2011 Section 1377 Review*.

²⁶ Foreign affiliates are U.S. parents companies' majority-owned nonbank affiliates in foreign markets, whereas U.S. affiliates are foreign parent companies' majority-owned nonbank affiliates in the U.S. market.

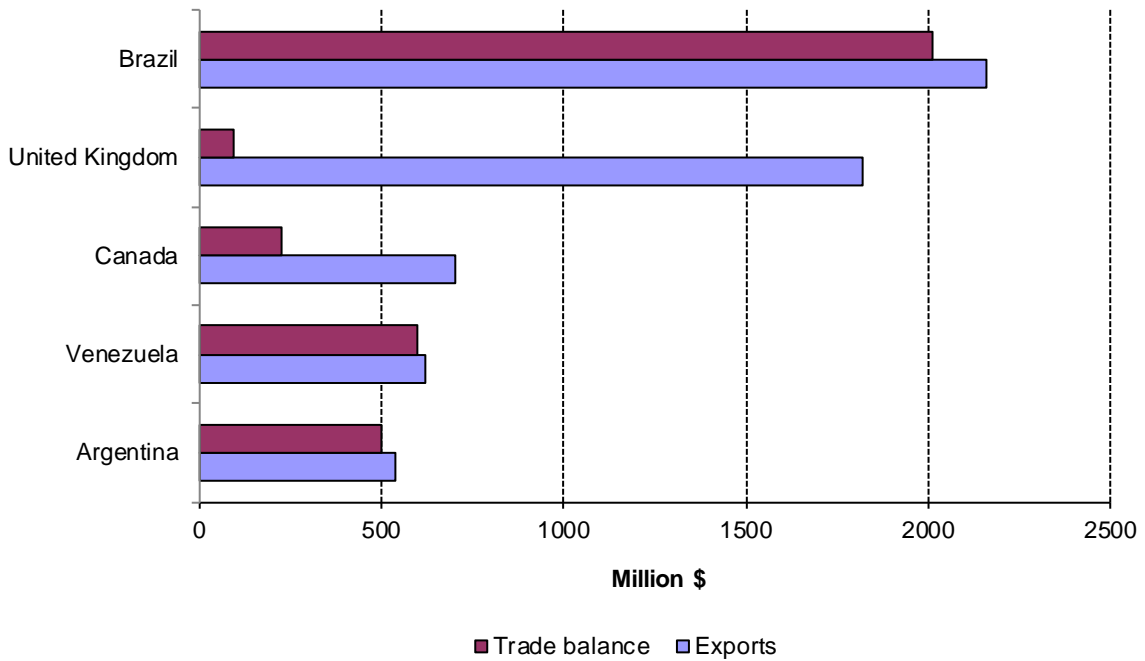
FIGURE 8.2 Telecommunication services: Brazil and the United Kingdom were the top markets for U.S. exports while the United Kingdom was the leading source of telecommunication services imports in 2010



Source: USDOC, BEA, *Survey of Current Business*, October 2011, 44–45, table 5.2.

Note: Geographic regions are shaded in yellow. Figures may not total 100 percent due to rounding.

FIGURE 8.3 Telecommunication services: The United States showed a cross-border trade surplus with major trading partners in 2010



Source: USDOC, BEA, *Survey of Current Business*, table 5.2, October 2011, 44–45.

grew at a CAGR of 5 percent from 2004 through 2009.²⁷ In 2009, services supplied to U.S. customers by the U.S.-based affiliates of foreign telecommunication service companies totaled \$30.9 billion, roughly the same level as in 2008. From 2006 through 2009, sales by U.S. affiliates of foreign companies grew at a CAGR of 13 percent.²⁸

Nontariff Measures Affecting Trade

Firms seeking to offer services outside their home country typically face a number of barriers to market entry. In many countries, government regulation acts as a barrier. For example, governments often control the issuance of service licenses as a way to limit the number of competing firms. In the wireless segment, new entrants also need to obtain a license that authorizes the use of electromagnetic spectrum. In addition to the (often substantial) cost of obtaining such a license, spectrum availability is finite in all markets; once all available spectrum is allocated, mergers or acquisitions are typically the only way to enter the market. Government-imposed ownership restrictions, such as foreign equity caps on domestic telecommunication carriers, are another important type of

²⁷ USDOC, BEA, *Survey of Current Business*, October 2011, 54, table 9.2. The BEA suppressed sales data related to U.S. foreign affiliates in 2007 and 2008 to avoid disclosure of data of individual companies.

²⁸ The BEA suppressed sales data related to the U.S. affiliates of foreign telecommunication companies in 2004 and 2005 to avoid disclosure of data of individual companies.

barrier. In some countries, governments completely prohibit foreign companies from taking an ownership position in incumbent operators.²⁹

Outlook

Over the next three years, the global telecommunication services industry is expected to grow at steady, if unspectacular, rates, driven by continued economic recovery and robust demand for high-bandwidth data services. Growth in industry revenues worldwide is expected to decline slightly, from 6.3 percent per annum in 2012 to 5.7 percent by the end of 2015, largely due to maturing market conditions in many countries.³⁰ In an effort to offset slower growth, many companies around the globe are expected to continue efforts to reduce costs and streamline operations. A growing number of carriers, for example, are expected to adopt network-sharing arrangements to reduce both up-front capital expenditure and ongoing operating costs.³¹ As pressures grow to cut costs, carriers are also expected to engage in innovative partnerships and joint venture agreements. Over the next few years, a growing number of carriers are expected to cooperate under purchasing agreements wherein two or more carriers form a joint venture so they can pool their purchases of telecommunications equipment.³² For example, in 2011, German and French incumbents Deutsche Telekom and France Télécom set up a venture specifically to purchase telecommunications equipment. France Télécom estimates that their purchasing venture will save it as much as \$1.2 billion over the next three years, whereas Deutsche Telekom estimates savings of more than \$500 million over the same time period. The savings will stem from both increased negotiating power with telecom equipment makers and economies of scale.³³

Over the next few years, M&A activity is likely to increase as telecommunication companies face maturing markets and growing subscriber saturation. In developed countries, M&A activity is likely to focus on domestic consolidation, whereas M&A activity in emerging markets is likely to take the form of cross-border acquisitions as large, multinational telecommunications companies attempt to boost revenues and subscribers by investing in fast-growing markets.³⁴

²⁹ ITU, ICT Eye database.

³⁰ TIA, *TIA's 2011 Market Review and Forecast*, 2011, 1–3.

³¹ Hot Telecom, *Global Telecom Market Status and Forecast Report 2010–2015*, 2011, 29.

³² Pyramid Research, “Pyramid Perspective 2012,” October 2011, 23.

³³ Campbell and Rahn, “Deutsche Telekom, France Telecom Set Up Purchasing Venture,” *Bloomberg*, April 18, 2011.

³⁴ Hot Telecom, *Global Telecom Market Status and Forecast Report 2010–2015*, 2011, 29.

Bibliography

- Campbell, Matthew, and Cornelius Rahn. "Deutsche Telekom, France Telecom Set Up Purchasing Venture." *Bloomberg*, April 18, 2011. <http://www.bloomberg.com/news/2011-04-18/deutsche-telekom-france-telecom-agree-on-procurement-venture.html>.
- Capacity Magazine*. "Analysis: Boom in International Bandwidth," May 9, 2011.
- Economist*. "Sharing the Load," March 26, 2009. <http://www.economist.com/node/13381538> (subscription required).
- Economist Intelligence Unit (EIU). *Industries in 2012*. New York: Economist Intelligence Unit, 2011. http://www.eiu.com/public/topical_report.aspx?campaignid=Industries2012 (subscription required).
- Hot Telecom and Total Telecom. *Global Telecom Market Status and Forecast Report 2010–2015*, July 2011.
- IBISWorld. "Global Wireless Telecommunications Carriers: I5111-GL." *IBISWorld Industry Reports*, October 14, 2011.
- . "Global Internet Service Providers: I5121-GL." *IBISWorld Industry Reports*, May 31, 2011.
- International Telecommunications Union (ITU). ICT Eye database (accessed June 28, 2012).
- KPMG. "Telecoms Operators Are Learning to Cooperate, Finds KPMG." Press release, September 20, 2011. <http://www.kpmg.com/africa/en/issuesandinsights/articles-publications/press-releases/pages/telecoms-learning-to-cooperate.aspx>.
- Lennighan, Mary. "Irish Mobile Operators in Network Sharing Deal." *Total Telecom*, April 6, 2011 <http://www.totaltele.com/view.aspx?ID=463901> (subscription required).
- Middleton, James. "Share and Share Alike." *Telecoms.com*, December 16, 2009. <http://www.telecoms.com/17067/share-and-share-alike>.
- Office of the United States Trade Representative (USTR). *2011 Section 1377 Review on Compliance with Telecommunications Trade Agreements*. http://www.ustr.gov/webfm_send/2788.
- Pyramid Research. *Pyramid Perspective 2012: Top Trends in the Global Telecommunications Industry (excerpt)*, October 2011.
- Reuters. "TPSA, TPA Sign Infrastructure Deal," December 17, 2010. <http://www.reuters.com/article/2010/12/17/tpsa-idUSLDE6BG1PI20101217>.
- Rubenstein, Roy. "Technology Trends: Mobile Network Sharing: Share Issues." *Total Telecom*, July 25, 2009. <http://www.totaltele.com/view.aspx?ID=446761> (subscription required).
- Taaffe, Joanne. "Subsea Cable Networks: Well Connected." *Total TelecomPlus*, February 2011. <http://www.totaltele.com/view.aspx?ID=462239>.

Telecommunications Industry Association (TIA). *TIA's 2011 ICT Market Review and Forecast*. Arlington, VA: Telecommunications Industry Association, 2011.

TeleGeography. "New Cables and Falling Prices to Disrupt Intra-Asian Submarine Cable Market." Press release, February 29, 2012. <http://www.telegeography.com/press/press-releases/2012/02/29/new-cables-and-falling-prices-to-disrupt-intra-asian-submarine-cable-market/index.html>.

———. "World Telecoms M&A Timeline." GlobalComms Database, 2012.

Total Telecom. Global 100, October 2011. <http://www.totaltele.com/download.aspx?ID=468485> (subscription required).

U.S. Department of Commerce (USDOC). Bureau of Economic Analysis (BEA). *Survey of Current Business* 89, no. 10 (October 2009).

USDOC. BEA. *Survey of Current Business* 91, no. 10 (October 2011).

———. Form BE-125 (1-2010). "Quarterly Survey of Transactions in Selected Services and Intangible Assets with Foreigners," (accessed February 29, 2012).

USTR, *see* Office of the U.S. Trade Representative.

World Trade Organization (WTO). "Coverage of Basics Telecommunications and Value-Added Services," n.d. http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_coverage_e.htm (accessed February 29, 2012).

CHAPTER 9

Services Roundtable

The Commission hosted its fifth annual services roundtable on November 3, 2011, with USITC Chairman Deanna Tanner Okun presiding and USITC Vice Chairman Irving Williamson moderating. These roundtables are held to facilitate discussions among individuals from government, industry, and academia about important issues affecting services trade. This year's discussion focused on the following topics:

- The outcomes and prospects of multilateral and regional trade negotiations as well as unilateral liberalization efforts;
- The challenges and opportunities of harmonizing regulations affecting services industries; and
- Services industries' contribution to global economic activity.

Approaches to Services Trade Liberalization

Several participants stated that, while negotiations at the World Trade Organization (WTO) resulted in the landmark 1995 General Agreement on Trade in Services, the WTO has not effectively facilitated services trade liberalization in recent years. As evidence they cited the impasse in the Doha Round and the fact that many of the best offers made by WTO members fall short of actual on-the-ground levels of liberalization. One participant argued that the WTO does not adequately deal with some increasingly important services trade issues: state-owned enterprises, restrictions on data flows, forced localization of business activities, indigenous innovation, and local content requirements. The panel suggested that the slow rate of progress in the Doha Round may lower expectations for what can be achieved within the current WTO structure and motivate more countries to seek bilateral free trade agreements (FTAs) and regional trade agreements (RTAs).

The participants discussed the tradeoffs between pursuing broad multilateral negotiations and pursuing smaller "coalition-of-the-willing" negotiations. They noted that RTAs often do better at capturing de facto liberalization levels and providing more security of access with wider and deeper bindings than do "lowest common denominator" agreements among a larger number of partners. Nevertheless, one speaker pointed out that RTAs are imperfect, as they generally do not increase market access beyond policies already in place: countries often only make offers that at best ratify current market conditions, technologies, and business models, or that reflect liberalization reforms which they are already prepared to undertake unilaterally (though agreements that bind such practices are still valuable). Moreover, according to one participant, the diversity of RTAs in general, and the negative-list¹ structure of some RTAs specifically, require negotiators to

¹ In a negative-list approach, liberalization provisions apply to all industries except for those industries, or those discriminatory measures, that are explicitly excluded. The WTO employs a positive-list approach, in which liberalization provisions apply only to industries or measures that are specifically identified by members.

learn multiple “languages” in pursuing parallel negotiating tracks at the same time. On the other hand, panelists also noted that RTA provisions are easily “multilateralizable,” in that they can be extended to countries outside the agreement.

The panel also considered the merits of bilateral FTAs, which like RTAs tend to be wider and deeper than broad multilateral agreements. One speaker pointed out that in spite of the WTO’s challenges, the United States is not negotiating commercially meaningful bilateral trade agreements with large important markets like India, China, or Brazil, in part because those economies are more interested in negotiating multilaterally. Many successfully negotiated U.S. FTAs are with small markets, such as the signatories to the Dominican Republic-Central America-United States Free Trade Agreement, which face challenges in enticing U.S. firms to enter their markets due to their size.

The participants also discussed unilateral liberalization undertaken by countries that simply decided such changes were in their own interest. Telecommunications was cited as a striking example of successful unilateral liberalization driven by the alignment of consumers, suppliers, and regulators. In many countries, consumers sought better telecommunications services, suppliers wished to provide them, and regulators were pushed to reform for fear of being “left behind.” This sequence of events was contrasted with plurilateral negotiations that narrowly focus on requests for and offers of specific commitments, which can disregard the overall context of reforms. One participant suggested that domestic debates may be the most important forums for discussing liberalization, as they provide an opportunity to persuade consumers (and hence electorates) that gaining access to state-of-the-art infrastructure services provided by foreign firms can raise living standards and facilitate development.

The Role of Regulations

The participants discussed the role of regulations in services trade, emphasizing that some of the most vital issues in services liberalization involve the clash of regulatory systems. At the WTO, negotiations have generally taken a narrow approach to regulations by addressing them only insofar as they restrict market access. One participant explained that WTO negotiators chose to focus on services principles instead of services regulations at the onset of Uruguay Round negotiations because “principles” imply a relatively simple conversation, whereas “regulations” cover many complex conversations about hundreds of individual regulatory structures. While acknowledging the importance of harmonizing regulations, several speakers pointed out that there is often no single set of best regulatory practices, as it is difficult to determine the optimal way of addressing issues like market concentration (for example, in telecommunications) or asymmetric information (for example, the inability of consumers to judge the quality of banks). Participants noted that the financial crisis revealed flaws in developed countries’ financial regulations, and suggested that ideas about what constitutes a good regulatory framework shift over time and adapt to new circumstances; furthermore, global best practices may simply not exist due to the institution-dependent nature of regulations. One speaker emphasized that the path of services liberalization in developing countries may not resemble its path in developed countries, and specifically suggested that no one set of regulatory choices can simultaneously achieve the three goals of efficiency, equity of access, and stability over time.

Another speaker noted the value of regulators talking to each other even in the absence of specific trade negotiations, pointing out that financial regulators in the United States and

the EU have an ongoing dialogue about issues such as accounting standards, and that this dialogue has been a foundation for progress on recognizing regulatory equivalence. Additionally, according to one participant, direct coordination among regulators may be the most effective means of harmonizing regulations, as it requires input and agreement from those responsible for carrying out the revised rules. As an example, the panel indicated that dialogue between financial regulators in ASEAN countries helped make it possible to create the region's integrated stock market.

The panelists indicated that it is frequently difficult to measure actual levels of openness, as many regulatory barriers to services trade are “invisible” in that they are not explicit, trade-oriented policies. (For example, retail services are affected by behind-the-border procedures for opening new stores and rules about what products can be sold in stores.) Partly for this reason, some organizations represented at the roundtable have tried to pinpoint and quantify services trade restrictiveness. In addition to the Commission, the Organization for Economic Co-operation and Development has constructed a database of services regulations, and the World Bank is developing a database of on-the-ground services policies. The participants suggested that these data can help people assess the progress of trade agreements and identify good regulatory practices.

Broader Economic Issues

The panel considered the relationship between services trade and employment. One speaker cited research showing that tradable services employ a large number of people—particularly highly educated people who are paid high wages—and that the United States could likely export significantly more services, and employ more services workers, in the absence of obstacles and restrictions. This research contrasts with what the speaker described as a prevailing stereotype that services jobs are low-paying, fueling the emphasis among politicians on creating manufacturing jobs.

The panel discussed the differences between gross services trade and embedded services trade.² Several participants remarked that data which include embedded services look very different from data on gross services exports, as the latter do not fully capture the ways in which services are inputs to manufacturing, or the ways in which services add value to finished manufactured goods. While India is a world leader in gross services exports, the United States exports enormous amounts of embedded services; one participant pointed out that the percentage of U.S. exports that are re-exported has grown from 1 percent to 10 percent over the past 25 years, suggesting that U.S. service providers are adding value to products manufactured overseas and making significant mark-ups. Referring to embedded services, one speaker suggested that developing countries “would be surprised at how many services they actually export.” The panel considered an example of a U.S. firm sending cloth to Mexico, where workers sew it into a shirt and then send it back to the firm: this transaction could be classified as two goods transactions (an export of cloth and an import of a shirt) or as one import of tailoring services. According to the speaker, virtually everything can be thought of as a service, and adopting this perspective illustrates that “what matters is not what you make. It's what you do.”

² Embedded services refer to services that are integrated or bundled with goods. For example, software design services and marketing services are embedded in mobile phones.

The panel noted that services trade was relatively resilient during the financial crisis and the consequent recession, perhaps because the pressure to cut costs led firms to switch from domestic to foreign sources of services. One speaker emphasized that a recession can have lasting effects on the structure of economies, both in terms of industries that emerge in good condition (insurance was cited as an example of a relatively healthy and ready-to-expand U.S. service industry) and in terms of geographic patterns of trade. The panel also noted that economic stagnation in developed countries has motivated U.S. services exporters to focus on emerging markets, with a particular emphasis on China, where middle-class growth is expected to increase demand for services.

List of external participants at the Commission's services roundtable held on November 3, 2011

<u>Name</u>	<u>Title / Affiliation</u>
Erik Autor	Vice President and International Trade Counsel National Retail Federation
Nora Dihel	Senior Trade Economist, Africa Region World Bank
Geza Feketekuty	Professor Monterey Institute of International Studies
Greg Frazier	Vice President Motion Picture Association of America
Adam Hemphill	Senior Manager of Federal Government Relations Wal-Mart
Ron Hira	Associate Professor of Public Policy Rochester Institute of Technology
J. Bradford Jensen	Associate Professor of International Business and Economics McDonough School of Business at Georgetown University
Sophia Lafargue	Chief of Staff Congressman Gregory W. Meeks
Welby Leaman	Trade Counsel House Committee on Ways and Means
David Long	Director of the Office of Services Industries U.S. Department of Commerce
Aaditya Mattoo	Research Manager, Trade and Integration World Bank
Marc Mealy	Vice President US-ASEAN Business Council
Jack Moody	Assistant Division Chief U.S. Census Bureau
Hildeguun Nordas	Senior Policy Analyst OECD
Lisa Pearlman	Counsel, Regulatory and Government Affairs Department WilmerHale
Richard Self	Trade Policy Consultant World Trade Organization
Laura Sherman	Senior Legal Advisor Transparency International USA
David Snyder	Vice President and Associate General Counsel, Public Policy American Insurance Association

List of external participants at the Commission's services roundtable held on November 3, 2011

<u>Name</u>	<u>Title / Affiliation</u>
Sherry M. Stephenson	Director of Department of Trade Organization of American States
J. Robert Vastine	President Coalition of Services Industries
James Wallar	Senior Vice President Nathan Associates