

Recent Trends in U.S. Services Trade

2008 Annual Report

**June 2008
Publication No. 4015**

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



U.S. International Trade Commission

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ABSTRACT

The report *Recent Trends in U.S. Services Trade, 2008 Annual Report* focuses principally on infrastructure services, i.e., telecommunications, banking, insurance, and logistics, that are consumed by every firm irrespective of economic sector. It finds that U.S. services overall, and infrastructure services in particular, grew faster in 2006 in terms of gross domestic product, employment, and cross-border exports than the average annual basis in the preceding five-year period. Separately, services supplied to foreign consumers by foreign-based affiliates of U.S. firms, including those in infrastructure services, also experienced recent strong growth. The report also finds that U.S. infrastructure service firms continued to encounter various impediments to trade in other countries. The report also summarizes recent and ongoing initiatives by international organizations and countries to improve services trade statistics.

The report highlights the services and the geographic markets and regions that contributed most substantially to recent services trade performance. Separate chapters on particular infrastructure services and retail services describe how each service is traded, identify trends and issues affecting competitive conditions in the industry, and compare recent trade performance to historical trends.

PREFACE

This report is the twelfth 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 under investigation No. 332-345. The Commission also publishes an annual companion report, under this investigation number, on U.S. merchandise trade, entitled *Shifts in U.S. Merchandise Trade*. These annual reports are the product of an investigation instituted by the Commission in 1993 under section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)).¹ A significant amount of the information contained in this recurring report reflects basic research that is required by staff to maintain a proficient level of trade and industry expertise. The knowledge, industry contacts, and analytic skills developed in this report are vital to enabling the Commission to provide expert analysis of multiple service industries on a timely basis. The Commission has found such expertise to be essential in its statutory investigations and in apprising its varied customer base of global industry trends, regional developments, and competitiveness issues.

In recent years, the Commission has published several reports on the services sector outside of the *Recent Trends* series. These reports include *Express Delivery Services: Competitive Conditions Facing U.S.-based Firms in Foreign Markets* (USITC publication 3678, April 2004), *Solid and Hazardous Waste Services: An Examination of U.S. and Foreign Markets* (USITC publication 3679, April 2004), *Remediation and Nature and Landscape Protection Services: An Examination of U.S. and Foreign Markets* (USITC publication 3727, October 2004), *Air and Noise Pollution Abatement Services: An Examination of U.S. and Foreign Markets* (USITC publication 3761, April 2005), *Logistic Services: An Overview of the Global Market and Potential Effects of Removing Trade Impediments* (USITC publication 3770, May 2005), and *Renewable Energy Services: An Examination of U.S. and Foreign Markets* (USITC publication 3805, October 2005).

¹ 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 services, agriculture, and manufacturing sectors.

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EXECUTIVE SUMMARY

Cross-Border Services Trade Overview

The United States remains the world's largest services market and also the world's leading exporter and importer of services. In 2006, U.S. cross-border exports of private services increased by 10 percent over 2005 to \$404.3 billion (up from an 8 percent average annual rate for 2001–05), while U.S. imports rose by 9 percent to \$307.8 billion (up from an 8 percent average annual rate for 2001–05). Thus, the U.S. services surplus grew in 2006 to \$96.6 billion, the highest level recorded. The United States continues to have the largest services surplus of any country in the world. Infrastructure services, the focus of this year's report, were major contributors to the growing services surplus, as evidenced by a surge in exports of telecommunication, banking, and insurance services. Preliminary U.S. services trade data indicate that U.S. exports grew faster in 2007 (14 percent), while U.S. imports increased at approximately the same rate as in 2006, resulting in a new record U.S. services surplus (\$127 billion).

Affiliate Transactions

U.S. parent firms' sales of services through their affiliates established abroad (herein termed foreign affiliates) are no less dynamic. Affiliate sales data reflect the importance to many U.S. services, including the infrastructure services examined in this report, of maintaining a commercial presence abroad. In 2005 (the latest year with available data), sales of services by foreign affiliates increased by 9 percent to \$528.5 billion, approximately twice the average annual growth rate for years 2001–04. Currency-related effects of the depreciated dollar and higher transaction volumes in certain service industries contributed to the increased value of sales by foreign affiliates. In comparison, domestic purchases of services from foreign parent firms' affiliates established in the United States (herein termed U.S. affiliates) continued their slow growth trend from 2001 through 2004, increasing by 2 percent to \$389.0 billion.

The recent growth and ascendancy of affiliate transactions relative to cross-border trade in the U.S. services sector, including infrastructure services, illustrate the emergence of global markets in many service industries, led by multinational rather than national enterprises. Significant merger and acquisition activity in insurance, banking, logistic, and retail services illustrate the importance of service suppliers' proximity to consumers. Additionally, technological advancements such as mobile services in telecommunications, tracking in logistics, and supply chain management and customer databases in retailing demonstrate multinational firms' progress in enhancing their speed, efficiency, and reliability while managing costs of operations throughout widened networks of affiliates. The trend towards unilateral liberalization of impediments to services trade and less direct government intervention in the regulation of infrastructure services by certain developing and developed countries continues to have a favorable impact on the expansion of infrastructure services trade. Additional progress is underway, especially through the U.S. negotiation of free trade agreements with certain trading partners, aimed at lowering market access and national treatment impediments for U.S. companies seeking to expand services exports and/or increase their commercial presence abroad.

Global Initiatives to Improve Services Data

International agencies and national statistical offices are engaged in initiatives to increase the development of more detailed and internationally comparable data on services trade, largely in response to demand from trade negotiators and trade policy makers. Revisions to classifications and definitions and new regulations in the European Union should facilitate the ability of many countries to enhance the detailed reporting of particular services sectors and of services trade with particular trading partner countries.

Recent ITC Roundtable Discussion

The Commission recently held a roundtable discussion focused on services trade research interests and concerns. Representatives of U.S. government and nongovernment agencies, Congressional staff, and the World Bank highlighted the role of regulation, nontariff measures, services productivity, and the effect of services trade on domestic employment, as issues of particular interest. A brief summary of the discussion is provided in appendix A.

Infrastructure Services

As noted, this report focuses on infrastructure services. Infrastructure services—such as banking, insurance, telecommunications, and logistics—which underpin an entire economy, experienced more robust growth in U.S. gross domestic product, employment, and cross-border exports in 2006 than in the preceding five-year period on an average annual basis. Infrastructure services, including but not limited to those examined in this report, accounted for 32 percent of gross domestic product and employed 31.7 million workers in the United States in 2006 (29 percent of total private-sector employment and 34 percent of employment in the services sector).

CHAPTER 1

Introduction

Scope

This annual report examines U.S. services trade, both in the aggregate and in selected industries, identifies important U.S. trading partners, and briefly analyzes global competitiveness conditions in particular service industries. Commencing with this year's report, analysis of selected infrastructure and distribution services alternates on a biennial basis with analysis of selected business and professional services. This report focuses primarily on infrastructure services that significantly affect and underpin an entire economy, which include banking, insurance, telecommunications, and logistic services. Although not traditionally considered as infrastructure services, distribution services, represented by retailing services in this report, are included in this analysis due to their position as the last link in the global supply chain.

Data and Organization

Services trade comprises cross-border trade and sales through foreign affiliates, with the latter predominating. The Commission draws much of its services trade data from the U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA).¹ In many cases, such data are supplemented with information drawn from primary and secondary sources, including individual service firms, trade associations, industry journals and reports, electronic media, international organizations, and other government agencies.

Chapter 2 of this report examines cross-border services trade from 2001 through 2006 and affiliate sales from 2001 through 2005, comparing trade during the most recent year to previous trends.² Chapter 2 also describes the nature and extent of cross-border trade and affiliate transactions. Chapters 3 through 7 provide analysis of the following industries: banking, insurance, telecommunications, logistics, and retailing. These chapters provide an overview of the global competitive landscape followed, as appropriate, by an examination of recent trends in cross-border trade and/or affiliate transactions and a summary of activity regarding the liberalization of impediments to trade. Chapter 8 features a review of global initiatives to improve services trade statistics. Appendix A summarizes a recent services trade roundtable discussion hosted by the United States International Trade Commission (USITC).

¹ The BEA's data are compiled from surveys of services directed to specific service industries or types of investment. For more information about the BEA's methods, see USDOC, BEA, *Survey of Current Business* 87, no. 10, 105.

² Data on affiliate transactions lag those on cross-border services trade by one year. Analyses of cross-border trade data compare performance in 2006 to trends from 2001 through 2005. Similarly, analyses of affiliate sales compare performance in 2005, the most recent year for which affiliate sales data are available, to trends from 2001 through 2004.

Infrastructure Services

Infrastructure services fill a structural role in the economy by enabling the production of goods and services and facilitating other economic activity such as trade. Some infrastructure services, especially those that depend on a physical network such as telecommunications, transportation, and energy services,³ traditionally had natural monopoly characteristics. Establishing the network typically entails substantial fixed costs, while providing the service to additional users carries fairly low marginal costs once the network is established, resulting in significant economies of scale.⁴

The combination of their economic importance and the potential for monopolists to under-supply and over-price these services has traditionally prompted a great deal of government attention to infrastructure services. This involvement ranges from direct state ownership to extensive regulation of private-sector operators. In recent decades, however, there has been a trend towards less direct government intervention in infrastructure services, due to a number of factors, including the realization that in many cases the private sector can operate crucial infrastructure services more effectively; advances in technology; and the lure of a substantial, although temporary, increase in government revenues generated by the sale of state-owned infrastructure services firms.⁵

The global competitiveness of many non-infrastructure industries is heavily dependent on the efficient and economical provision of infrastructure services. By privatizing inefficiently operated state-owned infrastructure services and by deregulating or liberalizing in a manner that promotes greater efficiency, countries have increased their global competitiveness in both infrastructure and non-infrastructure industries. For instance, after privatization in the mid-1990s of Kenya's struggling national airline, Kenya Airways, the Kenyan aviation services industry was able to transform itself into one of the largest and most profitable on the African continent and encouraged other industries dependent on aviation services, such as the cut flower industry, to flourish.⁶

Additionally, technological developments have diminished many of the natural monopoly aspects of infrastructure services, undermining the justification for monopolies. For instance, the advent of relatively small-scale, combined-cycle gas turbines and renewable energy technologies greatly reduced initial fixed costs in the electric power industry, by allowing large industrial users of electricity to bypass the grid.⁷ Similarly, in the telecommunications industry, firms can now deploy cellular networks at a fraction of the cost of fixed-line networks, which has allowed privately owned mobile operators to eclipse fixed-line monopoly providers in many countries.⁸ Also, due to technological advances such as Voice over Internet Protocol, which involves routing calls over the Internet, heavily regulated telecommunication services became virtually indistinguishable from lightly or unregulated computer services, prompting the modification of regulatory practices.

³ For an analysis of energy services, see *Recent Trends in U.S. Services Trade 2007 Annual Report*.

⁴ New Zealand Institute of Economic Research, Appendix B, May 2004.

⁵ Kessides, *Infrastructure Regulation, Promises, Perils and Principles*, I.

⁶ Industry representative, interview with Commission staff, Nairobi, Kenya, October 19, 2007; USITC, *Sub-Saharan Africa: Factors Affecting Trade Patterns of Selected Industries*, 2008, 4-11.

⁷ USITC, *Electric Power Services: Recent Reforms in Selected Foreign Markets*, 2000, 2-7.

⁸ TeleGeography, GlobalComms 3.0 (accessed August 23, 2007).

Infrastructure Services Trade in Context

As in other high-income countries, and an increasing number of middle-income countries, services industries account for the largest share of the U.S. economy. Services accounted for 83 percent of U.S. private-sector gross domestic product (GDP) and 85 percent of private-sector employment in 2006 (figures 1.1 and 1.2). Infrastructure services,⁹ in turn, accounted for 32 percent of GDP and 29 percent of employment in the same year. Services GDP and infrastructure services GDP both increased by 7 percent in 2006, faster than their 5 percent average annual rate¹⁰ from 2001 through 2005. Employment in services increased by 2 percent in 2006, surpassing its average annual rate (1 percent) from 2001 through 2005. Employment in infrastructure services increased by 1 percent in 2006 after five years of essentially no growth. As points of comparison, merchandise GDP increased by 5 percent in 2006, slightly outpacing the 4 percent average annual rate for the preceding five-year period. Employment in the goods sector fell by 0.3 percent in 2006, which was not as rapid as the average annual decrease during the preceding five-year period (3 percent).¹¹

The United States is globally competitive in the world services market, consistently exporting more services than it imports and selling more services through foreign affiliates (i.e., U.S. parent firms' majority-owned, non-bank affiliates in foreign markets) than it purchases from U.S. affiliates (i.e., foreign parent firms' majority-owned, non-bank affiliates in the U.S. market). Cross-border services trade accounted for 21 percent of total U.S. cross-border trade volume in 2006 (figure 1.3), with infrastructure services¹² accounting for 6 percent of total cross-border trade.¹³ Similarly, services affiliates accounted for 17 percent of sales by U.S. and foreign affiliates in 2005 (latest year available), with infrastructure services affiliates accounting for 7 percent of the total. Including both public- and private-sector transactions, U.S. cross-border trade in services generated a \$79.7 billion surplus in 2006, in contrast to a U.S. merchandise trade deficit of \$838.3 billion.¹⁴ The "surplus" generated by affiliate transactions was even greater, with services sales by foreign affiliates exceeding services purchased from U.S. affiliates by approximately \$139.5 billion.¹⁵ Cross-border infrastructure services trade recorded a \$13.0 billion deficit, while U.S. affiliates of foreign infrastructure service firms generated approximately a \$27.2 billion "surplus."

⁹ In this context, infrastructure services include banking and securities, insurance, retail, wholesale, utilities, broadcasting and telecommunications, and transportation and warehousing.

¹⁰ Throughout the report, the annual rate of growth for a stated period of years is computed on the basis of the compound annual growth rate, although termed "average annual rate" for simplicity.

¹¹ USDOC, BEA, "Full-Time Equivalent Employees by Industry," table 6.5D, *Survey of Current Business* 87, no. 8, 140.

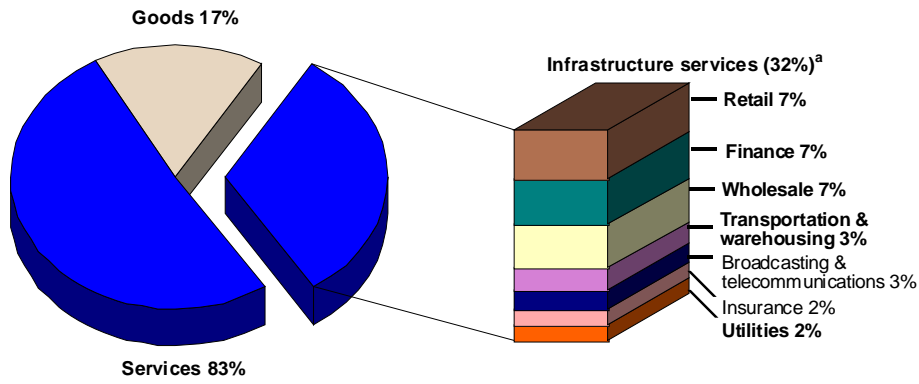
¹² In this context, infrastructure services include banking and securities, insurance, telecommunication, and transportation services. The services included in the infrastructure services category vary somewhat from the category as specified in footnote 9 above because of the availability and level of aggregation of reported data.

¹³ Total trade volume is the sum of the value of imports and exports.

¹⁴ USDOC, BEA, "Table A. Summary of U.S. International Transactions," *Survey of Current Business* 87, no. 10, 148. For purposes of comparison with the merchandise trade deficit, the figure cited here for the services trade surplus reflects public-sector (such as military and embassy operations) as well as private-sector transactions. Elsewhere in this report, beginning with chap. 2, services trade data reflect private-sector transactions only.

¹⁵ USDOC, BEA, *Survey of Current Business* 87, no. 10, 96. The difference between sales by and purchases from affiliates is only approximate, because of variations in data coverage. The foreign parent company of a non-bank U.S. affiliate may or may not be a bank, whereas the U.S. parent company of a foreign affiliate is a non-bank, as is its foreign affiliate.

FIGURE 1.1 U.S. private-sector gross domestic product, by sector, 2006

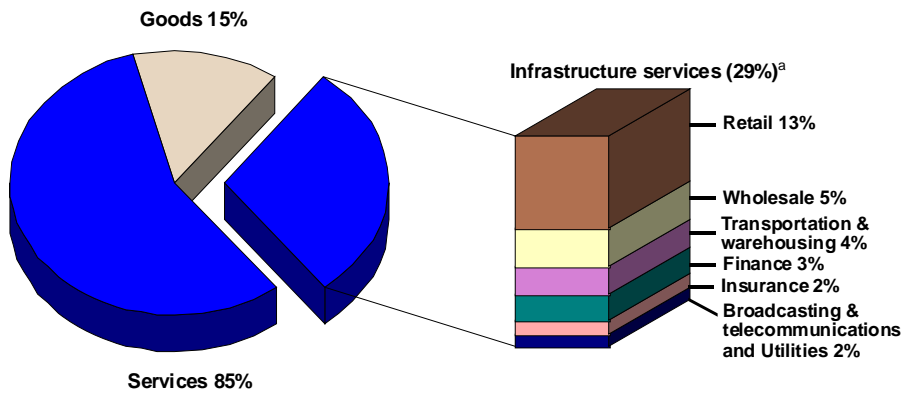


Total private-sector GDP = \$11.6 trillion

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Industry Economic Accounts database*, "Gross Domestic Product by Industry," October 2007.

^aPercent of total private-sector GDP. Data may not equal 32 percent due to rounding.

FIGURE 1.2 U.S. private-sector employment, by sector, 2006

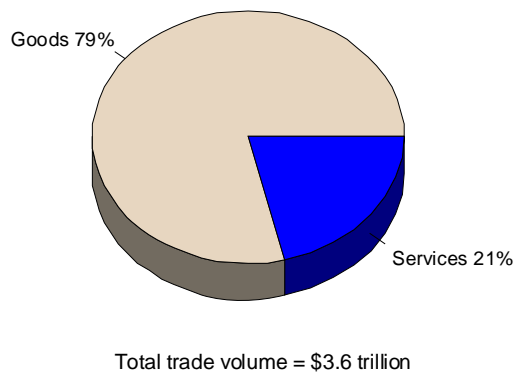


Total private-sector employment = 109 million workers

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Industry Economic Accounts database*, "Full-Time Equivalent Employees by Industry," November 2007.

^aPercent of total private-sector employment.

FIGURE 1.3 U.S. cross-border trade volume, by sector, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 148.

According to data reported by the World Trade Organization (WTO), global cross-border exports of services totaled \$2.8 trillion in 2006.¹⁶ The United States was by far the largest services exporter, accounting for 14 percent of both services exports overall as well as infrastructure services exports (figure 1.4). Other significant services exporters included the United Kingdom (8 percent), Germany (6 percent), and Japan, France, Spain, and Italy (4 percent each).¹⁷ Significant infrastructure services exporters included the United Kingdom (12 percent), Germany (7 percent), and Japan and Luxembourg (5 percent each).¹⁸ Among those countries for which 2006 trade data were reported by the WTO, the United States posted the largest services trade surplus (\$81 billion), whereas Germany posted the largest services trade deficit (\$50 billion) (figure 1.5).¹⁹ The United Kingdom posted the largest infrastructure services surplus (\$42 billion), while China posted the largest infrastructure services deficit (\$19 billion).²⁰

¹⁶ WTO, "World Exports of Commercial Services by Region and Selected Economy, 1996–2006," *International Trade Statistics*, table A8.

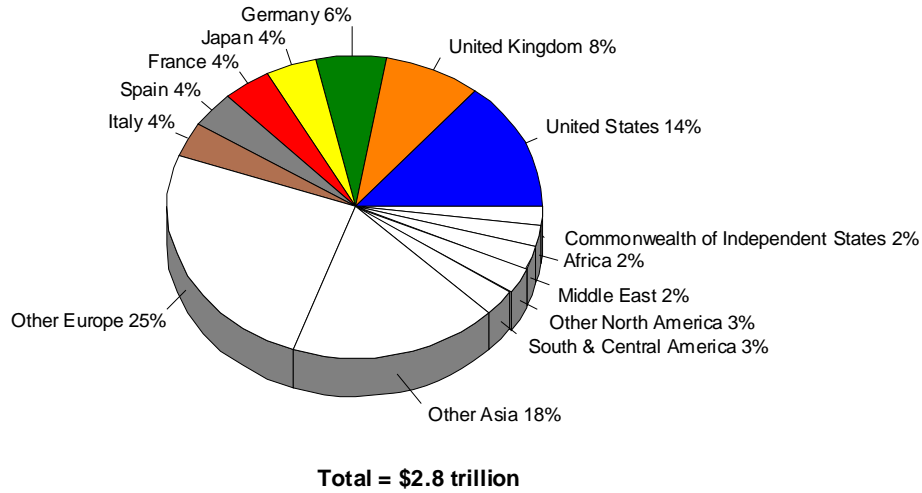
¹⁷ *Ibid.*

¹⁸ International Monetary Fund (IMF), *Balance of Payments Statistics* (accessed February 6, 2008).

¹⁹ WTO, "Leading Exporters and Importers in World Trade in Commercial Services, 2006," table 1.10. The \$81 billion surplus calculated by the WTO is presented only for the purpose of cross-country comparison. Because the WTO treats trade in insurance services differently than the BEA does, this number is not comparable with BEA data used in all following chapters.

²⁰ IMF, *Balance of Payments Statistics* (accessed February 6, 2008).

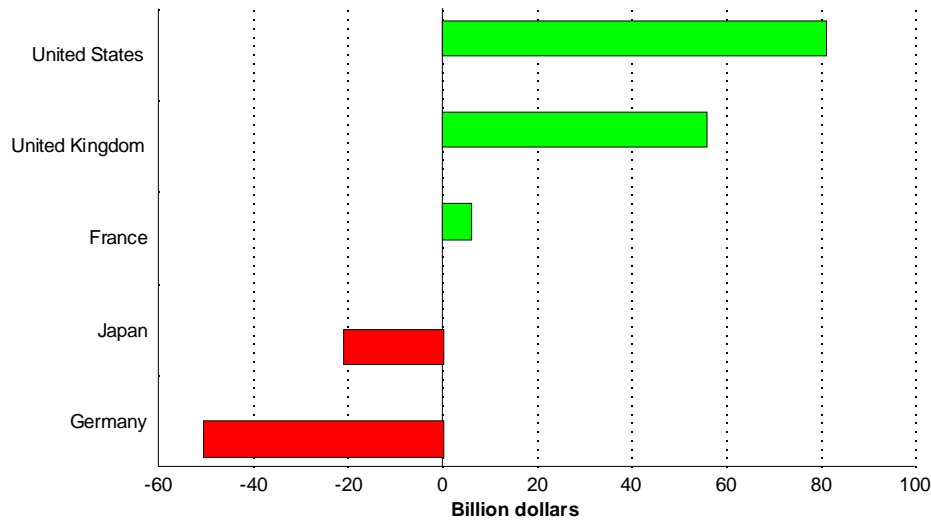
FIGURE 1.4 Global cross-border exports of services, by exporting country or region, 2006



Source: World Trade Organization, *International Trade Statistics, 2007*, "World Exports of Commercial Services."

Note: Excludes public-sector transactions.
Total may not equal 100 percent due to rounding.

FIGURE 1.5 Services trade balances of leading exporting countries, 2006



Sources: World Trade Organization, *International Trade Statistics, 2007*, "World Exports of Commercial Services by Region and Selected Economy, 1996–2006," table A8 and "World Imports of Commercial Services by Region and Selected Economy, 1996–2006," table A9.

Note: Excludes public-sector transactions.

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CHAPTER 2

U.S. Trade in Services

Summary

In 2006, the U.S. surplus in cross-border services trade (counting private-sector transactions only) increased for the third consecutive year to \$96.6 billion, the largest ever reported.¹ The considerable increase in the overall services trade surplus was due to increases in numerous services sectors, most notably business, professional, and technical services² and infrastructure services such as telecommunications, banking, and insurance. U.S. cross-border services exports and imports grew faster in 2006 than the annual average during the preceding five-year period.

Sales of services by foreign affiliates of U.S. firms exceeded domestic purchases of services from U.S. affiliates of foreign companies by a record-high \$139.5 billion in 2005 (box 2.1).³ The value of sales by foreign affiliates increased considerably faster, due in large part to exchange rate changes, than did domestic purchases from U.S. affiliates.⁴

Introduction

Firms in one country may sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. National accounts refer to these as “cross-border transactions,” and they appear explicitly as imports and exports in the balance of payments. Firms also provide services to foreign consumers through affiliates established in host countries, with the income generated by “affiliate transactions” appearing as investment income in the balance of payments. The channel of delivery used by service providers depends primarily on the nature of the service (box 2.2). For example, many financial services, such as retail banking services, are supplied most effectively by affiliates located close to the consumer. Conversely, trade in education services predominantly takes the form of cross-border transactions involving students studying abroad.

¹ The \$81 billion surplus calculated by the World Trade Organization (WTO) (reported in chap. 1) is presented only for the purpose of cross-country comparison. Because the WTO treats trade in insurance services differently than the U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA) does, the WTO’s data for the trade surplus are not comparable with BEA data used in this and subsequent chapters.

² Business, professional, and technical services include advertising; computer and information services; research, development, and testing services; management, consulting, and public relations services; legal services; construction, architectural, and engineering services; industrial engineering; installation, maintenance, and repair of equipment; operational leasing; and other miscellaneous services.

³ Foreign affiliates are U.S. parent firms’ majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms’ majority-owned non-bank affiliates in the U.S. market.

⁴ USDOC, BEA, *Survey of Current Business* 87, no. 10, 96.

BOX 2.1 The rise of affiliate transactions

Since 1986, when the U.S. Department of Commerce (USDOC) began collecting statistics on U.S. services trade, the relative importance of cross-border trade and affiliate transactions has shifted significantly.¹ For example, in the 10 year period from 1986 through 1995, U.S. cross-border exports of services consistently exceeded sales by majority-owned foreign affiliates of U.S. firms by average annual margins of approximately 18 percent. Since 1996, however, sales by U.S. firms' foreign affiliates have exceeded cross-border services exports. In 2005, sales by U.S. firms' affiliates abroad (\$528.5 billion) exceeded U.S. cross-border exports of services (\$367.8 billion) by \$160.7 billion, or approximately 44 percent. Similarly, U.S. purchases of services from foreign-owned affiliates have exceeded cross-border services imports since 1989. In 2005, sales to U.S. citizens by the U.S. affiliates of foreign companies (\$389.0 billion) exceeded services imports (\$281.6 billion) by \$107.4 billion, or 38 percent.² The predominance of affiliate transactions largely reflects the global spread of service firms, facilitated by the liberalization of investment and services trade regimes, which first occurred in developed countries and more recently in a growing number of low- and middle-income countries. The liberalization of services trade regimes, in turn, is largely rooted in the growing recognition that efficient infrastructure industries—telecommunications, banking, insurance, energy, and transportation—improve performance throughout a country's economy.

¹ USDOC, BEA, *Survey of Current Business* 86, no. 10, 20–21. "Sales of services delivered through cross-border trade cannot be precisely compared with sales through affiliates because of differences in coverage, measurement, and classification. Despite these differences, the large gap between sales through cross-border trade and sales through affiliates suggests that the latter is the larger channel of delivery for both U.S. sales of services abroad and foreign sales of services in the United States."

² USDOC, BEA, *Survey of Current Business* 87, no. 10, 95.

BOX 2.2 Services trade and the General Agreement on Trade in Services (GATS)

Cross-border trade and affiliate transactions reported by the BEA do not correspond exactly to the channels of services delivery reflected in the GATS of the World Trade Organization (WTO).¹ The GATS identifies four modes of supply through which services are traded between WTO members: cross-border supply (mode 1), which is not synonymous with BEA's data for cross-border trade, in which 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); consumption abroad (mode 2), in which an individual from one country travels to another country and consumes a service in that country; commercial presence (mode 3), in which a firm based in one country establishes an affiliate, branch or subsidiary in another country and supplies services from that locally established affiliate, branch or subsidiary; and the temporary presence of natural persons (mode 4), in which 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 intra-company transferee at a branch or subsidiary established by that individual's firm in another country.² BEA notes that modes of supply 1, 2, and parts of 4 generally are included in its data on cross-border trade, while mode 3 transactions are included, with some exceptions, in affiliate transactions.

¹ USDOC, BEA, *Survey of Current Business* 86, no. 10, 38–40.

² For more information on modes of supply under the GATS, see WTO, GATS Training Module, "Chapter 1: Basic Purpose and Concepts."

Cross-Border Trade⁵

In 2006, U.S. services exports and imports increased faster than the annual average in the five year period beginning in 2001, as major U.S. trading partners' gross domestic product (GDP) growth contributed to accelerated U.S. services exports, while U.S. imports of services were not dampened by slightly slower U.S. GDP growth.⁶ The expansion of two-way trade in business, professional, and technical services led all other services in 2006. U.S. exports of private-sector services⁷ totaled \$404.3 billion in 2006, while U.S. imports totaled \$307.8 billion, resulting in a \$96.6 billion trade surplus in 2006, the largest since services trade reporting began (figure 2.1).⁸ U.S. exports increased by 10 percent in 2006 over the 2005 level, which was higher than the 8 percent average annual rate from 2001 through 2005. Export growth in 2006 was dispersed broadly across service industries, led by increases in telecommunication services (20 percent); financial services and insurance services (19 percent each); business, professional, and technical services (15 percent); and transportation services (i.e., freight transport and port services) (12 percent). U.S. imports of services grew by 9 percent in 2006, slightly faster than the 8 percent average annual rate from 2001 through 2005. Import growth in 2006 was accounted for chiefly by accelerated growth rates in business, professional, and technical services (19 percent), insurance services (18 percent), and financial services (13 percent).⁹

The leading U.S. services exported, which were (1) business, professional, and technical services and (2) travel services, accounted for 24 percent and 21 percent, respectively, of total services exports in 2006 (figure 2.2). Other industries representing large shares of total U.S. services exports in 2006 were royalties and license fees (15 percent), transportation services and financial services (11 percent each), and passenger fares (5 percent).¹⁰

Intrafirm exports,¹¹ which largely reflect transactions between U.S. parent firms and their foreign affiliates, accounted for a gradually increasing portion of total services exports in the past decade and reached 26 percent of such exports in 2006.¹² The largest component of intrafirm exports in 2006, royalties and license fees, accounted for 43 percent of such exports.¹³ Royalties and license fees from affiliates in the manufacturing sector grew fastest.¹⁴

⁵ The main source for this section is the BEA's *Survey of Current Business*. See bibliography for full citations.

⁶ USDOC, BEA, *Survey of Current Business* 87, no. 10, 96.

⁷ 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 peace-keeping missions, this report will focus solely on private-sector transactions, except where noted.

⁸ USDOC, BEA, *Survey of Current Business* 72, no. 6, 68–70. Values are reported before deductions for expenses and taxes, as gross values are most directly comparable across countries, industries, and firms.

⁹ USDOC, BEA, *Survey of Current Business* 87, no. 10, 115.

¹⁰ *Ibid.*, 114.

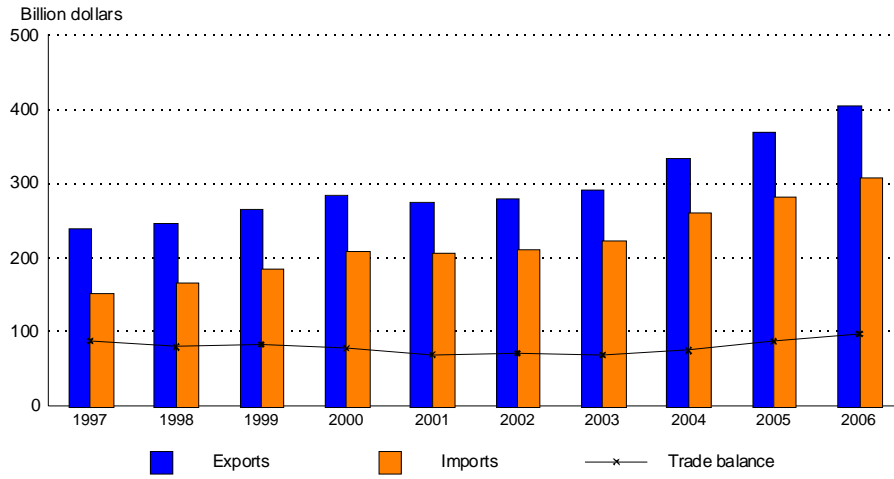
¹¹ *Ibid.*, 102. Intrafirm exports represent U.S. parents' receipts from foreign affiliates and U.S. affiliates' receipts from a foreign parent. Intrafirm imports represent U.S. parents' payments to foreign affiliates and U.S. affiliates' payments to foreign parents.

¹² *Ibid.*, 102, 114.

¹³ *Ibid.*

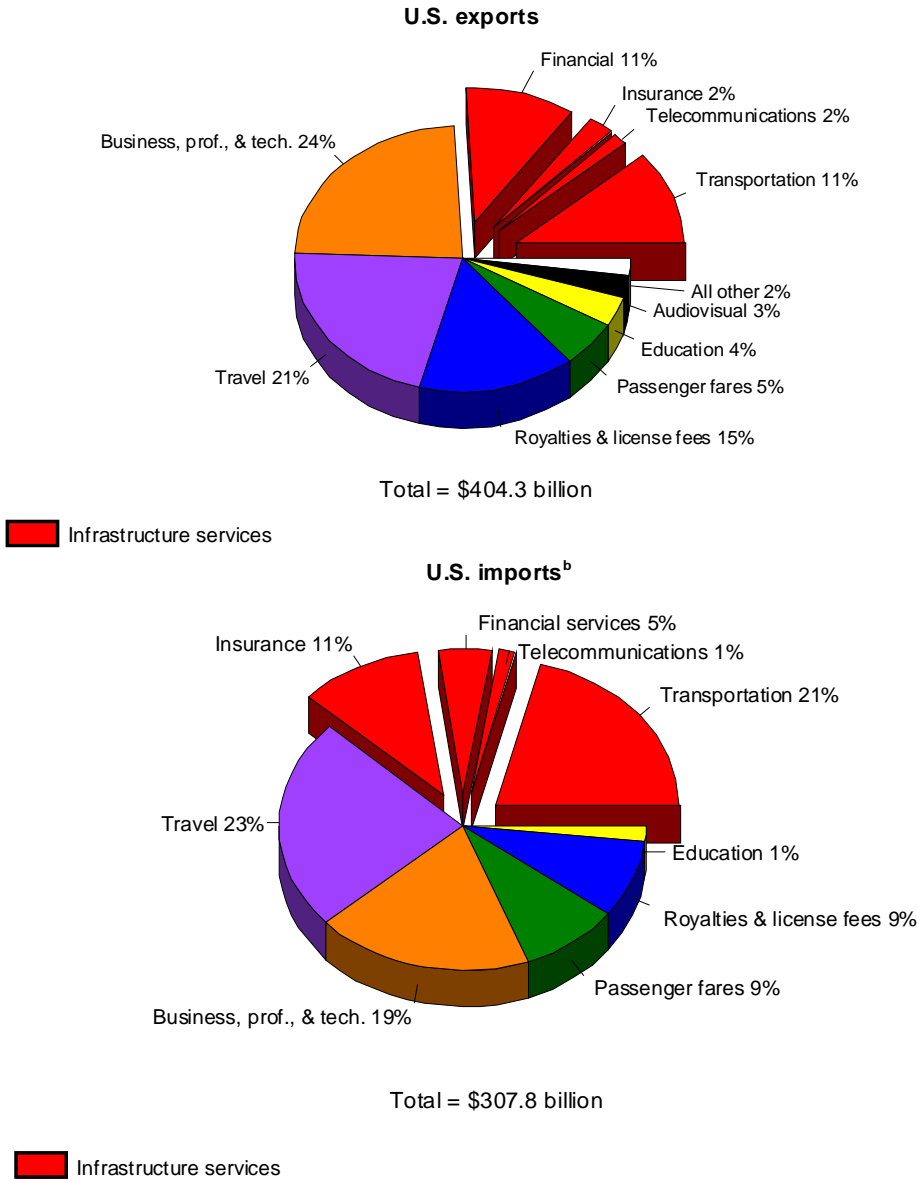
¹⁴ *Ibid.*, 101.

FIGURE 2.1 U.S. cross-border trade in private services: Exports, imports, and trade balance, 1997–2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

FIGURE 2.2 U.S. cross-border exports and imports of services, by industry, 2006^a



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

Note: Trade data exclude public-sector transactions.

^aTotals may not equal 100 percent due to rounding.

^bOther services is less than 0.5%, of which audiovisual services accounted for over half (0.27%).

Travel services accounted for the largest share (23 percent) of U.S. services imports in 2006 (figure 2.2). Other services with large shares of total services imports included transportation services (21 percent), business, professional, and technical services (19 percent), insurance (11 percent), and passenger fares and royalties and license fees (9 percent each).¹⁵ In 2006, intrafirm imports accounted for approximately 23 percent of total cross-border services imports,¹⁶ with royalties and license fees again making up the largest component (29 percent).¹⁷

As in most previous years, the majority of U.S. service industries registered cross-border trade surpluses in 2006. Services that netted the largest surpluses in 2006 included business, professional, and technical services¹⁸ (\$38.0 billion) and royalties and license fees (\$35.9 billion). Additionally, financial services (\$28.5 billion), travel (\$13.7 billion), and education services and audiovisual services (\$10.2 billion each) registered cross-border trade surpluses in 2006. By contrast, services with notable trade deficits included insurance (\$24.3 billion), transportation (\$19.0 billion), and passenger fares (\$5.3 billion). The deficit in insurance services principally reflects U.S. primary insurers' payments to European reinsurers in return for assuming a portion of large risks. The deficit related to transportation services (i.e., freight transport and port fees) largely reflects the asymmetrical nature of trade in manufactured goods between the United States and its trading partners and the method which BEA uses to measure freight transportation trade.¹⁹ For example, Chinese shipments of manufactured goods to the United States vastly exceed U.S. shipments of goods to China.

The United Kingdom (12 percent of total U.S. services exports) and Japan and Canada (10 percent each) were the largest single-country U.S. export markets in 2006 (figure 2.3). The United Kingdom (12 percent) and Japan and Canada (8 percent each) were also the largest single-country suppliers of U.S. services imports. In regional terms, the European Union (EU) was the largest services trading partner of the United States, accounting for 35 percent of U.S. exports and 38 percent of imports in 2006.²⁰

In 2006, the United States maintained large bilateral services surpluses with Japan (\$17.4 billion), Canada (\$15.8 billion) the United Kingdom (\$11.1 billion), Mexico (\$7.7 billion), and Korea (\$5 billion) and netted a large regional trade surplus with the EU (\$23.2 billion). In marked contrast to the large U.S. deficit in goods trade with China, the United States recorded a services trade surplus of \$3.7 billion with China in 2006. The United States registered its largest bilateral deficit in services trade with Bermuda (\$10.2 billion), which largely reflected payments for insurance and reinsurance services to U.S. and foreign firms that have set up operations there, chiefly for preferential tax treatment.²¹

¹⁵ USDOC, BEA, *Survey of Current Business* 87, no. 10, 115.

¹⁶ *Ibid.*, 102, 115.

¹⁷ *Ibid.*, 102.

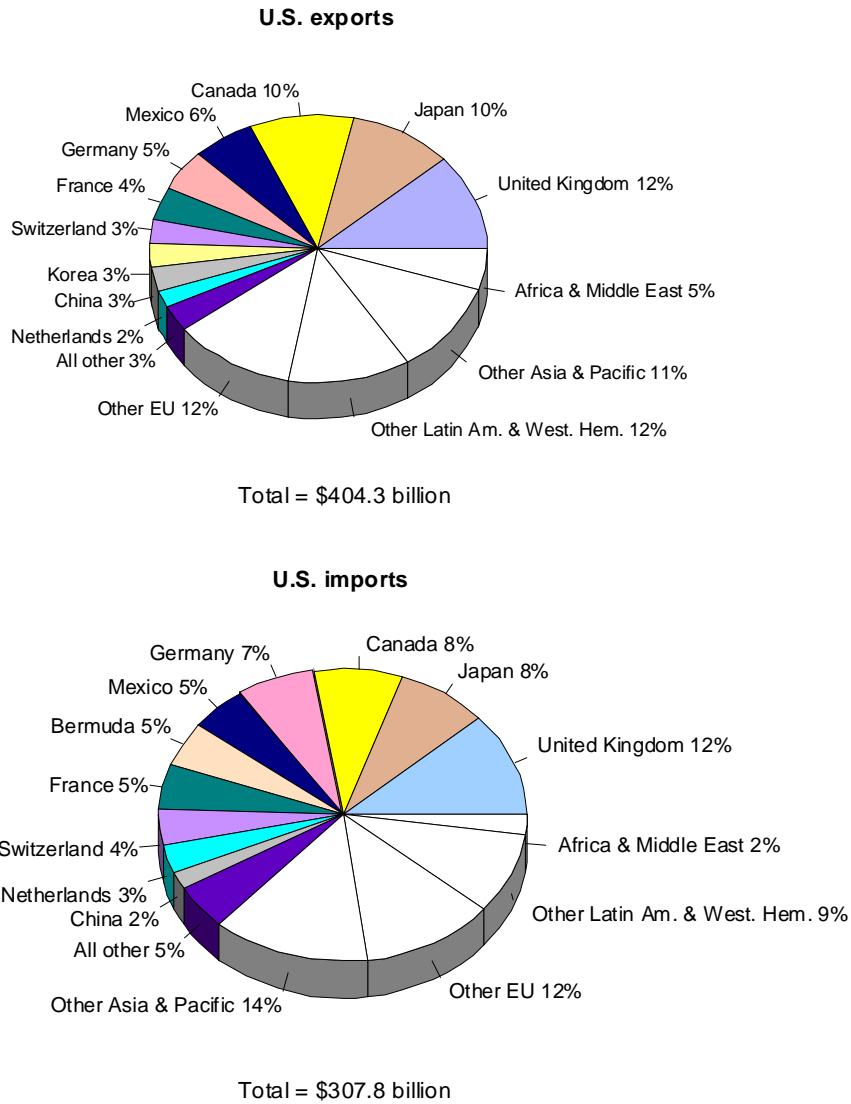
¹⁸ The overall trade surplus for business, professional, and technical services obscures wide variations in trade balances for subsets of such services. For example, trade between unaffiliated entities engaged in operational leasing; installation, maintenance, and repair services; architectural, engineering, and other technical services; legal services; and medical services posted surpluses, while trade in advertising; accounting, auditing, and bookkeeping services; and computer and information services posted deficits.

¹⁹ For a summary explanation of BEA's trade data on freight transportation and port fees, see box 6.2 in chap. 6.

²⁰ USDOC, BEA, *Survey of Current Business* 87, no. 10, 116–117.

²¹ *Ibid.*, 115–117. The vast majority of these payments are recorded as unaffiliated transactions, as they are undertaken on behalf of third-party policyholders.

FIGURE 2.3 U.S. cross-border exports and imports of services, by country or region, 2006^a



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 116–117.

Note: Trade data exclude public-sector transactions.

^aTotals may not equal 100 percent due to rounding.

Affiliate Transactions²²

In 2005, sales of services by foreign affiliates of U.S. firms increased by 9 percent to \$528.5 billion. The rate of increase in such sales in 2005 is approximately double the average annual rate from 2001 through 2004. The currency-exchange effects of a depreciated dollar²³ and increased transaction volumes in certain service industries contributed to the acceleration of sales by foreign affiliates in 2005. Foreign affiliates in the insurance industry accounted for approximately 18 percent of total foreign affiliate sales, the largest single-industry share (figure 2.4). Other industries that accounted for relatively large shares of foreign affiliate sales included finance (8 percent), utilities (7 percent), and accommodations and food services (5 percent). The largest host-country markets for sales by foreign affiliates were the United Kingdom (21 percent), Canada (11 percent), Japan (10 percent), and Germany and France (6 percent each) (figure 2.5). Regionally, the EU accounted for 49 percent of total foreign affiliate sales in 2005.²⁴

In 2005, domestic purchases of services from U.S. affiliates of foreign firms increased by 2 percent to \$389.0 billion, slightly greater than the 1 percent average annual rate from 2001 through 2004. Services purchased from U.S. insurance affiliates accounted for 20 percent of total U.S. affiliate transactions, the largest single-industry share in 2005. Transportation and warehousing had a significant share, accounting for 9 percent of domestic purchases from U.S. affiliates in 2005. The other significant shares were posted by three service industries (finance; administration, support, and waste management; and architectural, engineering, and construction), each accounting for 6 percent. In 2005, U.S. affiliates of British parent firms accounted for 17 percent of domestic purchases of services from U.S. affiliates. German- and French-owned affiliates followed, accounting for 14 percent and 13 percent, respectively, of services purchased, while Canadian-owned affiliates accounted for 10 percent. Regionally, 58 percent of domestic purchases were from U.S. affiliates of parent firms in the EU.²⁵

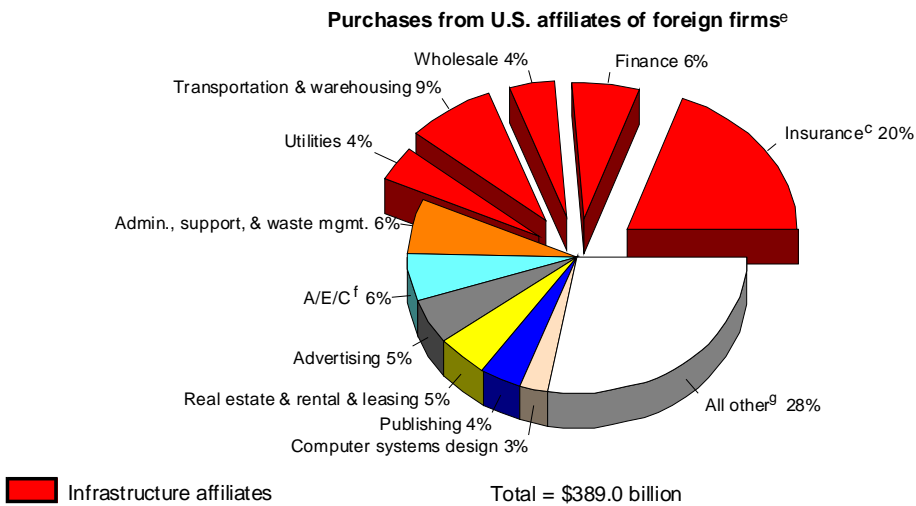
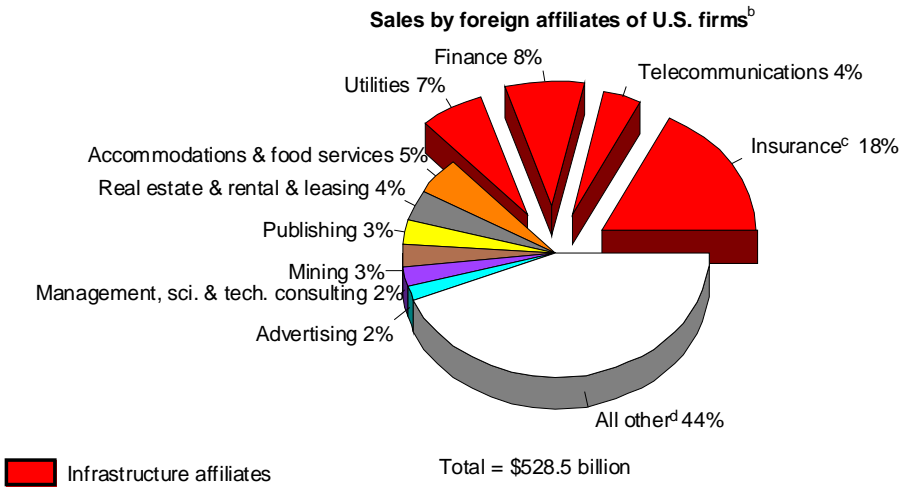
²² The main source for this section is the BEA's *Survey of Current Business*. See bibliography for full citations. The data on affiliate transactions reported by BEA that are summarized and discussed in this chapter understate transactions with respect to distributive services provided by wholesalers and retailers. BEA estimates on wholesale and retail services trade capture auxiliary services provided by distributors—such as repair services—but do not capture distributive activities—such as the sales of automobiles—which are recorded as sales of goods. See chap. 7 for a discussion of how distributive services in retailing may be estimated, using retail affiliates' total sales and gross margin data.

²³ Depreciation of the dollar increased the dollar value of sales denominated in foreign currencies.

²⁴ USDOC, BEA, *Survey of Current Business* 87, no. 10, 116.

²⁵ *Ibid.*

FIGURE 2.4 Services transactions by affiliates, by industry of affiliate, 2005^a



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 144, 146.

^aTotals may not equal 100 percent due to rounding.

^bSales of services by majority-owned foreign affiliates of U.S. parent firms.

^cIncludes insurance carriers, agencies, brokerages, and other insurance related activities.

^dReflects sales of services by manufacturers, retailers, real estate firms, and all other service firms.

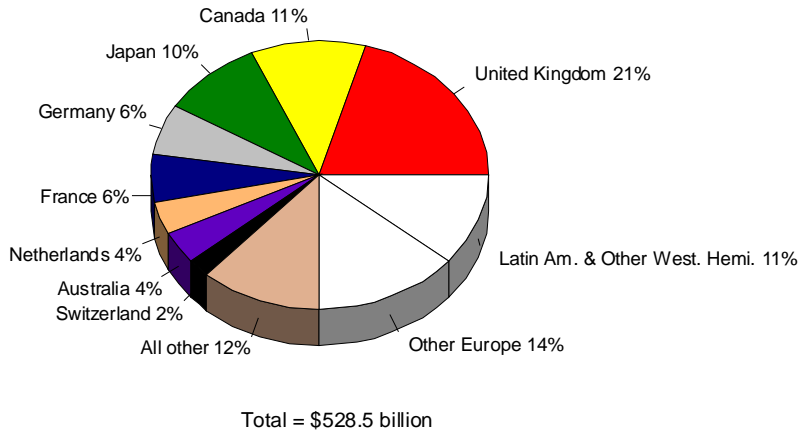
^ePurchases of services from majority-owned U.S. affiliates of foreign parent firms.

^fA/E/C refers to the combined categories of "architectural, engineering, and related" and "construction" firms.

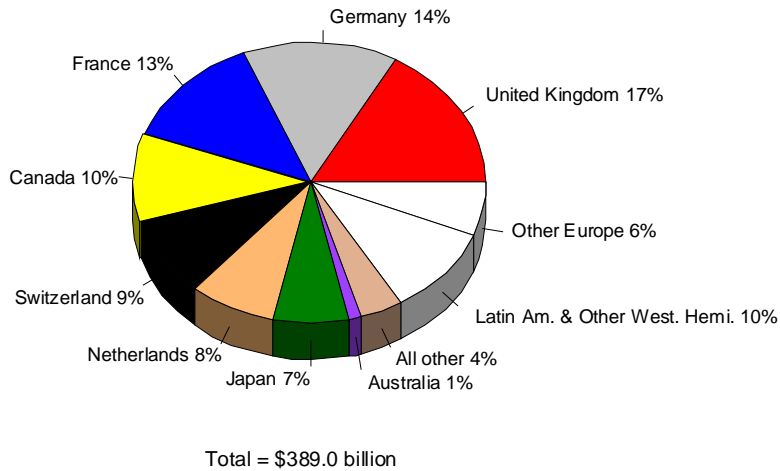
^gReflects purchases of services from manufacturers, audiovisual firms, retailers, and all other services firms.

FIGURE 2.5 Services transactions by affiliates, by country or region, 2005^a

Sales by foreign affiliates of U.S. firms^b



Purchases from U.S. affiliates of foreign firms^c



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 142.

^aTotals may not equal 100 percent due to rounding.

^bSales of services by majority-owned foreign affiliates of U.S. parent firms.

^cPurchases of services from majority-owned affiliates U.S. of foreign parent firms.

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CHAPTER 3

Banking Services

Summary

The global banking industry is highly competitive, with multinational firms continuously seeking new growth. As opportunities for expansion in developed markets become more limited and profit margins shrink, companies are increasingly looking toward emerging economies where strong economic growth in recent years is creating demand for banking services among the new middle classes. Worldwide sector growth has been strong since 2003, and U.S. banking firms' share of the global market has remained steady at approximately 17 percent.¹

Banking services are traded in large quantities through both cross-border and affiliate transactions. However, because official trade data do not include deposit-taking services, an important service offering for U.S. firms operating abroad, the actual value of affiliate transactions by banks is unclear. Trade through both avenues, however, has risen steadily since 2003, with the United States running a consistent surplus in the sector. This surplus is, in part, a reflection of the increasingly global focus of large U.S. banks.

Banks operating in the global market most often tend to face barriers related to the legal form of establishment, equity limitations on foreign ownership, and establishment of new, or acquisition of existing, entities. They also face barriers in the form of insufficient regulatory transparency and the discriminatory application of rules. Notwithstanding such barriers, firms often enter such markets in order to gain first-mover advantage against other foreign competitors.

Competitive Conditions in the Global Market for Banking Services

Total assets in the global banking industry—including commercial, retail, and mortgage banks—were valued at \$68.2 trillion in 2006, representing a 4 percent increase over the preceding year.² This compares with a compound average annual growth rate of 5 percent during 2001–05.³ Despite slower growth, global profits for banks in 2006 reached an all-time high of \$788 billion, making it the industry with the highest absolute profits.⁴ Europe accounted for the largest share of the global banking industry's value by geographic distribution of assets—not accounting for the origin of banks holding the assets—with 61 percent in 2006, followed by the Asia-Pacific region and the United States with

¹ Datamonitor, *Global Banks*, May 2004, May 2005, April 2006, and March 2007. This figure represents the average across years 2003–06, and may be slightly inflated, as the figure for 2004 represents all of North America instead of solely the United States.

² Datamonitor, *Global Banks*, March 2007, 8. Figure represents total assets.

³ Datamonitor, *Global Banks*, April 2006, 8.

⁴ Dietz, Reibestein, and Walter, "What's in Store for Global Banking," January 2008, 3. This figure represents after-tax profits.

19 percent and 16 percent, respectively.⁵ The global industry is highly fragmented, with the top four firms accounting for just 9 percent of market share.⁶ Worldwide, U.S., European, and Japanese banks are dominant, accounting for the 10 largest banks by assets (table 3.1). In 2006, the Industrial and Commercial Bank of China and the Bank of China emerged as the 19th and 25th largest banks in the world and were the only developing country institutions among the top 75 banks.

TABLE 3.1 World's largest banks,^a latest fiscal year with available data (million dollars)

Rank	Institution	Country of incorporation	Total assets
1	Barclays PLC	United Kingdom	1,952,761
2	BNP Paribas SA	France	1,900,565
3	Citigroup Inc.	United States	1,884,318
4	HSBC Holdings PLC	United Kingdom	1,860,758
5	Royal Bank of Scotland Group PLC	United Kingdom	1,707,184
6	ING Groep NV	The Netherlands	1,618,140
7	Mitsubishi UFJ Financial Group Inc.	Japan	1,607,422
8	UBS AG	Switzerland	1,566,968
9	Credit Agricole SA	France	1,497,520
10	Bank of America Corp.	United States	1,459,737

Source: Standard & Poor's, *Global Industry Surveys: Banking Asia*, April 2007, 8.

^aBased on assets.

Conditions for global banks in 2006 were generally favorable, with major markets experiencing steady economic growth, controlled inflation, and strong returns on equity. Job growth and consumer confidence heightened demand for retail and mortgage banking services, while business loans and reinvested earnings bolstered the commercial banking sector. Rising interest rates, deflating housing markets, higher energy costs, and the emerging sub-prime mortgage crisis had only marginal impact on the industry in 2006 (see box 3.1 for more on the fallout from sub-prime mortgage loans). Global banking continues to trend toward consolidation as multinational firms try to expand market share in their home and foreign markets, and domestic banks in emerging markets attempt to better serve their growing middle classes.

⁵ Datamonitor, *Global Banks*, March 2007, 9. The relatively high share of assets in Europe reflects the number of large banks operating in the region.

⁶ Ibid., 10. These firms include UBS (Switzerland) with 2.6 percent, Citigroup (United States) with 2.3 percent, HSBC (United Kingdom) with 2.2 percent, and Mizuho Financial Group (Japan) with 1.8 percent.

BOX 3.1 Effects of the Subprime Mortgage Crisis on the global banking industry¹

While the credit crisis stemming from significant losses in mortgage-backed securities had only begun to emerge in 2006, and therefore had little effect on the global banking sector in that year, its impact on the industry since then merits further attention. Beginning in 1998, real estate became a widely attractive investment option as prices were generally considered to be undervalued. At the same time, the mechanics of mortgage lending were continuing to change. Where banks and mortgage companies had previously made loans and held onto the bulk of them through repayment, a greater share of such loans were now being immediately packaged into collateralized debt obligations and sold as securities in global equity markets. The securities were popular with investors, and as demand rose, banks became less risk averse in their lending and aggressively sought out a wider customer base for mortgage loans. Borrowers with low, or subprime, credit scores were suddenly able to get mortgage loans, albeit at a higher interest rate than those with higher scores. Because interest rates were generally low, even the higher rates paid by the subprime borrowers were relatively low, though many of these loans were offered at introductory rates that would expire after a few years. When rates went up, many subprime borrowers defaulted on their mortgages. As defaults have risen, the value of mortgage-backed securities that are heavy on subprime loans has correspondingly plummeted, causing multiple problems throughout the financial sector.

Though the primary bearers of the financial backlash are investment banks, which are not included in the scope of this chapter's analysis, there are serious ramifications for commercial and retail banks as well, especially those that have investment banking operations. While the extent of exposure by many banks to falling subprime assets is still unclear, some of the biggest firms have already experienced sizeable losses. Citigroup, for example, undertook an \$18.1 billion write-down in the fourth quarter of 2007 as a result of subprime losses. Any such write-down cuts deeply into a bank's capital base. Because the issue of exposure is still unresolved, banks are becoming increasingly wary of engaging in interbank lending for fear that the borrowing institutions are at risk, and thus a crisis of illiquidity is emerging. As interbank lending constricts, banks are less able to make loans available to commercial and retail clients, which will likely contribute to the projected economic slowdown. Because the mortgage-backed securities have been so widely traded in global markets, the financial ill-effects are not confined to the United States. Equity markets in Europe and Asia have already reacted negatively to the events unfolding in the United States, with central banks in those markets—as well as in the United States—taking measures to avert serious economy-wide repercussions.

¹ Information in this box was primarily drawn from the following sources: Economist Intelligence Unit, *Heading for the Rocks: Will Financial Turmoil Sink the World Economy?*, 2007, and "USA Economy: Keep the Cash Coming," March 13, 2008; *New York Times*, "Can't Grasp the Credit Crisis? Join the Club," March 19, 2008, and "Who Will Come to the Rescue," March 18, 2008; and Standard & Poor's, *Global Industry Surveys: Banking*, December 2007.

Cross-Border Mergers and Acquisitions

Cross-border merger and acquisition (M&A) activity has become a core growth strategy for multinational banks. Activity is prevalent in both developed and emerging economies, with acquiring banks approaching the two markets with different objectives. In the case of highly competitive developed markets, M&A deals typically capitalize on a bank's particular specialty or regional network. Such has been the case in the United States, where large banks have expanded into new regions and/or have reduced costs within an existing business area by absorbing competitors' customers while eliminating overlap in branch networks. In the European banking landscape, cross-border M&A has accelerated, resulting in greater consolidation and pressure upon smaller institutions to seek out partners. The highly fragmented markets in Italy and Germany have recently been the targets of large firms from the United Kingdom and Spain, where industry consolidation is greater and opportunities for domestic growth are limited. In one of the most valuable deals in 2007, a consortium including Royal Bank of Scotland (UK), Banco Santander (Spain), and Fortis (Belgium) prevailed over Barclay's in a hostile takeover of multinational bank ABN Amro (The Netherlands). This acquisition was preceded by ABN Amro's sale of U.S.-based LaSalle Bank Corporation to Bank of America. Royal Bank of Scotland had planned to acquire

LaSalle as part of the takeover of ABN Amro, but subsequently indicated that it wants to acquire all operations outside of the Netherlands and Italy/Brazil. ABN Amro's Netherlands operations would subsequently go to Fortis, and operations in Italy and Brazil would be controlled by Banco Santander.⁷

In many cases, developing economies hold even greater appeal for multinational banks seeking new growth, as competition is less intense than in developed markets and the profit margins tend to be higher. In many such markets, accelerated economic growth in recent years has produced emerging middle classes with increasingly sophisticated, and often underserved, banking needs. In assessing market entry strategies, multinational banks are increasingly opting for mergers in lieu of organic growth as a means to expand market share, as it is believed that operating under an established brand is more conducive to retaining existing customers and attracting new ones.⁸ In addition, diversification into multiple markets can offset major losses in other areas. For example, HSBC (United Kingdom) saw profits from its U.S. personal finance business decline by between \$700 and \$800 million in 2006, resulting from higher-than-anticipated delinquencies in its sub-prime mortgage holdings.⁹ However, the company was able to end the year with steady earnings derived in large part from its operations in emerging markets.¹⁰ Certain markets in Asia and Central and Eastern Europe saw heightened cross-border M&A activity in 2006 and 2007.

In the Central and Eastern European region, M&A activity in recent years has been largely concentrated in Poland, Hungary, and the Czech Republic—due in part to European Union accession, coupled with greater economic prosperity relative to their eastern neighbors. Poland and the Czech Republic both saw annual gross domestic product (GDP) growth of 6 percent in 2006, while Hungary registered 4 percent, its lowest level in a decade.¹¹ Access to credit and use of banking services have risen in recent years, though there remains a lower level of bank usage rates among these countries than in developed countries.¹² Nonetheless, these markets are becoming saturated with foreign banks, which maintain majority shares in the 10 largest private banks in Poland; 4 of the 5 largest banks in Hungary; and 27 of the 36 banks operating in the Czech Republic.¹³ These foreign banks are largely Western European in origin, expanding their reach further east. In October 2007, Bayerische Landesbank (Germany) acquired a \$2.29 billion majority stake in Hypo Alpe-Adria-Bank International (Austria), which was attractive because of its banking networks throughout the Balkans, including Bulgaria, Croatia, Serbia, and Slovenia.¹⁴ Erste Bank (Austria) purchased a 62 percent share of Banca Comerciala Romana—the largest bank in Romania—for \$4.5 billion dollars, as well as a majority stake in Ukraine's Prestige Bank for \$109 million.¹⁵

⁷ Van der Starre, "Bank of America Completes LaSalle Bank Purchase," October 2, 2007; Weber, Joseph, "LaSalle Bank Sparks a Deal," April 27, 2007; and Bank of America, "Bank of America Completes Purchase of LaSalle Bank (October 1)," 2007.

⁸ Datamonitor, *Global Banks*, March 2007, 6.

⁹ Mergent Online, *The Europe Banking Sectors*, August 2007, 3; and HSBC, "HSBC Holdings plc 2006 Final Results," March 5, 2007.

¹⁰ Mergent Online, *The Europe Banking Sectors*, August 2007, 4.

¹¹ World Bank, World Development Indicators online database.

¹² Standard & Poor's, *Global Industry Surveys: Banking Europe*, August 2007, 13.

¹³ *Ibid.*, 14.

¹⁴ Hypo Group Alpe Adria, "BayernLB is Majority Shareholder of Hypo Group Alpe Adria (October 9)," 2007.

¹⁵ Standard & Poor's, *Global Industry Surveys: Banking Europe*, August 2007, 14–15.

While acquisitions in other markets in the region are accelerating as well, multinational banks have developed a newfound focus on Russia. Strong economic growth, based largely on oil revenues, and a recent increase in Russians' willingness to use banking services¹⁶ have prompted some of the largest multinational firms to increase their operations there. In 2006, Raiffeisen International Bank AG (Austria) acquired 100 percent of Impexbank for \$555 million, and Deutsche Bank (Germany) increased its stake in Moscow's United Financial Group from 40 percent to 100 percent.¹⁷

The Asian region has also been a magnet for multinational banks in recent years as countries have finally overcome setbacks from the financial crisis of a decade ago, registering regional GDP growth of 8 percent in 2006. Some of the highest profile M&A activity of late has occurred in China, as companies angle for market share in the \$5.1 trillion banking market. Chinese implementation of World Trade Organization (WTO) commitments in the banking sector, including lifting of geographic restrictions on foreign bank operations and allowing foreign banks to establish branches and to operate in the domestic currency business, has facilitated increased acquisitions. Further, recent record-setting initial public offerings (IPOs) by state-owned banks have heightened interest in Chinese banks. In 2006, Citigroup acquired a majority share of Guandong Development Bank for \$3.14 billion,¹⁸ giving it access to the Chinese bank's 500 branch network.¹⁹ Also in 2006, Banco Bilbao Vizcaya Argentaria (Spain) purchased a \$1.31 billion stake in China CITIC Bank, giving the company a 5 percent share, while The Australia and New Zealand Banking Group purchased 20 percent shares in both the Shanghai Rural Commercial Bank and the Tianjin City Commercial Bank.²⁰ Despite heightened M&A activity, the majority of bank assets in China remain under state control, and new opportunities for foreign banks to partner with Chinese firms will likely occur on a controlled timeline.

The globalization of China's banking sector is not solely inbound. The growing asset bases of certain Chinese banks, particularly those that benefitted from strong IPOs, have recently allowed them to make a few strategic acquisitions outside their home market. In 2006, the Industrial and Commercial Bank of China acquired 90 percent of Indonesia's Halim Bank,²¹ and in March 2008, completed acquisition of a 20 percent share in South Africa's Standard Bank Group Ltd for \$4.9 billion.²² China Construction Bank purchased Bank of America Asia (Hong Kong) in 2006 for \$1.24 billion.²³ In addition, one of the largest acquisitions by Chinese banks, by value, is pending: China Development Bank's purchase of a \$10.5 billion share of Barclays Plc (UK) is awaiting regulatory approval.²⁴

¹⁶ Ibid., 14. The Russian government has instituted deposit insurance of up to \$3,550, which will likely result in increased deposits.

¹⁷ Bureau van Dijk, Zephyr Mergers and Acquisitions Database (accessed February 5, 2007).

¹⁸ *Xinhua Finance*, "China Industry Reports, Market Snapshot: Banking," May 2007, 6.

¹⁹ While new WTO commitments allow unlimited branching for foreign banks, it would take significant time and resources for foreign banks to build branch networks in China to rival those of existing Chinese banks. As such, mergers that give foreign firms access to a significant number of branches are highly appealing.

²⁰ *Xinhua Finance*, "China Industry Reports, Market Snapshot: Banking," May 2007, 6.

²¹ Ibid.

²² Bureau van Dijk, Zephyr Mergers and Acquisitions database (accessed April 16, 2008).

²³ *Xinhua Finance*, "China Industry Reports, Market Snapshot: Banking," May 2007.

²⁴ Bureau van Dijk, Zephyr Mergers and Acquisitions database (accessed April 16, 2008).

Trade Trends

Cross-Border Trade

U.S. cross-border exports of non-depository, non-insurance financial services (box 3.2) increased by 19 percent to \$42.8 billion in 2006, following an average annual rate of 16 percent from 2001 through 2005 (figure 3.1). U.S. imports of financial services increased by 13 percent in 2006, reaching \$14.3 billion, compared to an average annual rate of 3 percent during the years 2001–05.²⁵ Reflecting the higher rate of export growth in 2006, the U.S. trade surplus in financial services increased by 22 percent to \$28.5 billion. The rise in exports was largely attributable to increases in financial management and advisory services, underwriting and private placement services related to the issuance of foreign securities in the United States, electronic funds transfer services, and credit card services.²⁶ The rise in imports of the subject services is due in part to increased trading in foreign markets by U.S. investors, securities lending services, and electronic funds transfer services.²⁷

The United Kingdom, Canada, Bermuda, Japan, and Germany were the largest markets for U.S. exports of financial services in 2006, purchasing \$6.1 billion, \$2.3 billion, \$2.2 billion, \$1.6 billion, and \$1.4 billion, respectively (figures 3.2 and 3.3). These figures represent year-on-year increases for all countries. Such growth is likely due to improving economic conditions in those countries and, in some cases, rising stock markets. The continued depreciation of the U.S. dollar vis-a-vis those countries' currencies in 2006 was also likely a contributing factor.²⁸

In 2006, the largest suppliers of financial services imports to the United States were the United Kingdom (\$2.3 billion), France (\$836 million), Canada (\$435 million), Japan (\$421 million), and Germany (\$406 million).²⁹ These figures represent strong growth over 2005 levels for each country.

²⁵ The 3 percent average annual rate from 2001 through 2005 includes a period of fluctuation, with a decline in imports in 2002 and 2003 following the slowdown in U.S. stock market activity in 2001. Imports have risen steadily since 2004.

²⁶ U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), *Survey of Current Business* 87, no. 10, 104.

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ *Ibid.*, 129.

BOX 3.2 An explanation of BEA data on cross-border trade and affiliate transactions in financial services (not including depository or insurance services)

Non-depository, non-insurance financial services comprise certain fee-based commercial banking services and securities-related services. Both fee-based commercial banking services and securities-related services can be traded across borders or sold through affiliates.

BEA data on cross-border trade in financial services include fund management services; advisory services; credit card services; commissions and fees on securities transactions and credit-related services; and other financial services.¹ These data exclude both deposit-taking and lending services.² In 2006, BEA revised its financial services estimates for 2003–05 based on information from the 2004 Benchmark Survey of Financial Services Transactions Between U.S. Financial Services Providers and Unaffiliated Foreign Persons, and based on a revision of the average bid-ask spreads that BEA uses in its estimation of bond dealers' fees and commissions.³ Bid-ask spreads—which represent an intermediary's profit and can be defined as the margin between a buyer's bid price and a seller's asking price⁴—have decreased in recent years due to technological improvements, greater market competition and efficiency, and increased transparency regarding costs, leading BEA to adjust its average bid-ask spreads to reflect this development. As a result of these revisions and adjustments, BEA's annual estimates of U.S. financial services exports among entities not belonging to the same multinational firm increased by as much as \$3.3 billion and decreased by as much as \$0.4 billion for the data years 2003–05.⁵ BEA's annual estimates of U.S. imports of financial services were also revised and adjusted downward by as much as \$0.2 billion and upward by \$0.3 billion for the same three-year period.

BEA estimates of affiliate transactions in the financial services industry include sales by, and purchases from, entities 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. Currently, these estimates do not include sales by, or purchases from, bank affiliates, which reportedly may account for a substantial share of affiliate transactions in this sector. BEA began to address this gap in industry coverage by collecting data on bank affiliates as part of the 2002 and 2004 benchmark surveys of inbound and outbound direct investment, respectively. Based on these surveys, BEA estimated that U.S. purchases from foreign-owned bank affiliates in the United States were \$30.5 billion in 2002, while sales to foreign consumers by U.S.-owned bank affiliates in foreign markets were about \$38.3 billion in 2004.⁶ BEA plans to capture bank affiliates in its yearly estimates of affiliate sales and purchases of financial services beginning with data for the year 2007.⁷

¹ USDOC, BEA, *Survey of Current Business* 87, no. 10, 99.

² BEA does not report data in trade in deposit-taking and lending services provided by commercial banks.

³ USDOC, BEA, *Survey of Current Business* 86, no. 7, 41.

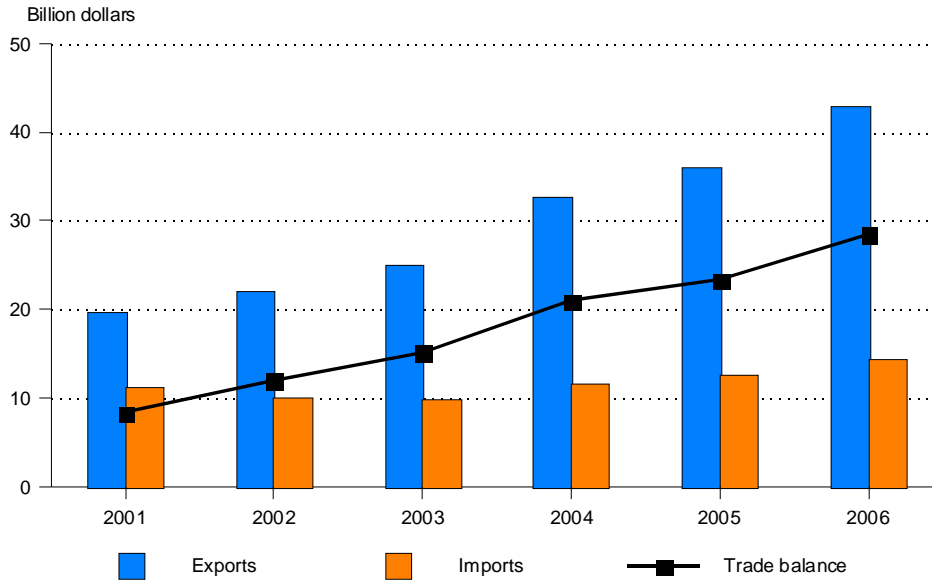
⁴ "Bid/ask Spread," *Investor Glossary* Web site, <http://www.investorglossary.com/bid-ask-spread.htm/> (accessed April 9, 2008).

⁵ USDOC, BEA, *Survey of Current Business* 86, no. 7, 41.

⁶ USDOC, BEA, *Survey of Current Business* 87, no. 10, 110.

⁷ BEA representative, telephone interview by Commission staff, April 9, 2008.

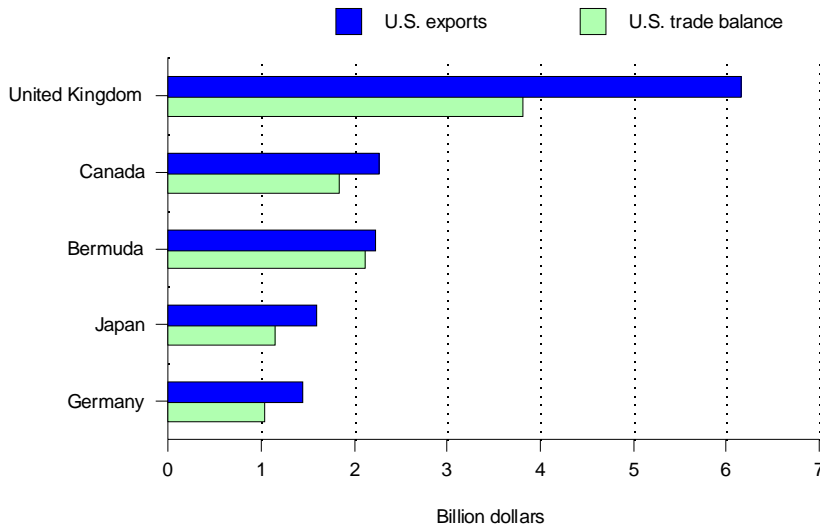
FIGURE 3.1 Banking services:^a U.S. cross-border trade, 2001–06



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

^aIncludes securities.

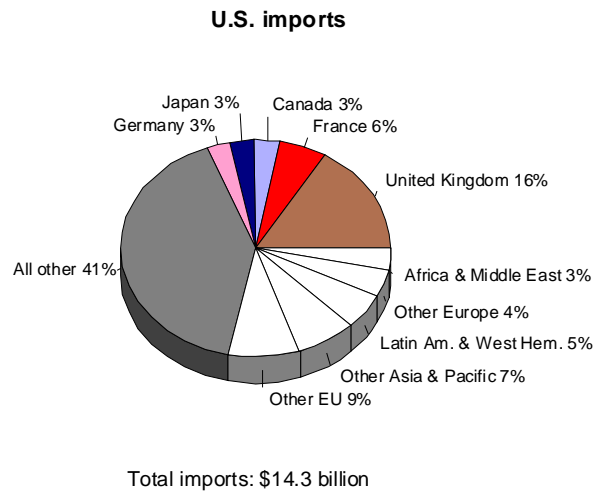
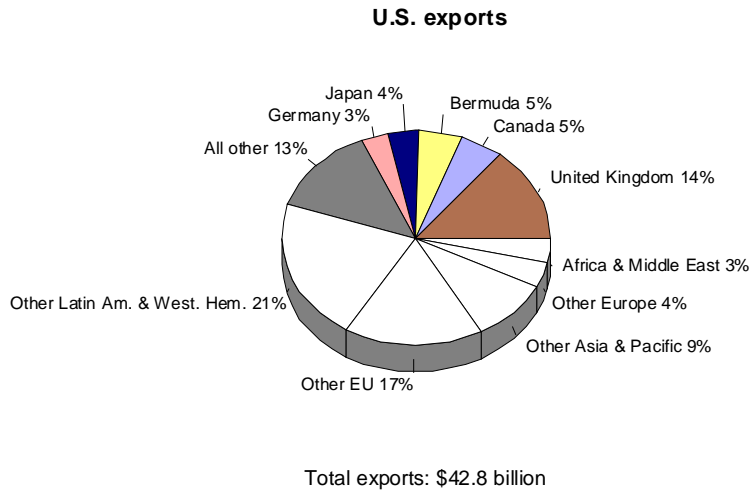
FIGURE 3.2 Banking services:^a U.S. cross-border exports and trade balance, by major trading partners, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 129.

^aIncludes securities.

FIGURE 3.3 Top 5 U.S. banking services^a export markets and import sources, share of world, 2006

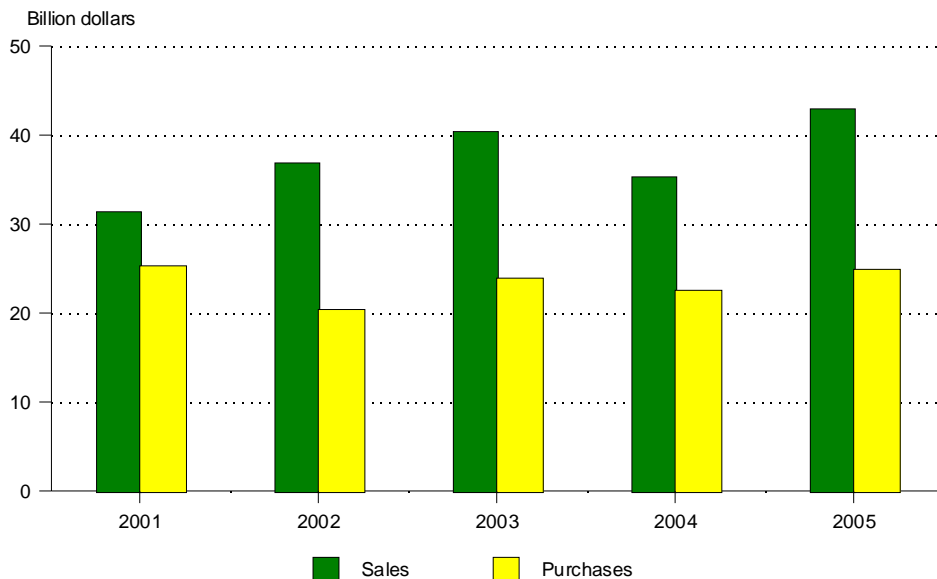


Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 129.

Note: Totals may not equal 100 percent due to rounding.

^aIncludes securities.

FIGURE 3.4 Banking services:^a Sales by foreign affiliates of U.S. firms and domestic purchases from U.S. affiliates of foreign firms, 2001–05



Sources: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 143–146; 86, no. 10, 71, 73; 85, no. 10, 75, 77; 84, no. 10, 73, 75; and 83, no. 10, 115, 117.

^aIncludes securities.

The volume of cross-border lending and deposit taking also experienced notable growth in 2006, reaching a worldwide value of \$3.5 trillion, a 30 percent increase over 2005 levels.³⁰ This type of transaction was the largest form of global capital flow in 2006. However, cross-border lending and deposit taking activity tends to ebb and flow with changing macroeconomic conditions, as banks are more willing to make riskier loans when capital is plentiful and reclaim that capital when financial conditions contract. Thus, it is likely that data will reflect declines in cross-border lending and deposit taking in 2007 and 2008 as a result of the subprime mortgage crisis and ensuing credit constraints.³¹

Affiliate Transactions

In 2005, sales of all non-depository, non-insurance financial services by foreign affiliates³² totaled \$42.9 billion, a 22 percent increase over the preceding year (figure 3.4).³³ The growth in 2005 is substantially higher than the average annual rate of 0.4 percent from 2001 through 2004. The increase was largely attributable to greater M&A activity and increased trading volume in foreign securities markets, as well as high commissions and fees resulting from the increased value of precious metals.³⁴ The United Kingdom accounted for the single largest share of total foreign affiliate sales at \$19.1 billion, a 14 percent increase over the previous year.

³⁰ McKinsey Global Institute, *Mapping Global Capital Markets: Fourth Annual Report*, January 2008, 53.

³¹ Data on cross-border lending and deposit taking for 2007 are not yet available.

³² Foreign affiliates are U.S. parent firms' majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms' majority-owned non-bank affiliates in the U.S. market.

³³ Data disaggregated by service sector—nondepository credit intermediation and related services; securities, commodity contracts, and other intermediation and related activities; and funds, trusts and other financial vehicles—have been suppressed to avoid disclosure of individual firms' market shares.

³⁴ USDOC, BEA, *Survey of Current Business* 87, no. 10, 108.

Domestic purchases of financial services from U.S. affiliates totaled \$24.9 billion in 2005, a 10 percent increase over 2004 levels. This reverses a 7 percent average annual decline in purchases from U.S. affiliates from 2001 through 2004, during which time U.S. financial markets experienced some volatility. Fees from purchases of securities, commodity contracts, and other intermediation and related activities accounted for 88 percent of total purchases of financial services. While total sales figures are available, data on individual country shares have been suppressed to avoid disclosing information on individual companies.

Liberalization of Trade Impediments

Impediments to trade in the banking sector are more prevalent in developing economies than in the relatively open banking markets of developed countries. While many developing markets are taking steps to liberalize trade, considerable barriers remain. The barriers most often cited by industry sources are those affecting the ability to sell services to foreign customers through a foreign affiliate, and specifically include limitations on legal form of establishment, foreign ownership, and the right to establish new or acquire existing companies. Firms also contend that certain countries develop and apply domestic banking regulations in a discriminatory or non-transparent manner. In addition, many developing countries have more liberal practices in their banking markets than are reflected in their current General Agreement on Trade in Services (GATS) commitments, and multinational banks would prefer to see GATS schedules altered accordingly in order to reduce uncertainty.³⁵ All of these barriers are being addressed in the current round of WTO negotiations.³⁶

Impediments to trade in financial services have also been addressed in U.S. bilateral and multilateral free trade agreements (FTAs), including those U.S. FTAs that have been negotiated and/or established with middle- and low-income countries such as Chile, Colombia, Jordan, Mexico, Morocco, Oman, Panama, and Peru. USITC analyses of these FTAs generally estimate that the agreements' financial services provisions will increase U.S. firms' access to these countries' markets.³⁷

³⁵ Industry representative, meeting with Commission staff, December 7, 2007.

³⁶ WTO, "Special Session of the Council for Trade in Services: Report by the Chairman to the Trade Negotiations Committee," November 28, 2005, 18.

³⁷ Section 2104(f)(2) of the Trade Act of 2002 requires that, when the President enters into a trade agreement, the Commission prepare a report assessing the likely effects of that agreement on the U.S. economy as a whole, and on specific industry sectors. These reports are available at www.usitc.gov/ind_econ_ana/research_ana/pres_cong/332/index.htm.

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CHAPTER 4

Insurance Services

Summary

Insurance services play a critical role in the global economy, both in terms of the size of the insurance market and the contribution of the insurance industry to economic growth and development.¹ The Insurance Information Institute (III) reports that global life and non-life² insurance premiums increased from over \$2.4 trillion to over \$3.7 trillion between 2000 and 2006. U.S. life and non-life insurance premiums totaled about \$1.2 trillion in 2006, and accounted for 31 percent of global premiums. Overall, the U.S. share of the world insurance market has declined slightly since 2000, when U.S. premiums accounted for 35 percent of global premiums. U.S. service providers are highly competitive in the global market for insurance services, and U.S. firms rank among the leading companies in each segment of this market.

Affiliate transactions account for the vast majority of U.S. trade in insurance services. Sales by foreign insurance affiliates have surpassed domestic purchases from U.S. affiliates in recent years.³ Sales by foreign insurance affiliates increased rapidly from 2001 through 2006, while purchases from U.S. insurance affiliates registered an overall decline. By contrast, U.S. cross-border exports of insurance services increased rapidly from 2001–05, and continued to grow at a high—albeit slightly slower—rate in 2006. Throughout 2001–06, the United States posted a growing cross-border trade deficit in insurance services. Although a large number of World Trade Organization (WTO) members have made specific commitments on financial services, including insurance services, foreign suppliers of insurance services continue to face barriers to market access and national treatment in many markets.⁴ Financial services trade barriers identified by WTO members for the purposes of the ongoing Doha round negotiations include restrictions on foreign ownership, on the legal form (such as a branch, joint venture, or wholly-owned subsidiary) in which a foreign service supplier may establish a commercial presence, and on the establishment and acquisition of firms; numerical quotas, monopolies, and other non-discriminatory limitations; regulatory discrimination; and non-transparent regulatory regimes.⁵

¹ For more information on the relationship between insurance services and development, see, for example, United Nations Conference on Trade and Development (UNCTAD), “Trade and Development Aspects of Insurance Services and Regulatory Frameworks,” November 21, 2005.

² III Web site, “Glossary of Insurance Terms,” <http://www.iii.org/media/glossary/alfa.P> (accessed March 10, 2008). Non-life insurance—commonly referred to as property/casualty insurance in the United States—covers property holders against property damage or injury to another person.

³ Foreign affiliates are U.S. parent firms’ majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms’ majority-owned non-bank affiliates in the U.S. market.

⁴ UNCTAD, “Trade and Development Aspects of Insurance Services and Regulatory Frameworks,” November 21, 2005, 11, 22.

⁵ WTO, “Report by the Chairman to the Trade Negotiations Committee,” November 28, 2005, 18.

Competitive Conditions in the Global Insurance Services Market

The global insurance market is large and highly concentrated in a small number of developed countries. In 2006, the global volume of life and non-life insurance premiums totaled \$3.7 trillion, with premiums written in the United States (31 percent), Japan (12 percent), and the United Kingdom (11 percent) together accounting for more than half of such premiums (table 4.1). Other countries that accounted for a significant share of global premiums included France (7 percent), Germany (5 percent), and Italy (4 percent). China, which accounted for almost 2 percent of the global life and non-life insurance premiums in 2006, is the only country not a member of the Organization for Economic Cooperation and Development (OECD) which ranked among the world's top 10 insurance markets in that year.⁶ The combined value of life and non-life premiums written in China increased by 18 percent in 2006,⁷ and several foreign firms that participate in the Chinese insurance market anticipate that premiums will increase at annual rates of approximately 12 to 20 percent in both 2007 and 2010.⁸

The global insurance industry is highly competitive due to factors such as the large number of firms—including small-sized firms—participating in this industry, the similarity of the products being offered, and the emphasis on price rather than brand loyalty in consumer purchasing decisions.⁹ Despite a relatively low level of market consolidation, most segments of the global insurance industry include several very large firms. ING Group (Netherlands) is the world's top insurance firm, with earned revenues totaling \$158.3 billion in 2006 (table 4.2). Other life and non-life insurance firms that earned more than \$100 billion in revenues in 2006 include AXA (France), Allianz (Germany), American International Group (AIG) (United States), and Assicurazioni Generali (Italy). Two additional U.S. firms—Berkshire Hathaway and State Farm Insurance Cos.—were also among the world's top 10 insurance firms in 2006, with revenues of \$98.5 billion and \$60.5 billion, respectively. ING Group, AXA, and Assicurazioni Generali lead the global life insurance market, while Allianz, AIG, and Berkshire Hathaway are the world's top non-life insurance companies. Munich Re (Germany), Swiss Re (Switzerland), and Berkshire Hathaway Re (United States) are the world's top reinsurers, having written reinsurance premiums totaling \$25.4 billion, \$23.8 billion, and \$11.6 billion, respectively, in 2006. Other U.S. firms that numbered among the world's top 10 writers of reinsurance premiums in that year include Reinsurance Group of America Inc. and Transatlantic Holdings Inc. In the insurance brokerage segment, all of the world's top 10 firms are based in either the United States or the United Kingdom. Marsh & McLennan Cos. Inc. (United States) led this market segment in 2006, with brokerage revenues of \$10.5 billion.¹⁰

⁶ III, *The III Insurance Fact Book 2008*, 1–2.

⁷ *Ibid.*, 1.

⁸ Metcalfe, *Foreign Insurance Companies in China*, 48.

⁹ Datamonitor, *Global Non-Life Insurance*, September 2007, 13–14 and *Global Life Insurance*, September 2007, 11–12.

¹⁰ III, *The III Insurance Fact Book 2008*, 4–6.

TABLE 4.1 Insurance premiums: Top 10 countries,^a 2006
(million dollars)

Rank	Country	Total premiums
1	United States ^b	1,170,101
2	Japan ^c	460,261
3	United Kingdom	418,366
4	France	251,164
5	Germany	204,544
6	Italy	138,679
7	Korea ^c	101,179
8	Canada ^d	88,200
9	China	70,805
10	Spain	65,813

Source: The Insurance Information Institute, *Fact Book 2008*, 1.

^aBased on premiums.

^bNon-life premiums include state funds; life premiums include an estimate of group pension business.

^cApril 1, 2006–March 31, 2007.

^dLife business expressed in net premiums.

TABLE 4.2 World's leading insurance firms,^a 2006 (million dollars)

Rank	Company	Country of incorporation	Total revenues ^b
1	ING Group	Netherlands	158,274
2	AXA	France	139,738
3	Allianz	Germany	125,346
4	American International Group	United States	113,194
5	Assicurazioni Generali	Italy	101,811
6	Berkshire Hathaway	United States	98,539
7	Aviva	United Kingdom	83,487
8	Prudential	United Kingdom	66,134
9	Zurich Financial Services	Switzerland	65,000
10	State Farm Insurance Cos.	United States	60,528

Source: The Insurance Information Institute, *Fact Book 2008*, 4.

^aBased on revenue.

^bRevenues are the sum of income earned through premiums, annuities, investments, and capital gains/loses, but do not include deposits. This total captures consolidated subsidiaries, but not excise taxes.

The U.S. life insurance market has been characterized by a high level of merger and acquisition (M&A) activity in recent years. The industry has consolidated in an effort to increase competitiveness through economies of scale and mitigate the effects of the relatively low interest rate spreads¹¹ which have had an unfavorable effect on industry profitability in recent years.¹² Relatively conservative M&A activity in the non-life segment reportedly may be a result of low market entry barriers, which makes it less likely that consolidation will lead to industry control, as well as the increased regulatory scrutiny of the insurance industry in recent years.¹³ Certain insurers in this segment have responded to the weak interest rate environment through divestment or market exit. At the same time, some private equity firms have responded to increased regulatory scrutiny by acquiring non-life brokerage firms in an effort to benefit from these firms' profitability and stability.¹⁴ In 2006, the top M&A involving at least one U.S. insurance firm was UK firm Aviva Plc's purchase of AmerUs Group Co. in a deal valued at \$2.7 billion.¹⁵

Numerous factors affect the overall supply of and demand for insurance services. However, one factor considered unlikely to have a significant impact on most U.S. insurance firms is the subprime crisis (box 4.1).

U.S. insurance firms hold a strong competitive position in the domestic market, due to factors such as firm size and product sophistication.¹⁶ Certain U.S. firms are also key participants, or are making efforts to expand their participation, in the global insurance market.¹⁷ For some companies, foreign operations represent a substantial share of their business. For example, foreign markets (most notably Asian markets) accounted for about 68 percent of life insurance revenues, and over 48 percent of the total revenues, of AIG—the largest U.S.-based insurance firm—in 2006.¹⁸ However, many firms—particularly those in the non-life segment—retain a domestic-market focus.¹⁹

During the most recent five-year period for which data are available, changing demographics have had a notable impact on global demand for insurance services. A decrease in the death rate among individuals aged 25–44 has led to a decrease in life insurance premiums which, in turn, has increased demand for such insurance.²⁰ Further, increases in life expectancy likely will generate greater demand for retirement-oriented savings products, such as annuities, in both the United States and Europe.²¹ Factors which affect demand for all insurance services include stock market fluctuations, interest rates, and growth in gross domestic product, household income, and employment. Together, these factors affect personal wealth, consumers' ability to borrow money, and the value of assets which, in turn, impact consumers' need for insurance products (through, for example, fluctuations in

¹¹ Standard & Poor's, *Insurance: Life & Health*, September 13, 2007, 4. In this instance, the interest rate spread refers to the difference between insurance firms' potential bond market earnings and the rates that firms offer to holders of annuity and life insurance products.

¹² *Ibid.*, 4–5.

¹³ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 16–17.

¹⁴ *Ibid.*

¹⁵ III, *The III Insurance Fact Book 2008*, 14.

¹⁶ EDS, "U.S. Insurers Must Aim for a Place in the Global Insurance League," May 16, 2007.

¹⁷ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 9.

¹⁸ Insurance Day News Centre, "American Insurance Group (AIG)," August 3, 2007, 17.

¹⁹ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 9.

²⁰ Mergent, *The North America Insurance Sectors*, June 2007, 4.

²¹ Standard & Poor's, *Insurance: Life & Health*, September 13, 2007, 10 and *Insurance: Life & Health, Europe*, June 2007, 9.

BOX 4.1 Effect of the Subprime Mortgage Crisis on the insurance industry

To date, the subprime mortgage crisis reportedly has not had a significant impact on the insurance industry as a whole, and crisis-related losses seem to be limited to individual firms and industry segments. In general, industry sources predict that most U.S. insurance firms will experience relatively small and manageable losses resulting from the recent financial crisis, as many insurers in both the life and non-life segments of the industry have limited exposure to subprime investments.¹

At the same time, the crisis has had a significant impact on certain industry participants. Some of the global insurance industry's largest firms—including AIG and Swiss Re—have reported significant losses in recent months stemming from the credit crisis in the financial sector. These losses were largely a result of the firms' engagement in credit default swaps, which insure against decreases in the value of investments, including the non-payment of debt.² In December 2007, Mergent reported that insurance firms with substantial subprime exposure—including Allstate and Hartford—experienced declining share prices during April-September of that year.³ Share values for financial guaranty insurers such as Ambac Assurance Group Inc. and MBIA Inc., which principally guarantee third-party debt payments, also fell sharply in 2007.⁴

The subprime crisis may ultimately have an impact on the insurance industry through the industry's role as a provider of directors' and officers' liability (D&O) and errors and omissions (E&O) insurance. D&O and E&O insurance provides coverage to firms for errors, negligence, omissions, and other acts⁵ that may cause injury to clients and lead to lawsuits.⁶ Some industry sources predict that the recent crisis could produce several billion dollars in losses in 2008 and 2009⁷ and consequently, current demand for D&O or E&O insurance has risen in anticipation of future increases in the price of such coverage.⁸ However, a recent survey of executives in the financial services industry indicates that the subprime crisis has not yet had a significant effect on the price, availability, or coverage of D&O or E&O insurance policies.⁹

¹ Greenwald, "U.S. Life Insurers' Subprime Losses May Hit \$8B," February 21, 2008; and NU Online News Service, "S&P Finds No Subprime Impact on Insurers," August 30, 2007.

² Associated Press, "AIG Swings to \$5.3 Billion Loss," February 29, 2008; and "Swiss Re's Net Profit Plunges 87%," February 29, 2008.

³ Mergent, *The North America Insurance Sectors*, December 2007, 3–4.

⁴ Standard and Poor's, *Insurance: Property-Casualty*, January 24, 2008, 5.

⁵ D&O insurance and E&O insurance do not cover acts occurring in the medical profession.

⁶ Standard and Poor's, *Insurance: Property-Casualty*, January 24, 2008, 5.

⁷ Ibid.; and Gonzalez, "Impact of Subprime Crisis Not Expected to Be Severe," February 18, 2008.

⁸ Foley, "Implications of the Sub Prime Crisis for the Insurance Industry," March 2008.

⁹ *Insurance Journal*, "Study: Subprime Crisis Not Materially Affecting D&O or E&O Pricing," February 5, 2008.

construction, property values, and motor vehicle ownership), as well as consumers' ability to purchase insurance coverage.²²

As with demand, demographic shifts have had a significant impact on the nature and availability of certain life insurance products. Increasing life expectancy, together with an anticipated sharp increase in the retirement age population, has led to greater emphasis on the marketing of savings products in recent years. Firms in the U.S. market have incorporated new guarantees into their annuity products in order to address consumer concerns arising from recent decreases in equity markets. These new product features include, for example, guaranteed minimum withdrawal benefits, which ensure that an investor will be able to withdraw a certain amount of his/her annuity in a given year, based

²² IBISWorld, *Direct Insurance*, July 12, 2007, 13, 20.

on a specific percentage of the annuity's value.²³ In Europe, the availability of personal pension products has increased in response to government efforts to reduce reliance on state pension programs.²⁴

The provision of coverage by the non-life and reinsurance segments of the industry has been significantly affected by the rising potential for catastrophic events, particularly those related to climate change and international terrorism. Large claims relating to recent weather-related phenomena—such as the 2005 Gulf Coast hurricanes and recent flood events in Europe—together with rising property values in coastal locations, have prompted insurers to reassess their exposure to weather-related risks. As a result, some firms have raised premiums or reduced the availability of property insurance in certain locations.²⁵ For example, at various points from 2004 through 2006, the U.S. firm Allstate indicated that it would no longer offer new property or homeowners' policies in several U.S. coastal areas,²⁶ including Connecticut, Delaware, Florida, New Jersey, and New York City, and that it would limit business in certain Gulf Coast states.²⁷ In Europe, insurers' concerns regarding the potential impact of warmer winters reportedly have led to a gradual increase in insurance premiums,²⁸ and it is expected that the UK floods of June–July 2007 will lead to higher insurance rates in locations that are prone to such events.²⁹ Similarly, the terrorist attacks in the United States of September 11, 2001 led to a steep increase in the price, and decrease in the availability, of terrorism insurance. The Terrorism Risk Insurance Act, which became law in 2002 and was extended until year-end 2014 under the Terrorism Risk Insurance Program Reauthorization Act of 2007, increased the availability of terrorism insurance by requiring firms to provide such coverage in exchange for government-provided reinsurance for terrorism-related risks.³⁰ The industry continues to experience a shortage of insurance coverage for attacks involving biological, chemical, nuclear, or radiological devices, and the 2007 legislation mandates a study assessing the price and availability of such insurance.³¹

The supply of services in all segments of the insurance industry has been significantly affected by the nature of, and recent trends in, the regulatory environment. Moreover, pending regulatory changes suggest that these factors likely will continue to have a

²³ For a more detailed definition of guaranteed minimum withdrawal benefits, see Investopedia, "Guaranteed Minimum Withdrawal Benefit (GMWB)," <http://www.investopedia.com/terms/g/gmwb.asp> (accessed March 5, 2008).

²⁴ Standard & Poor's, *Insurance: Life & Health*, September 13, 2007, 11 and *Insurance: Life & Health, Europe*, June 2007, 12.

²⁵ PricewaterhouseCoopers, "Insurance Digest," September 2007, 6 and Mergent, *The North America Insurance Sectors*, June 2007, 17.

²⁶ Federal Emergency Management Agency (FEMA), "National Situation Update," May 2, 2006. Decreases in the availability of homeowners insurance typically lead to increases in consumer reliance on state insurance policies. Policies written by state insurers are relatively expensive (as compared to policies written by private insurers) and are funded by taxpayers.

²⁷ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 10–11.

²⁸ Kanter and Treaster, "Insurers Brace for Risks of Climate Change," May 31, 2007. For example, damage from windstorm Kyrill, which struck Europe in January 2007, cost insurers approximately \$9 billion. This storm did not result in large and immediate increases in insurance rates, reportedly due to the gradual rate increases that had been introduced in anticipation of such events.

²⁹ Standard & Poor's, *Insurance: Property-Casualty: Europe*, September 2007, 5.

³⁰ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 14; National Association of Insurance Commissioners (NAIC) Web site, "Terrorism Risk Insurance Act (TRIA)," http://www.naic.org/topics/topic_tria.htm (accessed January 17, 2008); and III, "9/11 and Insurance: The Five Year Anniversary," September 2006.

³¹ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 14 and NAIC Web site, "Terrorism Risk Insurance Act (TRIA)," http://www.naic.org/topics/topic_tria.htm (accessed January 17, 2008).

substantial impact on insurers' operations. In the United States, insurance firms are regulated at the state level, requiring companies to obtain a license and file annual financial statements in each state in which they operate.³² However, there is no consensus among insurers regarding the impact of this regulatory regime. Firms in the life insurance segment contend that this state-based system is inefficient, expensive, and may discourage the introduction of new insurance products, while representatives of the non-life segment indicate that state-level regulation is appropriate given the unique non-life insurance needs of customers in different states.³³ An industry source reports that increased and ongoing regulatory scrutiny of the U.S. insurance industry, which began in 2002, has led some firms to modify their business practices. Most notably, many firms have restricted or will no longer accept contingent³⁴ commissions.³⁵ Further, insurance providers could face additional scrutiny and competition with the passage of the Insurance Industry Competition Act of 2007.³⁶ This Act—which was introduced on February 15, 2007 as a response to the high incidence of the nonpayment of claims following Hurricane Katrina—would require insurers to comply with federal antitrust legislation and, thus, end the information sharing that currently occurs in the industry.³⁷ The legislation was designed to reduce premiums by increasing competition in the U.S. insurance sector.³⁸ Nevertheless, some industry participants contend that the inability to share the information that is used to set rates would produce inefficiencies and increase costs, which may decrease market competition by making it more difficult for small firms to enter and participate in the insurance industry.³⁹

In Europe, insurers' efforts to comply with several new regulations that are scheduled for implementation in the near term reportedly may affect the costs of, and the insurance prices charged by, firms operating in that market.⁴⁰ Prominent among these new measures is a new set of rules for determining the solvency of insurance firms, known as Solvency II. Solvency II, which is currently scheduled to be implemented in 2012, would base capital requirements on a particular firm's assumed risks and the strength of its risk management system, and would encourage increased transparency.⁴¹ Insurance services suppliers in the European Union (EU) market may incur costs related to the implementation of Solvency II (including, for example, the administrative costs of introducing a new method of determining capital requirements) and the increased capital requirements for high-risk policies under this

³² Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 26–27.

³³ Standard & Poor's, *Insurance: Life & Health*, September 13, 2007, 15.

³⁴ Wade, "A Brief History of Contingent Commission Agreements," January 24, 2005. Contingent commissions, which have been employed in the insurance industry since the 1960s, are commissions that carriers pay to agents and brokers based on the achievement of a particular sales goal.

³⁵ Standard & Poor's, *Insurance: Life & Health*, September 13, 2007, 5 and *Insurance: Property-Casualty*, July 26, 2007, 10.

³⁶ U.S. Congress, House, *Insurance Industry Competition Act of 2007*, HR 1081, 110th Congress, 1st Sess.

³⁷ Mergent, *The North America Insurance Sectors*, June 2007, 12–13 and Chadbourne & Parke LLP, "Introduction of the 'Insurance Industry Competition Act' May Bring New Federal Antitrust Scrutiny," March 2, 2007.

³⁸ For more information regarding the intended purpose of this legislation, see Office of Senator Patrick Leahy, "Leahy Leads Bipartisan Effort to Hold Insurance Companies Accountable," February 15, 2007, <http://leahy.senate.gov/press/200702/021507c.html> (accessed March 4, 2008).

³⁹ Mergent, *The North America Insurance Sectors*, June 2007, 13.

⁴⁰ Standard & Poor's, *Insurance: Property-Casualty, Europe*, September, 2007, 19.

⁴¹ *Ibid.*

standard;⁴² however, some analysts have suggested that these new disciplines may increase EU firms' competitiveness in the global market.⁴³

Trade Trends

Cross-Border Trade

U.S. cross-border trade in insurance services experienced strong growth throughout the most recent five-year period for which data are available. In 2006, U.S. cross-border exports of insurance services (box 4.2) increased by 19 percent to \$9.3 billion, slower than the rapid average annual rate of 23 percent recorded from 2001–05 (figure 4.1). U.S. imports of such services also increased in 2006 at a rate of 18 percent to \$33.6 billion, as compared to the 14 percent average annual rate observed from 2001–05. As a result of these trends, the U.S. trade deficit in insurance services increased by 17 percent in 2006 to \$24.3 billion, rising faster than the average annual increase of 12 percent registered from 2001 through 2005.

BOX 4.2 An explanation of BEA data on cross-border trade and affiliate transactions in insurance services

The insurance industry underwrites financial risk for life and non-life products, and provides many specialty products. The latter includes reinsurance (the transferring of risk between insurance companies), marine and transportation insurance (for goods in transit, hulls, aviation, and off-shore oil rigs), and brokerage services (the packaging of policies from several underwriters to cover a given risk).

Bureau of Economic Analysis (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 from policyholders and funds paid to cover policyholders' losses over a certain period of years. Auxiliary services include earnings from the provision of actuarial, agency and brokerage, claims adjustment, and salvage administration services, as well as agents' commissions.¹ BEA publishes discrete cross-border trade data for “primary and other insurance” (which principally includes life and non-life insurance) and reinsurance.²

Current estimates of affiliate transactions in the insurance industry reflect the sum of premium income (which reflects the difference between funds collected from policy holders and funds paid to cover policyholders' losses) and earnings from the provision of auxiliary services. In an effort to improve these estimates, BEA has developed a new method of measuring affiliate transactions in the insurance industry, which it has used to calculate experimental data on foreign affiliate sales for the years 2004–05, and on purchases from U.S. affiliates for the years 2002–05. Much like cross-border trade data, affiliate transactions data derived using this new approach would reflect premium income adjusted by “normal” losses, investment income, and earnings from the supply of auxiliary services.³ BEA plans to publish estimates based on this new method in the near future.⁴

¹ U.S. Department of Commerce (USDOC), BEA, *Survey of Current Business* 87, no. 10, 99.

² USDOC, BEA, *Survey of Current Business* 87, no. 10, 130–2.

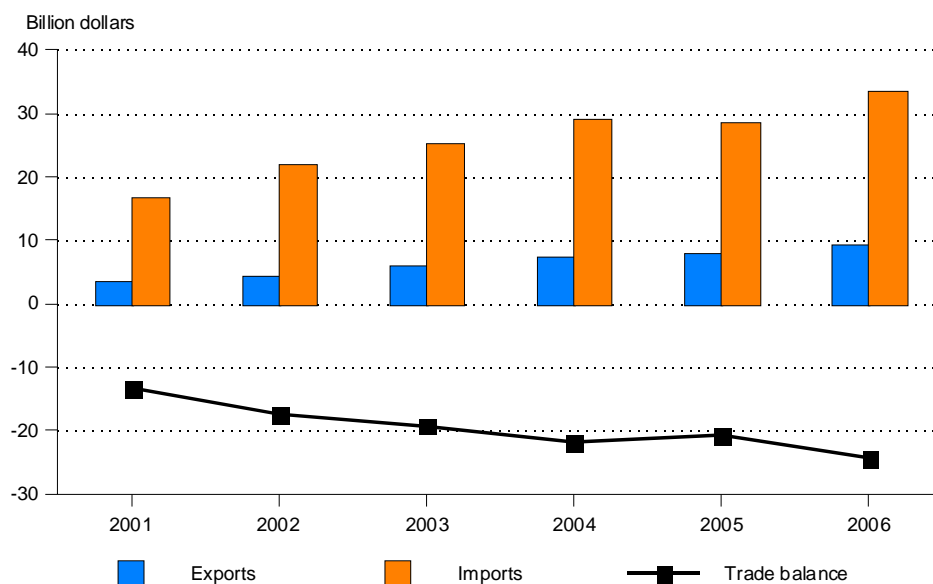
³ *Ibid.*, 109–10 and BEA representative, telephone interview by Commission staff, February 5, 2008.

⁴ BEA representative, telephone interview by Commission staff, February 5, 2008.

⁴² Comité Européen des Assurances (CEA) and Tillinghast, “Solvency II Introductory Guide,” June 2006, 3, 9.

⁴³ Ernst & Young, “New Regulation Will Increase the Insurance Market's Competitiveness,” July 10, 2007.

FIGURE 4.1 Insurance services: U.S. cross-border trade, 2001–06



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

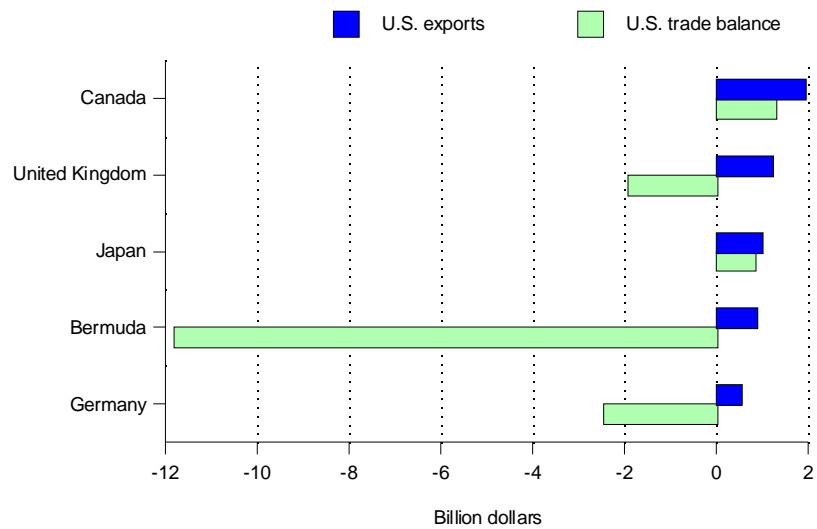
U.S. trade in insurance services is highly concentrated among a small number of trading partners. In 2006, the top five U.S. export markets for insurance services accounted for almost 60 percent of total U.S. exports of such services. Canada was, by far, the leading market for U.S. insurance exports in 2006, accounting for 21 percent of such exports in that year (figure 4.2). Other top export markets included the United Kingdom (13 percent), Japan (11 percent), Bermuda (9 percent), and Germany (6 percent) (figure 4.3). With the exception of Japan, these countries also numbered among the top five U.S. export markets for insurance services in 2001. In that year, the United Kingdom was the leading U.S. export market by a wide margin, having accounted for 23 percent of total U.S. insurance exports, and France ranked as the fourth largest U.S. export market for such services. Although U.S. exports of insurance services to the United Kingdom experienced an overall increase during the period, U.S. exports of such services to Canada grew sharply—from \$392 million in 2001 to \$1.9 billion in 2006—causing that country to overtake the United Kingdom as the top U.S. export market.⁴⁴ The increase in U.S. insurance exports to Canada occurred primarily in the primary and other insurance segment (as opposed to the reinsurance segment)⁴⁵ and may be a result, in part, of increasing demand among the country’s ageing population for life insurers’ wealth management products.⁴⁶

⁴⁴ USDOC, BEA, *Survey of Current Business* 87, no. 10, 130–2.

⁴⁵ USDOC, BEA, “U.S. International Services: Cross-Border Trade 1986–2006 and Sales Through Affiliates 1986–2005.”

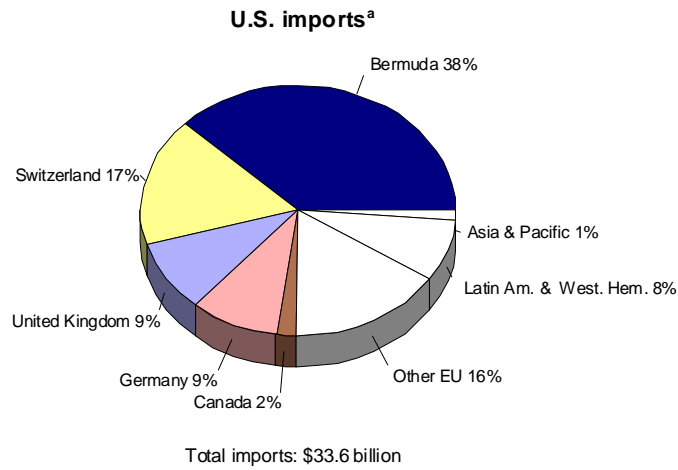
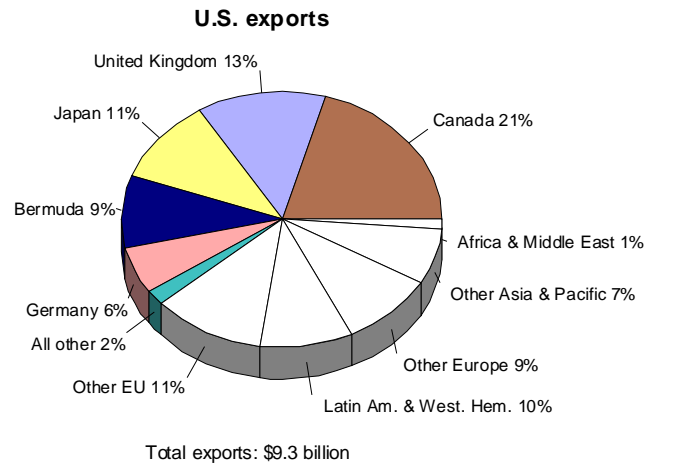
⁴⁶ Mergent, *The North America Insurance Sectors*, December 2007, 18.

FIGURE 4.2 Insurance services: U.S. cross-border exports and trade balance, by major trading partners, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 129.

FIGURE 4.3 Top 5 U.S. insurance services export markets and import sources, share of world, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 131.

Note: Data may not add due to rounding.

^aAfrica & Middle East, Other Europe, and All Other combined equal less than 0.5 percent.

As with exports, a small number of countries account for the vast majority of U.S. insurance services imports. In 2006, Bermuda (38 percent), Switzerland (17 percent), and the United Kingdom and Germany (9 percent each) were the top suppliers of U.S. cross-border imports of insurance services, together accounting for over 70 percent of such imports. Canada was the fifth-largest supplier of U.S. cross-border insurance services imports in 2006, accounting for 2 percent of such imports in that year. The top suppliers of insurance imports to the U.S. market have remained largely unchanged since 2001, when Bermuda accounted for 43 percent of U.S. insurance imports and the United Kingdom, Switzerland, and Germany were the second, third, and fourth largest suppliers of such imports, respectively. France ranked as the fifth largest supplier in that year, accounting for 3 percent of U.S. imports of insurance services. Bermuda's large but declining share of U.S. insurance services imports may be a result of the high but steadily decreasing number of captive insurance entities (captives) located in that country. A captive is an insurance entity that one or several non-insurance firms establish for the purpose of providing insurance to their own companies.⁴⁷ From 2002 through 2005, the number of captives in Bermuda decreased from 1,157 to 987, allowing the United States to surpass Bermuda as the world's leading host to captives, with 1,109 in 2005.⁴⁸

Although several U.S. states have legislation that permits the establishment of captive insurance firms, Vermont has become a particularly prominent host to captives, with between 500 and 600 U.S. firms having established captive insurance entities in that state.⁴⁹ Vermont's popularity as a captive domicile is reportedly a result of a consistently fair and pro-business regulatory environment, easy access to regulators, and favorable legislation which has been updated over time to reflect current market needs. Recent modifications to Vermont's legislation on captives—which was originally passed in 1981—include reductions in premium taxes, the establishment of a deputy commissioner post, and allowing firms to establish branch captives.⁵⁰

Most U.S. cross-border trade in insurance services occurs in the reinsurance segment, which accounted for 60 percent of U.S. insurance services exports and 90 percent of U.S. insurance services imports in 2006.⁵¹ As such, the significant presence of companies such as Munich Re (Germany), Swiss Re (Switzerland), and Everest Re (Bermuda) in U.S. and global reinsurance markets⁵² explains in large part the sizable share of total U.S. insurance imports held by these firms' home countries. Foreign-owned firms reportedly accounted for almost 85 percent of the reinsurance premiums collected from U.S. companies in 2006.⁵³

⁴⁷ III, "Glossary of Insurance Terms," <http://www.iii.org/media/glossary/alfa.C/> (accessed February 12, 2008).

⁴⁸ III, *The III Insurance Fact Book 2007*, 8 and *Insurance Fact Book 2005*, 6.

⁴⁹ Moody, "Vermont: The Gold Standard," August 5, 2005 and Mergent, *The North America Insurance Sectors*, June 2007, 11.

⁵⁰ Moody, "Vermont: The Gold Standard." August 5, 2005; Geisel, "25 Years After Law, A Top Domicile Rules," August 7, 2006; and Lenckus, "Onshore Domiciles Continue to See Growth in Captives," March 3, 2008.

⁵¹ USDOC, BEA, *Survey of Current Business* 87, no. 10, 132.

⁵² III, *The III Insurance Fact Book 2008*, 5, 40.

⁵³ *Ibid.*, 3.

Affiliate Transactions

Sales abroad of foreign insurance affiliates of U.S. firms have surpassed domestic purchases from U.S. affiliates of foreign firms in recent years, in contrast to their relative positions in 2001. Since 2003, foreign affiliate sales have increased rapidly, while purchases from U.S. affiliates have posted an overall decline. In 2005, foreign insurance affiliate sales increased by 8 percent to \$94.4 billion, following an average annual increase of 11 percent during the years 2001–04 (figure 4.4). By contrast, domestic purchases from U.S. insurance affiliates fell by 3 percent to \$77.2 billion in 2005, following an average annual decline of 2 percent posted from 2001 through 2004.⁵⁴

The rapid growth in foreign insurance affiliate sales during this period reflects a parallel trend in major U.S. insurance firms' direct investment position abroad,⁵⁵ which increased at an average annual rate of 18 percent during the years 2001–05. Particularly rapid growth occurred in the agencies, brokerages, and other insurance-related activities⁵⁶ segment and in the life insurance carriers segment, in which U.S. firms' investment abroad increased at average annual rates of 53 percent and 24 percent, respectively. Examples of U.S. firms' overseas investments during this period include MetLife's incorporation in India in April 2001⁵⁷ and U.S. brokerage firm Aon Corp.'s establishment of a joint venture in China in 2003, marking China's first issuance of a brokerage license to a foreign firm.⁵⁸

The direct investment position of foreign insurance firms in the U.S. market increased at an average annual rate of 6 percent during the years 2001–05, with investment by firms in the life insurance segment growing at a rate of 20 percent per year, and investment by firms in the agencies, brokerages, and other insurance-related activities segment and the non-life insurance carriers segment decreasing at annual rates of 10 percent and 2 percent, respectively. The concurrent increase in U.S. direct investment by foreign insurance firms, contrasting with a decrease in domestic purchases from U.S. insurance affiliates from 2001 through 2005, may be a product, in part, of the substantial operating losses sustained as a result of significant U.S. weather-related catastrophes in 2004 and 2005, such as Hurricanes Katrina and Rita.⁵⁹ As data on purchases from U.S. insurance affiliates reflect premiums paid by U.S. policy holders less claims paid to such policy holders (see box 4.2), the declining value of domestic purchases during those years is likely more closely related to the heavy losses recorded by non-life insurers during the period than to the overall U.S. operations of these insurance firms.

⁵⁴ USDOC, BEA, *Survey of Current Business* 87, no. 10, 143–6.

⁵⁵ USDOC, BEA, *Survey of Current Business* 87, no. 7, 22. BEA data on U.S. direct investment position abroad reflect U.S. parent firms' equity in their overseas affiliates, in addition to the net value of the loans which those parent firms have made to their foreign affiliates.

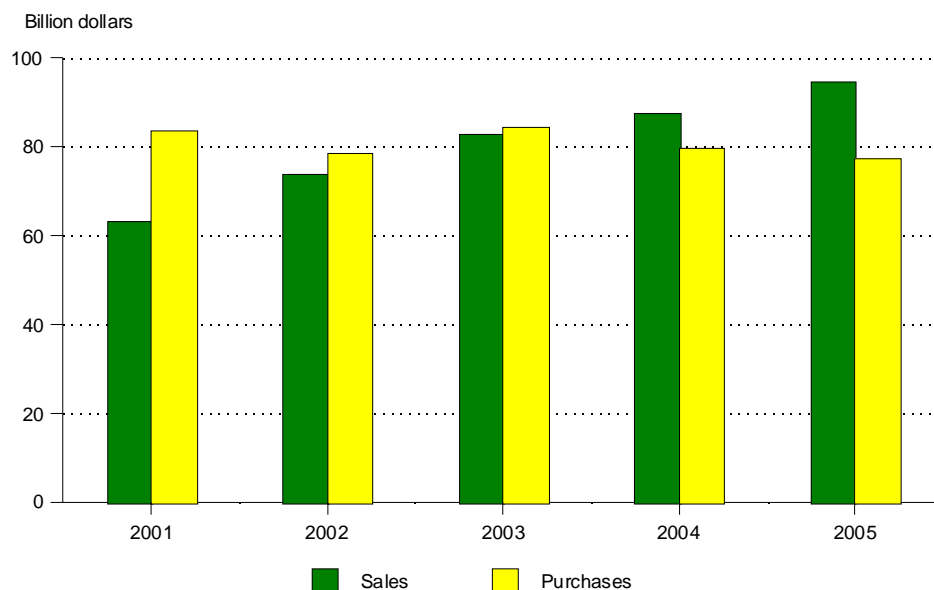
⁵⁶ Office of Management and Budget (OMB), *North American Industry Classification System*, 536. This industry segment includes firms that sell insurance policies or annuities as agents or brokers, as well as firms that supply third party administration, claims adjustment, and other services related to insurance and employee benefits.

⁵⁷ MetLife India Insurance Co., "MetLife Inaugurates New Office in Hubli," February 10, 2005.

⁵⁸ Aon Corp., "Aon Becomes First Foreign Insurance Broker Licensed in China," January 15, 2003.

⁵⁹ Standard & Poor's, *Insurance: Property-Casualty*, July 26, 2007, 2, 3.

FIGURE 4.4 Insurance services: Sales by foreign affiliates of U.S. firms and domestic purchases from U.S. affiliates of foreign firms, 2001–05



Sources: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 143–146; 86, no. 10, 71, 73; 85, no. 10, 73, 75; and 83, no. 10, 115, 117.

Although some data on affiliate transactions have been suppressed in order to maintain the confidentiality of individual firm data, available information indicates that insurance affiliates based in Europe and Japan, respectively, accounted for 27 percent and 26 percent of total foreign insurance affiliate sales, while affiliates of European firms accounted for 63 percent of domestic purchases from U.S. insurance affiliates. OECD data indicate that affiliates of foreign firms account for a substantial share of the life and non-life insurance markets in Europe and Japan. For example, such affiliates accounted for 57 percent of the UK life insurance market and 44 percent of the UK non-life insurance market in 2005. In that same year, affiliates accounted for 26 percent and 6 percent of Japan’s life and non-life insurance markets and 28 percent and 33 percent of the Italian life and non-life insurance markets. Within the OECD, foreign entities have a particularly strong presence in the Czech Republic insurance market, accounting for 93 percent of both life and non-life insurance segments in 2005.⁶⁰ U.S. insurance firms’ significant investment position in Europe and Japan suggests that U.S. companies may represent a substantial portion of the overall market share held by affiliates in these regions.

Liberalization of Trade Impediments

In recent years, increased trade liberalization in the insurance services sector has primarily occurred through bilateral trade agreements that include a developed-country partner, such as the United States.⁶¹ For example, U.S. free trade agreements implemented in years 2004–07—which include agreements with Bahrain, CAFTA-DR (the Dominican Republic,

⁶⁰ OECD, *Insurance Statistics Yearbook*, 2007, 51, 53.

⁶¹ Stephanou, “Financial Services Liberalization and Trade Agreements in Latin America and the Caribbean,” April 11, 2007, 2.

El Salvador, Guatemala, Honduras, and Nicaragua), Chile, and Morocco—each contain specific commitments on cross-border and affiliate trade in financial services, including insurance. Financial services provisions also are found in several North-South free trade agreements which do not include the United States as a signatory, such as those between the EU and Chile, and Japan and Mexico.⁶² At the same time, countries have continued to pursue multilateral liberalization within the context of the current round of WTO negotiations. Members have proposed several negotiating objectives specific to financial services inclusive of insurance, including the removal or reduction of restrictions on foreign ownership, legal form, and the establishment and acquisition of firms; the elimination or reduction of numerical quotas, monopolies, and other non-discriminatory limitations; the elimination or reduction of regulatory discrimination; and the improvement of regulatory transparency, particularly with regard to licensing and the development of new legislation.⁶³ As part of these negotiations, several WTO members have submitted offers that outline changes which they propose to make to their existing commitments on financial services. A U.S. government representative has suggested that these offers would liberalize some investment-related measures affecting financial services trade, but indicated that the United States would favor more liberalization by a larger group of WTO members, including developing-market countries.⁶⁴ To date, no new negotiating deadlines have been established.

Industry, government, and academic sources suggest that further liberalization of trade in insurance services would benefit foreign providers of such services and foster economic development by increasing profitability, encouraging direct investment, and enhancing financial security in the domestic market.⁶⁵ The American Insurance Association contends that granting national treatment to foreign providers of insurance services would benefit both foreign and domestic firms, as increased market competition would lead to the availability of a wider variety of products and a rise in market demand.⁶⁶ Further, the liberalization of trade in insurance services may advance economic development by increasing the availability and lowering the cost of insurance services, improving the efficiency and stability of the financial sector, and improving regulatory transparency.⁶⁷

⁶² United States Trade Representative (USTR) Web site, “Bilateral Trade Agreements,” undated, http://www.ustr.gov/Trade_Agreements/Bilateral/Section_Index.html (accessed January 8, 2008).

⁶³ WTO, “Special Session of the Council for Trade in Services: Report by the Chairman to the Trade Negotiations Committee,” November 28, 2005, 18.

⁶⁴ USTR, Testimony Before the House Financial Services Subcommittee on Domestic and International Monetary Policy, Trade and Technology, November 15, 2005, 5.

⁶⁵ See, for example, WTO, “Communication from Australia, Bahrain, Canada, et al.,” June 8, 2005; International Chamber of Commerce (ICC), “The Liberalization of Trade in Insurance Services,” policy statement, May 13, 2005; American Council of Life Insurers Web site, “Issues: International,” <http://www.acli.com/ACLI/Issues/52.htm> (accessed January 7, 2008); and Oetzel and Banerjee, “Market Liberalization and Insurance Firm Performance in Emerging Markets and Developing Countries,” undated, <http://auapps.american.edu/~oetzelj/Market%20Liberal%20and%20Insur%20in%20Emerging%20Markets.pdf>.

⁶⁶ American Insurance Association, “International,” undated, <http://www.aiadc.org/> (accessed January 7, 2008).

⁶⁷ WTO, “Communication from Australia, Bahrain, Canada, et al.,” June 8, 2005 and ICC, “The Liberalization of Trade in Insurance Services,” May 13, 2005.

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- . “Special Session of the Council for Trade in Services: Report by the Chairman to the Trade Negotiations Committee.” TN/S/23, November 28, 2005.

CHAPTER 5

Telecommunication Services

Summary

The global telecommunications market has expanded rapidly in recent years, with the United States accounting for the largest, albeit declining, share of global revenues. In most countries, mobile voice telecommunication services account for a large and growing share of total telecommunication services revenues. In developed countries, the mobile services market is entering the mature phase of the industry life-cycle, characterized by increasing competition, high mobile penetration rates, and slowing rates of growth in terms of both revenues and subscriber numbers. By contrast, the mobile markets of developing countries are growing very rapidly, albeit from a low base, driven by significant latent demand for basic voice telephone services, decreasing equipment costs, and innovative marketing techniques. In 2006, U.S. cross-border exports of telecommunication services grew four times as fast as the average annual growth rate from 2001 through 2005. By contrast, U.S. cross-border imports of such services stagnated during the period. Although cross-border trade is significant, historical data indicate that international trade in telecommunication services predominantly occurs through the foreign affiliates of multinational telecommunications companies.¹ Regulatory barriers to trade in telecommunication services largely affect the establishment of affiliates in foreign countries; common barriers include government-imposed limits on the number of allowed telecommunication services providers and foreign equity limits.

Competitive Conditions in the Global Telecommunication Services Market

Global telecommunication services revenues grew by approximately 14 percent in 2006 to \$2.6 trillion, slightly faster than the 11 percent compound annual growth rate of 2001 through 2005.² In 2006, the European region accounted for approximately 41 percent of the global telecommunication services market, followed by the United States (36 percent), Asia (29 percent), Latin America (8 percent), and the Middle East/Africa (4 percent). From 2007 to 2010, the global market for telecommunication services is forecast to grow at an annual rate of 10 percent to \$4.2 trillion.³ Measured in terms of revenues, the largest global telecommunication services firms include well-known companies like AT&T (U.S.), NTT (Japan), Verizon (U.S.), Deutsche Telekom (Germany), and Telefónica (Spain) (table 5.1).⁴

¹ Significant portions of official BEA data pertaining to affiliate transactions in telecommunication services were not disclosed for the period examined in the report.

² Telecommunications Industry Association (TIA), *2008 Telecommunications Market Review and Forecast*, 2008, 10, 229.

³ TIA, *2008 Telecommunications Market Review and Forecast*, 2008, 10, 229.

⁴ *Total Telecom Magazine*, "Global 100 Operators 2006," 5.

TABLE 5.1 Top 10 global telecommunication services companies, 2006–07

Company	Country	Revenue, 2006–07 (million \$)	Net profit, 2006–07 (million \$)	Net profit margin (%)
AT&T	United States	116,300	9,226	8
NTT	Japan	92,763	4,111	4
Verizon	United States	88,144	6,197	7
Deutsche Telekom	Germany	77,070	3,976	5
Telefónica	Spain	66,460	7,831	12
France Telecom	France	64,953	5,200	8
Vodafone	United Kingdom	57,337	17,570	31
Sprint Nextel	United States	41,028	1,327	3
Telecom Italia	Italy	39,291	3,773	10
British Telecom	United Kingdom	37,279	5,257	14

Source: Terrapin Publications, “Global 100” (October 2007).

The primary means of cross-border international trade in telecommunication services is the standard international telephone call. For decades, international telephone traffic, measured in minutes, grew at a predictable rate of approximately 12–15 percent per year. Starting in the late 1990s, however, liberalization efforts in many parts of the world, impelled in part by negotiations under the World Trade Organization’s (WTO) Basic Telecommunications Agreement, led to a surge in telecommunications traffic between countries. Because of rapidly falling per-minute prices—in turn a consequence of competition from new-entrant long distance companies—aggregate international telecommunications traffic growth exceeded 20 percent per year in the late 1990s, peaking at 25 percent in 2000. The initial stimulus provided by increased competition and falling prices moderated in 2001, when aggregate traffic grew by 13 percent. From 2003 through 2005, aggregate international traffic grew roughly in line with historic averages, but fell to an all-time low of 10 percent in 2006.⁵

The largest number of international minutes tend to originate in large, developed countries, such as the United States (30 percent of global outgoing traffic), the United Kingdom (8 percent), Germany (6 percent), France (5 percent), and Canada (5 percent).⁶ Important drivers of outgoing international call volumes include per capita income; high-fixed and/or mobile penetration rates; declining international call prices; historic, geographic, linguistic, and commercial ties between countries; and immigration patterns.⁷

For more than 100 years, traditional fixed-line voice telephone services constituted the core service offered by telecommunication companies worldwide. Starting in the 1990s, however, mobile voice telecommunication services emerged as a key driver of the global telecommunication services market. Although such services existed for decades, a commercially viable service emerged in the mid-1990s, leading to widespread adoption in

⁵ TeleGeography, *TeleGeography 2008*, 2.

⁶ *Ibid.*, 3.

⁷ *Ibid.*, 6–7.

many countries over the next 5 to 10 years. From 1995 through 2001, the number of mobile subscribers worldwide grew very rapidly, due to the convenience and popularity of such services.⁸ Although the rate of subscriber growth slowed from 2002 onwards, particularly in developed countries, mobile penetration rates⁹ have continued to climb in nearly all geographic markets. By the end of 2006, mobile penetration in most developed countries approached or exceeded 100 percent (table 5.2).¹⁰ The number of mobile subscribers worldwide totaled approximately 2.7 billion in 2006, up from 940 million in 2001.¹¹

Over the past decade, revenues derived from mobile services have grown in step with the large increase in mobile subscribers. Mobile revenues now account for a large share of total telecommunication services revenues in many markets worldwide, often driving the profitability of not only pure-play mobile operators (i.e., carriers that provide mobile services exclusively) but also integrated telecommunication services firms (i.e., carriers that provide a variety of telecommunication services). In 2001, for example, revenues derived from mobile services represented approximately 18 percent of total global telecommunication revenues, increasing to approximately 30 percent by the end of 2006. Overall, revenues originating in the mobile services market totaled approximately \$765 billion in 2006, up 23 percent over 2005 and largely in line with the compound annual growth rate of 23 percent recorded from 2001 through 2005.¹² In geographic terms, nearly 86 percent of such revenues were derived from Europe (35 percent), the Asia-Pacific region (33 percent), and North America (18 percent). The regions of Latin America and the Middle East-Africa accounted for 7 percent and 6 percent, respectively.¹³

The eight largest mobile services firms, each of which accounted for approximately 6–7 percent of global revenues in 2006, were Vodafone Group Plc (UK), NTT DoCoMo (Japan), Deutsche Telekom AG (Germany), Verizon Wireless Inc. (U.S.), AT&T Inc. (U.S.), China Mobile Limited (China), France Telecom (France), and Sprint Nextel (U.S.).¹⁴ At the global level, the mobile services industry is characterized by a low-level of industry concentration, with the top four companies together accounting for less than 29 percent of total global revenues in 2006. Such low concentration stems from the structure of the global mobile services market, which is highly fragmented along national lines. Most companies providing mobile services derive the majority of their revenues by providing domestic mobile services within their home market. Even large multinational firms typically offer domestic mobile services in their home markets and perhaps one or two additional countries or, in some cases, regions. For example, China Mobile operates exclusively within the Chinese market.

⁸ International Telecommunication Union, World Telecommunication Indicators Database 2006. In the European Union, for example, mobile cellular telephone subscribers increased from approximately 22 million in 1995 to 239 million in 2000, a compound annual growth rate of approximately 62 percent.

⁹ The term mobile penetration rate is defined as the number of mobile services subscribers per 100 people.

¹⁰ Mobile penetration rates exceeding 100 percent typically indicate that the average mobile services customer owns more than one mobile telephone.

¹¹ TIA, *2008 Telecommunications Market Review and Forecast*, 2008, 117, 233.

¹² *Ibid.*, 10, 229.

¹³ TIA, *2008 Telecommunications Market Review and Forecast*, 2008, 10, 247, 268, 287, 299, 319.

¹⁴ IBISWorld, *Global Wireless Telecommunications Carriers*, June 13, 2007, 8–9.

TABLE 5.2 Mobile telephone services: Mobile penetration rate and 1-year change,^a by region and country, 2007

Europe		Middle East–Africa		Latin America		Asia	
Country	Penetration / (1-yr change)	Country	Penetration / (1-yr change)	Country	Penetration / (1-yr change)	Country	Penetration / (1-yr change)
Estonia	130 (3%)	Israel	132 (0%)	Argentina	95 (20%)	Hong Kong	135 (0%)
Czech Republic	124 (4%)	Jordan	84 (14%)	Colombia	87 (28%)	Singapore	107 (0%)
Italy	124 (0%)	Saudi Arabia	83 (14%)	Chile	84 (9%)	Taiwan	101 (0%)
United Kingdom	117 (2%)	South Africa	80 (5%)	Venezuela	84 (15%)	Australia	98 (0%)
Spain	116 (2%)	Oman	79 (13%)	Panama	77 (10%)	New Zealand	97 (1%)
Ireland	115 (0%)	Algeria	71 (13%)	Ecuador	70 (11%)	South Korea	85 (4%)
Austria	113 (0%)	Botswana	63 (13%)	Guatemala	68 (21%)	Japan	83 (4%)
Bulgaria	109 (1%)	Morocco	61 (17%)	Dominican Rep.	62 (22%)	Malaysia	81 (1%)
Denmark	107 (0%)	Egypt	28 (17%)	El Salvador	62 (13%)	Thailand	77 (22%)
Sweden	107 (0%)	Iran	27 (42%)	Mexico	62 (17%)	Philippines	55 (17%)
Germany	103 (1%)	Nigeria	27 (13%)	Brazil	59 (11%)	China	41 (17%)
Hungary	102 (2%)	Kenya	22 (16%)	Paraguay	54 (6%)	Indonesia	36 (29%)
Poland	97 (2%)	Tanzania	20 (33%)	Peru	45 (45%)	Pakistan	29 (38%)
Belgium	94 (1%)	Zimbabwe	8 (33%)	Costa Rica	44 (33%)	India	20 (33%)
France	88 (4%)	Ethiopia	2 (100%)	Bolivia	32 (10%)		

Source: Telecommunications Industry Association, *TIA's 2008 Telecommunications Market Review and Forecast*.

Note: Mobile penetration rates exceeding 100 percent typically indicate that the average mobile services customer owns more than one mobile telephone. The mobile penetration rate in the United States is approximately 80 percent.

^aThe term mobile penetration rate is defined as the number of mobile services subscribers per 100 people.

Similarly, Deutsche Telekom derives the vast majority of revenues by offering domestic mobile services in Germany, its home market, and the United States, via its affiliate T-Mobile.¹⁵ Overall, most countries support only a few mobile services operators, typically three to five firms, due partly to regulatory barriers to entry in many countries. Access to capital can also pose a significant barrier, with capital requirements running in the hundreds of millions, or even billions, of dollars to purchase licenses, build a wireless telecommunications network, and establish commercial operations.

Across countries, demand for mobile services is sensitive to economic conditions. Consumer demand for mobile services, for instance, is influenced by household incomes, while business demand is correlated to cycles of economic activity.¹⁶ Demand for mobile services is also highly price elastic, with competition-induced price declines often increasing sales by enabling less affluent customers to afford mobile services. Innovative marketing programs can also boost demand for mobile services. In many markets, for example, price caps¹⁷ are utilized to boost demand, increase subscriber numbers, and reduce defection, or “churn.”¹⁸ For more than a decade, too, mobile carriers in many parts of the world have subsidized the cost of purchasing mobile telephone handsets, a technique that increases demand by reducing up-front subscriber costs. Such techniques, however, allow carriers to re-coup subsidy costs by requiring contract terms of 1–3 years, a move that also reduces churn. In some cases, the introduction of new technologies and popular value-added services, like short message services (SMS),¹⁹ increases consumer demand for mobile services. Currently, mobile services providers in many developed countries are upgrading their networks to offer the most current mobile technologies available, so-called third generation (3G) technologies. 3G technologies, which offer data transfer speeds that are significantly faster than second generation technologies, enable the delivery of high-bandwidth, multimedia applications like high-speed Internet access and mobile television.²⁰ Although 3G network upgrades require significant capital expenditure, often running into the hundreds of million or billions of dollars, many telecommunication carriers around the world believe that offering 3G services will not only attract new customers but also will convince existing customers to upgrade to more-expensive 3G services. In many developing countries, the mobile services market is driven by a strong latent demand for basic voice services, resulting primarily from decades of underinvestment in fixed-line infrastructure. In such countries, the strong demand for voice services has mostly benefitted mobile services providers because wireless networks can be deployed more rapidly, and with substantially less capital investment, than fixed-line networks.

¹⁵ Deutsche Telekom is also a major shareholder in Magyar Telecom (Hungary); Slovak Telekom (Slovakia); and T-Hrvatski Telekom (Croatia).

¹⁶ IBISWorld, *Global Wireless Telecommunications Carriers*, June 13, 2007.

¹⁷ Price cap programs offer consumer and business subscribers a predetermined number of minutes for a volume-discounted price.

¹⁸ IBISWorld, *Global Wireless Telecommunications Carriers*, June 13, 2007. Churn, a closely watched industry metric, is calculated as the percentage of subscribers terminating wireless service on a monthly basis.

¹⁹ Short message services are more commonly known as text messaging.

²⁰ The primary 3G technologies are Code Division Multiple Access 2000 (CDMA2000) and Wideband Code Division Multiple Access (WCDMA). The CDMA2000 technology is the 3G successor to the second generation (2G) CDMA standard largely used in the United States and a small number of additional countries. By contrast, the WCDMA technology is the 3G successor to the 2G Global System for Mobile communications standard used in most countries.

In most countries, mobile services firms generate the majority of revenue from the provision of basic voice telephone services. In Western Europe, for example, 75–80 percent of mobile voice revenues are derived from basic voice services.²¹ In developed countries, where subscribers often have established credit histories and higher levels of disposable income, mobile voice services tend to be charged using “postpaid” contracts established on 1–2 year terms.²² As competition increases, however, carriers are also using “prepaid” methods to penetrate the low-income and youth segments of the mobile telecommunication services market. Prepaid payment methods typically require customers to purchase telephone cards in standardized monetary denominations. In the United States, for example, subscribers to T-Mobile’s prepaid service can purchase \$10, \$25, \$50, and \$100 cards.

In developed countries, the rapid growth in mobile subscribers and revenues that began in the mid-1990s has moderated significantly over the past few years, as the industry enters the mature stage of its life cycle.²³ Such maturity is reflected in high mobile penetration rates, particularly in developed countries (table 5.2). In such countries, mobile services providers now face highly competitive, saturated markets with flat or declining growth rates in subscriber additions and revenues, resulting in intense competition for the few remaining subscribers that do not own a mobile telephone.²⁴ In some markets, such as the United States, competition for subscribers is increasingly evolving into a zero-sum game, as carriers are increasingly able to add subscribers only by taking them from competitors.²⁵

Competition in the mobile services market is also heightened, mostly in North America and Europe, by the entry of mobile virtual network operators (MVNOs). These carriers, which essentially resell the mobile services of mainstream carriers, typically offer cut-rate voice services and/or market their services to specific market segments/subsegments such as lifestyle or ethnic groups. Although there are a number of MVNOs operating in the United States, most MVNO activity is confined to Europe. At the end of 2007, for example, there were approximately 355 MVNOs operating in Europe, with the bulk of such firms operating in Northern Europe. By contrast, the market entry of MVNOs is at an early stage in Southern and Eastern Europe.²⁶ Given the large number of MVNOs that started operations over the past several years, many industry analysts predict that segment consolidation is inevitable. In the United States, for example, a number of well-known MVNOs, including Disney Mobile, Mobile ESPN, and Amp’d, either filed for bankruptcy or ceased operations. In addition, Helio, a high-end joint venture between Earthlink Inc. (U.S.) and SK Telecom Co. (Korea), experienced heavy losses in 2007. In general, industry analysts attribute such problems in the United States to intense competition, high levels of capital consumption, flawed product development, excessively narrow target market selection, and even late-paying customers. By contrast, U.S. MVNOs that focused on inexpensive, mass-market

²¹ Patterson, “Mature Mobile Markets,” November 2007, 9 and Suo-Saunders, “Can Mobile Operators In Western Europe Halt The Decline in Voice ARPU?,” August 23, 2007.

²² Post-paid billing methods charge customers for mobile services after such services have been delivered.

²³ IBISWorld, *Global Wireless Telecommunications Carriers*, June 13, 2007.

²⁴ Cuneo, “Wireless Market Faces A Saturation Situation,” November 5, 2007; Brydon, “Wireless Industry Players Must Take Action,” June 13, 2007; Thomas, “Vodafone Sees Europe Margins Fall in 2008,” May 29, 2007; Standard & Poor’s, *Telecommunications: Wireless (Europe)*, April 2007, 9; and Standard & Poor’s, *Telecommunications: Wireless*, October 4, 2007, 1.

²⁵ Standard & Poor’s, *Telecommunications: Wireless*, October 4, 2007, 14.

²⁶ *Cellular-News*, “MVNOs Effectively Addressing the Needs of Different Social Groups,” November 12, 2007.

voice services, namely Virgin Mobile and TracFone Wireless, have been relatively effective at expanding their businesses and gaining market share.²⁷

In most mobile markets, service providers compete on the basis of price largely because the voice quality of such services is relatively similar from carrier to carrier.²⁸ Carriers often aggressively discount the price of voice services in an attempt to attract new customers and/or retain current customers and, in some cases, such competition escalates into a price war. In Australia and Hong Kong, for example, the entry of a company named “3” into each market resulted in aggressive price discounting by all carriers. Indeed, mobile markets in most Asian countries, with the possible exception of Singapore, are currently subject to aggressive price discounting.²⁹ While price discounting tactics may allow mobile firms to add subscribers and increase market share, such tactics also tend to put downward pressure on a key industry metric, Average Revenue Per User (ARPU). In many developed countries, ARPU statistics have begun to flatten out or decline, due not only to price discounting but also to the addition of lower-income and/or young subscribers. Regulatory efforts to reduce mobile termination rates, particularly in Europe, and slowing subscriber growth are also important factors behind declining ARPU in many developed countries.³⁰

In an effort to offset the negative impact of flat/declining mobile voice revenues on ARPU, carriers in developed countries are increasingly focused on the delivery of data and/or 3G services.³¹ In addition to SMS, the leading generator of non-voice revenues, mobile carriers are increasingly focusing on music and game downloads, Internet access services, mobile television, and mobile telephone-based value-added services, including mobile banking, shopping, and social networking. In developed countries, the increasing emphasis on data services is also driving mobile carriers to invest millions of dollars to upgrade mobile network facilities to 3G technologies that are better able to deliver broadband data services. The emphasis on data services has been a successful strategy in some markets. In the United States, for example, ARPU increased by approximately 2 percent in 2007, largely because the growth in data revenues exceeded the decline in voice revenues. By contrast, in many European countries, growing data revenues did not offset flat or declining voice revenues.³² Asian wireless carriers, particularly those in Japan and Korea, were early pioneers in the development of 3G networks and services, efforts which now make them top earners of wireless data revenues. In South Korea and Japan, for example, data services accounted for 20–35 percent of carriers’ total revenues in 2006.³³

²⁷ Fitzgerald, “Amp’d Mobile Puts Assets Up For Sale,” July 23, 2007; Rosmarin, “Winnie The Pooh Won’t Be Calling,” September 27, 2007; Rehak, “Is The US MVNO Market Over-Amp’d?,” June 21, 2007; and Cheng, “Helio’s Struggles Show Risks Of Serving Niche Markets,” September 24, 2007.

²⁸ IBISWorld, *Global Wireless Telecommunications Carriers*, June 13, 2007.

²⁹ Patterson, “Mature Mobile Markets,” November 2007.

³⁰ Suo-Saunders, “Can Mobile Operators In Western Europe Halt The Decline in Voice ARPU?,” August 23, 2007; Newman, “Mobile Operator Strategies,” November 2007; Parkin-White and Nierinck, “Mobile Market Perspectives 2008,” February 2008; and Standard & Poor’s, *Telecommunications: Wireless-Europe*, April 2007, 9.

³¹ Parkin-White and Nierinck, *Mobile Market Perspectives 2008*, February 2008 and Banerjee, Partridge, and Maynard, “The Next Trillion Dollars From The Anywhere Network,” July 2007, 7.

³² Newman, “Mobile Operator Strategies,” November 2007. In the United States, ARPU increased from \$52 in 2006 to \$53 in 2007.

³³ Standard & Poor’s, *Telecommunications: Wireless-Asia*, April 2007, 17.

Mobile operators in developed countries are also responding to increased competition by cutting costs. In the United States and Europe, carriers like Sprint Nextel and Vodafone are implementing staff reductions.³⁴ Carriers are also attempting to reduce operating expenses by streamlining network operations and increasing network efficiency. Increasingly, such activities involve the migration of telecommunications traffic from traditional circuit-based networks to lower-cost Internet Protocol networks. Carriers can also significantly reduce operating expenses by minimizing customer churn. Such efforts, which include expanding network coverage and improving customer service, tend to improve customer retention, thereby reducing the high costs associated with signing up new subscribers.³⁵ Recently merged companies are also attempting to realize cost efficiencies by streamlining and combining merged operations. In 2007, for example, the recently merged AT&T/BellSouth entity achieved cost savings of approximately \$3 billion by reducing capital expenditures, consolidating corporate staff, merging network facilities, and re-branding under a single AT&T logo.³⁶

In 2005 and 2006, intense competition in the telecommunications industry drove a wave of mergers and acquisitions (M&A), mostly in the developed countries of North America and Europe. By 2007, large-scale M&A activities had largely subsided in most developed countries, although intense competition continued to have an influence, driving carriers to search for higher profits in the developing markets of Africa, Asia, and South America. In 2007, for example, UK-based Vodafone paid \$11.1 billion for a 67 percent stake in Indian operator Hutchinson Essar. Vodafone's purchase of Hutchinson is part of its strategy to focus on high-growth emerging markets. Since 2004, Vodafone has also invested in wireless businesses in Malaysia, South Africa, Turkey, the Czech Republic, and China. Going forward, Vodafone has announced intentions to make further investments in Africa, Asia, and Eastern Europe.³⁷ Similarly, in 2006, AT&T secured a license, through a majority-owned affiliate, to serve global and India-headquartered companies in India.³⁸ AT&T also announced plans to invest more than \$750 million to expand its global Internet Protocol network and deploy a broad array of access technologies, with a focus on high-growth economies in the Asia Pacific, Middle Eastern, and Latin American regions. In particular, AT&T plans to expand its enterprise network to more than 2,000 locations in 155 countries, including new locations in China, India, Kuwait, Malaysia, Morocco, Saudi Arabia, Pakistan, and Vietnam.³⁹

Until recently, the mobile services markets of developing countries were characterized by low levels of mobile penetration (table 5.2). In the past several years, however, subscriber additions have grown very rapidly. In 2007, for example, approximately 90 percent of new mobile services subscribers worldwide lived in developing countries. As discussed above, strong demand for mobile services in developing countries is largely attributable to latent demand for basic telephone services stemming from decades of underinvestment in fixed-line infrastructure. High levels of subscriber growth are also driven by falling costs for

³⁴ Flowers, "Sprint To Cut 4,000 Jobs, Disclose Customer Losses," January 18, 2008 and Meyer, "Unions Pour Scorn On Vodafone Layoffs," May 30, 2006.

³⁵ Standard & Poor's, *Telecommunications: Wireless*, October 2007, 14.

³⁶ Standard & Poor's, *Telecommunications: Wireless*, April 2007, 14.

³⁷ Laurent, "Vodafone Jumps On Emerging Markets," November 13, 2007; Thomas, "Sarin Keen On Further African, Asian Assets," January 31, 2008; Ram, "Vodafone Rings True," January 31, 2008; Standard & Poor's, *Telecommunications: Wireless*, April 2007, 2.

³⁸ *Light Reading*, "AT&T Granted India License," October 10, 2006.

³⁹ Lennighan, "AT&T To Invest \$750m Worldwide in 2007," March 13, 2007 and Searcey, "AT&T Again Is Calling Overseas," September 28, 2007.

mobile telephone handsets and network infrastructure. Such falling costs result not only from the increasing migration of manufacturing facilities to low-cost countries, particularly in Asia, but also to deliberate efforts by telecommunications equipment vendors to develop low-cost phones for use in developing markets.⁴⁰ The growing influence of Chinese telecommunications equipment manufacturers, particularly Huawei Technologies (Huawei) and ZTE Corp (ZTE), has also reduced the cost of deploying network infrastructure in developing countries. Over the past several years, Huawei and ZTE have won dozens of contracts in developing countries, often by undercutting leading global equipment vendors by 30–50 percent in tender negotiations.⁴¹

Deregulation activities in the telecommunication services markets are also spurring increased competition and surging subscriber growth in developing countries. Such deregulation is particularly notable in the Middle East, where several countries awarded new mobile licenses in 2007, while several others plan to issue licenses in 2008. In June 2007, for example, Saudi Arabia awarded the country's third mobile license to a consortium headed by Kuwait-based Zain.⁴² Similarly, in November 2007, Saudi Telecom submitted the winning bid for a 26 percent stake of Kuwait's third mobile services operator.⁴³ In addition, UK-based Vodafone placed the highest bid for a second mobile services license in Qatar in December 2007.⁴⁴

As in developed countries, the primary mobile service in developing countries is simply basic voice telephone service. Unlike in developed countries, however, the vast majority of subscribers in developing countries are billed via prepaid methods. Prepaid methods were introduced in developing countries more than a decade ago to remove the need for credit checks, a major barrier to acquiring cell phone service for people that lack identity papers.⁴⁵ Due to the low income levels prevailing in many developing countries, prepaid telephone cards are typically configured in small monetary denominations, with minimum face-values in many cases of less than one dollar. Mobile services companies have also developed other innovative pricing and marketing strategies to reach low-income customers, many of whom earn less than \$5 per day. For example, Luxembourg-based Millicom, which targets markets in Africa, Asia, and Latin America, developed a product called e-PIN, which allows users to add minutes to their mobile phones without having to purchase a prepaid card. The lower expenses associated with e-PIN allowed Millicom to reduce the minimum amount of air time available for purchase from approximately \$1.30 to 30 cents, a move that spurred subscribers to buy more minutes. Millicom also started using per-second billing methods, a technique that charges only for the exact duration of a telephone call.⁴⁶ After introducing e-PIN and per-second billing in Paraguay in 2005, Millicom saw voice traffic increased by 47 percent, subscribers by 84 percent, and revenue by 91 percent.⁴⁷ Such innovative pricing and marketing techniques, particularly prepaid and per-second billing methods, are successfully utilized by innovative developing market carriers around the world. Using similar techniques in the Caribbean region, for example, Digicel expanded from its home country of Jamaica to 23 countries in the region, witnessing subscriber numbers grow from a start-up position

⁴⁰ *Associated Press*, "Nokia Shows Phones For Emerging Market," January 22, 2008.

⁴¹ Industry representative, interview by USITC staff, Washington, DC, April 11, 2008.

⁴² Wood, "Emerging Markets Hit The Headlines," January 1, 2008.

⁴³ Lennighan, "Saudi Telecom To Pay €600m For Kuwait Mobile Stake," November 27, 2007.

⁴⁴ Lohade and Karrar, "Vodafone Wins Qatar's Second Mobile License," December 10, 2007.

⁴⁵ Childress, "Millicom Grows Rapidly By Selling To Emerging World," August 28, 2007.

⁴⁶ The per-second billing method is generally less expensive than standard per-minute methods because telephone calls of less than a minute are not rounded up.

⁴⁷ Childress, "Millicom Grows Rapidly By Selling To Emerging World," August 28, 2007.

in 2001 to more than 6 million by the end of 2007.⁴⁸ Similarly, in Kenya, Safaricom used prepaid and per-second billing techniques to establish market share of approximately 75 percent.⁴⁹

Trade Trends

Cross-Border Trade

In 2006, U.S. exports of telecommunication services (box 5.1) totaled \$6.3 billion, while imports totaled \$4.6 billion, yielding a trade surplus of approximately \$1.7 billion (figure 5.1). Exports increased by approximately 20 percent in 2006, four times as fast as the average annual growth rate of 5 percent recorded from 2001 through 2005.⁵⁰ The surge in growth of U.S. telecommunications exports is at least partly attributable to increased call volumes from developing countries, due in large part to the increasing availability of mobile telephones. In 2006, receipts for telecommunication services from Latin America and the Middle East grew by 55 percent and 21 percent, respectively. Increased receipts for satellite services also contributed to the surge in U.S. telecommunications exports in 2006.⁵¹

By contrast, imports of telecommunication services increased by less than 1 percent in 2006, compared to an average annual decrease of 1 percent from 2001 through 2005.⁵² The stagnation of telecommunication services imports over the last few years is largely attributable to U.S. carriers' efforts to increase the proportion of international traffic that is routed over wholly owned international networks. Although subject to termination fees in destination countries, traffic routed over such networks travels outside the international accounting rate system, eliminating the need for U.S. carriers to make settlement payments to foreign carriers.

⁴⁸ Marek, "Carrier Adapts To Island Demographics," February 1, 2005 and Digicel company website, "About Digicel," <http://www.digicelgroup.com>.

⁴⁹ Jopson, "How Safaricom Gives Voice To Africa," October 9, 2007.

⁵⁰ U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), *Survey of Current Business* 87, no. 10, 114.

⁵¹ *Ibid.*, 105 and TeleGeography, *TeleGeography 2007*, November 2006.

⁵² USDOC, BEA, *Survey of Current Business* 87, no. 10, 115.

BOX 5.1 An explanation of BEA data on cross-border trade and affiliate transactions in telecommunication services

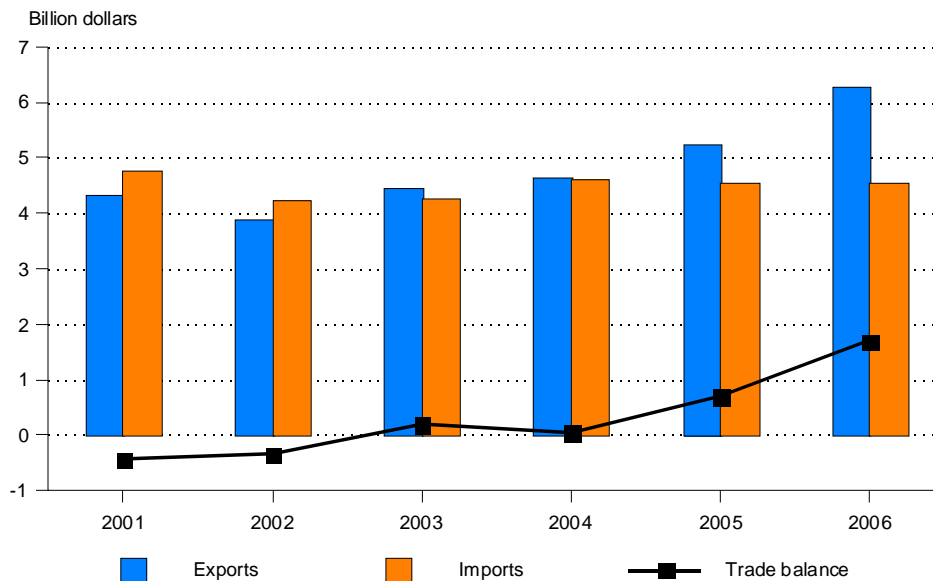
Telecommunication services trade encompasses basic and value-added services, both of which can be provided across national borders and through foreign-based affiliates. Cross-border trade in telecommunication services involves placing a standard international telephone call that terminates in another country. Cross-border trade data are principally derived from an international system under which telecommunication carriers negotiate accounting rates, or bilateral fees, for carrying and terminating international traffic, which is measured in minutes. Each carrier's portion of the accounting rate, known as the settlement rate, is typically equal to one-half of the accounting rate. Since international calls are typically billed in the originating country, carriers whose outbound calling minutes exceed inbound calling minutes make a net settlement payment to their counterparts abroad. Net settlement payments are recorded as imports in the U.S. balance of payments, whereas net settlement receipts are recorded as exports. Over the past decade, regulatory liberalization of telecommunication markets in many countries, and subsequent price-based competition for international telephone calls, has impelled many international carriers to route international minutes over wholly owned network infrastructure, a process that reduces the number of minutes billed under the traditional accounting rate system.

Cross-border trade data also include receipts and payments between U.S. and foreign telecommunication services companies for channel leasing; telex, telegram, and other jointly provided basic services; value-added services, such as electronic mail, video conferencing, Internet backbone services, router services, and broadband access services. In addition, cross-border trade data include telecommunications support services, including equipment repair and maintenance, capacity leasing, ground station services, and satellite launching services.

Data pertaining to affiliate transactions primarily reflect payment of network access fees by fixed-line and wireless telecommunication services providers, and capacity leasing fees incurred by telecommunication services re-sellers and other telecommunication services providers.

Source: USDOC, BEA, *Survey of Current Business* 87, no. 10, 99.

FIGURE 5.1 Telecommunication services: U.S. cross-border trade, 2001–06

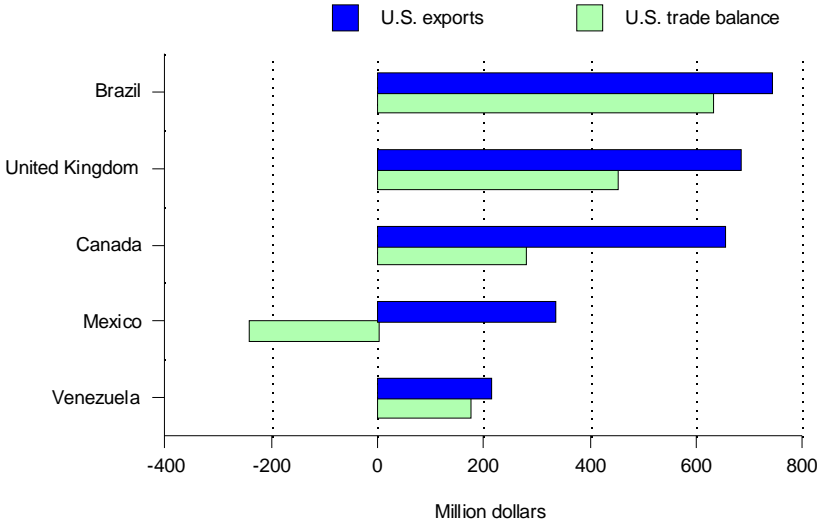


Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

A growing portion of international traffic is also delivered using Voice-Over Internet Protocol (VoIP) technologies. Although a large portion of international VoIP traffic is terminated on fixed or wireless networks in destination countries, and is therefore subject to termination fees, such calls are also routed outside the international accounting rate system, reducing the fees that U.S. carriers pay to foreign carriers.⁵³ U.S. carriers are also paying lower fees to their counterparts abroad because many foreign carriers are reducing mobile termination fees at the behest of national regulators.⁵⁴

In 2006, the leading export markets for U.S. telecommunication services were Brazil (\$740 million), the United Kingdom (\$683 million), Canada (\$651 million), Mexico (\$332 million), and Venezuela (\$211 million) (figure 5.2). The top sources of U.S. telecommunication services imports include Mexico (\$573 million), Canada (\$372 million), Philippines (\$274 million), the United Kingdom (\$232 million), and India (\$143 million) (figure 5.3).⁵⁵

FIGURE 5.2 Telecommunication services: U.S. cross-border exports and trade balance, by major trading partners, 2006



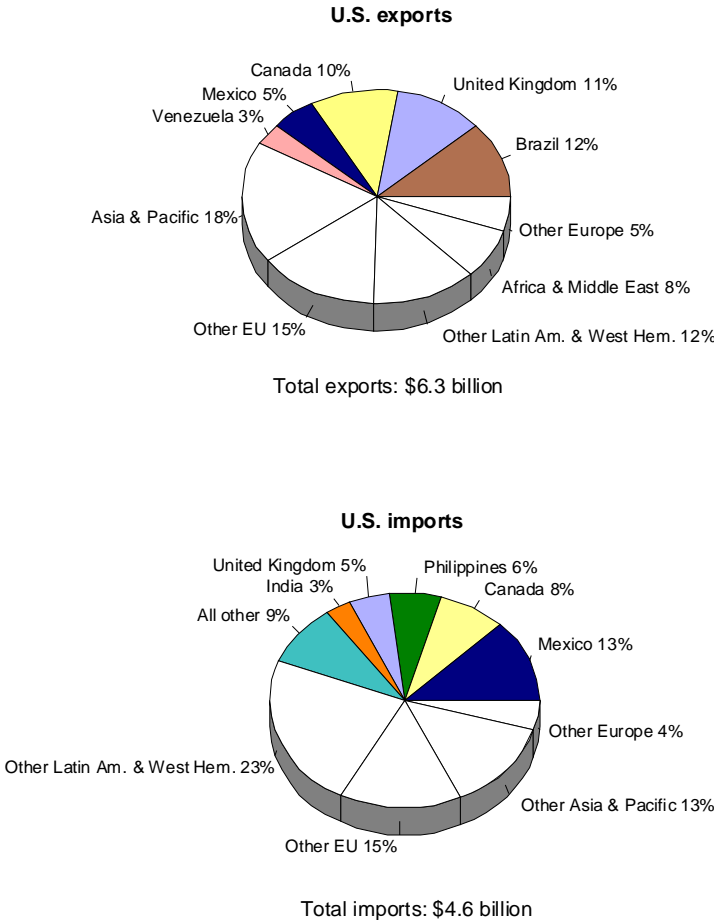
Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 129.

⁵³ A small share of VoIP traffic is routed between computers. Since such calls are not delivered to a fixed-line or mobile handset, they do not attract a fee to “terminate” the telephone call.

⁵⁴ TeleGeography, *TeleGeography 2007*, November 2006, 14.

⁵⁵ USDOC, BEA, *Survey of Current Business* 87, no. 10, 129.

FIGURE 5.3 Top 5 U.S. telecommunication services export markets and import sources, share of world, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 129.

Note: Total may not add due to rounding.

Affiliate Transactions

International trade in telecommunication services now occurs predominantly through the affiliates of multinational companies.⁵⁶ For example, in 2005, sales by foreign telecommunication affiliates of U.S. firms totaled approximately \$21.5 billion,⁵⁷ more than four times the U.S. cross-border exports of telecommunication services in the same year. Overall in 2005, sales by foreign affiliates decreased by 13 percent below 2004, but had increased slightly over the \$20.3 billion in foreign affiliate sales in 2001.⁵⁸ The stagnation of foreign affiliate sales reflects the general slowdown in the global telecommunications industry following the industry's boom-to-bust cycle from 1997 through 2001. Such stagnation is reflected not only in flat or declining revenues from 2000 through 2003, but also in the retrenchment of U.S. firms to their home-country market following losses abroad.⁵⁹ Bell South's operations in Latin America, for example, suffered during the region's economic downturn in 2002, prompting it to sell its wireless assets in 10 Latin American countries to Spain's Telefónica in 2004 for approximately \$6 billion.⁶⁰ More recently, however, multinational telecommunication services firms have again sought to invest in operations outside their respective home markets, largely in response to the maturation of developed country markets.⁶¹ For example, competitive and regulatory pressures in Austria were behind Telekom Austria's purchase of 70 percent of MDC in Belarus for approximately \$1 billion.⁶² Such investment, which is largely confined to the high-growth mobile services segment, typically occurs through acquisition of an existing mobile provider or by acquiring a mobile services license. Vodafone, for example, chose to enter the Indian market by purchasing Indian firm Hutchinson Essar, while AT&T and Verizon each filed applications for mobile licenses with India's Department of Telecommunications.⁶³

Liberalization of Trade Impediments

In many countries, new-entrant telecommunication services firms face regulatory barriers, as national governments actively control the number of companies operating in each market via the issuance of mobile services licenses. The limited availability of, and government control over, the electromagnetic spectrum also represents an important barrier to entry. In some cases, companies seeking to establish operations outside their home country face regulatory barriers aimed specifically at foreign companies. Common barriers include foreign ownership limitations⁶⁴ and restrictions limiting foreign firms to the provision of value-added services, potentially reducing the revenue opportunities of such firms.

⁵⁶ Foreign affiliates are U.S. parent firms' majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms' majority-owned non-bank affiliates in the U.S. market.

⁵⁷ USDOC, BEA, *Survey of Current Business* 87, no. 10, 143–144. Sales by UK affiliates amounted to \$5.8 billion or 27 percent of total sales by foreign telecommunications affiliates in 2005. The sales by UK affiliates ranked the highest of only three countries for which data on foreign affiliate sales were disclosed.

⁵⁸ Sales data for total foreign affiliates were suppressed from 2002 through 2003 to avoid disclosing the data of individual firms. Similarly, data pertaining to domestic purchases from total U.S. affiliates were suppressed from 2003 through 2005.

⁵⁹ Searcey, "AT&T Again Is Calling Overseas," September 28, 2007.

⁶⁰ *TechWeb*, "Spain's Telefonica Buys BellSouth's Latin American Cell Phone Units," March 8, 2004.

⁶¹ Fildes, "Vodafone Digs In Over Challenge For Vodacom," September 4, 2007 and Searcey, "AT&T Again Is Calling Overseas," September 28, 2007.

⁶² Ram, "Telekom Austria Bets On 'Outpost of Tyranny,'" October 3, 2007.

⁶³ Weiland, "AT&T, Verizon Circle On India's Mobile Market," October 2, 2007.

⁶⁴ For example, in some countries, foreign firms are allowed to purchase and/or control between 30 percent and 49 percent of the equity shares in a domestic company. Similarly, foreign firms are often barred from acquiring shares in the incumbent telecommunications operator.

Overall, there has been little progress in the reduction or removal of barriers to trade in telecommunication services via multilateral negotiations in the WTO. In December 2007, the United States, acting in the capacity of request coordinator,⁶⁵ submitted a collective request for telecommunication services to the members of the WTO's Council for Trade in Services. The request, which was sent to 22 member countries, presented a list of objectives designed to guide future commitments in the telecommunication services sector. Broadly, the request asked for, inter alia, reduction or elimination of national treatment and market access limitations for all modes of supply of services (see box 2.2 in chapter 2), acceptance of the pro-competitive telecommunications Reference Paper,⁶⁶ removal of all Most Favored Nation exemptions, and an increase in telecommunications sectoral coverage.⁶⁷ Overall, most recipient members indicated that they did not intend to meet key elements of the request or reduce/eliminate existing restrictions on market access. For example, 15 of 22 recipients did not provide comprehensive sectoral coverage⁶⁸ in their offers and did not indicate future intentions to do so. Similarly, for mode 3, 18 of 22 recipients maintained market access limitations and did not indicate a willingness to reduce/eliminate limitations identified in the collective request, or even establish commitments that reflect the current level of in-country liberalization.⁶⁹

By contrast, the United States has experienced a fair degree of success in reducing or removing barriers to trade in telecommunication services in the context of bilateral free trade agreements (FTAs) and trade promotion agreements (TPAs) negotiated with partner countries including Singapore, Chile, Morocco, Bahrain, Oman, Panama, Peru, Colombia, and Korea. Overall, such FTA/TPA agreements contain many "WTO-plus" provisions, including, inter alia, commitments to ensure a high degree of openness, transparency, and non-discrimination for both basic and value-added telecommunication services. Overall, service providers in each country, including suppliers possessing significant market power, are required to cooperate with rival firms by, inter alia, allowing such firms to establish network connections, re-sell services, lease specific elements of the public telecommunications network, and allow joint use of telecommunications facilities.

⁶⁵ In total, 10 members cosponsored the telecommunication services request: Australia, Canada, the European Commission, Hong Kong China, Japan, Korea, Norway, Singapore, the United States, and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu.

⁶⁶ The Reference Paper, a component of the WTO agreement on basic telecommunication services, lists a set of best-practice regulatory principles to which countries were encouraged to subscribe, including competitive safeguards, interconnection requirements, transparent licensing procedures, and independent regulators.

⁶⁷ WTO, Council for Trade in Services (CTS), "Communication from the United States," December 4, 2007.

⁶⁸ The WTO agreement on basic telecommunication services covers a variety of telecommunications sectors including, inter alia, voice telephone services, packet-switched data transmission services, circuit-switched data transmission services, telex services, telegraph services, facsimile services, private leased circuit services, mobile services, paging services, and satellite services.

⁶⁹ In many countries, the telecommunication services market has been substantially liberalized in recent years; such liberalization is not reflected in commitments established under the WTO agreement on basic telecommunication services.

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CHAPTER 6

Logistic Services

Summary

Both U.S. and foreign logistics firms experienced significant revenue growth during the period 2001–06, as demand for logistic services increased.¹ Growth in the demand for logistic services was the result of increasing globalization of manufacturing and manufacturers' growing interest in outsourcing supply chain functions.² In 2006, although U.S. providers comprised 7 of the top 10 global third-party logistics (3PL) firms by revenue, they faced strong competition from European firms such as DHL Logistics and Kuehne & Nagel.³ The latter gained an increasing share of worldwide revenues through mergers and acquisitions (M&A). Overall, international M&A activity has altered the competitive landscape for the logistics industry by creating larger, more diversified firms with extensive geographic networks. In addition, although cross-border transactions remain the predominant form of U.S. trade in logistic services, rising by nearly 30 percent in 2006, recent mergers between U.S. and non-U.S. firms have made affiliate transactions an increasing part of logistic services trade. Nonetheless, regulatory barriers with respect to logistic services still exist, with the most prevalent being those related to customs procedures, establishment abroad, and the ownership and operation of transportation equipment.

Competitive Conditions in the Global Logistic Services Market

In 2006, global revenues for the logistics industry reached \$417 billion, an increase of more than 5 percent over the previous year. Global revenues for logistic services grew at an average annual rate of slightly less than 5 percent during the period 2001–05.⁴ Europe

¹ The following discussion pertains largely to third-party logistics (3PL) firms. Third-party logistics firms provide a range of services, and include asset and non-asset based firms. Asset-based firms use their own equipment to provide freight transportation by air, land, or sea; non-asset based firms arrange freight transportation for their clients by contracting with asset-based 3PLs or with other commercial transportation firms. 3PLs may supply individual logistic services to their clients, such as warehousing and distribution, or they may engage in the end-to-end management of their client's manufacturing supply chain. In addition to 3PLs, the logistics industry includes second-party logistics firms, which provide proprietary transportation equipment and distribution facilities for their client's own use, and fourth-party logistics firms, which manage the flow of goods for their clients but do so by using other companies' information technology (IT) and transportation networks. Moreover, some firms may provide their own logistic services on an "in-house" basis, while outsourcing discrete functions, such as distribution and warehousing, to third-party firms.

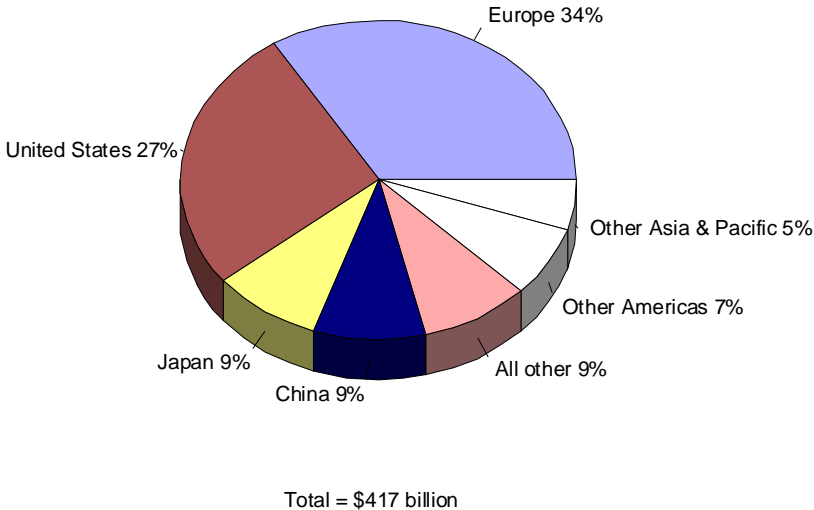
² A "supply chain" is defined as a network of interrelated activities including the production, transport, and storage of goods. Logistic services firms provide a range of supply chain services to their clients, including supply chain design, raw material procurement, warehousing, freight forwarding, customs brokerage, and the transportation of intermediate and final products by air, ocean, rail, or truck.

³ Armstrong and Associates, April 2007, 8 and ElAmin, "Acquisition Marks Further Consolidation in Logistics Industry," October 1, 2006.

⁴ Industry official, e-mail message to Commission staff, February 7, 2008.

accounted for the largest share of worldwide logistics revenues in 2006 at nearly 34 percent, followed by the United States (27 percent), and China and Japan (9 percent each) (figure 6.1).⁵ In 2006, although the United States ranked second in global revenues for logistic services, U.S. firms accounted for nearly 74 percent of the revenues of the top 10 3PLs, up from 17 percent in 2001.⁶ The increase in the U.S. share of the top 10 firms' global revenues was due primarily to growth in the logistics arms of large U.S. companies such as UPS, C.H. Robinson, and Expeditors International. Other firms that ranked among the largest 10 providers of logistic services in 2006 were DHL Logistics (Germany), BAX Global (Germany), UTi (U.S.), EGL Inc. (U.S.), Penske Logistics (U.S.), Schneider Logistics (U.S.), and Kuehne & Nagel (Switzerland) (table 6.1).

FIGURE 6.1 Logistic services: Global estimates of revenues by country or region, 2006



Source: Armstrong & Associates, *Global Logistics Estimates—2007*, 2.

⁵ Based on data from Armstrong and Associates, April 2007, 6.
⁶ Ibid., 6 and Richardson, "A Shift in Freight Forwarding," February 1, 2003.

TABLE 6.1 Logistic services: Top 10 providers by gross revenue, 2006

Company	Country	Revenue (million \$)
UPS SCS/Fritz/Menlo	United States	7,400
C.H. Robinson	United States	6,556
DHL Logistics	Germany	4,870
Expeditors Int'l	United States	4,626
BAX Global	Germany	3,623
UTi	United States	3,530
EGL Inc.	United States	3,218
Penske Logistics	United States	3,050
Schneider Logistics	United States	2,628
Kuehne & Nagel	Switzerland	2,478

Source: Armstrong & Associates, *U.S. and Global Third-Party Logistics Financial and Acquisition Results for 2006*, April 2007, 13.

In recent years, many logistics firms have undertaken M&As to extend their global reach and expand their service offerings.⁷ Some of these transactions have been domestic, such as UPS's acquisition of U.S. freight forwarding firms Fritz Companies, Inc. and Menlo Worldwide in 2001 and 2004, respectively (table 6.2).⁸ However, much of the M&A activity has been international, permitting firms to merge their global transport and supply chain networks and, in some cases, circumvent barriers to establishment abroad. Aside from UPS, the largest international M&As that took place during the subject period include purchases by Germany's state-owned Deutsche Post of express services provider DHL (U.S.) in 2002 and Exel Logistics (UK) in 2005; Kuehne & Nagel's (Switzerland) purchases of U.S. firms USCO in 2001 and ACR Logistics in 2005; Apollo Management's (U.S.) acquisition of TNT Logistics (the Netherlands) in 2006; and Deutsche Bahn's (Germany) acquisition of U.S. logistics provider BAX Global, also in 2006.⁹ Of these purchases, Deutsche Post's acquisition of DHL and Exel Logistics, and Deutsche Bahn's acquisition of BAX Global, helped position Germany as the leading global logistics provider during the subject period.¹⁰

⁷ Hoffman, "Leaping to Acquire," September 17, 2007.

⁸ UPS, 2006, 9. Overall, UPS reported that it completed 11 acquisitions between 2001 and 2006, enabling the company to offer a wider variety of supply chain services and to expand its geographic presence in China, Japan, and Europe.

⁹ Woodgate, "Kuehne & Nagel to Acquire ACR Logistics," October 17, 2005; Schenker Logistics, "Schenker Expands in Indonesia (October 25)," 2006; and Armstrong and Associates, April 2007, 8. ACR Logistics was formerly a French company that was sold to U.S. firm Platinum Equity Group in 2004, prior to its most recent acquisition by Swiss firm Kuehne & Nagel. Separately, Deutsche Bahn is the parent company of Schenker Logistics. The purchase allowed Deutsche Bahn to merge the operations of Schenker and BAX Global. The combined company has 1,500 offices in 150 countries, with a workforce of 50,000.

¹⁰ Armstrong and Associates, April 2007, 8 and Deutsche Post World Net, 2006, 47.

TABLE 6.2 Select M&As among logistic service providers, 2001–06

Acquisition target (Country)	Acquiring company (Country)	Year	Price (million \$)
Fritz (U.S.)	UPS (U.S.)	2001	437
USCO (U.S.)	Kuehne & Nagel (Switzerland)	2001	300
DHL (U.S.)	Deutsche Post (Germany)	2002	2,100
Hays Logistics (ACR Logistics) (France)	Platinum Equity (U.S.)	2004	179
Menlo Worldwide (U.S.)	UPS (U.S.)	2004	150 (+ 110 long-term debt)
Tibbett & Britten (UK)	Exel (UK)	2004	598
ACR Logistics (France)	Kuehne & Nagel (Switzerland)	2005	588
Exel (UK)	Deutsche Post (Germany)	2005	6,660
BAX Global (U.S.)	Deutsche Bahn (Germany)	2006	1,210
TNT Logistics (Netherlands)	Apollo Management (U.S.)	2006	1,884

Source: Armstrong & Associates, *U.S. and Global Third-Party Logistics Financial and Acquisition Results for 2006*, April 2007, 8.

M&As have allowed logistics firms to compete more effectively in the marketplace as they respond to the primary demand drivers for their services. Demand for logistic services and, in particular, supply chain management services, has grown in recent years due to the widespread deployment of “just-in-time” manufacturing processes and the continued globalization of the production process.¹¹ As firms locate their production operations abroad, while at the same time maintaining a need for the rapid delivery of both manufacturing inputs and final products, they look to logistics firms to manage their supply chain through a range of services.¹² These include traditional logistic services such as the packaging of goods for shipment, warehousing, customs brokerage, and freight transport, as well as other “strategic” services, such as supply chain design and information management. Because newly merged firms offer “one-stop shopping” through a wider breadth of services, they may compete more effectively for clients than firms that remain niche players.¹³ For example, UPS’s acquisition of Menlo Worldwide augmented UPS’s ability to transport heavy freight, while its earlier acquisition of Fritz Companies enhanced its customs brokerage and freight

¹¹ Chatterjee and Tsai, 2002, 3–5. Just-in-time manufacturing refers to a technique where production is scheduled in proximity to final demand. The globalization of production refers to a trend in which raw materials and intermediate components are sourced from separate geographic locations, and finished goods are produced in yet another location.

¹² Standard & Poor’s, “Transportation: Commercial,” December 27, 2007, 43.

¹³ Armstrong and Foster, “Moveable Feast of Top 25 Global Third-Party Logistics Providers,” May 2007, 28 and 35. It should be noted that the logistics industry largely comprises small, niche players, although revenues are concentrated among the top global providers that have extensive service and geographic networks.

forwarding abilities.¹⁴ Similarly, Kuehne & Nagel's purchase of ACR Logistics enabled the former to gain new capabilities in supply chain design and information management.¹⁵ Finally, through its acquisition of BAX Global, German firm Deutsche Bahn was able to extend its transportation network beyond Europe to North America, as well as acquire new capacities in supply chain management and air freight transport.¹⁶

Demand for logistic services has also been driven by gross domestic product growth in the developing economies of Asia and Eastern Europe. Both U.S. and non-U.S. logistics firms have established new operations in these markets, often by acquiring local logistics providers. For example, in 2004, DHL acquired Indian express services firm Blue Dart, enabling DHL to become the largest express delivery and logistics provider in India.¹⁷ Similarly, Netherlands-based TNT Logistics (now known as CEVA Logistics) purchased ARC India Ltd. in October 2006, thereby attaining a significant share of India's road freight transport market.¹⁸ In 2005, UPS acquired Polish courier firm Stolica, with the aim of gaining a stronger foothold in Eastern Europe's fastest growing economy.¹⁹ Finally, in 2007, FedEx acquired a 50 percent share in Chinese express firm DTW, while in the same year, DHL purchased a remaining 50 percent stake in a joint venture between its newly acquired affiliate Exel and Chinese state-owned firm Sinotrans. The acquisition made DHL the largest wholly owned foreign logistics provider in China (box 6.1).²⁰

While globalization and economic growth have driven the demand for logistic services, the supply of such services has been largely influenced by the availability of new technologies, improvements in transportation infrastructure, and changes in the regulatory environment for air transport. For instance, logistics firms have increasingly deployed radio frequency identification (RFID) and electronic tracking technology to help their clients manage inventories. RFID uses microchips to store and process large quantities of data and allows firms to exchange information regarding inventory status in real time. Electronic tracking technology relies on computer networks to monitor and control the shipment of goods from factory floor to final delivery.²¹ Both these technologies have been important in enabling logistics firms to help their clients facilitate the movement of goods between disparate geographic locations.²²

¹⁴ UPS, "UPS to Acquire Menlo Worldwide," 2004 and "UPS to Acquire Fritz Companies, Inc. For \$450 Million in Class B Common Stock," 2001.

¹⁵ *TheDeal.com*, "Kuehne & Nagel Picks Up ACR," October 17, 2005.

¹⁶ BAX Global, "BAX Goes Schenker," January 1, 2007 and "BAX and Schenker: Moving from Strength to Strength," 2007.

¹⁷ *Hindu*, "DHL Buys Into Blue Dart," November 9, 2004.

¹⁸ Standard & Poor's, *Transportation: Commercial (Asia)*, April 2007, 15; Avison, "CEVA Logistics Formed from TNT and EGL Merger," June 12, 2007; and *Logistics Today*, "TNT Logistics Sold," August 28, 2006. In 2007, TNT Logistics merged with U.S. logistics firm EGL to form CEVA Logistics.

¹⁹ UPS, "UPS to Acquire Messenger Service Stolica S.A.," February 7, 2005.

²⁰ FedEx Express, "FedEx Completes Acquisition of Express Business of China's DTW Group," February 28, 2007 and Berman, "Global Logistics: DHL Buys Out Remaining Share of Sinotrans-Exel JV," December 14, 2007.

²¹ Deutsche Post World Net Company Web site, <http://www.dpwn.de> (accessed February 26, 2008).

²² Navas, "The Global Supply Chain: 3PLs Lead the Way," May 11, 2005. Overall, the use of Internet-based technologies has become central to the provision of supply chain management services. As such, the information technology (IT) capabilities of such global firms as BDP International and Exel Logistics may position them ahead of logistics providers in developing economies, which often lack adequate IT infrastructure.

BOX 6.1 Direct investment by U.S. and foreign logistics firms in China

In recent years, several firms in the United States and other countries have expanded their investments in China's logistics market. In general, these investments have taken the form of establishing a commercial presence in China and/or building air hub facilities for the transportation, warehousing, and distribution of goods. In 2006, revenues for China's 3PL industry were slightly more than \$37 billion, approximately equivalent to Japan, the world's third largest logistics market behind Europe and the United States. At the same time, China spent 21 percent of its GDP on logistic services in 2006, far higher than the 10 percent recorded for both the United States and Europe.¹ The high cost of logistic services in China reflects the relative inefficiency of this sector due largely to the country's poor transportation infrastructure and burdensome regulatory environment.²

Each of the largest global logistics and express delivery firms has a substantial presence in China—namely, DHL, FedEx, TNT (CEVA Logistics), and UPS. These firms have augmented the scale and scope of their operations in China following the country's relaxation of rules on foreign establishment and the expansion of air service rights. For example, German-based DHL has engaged in a long-term joint venture, initiated in 1986, with Chinese state-owned firm Sinotrans Air Transportation Development Co., Ltd. (Sinotrans) focused on express delivery services, and recently took full ownership of a separate joint venture between Sinotrans and DHL-affiliate Exel Logistics.³ In addition, DHL invested \$175 million to build a new air hub facility at Shanghai's Pudong International Airport, while at the same time establishing the DHL Logistics University, also in Shanghai. Overall, DHL has reportedly invested \$900 million in China in the past few years.⁴ Similarly, FedEx has invested \$150 million to build a new hub at Guangzhou's Baiyun International Airport to support its logistics and express delivery operations and, in 2007, acquired its Chinese joint-venture partner DTW's remaining 50 percent share for \$400 million.⁵ Furthermore, having been awarded additional air traffic rights under a recently amended U.S.-China air transport agreement, FedEx now operates 30 weekly flights between the United States and major cities in China.⁶ Separately, in 2006, Netherlands-based TNT completed the purchase of China's Hoau Logistics Group for \$135 million. The acquisition provided TNT with access to Hoau's 140 warehousing and distribution facilities across China, its extensive land-based transportation network, and its largely domestic customer base.⁷ Finally, UPS currently operates more than 60 warehousing and freight distribution facilities in China and, like DHL, plans to develop a new air hub in Shanghai's Pudong Airport to support its air cargo operations.⁸ UPS now operates approximately 21 non-stop weekly flights between the United States and China.⁹ Overall, UPS has reportedly invested \$600 million in China over the past five years.¹⁰

¹ Armstrong and Associates, July 2007, 2.

² Foster, "Logistics Inside China," September 2005.

³ Malone, "DHL: The Long-Time China Player," October 2, 2006 and Berman, "Global Logistics: DHL Buys Out Remaining Share of Sinotrans-Exel JV," December 14, 2007. The establishment of the joint venture preceded the acquisition of then U.S.-based DHL by Germany's Deutsche Post World Net (DPWN) in 2002.

⁴ *Payload Asia*, "DHL to Set Up HQ for Sinotrans JV," May 2006.

⁵ FedEx Express, "FedEx Completes Acquisition of Express Business of China's DTW Group," February 28, 2007.

⁶ FedEx Company Web site, <http://www.fedex.com> (accessed March 5, 2008).

⁷ TNT, "TNT in Advanced Negotiations to Acquire Hoau, China's Leading Domestic Freight & Parcels Operator (December 6)," 2005.

⁸ *The Manufacturer*, "UPS and Shanghai to Announce First-Ever U.S. Air Hub in China," April 12, 2007.

⁹ UPS, "UPS, FedEx Unveil New Asia Plans," July 14, 2005.

¹⁰ *The Manufacturer*, "UPS and Shanghai to Announce First-Ever U.S. Air Hub in China," April 12, 2007.

Infrastructure improvements have also aided the supply of logistic services. Many countries see the development of logistics infrastructure as key to their economy's growth and have added capacity to both road and rail ways, in addition to augmenting facilities at air and sea ports. For example, China has completed the construction of approximately 18,600 miles of new highway infrastructure and plans to add more lines to its rail network.²³ Vietnam is planning the construction of an express railway to connect Hanoi to Ho Chi Minh City.²⁴ Singapore, which serves as a major transshipment hub in Asia, has constructed one of the region's largest logistics parks, located adjacent to the country's Changi Airport. The park includes a "free trade zone" where goods are processed quickly through customs and provides logistics firms with warehousing facilities and access to intermodal transport.²⁵ Finally, logistic service providers, reliant on air freight transport, have benefitted from recent aviation agreements—in particular, a new open skies agreement between the United States and the European Union (EU) and a recently liberalized air transport agreement between the United States and China.²⁶ Both agreements permit U.S. firms, such as UPS and FedEx, to fly to more cities in these markets, ultimately increasing the number of customers served.²⁷

Trade Trends

Cross-Border Trade

In 2006, U.S. exports of freight transportation and port services (box 6.2) reached \$46.3 billion, while U.S. imports of such services totaled \$65.3 billion, resulting in a U.S. deficit of \$19 billion (figure 6.2).²⁸ U.S. exports grew by 12 percent in 2006, compared to a 10 percent average annual increase during the period 2001–05, whereas U.S. imports grew by only 5 percent in 2006, a much smaller increase than the 12 percent average annual rate recorded during the years 2001–05. The relatively large increase in U.S. exports of freight transportation and port services in 2006 was primarily driven by an increase in U.S. merchandise exports, particularly to countries in Asia and Europe, and by higher fuel prices. By contrast, the smaller increase in U.S. imports of freight transportation and port services in 2006 reflected slower growth in U.S. merchandise imports, especially those conveyed by maritime transport.²⁹

²³ U.S. Commercial Service China, "China: Transportation (Non-Aerospace)" (accessed February 27, 2008).

²⁴ Standard & Poor's, *Transportation: Commercial (Asia)*, April 2007, 6.

²⁵ Changi Airport Web site, "Airport Logistics Park of Singapore,"

<http://www.changiairport.com/changi/en/index.html> (accessed February 27, 2008). Both DHL and UPS have built warehousing and distribution facilities within the logistics park to serve the intra-Asia market.

²⁶ "Air Transport Agreement," *OJ*, No. L 134/4 (May 25, 2007) and U.S. Department of State, "Protocol to Amend the Agreement Between the Government of the United States of America and the Government of the People's Republic of China Relating to Civil Air Transport," July 9, 2007. The U.S.-EU open skies agreement was completed on May 25, 2007, while the U.S.-China air transport agreement was most recently amended on July 9, 2007.

²⁷ Alford and Champley, "The Impact of the 2007 U.S.-EU Open Skies Air Transport Agreement," May 2007; Malone, "FedEx Focuses on China," October 2, 2006; and Malone, "UPS Targets China," October 2, 2006.

²⁸ U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), *Survey of Current Business* 87, no. 10, 120.

²⁹ *Ibid.*, 100.

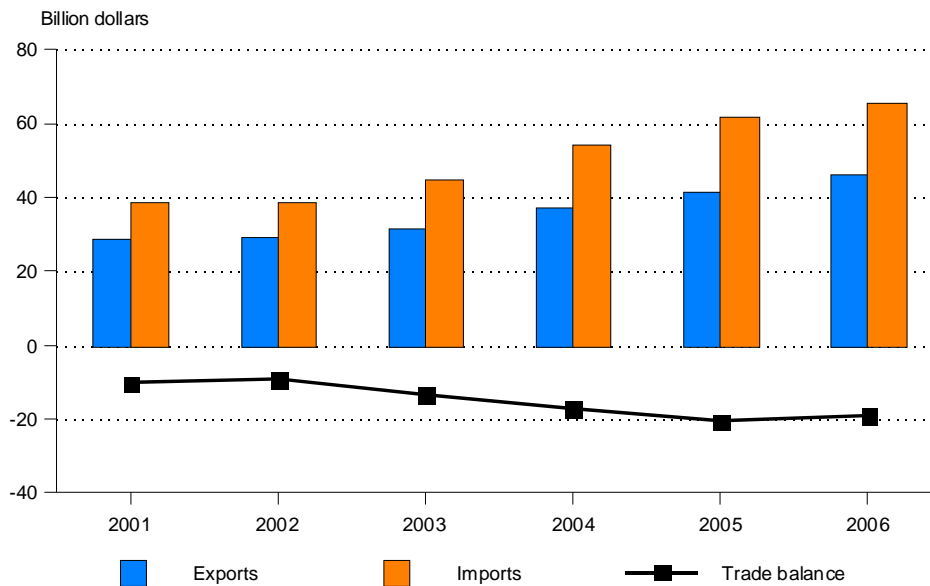
BOX 6.2 An explanation of BEA data on cross-border trade and affiliate transactions

Official data on cross-border trade in logistic services are unavailable. Therefore, data on trade in freight transportation services and port services are used as proxies. These data include transactions related to air, maritime, pipeline, rail, truck, and inland waterways transport services between the United States and foreign countries, as well as between foreign ports. Cross-border trade in freight transport and port services stems from merchandise trade. Exports of air and maritime freight transport 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 transport services refer to the transport of merchandise to the United States by foreign air and ocean carriers. At the same time, U.S. exports of port services reflect the value of goods and services procured for 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.

Similarly, due to the absence of official data on logistic services affiliates, data on transportation and warehousing affiliates serve as proxies. However, it is important to note that the BEA estimates include sales of all services by transportation and warehousing affiliates, not just those pertaining directly to transportation and warehousing. For 2005, BEA reported that certain foreign affiliates were reclassified from the manufacturing sector to the transportation and warehousing sector, thereby increasing sales of services overall and by transportation and warehousing affiliates specifically.

Source: USDOC, BEA, *Survey of Current Business* 87, no. 10, 96 and 100.

FIGURE 6.2 Logistic services:^a U.S. cross-border trade, 2001–06



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 114–115.

^aData are for freight transportation services and port services, which compose “other transportation services” in official statistics of the BEA.

The largest markets for U.S. exports of freight transportation and port services in 2006 were Japan (9 percent), followed by Canada, Germany, and the United Kingdom (7 percent each), and Korea (6 percent) (figure 6.3). The United States posted a deficit with each of these countries in 2006, with the largest U.S. deficits recorded for Japan (\$2.6 billion), Germany (\$1.7 billion), and Canada (\$1.5 billion) (figure 6.4). U.S. exports to Germany and Korea grew the fastest in 2006, rising by 14 percent and 15 percent, respectively. U.S. exports to Canada and the United Kingdom also increased, but exports to Japan fell by 3 percent in 2006, following an average annual increase of nearly 11 percent during the years 2001–05. The decrease in U.S. exports of freight transportation and port services to Japan in 2006 likely reflects a decrease in U.S. merchandise exports to that country.

The leading suppliers of U.S. imports of freight transportation and port services in 2006 were Japan (10 percent), Germany (8 percent), Canada and the United Kingdom (7 percent each), and Taiwan (6 percent). Of these markets, U.S. imports from Canada and Germany grew the fastest in 2006, increasing by 9 percent each. U.S. imports from each of the top five markets, with the exception of Canada, grew at a much slower rate in 2006 than during the period 2001–05. For example, U.S. imports of freight transportation and port services from Germany increased by nearly 17 percent, from the United Kingdom, 14 percent, and from Japan and Taiwan, 11 percent each. The slowdown in the growth of U.S. imports in 2006, as compared to the period 2001–05, partly reflects a decrease in U.S. imports of ocean port services in 2006, which fell by 1 percent, and a smaller increase in U.S. imports of ocean freight services, which grew by only 4 percent.³⁰

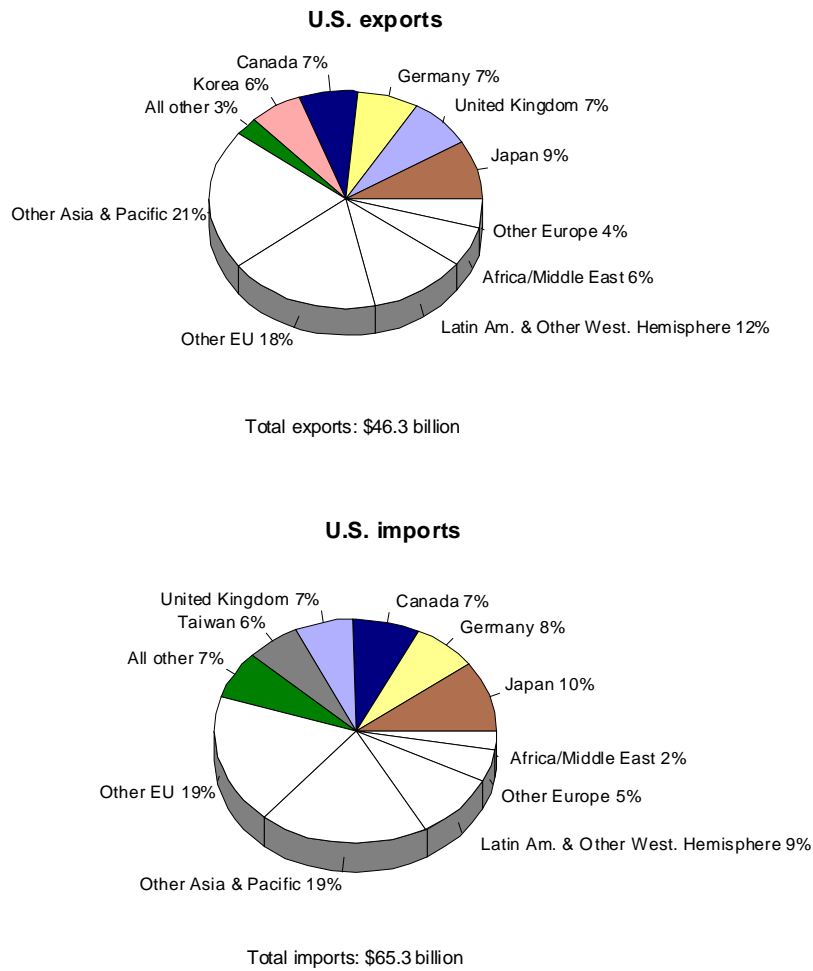
Affiliate Transactions

Total sales of services by foreign transportation and warehousing affiliates of U.S. firms³¹ were not reported in 2005, in order to avoid disclosure of information on individual firms. In 2004, the latest year for which such data were reported, foreign affiliate sales of services totaled \$32.8 billion (figure 6.5). In that year, the leading host country for these affiliates was the United Kingdom, which accounted for 17 percent of total sales of services by foreign transportation and warehousing affiliates, followed by Canada (13 percent), Germany (8 percent), and the Netherlands (5 percent). In 2005, sales by transportation and warehousing affiliates in these same four host countries increased by 15 percent. Affiliate sales in the United Kingdom were the highest (\$6.6 billion) and grew the fastest (22 percent) in 2005, on par with the 21 percent annual rate during the period 2001–04. Elsewhere, foreign affiliate sales grew by 11 percent in Canada and 9–11 percent in Germany, the Netherlands, and France in 2005, with affiliate sales growth rates in the latter three European countries less than half the average annual rates recorded in each from 2001 through 2004.

³⁰ Ibid., and 119–120.

³¹ Foreign affiliates are U.S. parent firms' majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms' majority-owned non-bank affiliates in the U.S. market.

FIGURE 6.3 U.S. logistic services^a export markets and import sources, by country and region, 2006

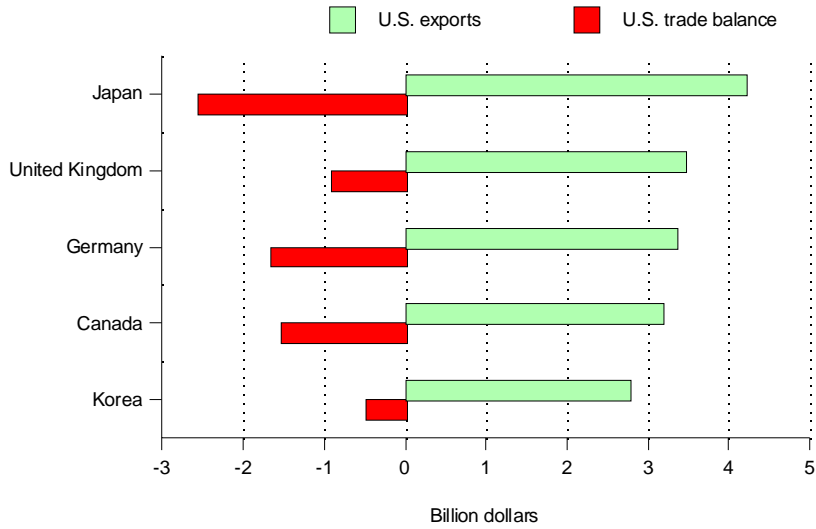


Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 86, no. 10, 120.

Note: Data may not add due to rounding.

^aData are for freight transportation services and port services combined.

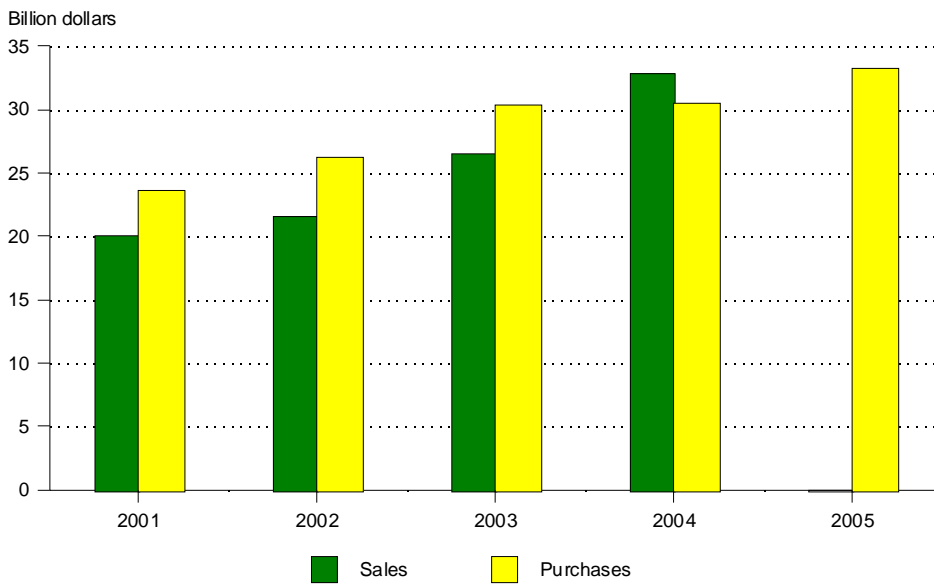
FIGURE 6.4 Logistic services:^a U.S. cross-border exports and trade balance, by major trading partners, 2006



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 120.

^aData are for freight transportation services and port services combined.

FIGURE 6.5 Logistic services:^a Sales by foreign affiliates of U.S. firms^b and domestic purchases from U.S. affiliates of foreign firms, 2001–05



Sources: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 87, no. 10, 143–146; 86, no. 10, 71, 73; 85, no. 10, 73, 75; and 83, no. 10, 115, 117.

^aData are for transportation and warehousing.

^bSales data for 2005 was suppressed to avoid disclosure of data of individual companies.

Domestic purchases from U.S. transportation and warehousing affiliates of foreign firms included principally those with parent firms in the United Kingdom (25 percent), Germany (19 percent), Canada (14 percent), and Japan (9 percent) in 2005. A shift occurred in recent years, as purchases from U.S. affiliates of parent firms in Germany increased substantially both in value terms and relative to affiliates of parent companies elsewhere abroad. Purchases from U.S. affiliates of German firms increased from \$2.2 billion (9 percent of the total purchased from all U.S. affiliates) in 2002³² to \$6.2 billion (19 percent of the total) in 2005 likely due to Deutsche Post's acquisition of U.S. firm DHL in 2002. By contrast, purchases from U.S. affiliates of Canadian firms decreased from \$7.1 billion (27 percent of the total purchased from all U.S. affiliates) in 2002 to \$4.7 billion (14 percent of the total) in 2005. Although BEA data pertaining to purchases from U.S. affiliates of Swiss firms were suppressed for the years 2002–05, it is likely that such purchases increased during the subject period due to Swiss firm Kuehne & Nagel's acquisition of U.S. firm USCO Logistics, one of the largest suppliers of warehousing services in North America, in 2001.³³

Liberalization of Trade Impediments

In recent years, the liberalization of trade impediments most common to logistic services, including those related to customs procedures, commercial establishment, and transportation services, has been considered under the World Trade Organization (WTO) as well as negotiated within free trade agreements (FTAs) between the United States and its trade partners. Liberalization efforts under the WTO have largely focused on the development of a “checklist” for the logistic services sector, a sector which is not currently defined under the General Agreement on Trade in Services. The earliest proposals on services to be included in this checklist were submitted to the WTO by both Hong Kong and Switzerland in 2001.³⁴ In 2004, a group of eight WTO members submitted a revised proposal for a checklist, which included a range of services such as freight transportation, cargo handling, and distribution services.³⁵ Most recently, in 2007, Hong Kong sponsored a request to other WTO members to provide new or improved commitments on services listed under the proposed checklist with the aim of achieving substantial liberalization of the logistics sector by the conclusion of the Doha Round.³⁶ In general, new or improved commitments on logistic services would include the removal of substantial limitations on commercial establishments by logistic service providers as well as the elimination of licensing and

³² BEA data for U.S. transportation and warehousing affiliates of German firms in 2001 were not disclosed.

³³ Heaver, “Logistics in Asia,” 316.

³⁴ WTO, Council for Trade in Services-Special Session (CTS-SS), “Logistic and Related Services,” March 28, 2001 and “GATS 2000: Services Auxiliary to All Modes of Transport,” May 4, 2001.

³⁵ WTO, CTS-SS, “Logistic Services,” June 25, 2004. The proposal divides logistic-related services into three broad categories: “core-freight logistic services”; “related freight logistic services”; and “non-core freight logistic services.” Core freight logistic services include cargo-handling, storage and warehousing, transport agency, and customs brokerage services. Related freight logistic services include air, land, and maritime transport services, as well as courier services, wholesale services, and retailing services. Non-core freight logistic services include computer and related services, packaging services, and management consulting services.

³⁶ WTO document provided through e-mail message to Commission staff, December 7, 2007.

registration requirements that affect the provision of transportation services by foreign logistics firms.³⁷

Several recently concluded U.S. FTAs, including agreements with Australia, Bahrain, CAFTA-DR (the Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua), Chile, Morocco, and Singapore have also contributed to the partial liberalization of the logistics sector through specific provisions on customs procedures. In particular, each of these agreements contains a chapter on customs administration and trade facilitation which, among other things, provides for the timely and efficient release of goods through customs, supports the electronic submission of customs documentation, and promotes cooperation between the customs authorities of parties to the agreement.³⁸ Although industry representatives appeared generally in favor of the trade facilitation provisions included in the FTAs, they cautioned that customs impediments in partner countries still remain, particularly with regard to the release of expedited shipments.³⁹

³⁷ WTO, CTS-SS, “Report by the Chairman to the Trade Negotiations Committee,” November 28, 2005 and “GATS 2000: Services Auxiliary to All Modes of Transport,” May 4, 2001. For further information on the liberalization of trade impediments in logistic services, see USITC, *Logistic Services: Overview of the Global Market and Potential Effects of Removing Trade Impediments*, Inv. no. 332-463, Publication 3770, May 2005.

³⁸ See, for example, USTR, “Final Text of the U.S.-Australia FTA—Chapter 6: Customs Administration,” May 18, 2004.

³⁹ IFAC 1, *U.S.-Singapore FTA*, February 2003; IFAC 1, *U.S.-Morocco FTA*, April 2004; and ITAC 14, *U.S.-Bahrain FTA*, July 2004.

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CHAPTER 7

Retail Services

Summary

The global retailing industry remains fragmented, with the five largest retail firms accounting for 6 percent of the global market. The global retail services market grew in 2006, though at a rate slightly below the average annual rate from 2001 through 2005.¹ Affiliate sales, particularly in developing markets, account for a significant portion of this growth. U.S. domestic retail sales as a share of global retail sales fell slightly from 2001 through 2006 due in large part to growth in developing markets.

Although the Internet increasingly provides for cross-border retailing,² international trade in retail services is principally conducted through affiliates of U.S. firms (box 7.1). In 2005, estimates of sales of retail services by foreign affiliates³ of U.S. firms maintained the high rate of growth registered from 2001 through 2004, while purchases of retail services from U.S. affiliates of foreign firms decreased slightly in 2005, reversing a trend of moderate growth from 2001 through 2004.

Nontariff measures limiting trade in retailing services include barriers to the establishment of commercial presence, such as limits on foreign equity ownership levels and restrictions on participation in certain retail sectors. Retail services trade is also affected by certain regulations that constitute unnecessary barriers to trade in violation of the World Trade Organization (WTO)'s General Agreement on Trade in Services (GATS) article VI.4 on domestic regulation, such as licensing requirements determined to be "more burdensome than necessary to ensure the quality of the service."⁴ Multilateral, Doha Round WTO negotiations and U.S. bilateral trade agreements, such as that with Panama, have sought to reduce or eliminate some of these barriers.

¹ Growth is expressed in nominal terms. However, in real terms, growth in retail services in 2006 was approximately double the average annual growth registered from 2001 through 2005.

² U.S. Census Bureau, "Quarterly Retail E-Commerce Sales 4th Quarter 2007," February 15, 2008. There are no official trade data on sales of retail services over the Internet. The U.S. Census Bureau estimates that national online retailing represented 3.4 percent of total retail sales in 2007, reflecting steady growth since 1999, when online retail sales represented 0.64 percent of total retail sales. This suggests that online cross-border retailing is small, but increasing.

³ Foreign affiliates are U.S. parent firms' majority-owned non-bank affiliates in foreign markets, whereas U.S. affiliates are foreign parent firms' majority-owned non-bank affiliates in the U.S. market.

⁴ WTO, GATS, 1994.

BOX 7.1 Measuring retail services trade

Official data on sales by and purchases from retail affiliates capture only the value of services incidental to retailing, such as repair services,¹ rather than their distributive services. Consequently, official data understate affiliates' retailing transactions. In order to provide more comprehensive coverage of the industry, this chapter provides estimates of retailers' distributive services, such as merchandise handling, stocking, selling, and billing. The value of distributive services is estimated to be 28 percent of total sales on the basis of official data on retailing margins and sales.²

¹ U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), *Survey of Current Business* 87, no. 10, 110. Other services incidental to retailing include assembly, installation, and maintenance; credit services; warranty services; promotion and advertising services; and delivery services.

² U.S. Census Bureau, "Table 8: Estimated Annual Gross Margin as a Percentage of Sales," *Annual Benchmark Report for Retail Trade and Food Services*, 49. This estimate is meant to provide an approximation of the level of trade flows only. Data include sales of distributive services, sales of services incidental to retailing, and sales of non-retail services for retail firms operating in secondary activities, but exclude retail sales by businesses whose primary business activity is in an industry other than retailing. For example, historical retail sales data for Koninklijke Ahold (Netherlands), primarily a supermarket retailer, would also include sales by its recently divested wholesaling affiliate, U.S. Foodservice, while retail sales by Apple Inc. (U.S.), primarily a manufacturer of computers and peripheral equipment, would be excluded. Additionally, estimates of retailing margins for foreign and U.S. retail affiliates are presumed to be the same based on industry analysis.

Competitive Conditions in the Global Retail Services Market

Global retail sales increased by approximately 7 percent to an estimated \$11.4 trillion in 2006.⁵ This fell short of the 8 percent average annual rate during 2001–05.⁶ Much of the growth is attributable to increased consumer demand in developing markets, particularly China, India, Eastern Europe, and members of the Commonwealth of Independent States.⁷

The largest retail services markets by sales include the United States with 26 percent of world retail sales, followed by Japan (10 percent), China (7 percent), and the United Kingdom and France (4 percent each) (figure 7.1). Growth rates of these markets have varied from 2001 through 2006, with France replacing Germany as the fifth largest retail services market beginning in 2003 (table 7.1).⁸ In the United States, growth in retail sales averaged

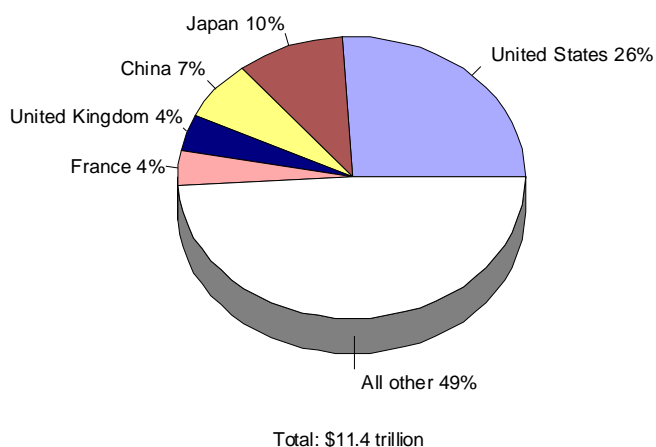
⁵ Planet Retail, "Global Retail Sales, 2002–6," January 2008.

⁶ Economist Intelligence Unit (EIU), "World Consumer Goods and Retail Forecast: Structural Shift," June 1, 2007; Planet Retail, "Global Retail Sales, 2002–6," January 2008; EIU, "World Consumer Goods and Retail Forecast: End to Easy Money," August 14, 2006; and Planet Retail representative, e-mail message to Commission staff, March 10, 2008. These nominal trends differ from trends adjusted for inflation and exchange rate fluctuations. In 2006, the real growth in retail services was 4 percent, approximately double the average annual growth rate registered from 2001 through 2005.

⁷ EIU, "World Consumer Goods and Retail Forecast: Structural Shift," June 1, 2007. The members of the Commonwealth of Independent States are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan.

⁸ Figures for retail spending are expressed in nominal U.S. dollars, therefore some growth rates are biased upward by the recent depreciation of the dollar. From 2003 through 2006 the dollar depreciated at an average annual rate of 4 percent vis-a-vis the British pound, 3 percent vis-a-vis the euro, 1 percent vis-a-vis the Chinese yuan, and appreciated by less than 1 percent vis-a-vis the Japanese yen. For exchange rates information, see <http://www.oanda.com>.

FIGURE 7.1 Retail sales by country, 2006



Sources: Planet Retail, "Global Retail Sales, 2002-6," January 2008; "Grocery Retailing in China," January 2008; "Grocery Retailing in France," January 2008; "Grocery Retailing in Japan," January 2008; "Grocery Retailing in United Kingdom," January 2008; and "Grocery Retailing in USA," January 2008.

TABLE 7.1 Net retail sales: Top country markets,^a nominal, 2001–06 (million dollars)

Country	2001	2002	2003	2004	2005	2006	Average annual rate, 2001–06 (%)
United States	2,250,784	2,314,053	2,424,262	2,612,460	2,823,928	3,003,193	6
Japan	1,119,546	1,078,978	1,157,071	1,232,129	1,218,363	1,162,635	1
China	454,108	493,682	529,696	588,407	653,698	742,210	10
United Kingdom	315,936	351,952	385,624	452,394	457,700	477,126	9
France	279,802	301,034	367,974	411,151	418,025	437,029	9
Germany	292,999	303,511	361,907	405,964	413,564	420,795	8
World	7,868,299	8,033,701	8,867,996	9,826,000	10,618,000	11,355,000	8

Sources: Planet Retail, "Global Retail Sales, 2002-6," January 2008; "Grocery Retailing in China," January 2008; "Grocery Retailing in France," January 2008; "Grocery Retailing in Japan," January 2008; "Grocery Retailing in United Kingdom," January 2008; "Grocery Retailing in USA," January 2008; and Planet Retail representative, e-mail message to Commission staff, March 10, 2008.

^aData for the six largest retail markets are provided as these markets are considerably larger than other global markets, and to illustrate the change in ordinal rank during the period 2001–06.

6 percent, largely attributable to an increase in consumer income, likely resulting from tax cuts under the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003.⁹ In Japan, rising unemployment, concern over the security of pensions, and deflation have limited average annual retail sales growth in dollar terms to 1 percent from 2001 through 2006.¹⁰ In China, rapid economic growth has boosted incomes, which in turn led to a 10 percent average annual increase in retail sales. Retail sales growth in the United Kingdom averaged 9 percent annually, stimulated by an influx of immigrants from Eastern Europe; low interest rates, which encouraged purchases on credit; and low rates of unemployment.¹¹ In France, retail sales increased on average by 9 percent per year, likely stimulated by tax cuts, falling unemployment, and a lower savings rate.¹² The five largest retail firms accounted for approximately 6 percent of total worldwide sales in dollar terms in 2006 (table 7.2).¹³ The top three largest retail firms, Wal-Mart (U.S.), Carrefour (France), and Home Depot (U.S.), remain unchanged in rank by sales since 2001. Tesco (UK) and Metro (Germany) presently round out the top five, rising from thirteenth and sixth largest, respectively, in 2001.

A large portion of sales growth for the five largest global retailing firms has been generated by expansion in developing markets. For instance, three of the four largest general merchandisers, Wal-Mart, Carrefour (France), Tesco (UK), and Metro (Germany), experienced faster sales growth in developing markets than in developed markets between 2001 and 2005 (table 7.3).¹⁴ Wal-Mart's sales in developing countries grew at an average annual rate of 14 percent, albeit from a smaller base, while sales in developed countries grew by 10 percent. Consequently, the share of Wal-Mart sales generated in developing countries increased from 5 percent of total sales to 6 percent during the period. Similarly, Tesco's average annual sales growth in developing countries (34 percent) exceeded growth in developed countries (19 percent), with the share of sales in developing countries increasing from 9 percent of global sales to 13 percent. Finally, Metro's average annual sales growth in developing countries (26 percent) exceeded growth in developed countries (11 percent), with the share in developing countries increasing from 13 percent of total sales to 20 percent. Carrefour's sales grew faster in developed countries, as sales in developing countries were slowed by poor performance in Latin America.¹⁵

⁹ Planet Retail, "Grocery Retailing in USA," January 2008, 7.

¹⁰ Planet Retail, "Grocery Retailing in Japan," January 2008, 4, 6.

¹¹ Planet Retail, "Grocery Retailing in United Kingdom," January 2008, 6, 8.

¹² Planet Retail, "Grocery Retailing in France," January 2008, 4, 6.

¹³ A list of the 5 largest retailers is provided, rather than the 10 largest retailers, because each of the 5 largest retailers has a significant presence globally, whereas 4 of the 5 next largest global retailers primarily operate in a single country, the United States.

¹⁴ Planet Retail, "Tesco," November 2006; "Metro Group," November 2006; "Wal-Mart," November 2006; and "Carrefour," November 2006.

¹⁵ EIU, "World Retail: Key Player—Carrefour," October 5, 2007.

TABLE 7.2 Retail services: Top five companies by net sales revenues and growth rate comparisons, 2001–06 (million dollars)

Company name	Country	2001	2002	2003	2004	2005	2006	Average annual rate, 2001–06 (%)
Wal-Mart Stores Inc.	United States	205,823	231,577	258,681	284,310	312,101	348,650	11
Carrefour SA	France	61,807	72,650	89,353	100,396	87,356	103,969	11
Home Depot Inc.	United States	53,553	58,247	64,816	73,094	81,511	90,837	11
Tesco Plc	United Kingdom	33,727	40,958	56,975	65,094	71,353	83,940	20
Metro AG	Germany	45,426	55,642	69,497	74,249	67,072	81,299	12

Source: Bureau van Dijk, Orbis Companies Database.

TABLE 7.3 Retail services: Top companies' gross sales and rate of sales growth^a comparisons, by sales in developing and developed countries, 2001 and 2005

Company	Sales in developing countries, 2001 (million \$)	Sales in developing countries, 2005 (million \$)	Rate of sales growth in developing countries (2001–05) (%)	Sales in developed countries, 2001 (million \$)	Sales in developed countries, 2005 (million \$)	Rate of sales growth in developed countries (2001–05) (%)
Tesco	3,214	10,273	34	33,770	66,965	19
Metro	6,510	16,652	26	42,904	66,027	11
Wal-Mart	12,007	20,371	14	218,440	318,460	10
Carrefour	14,596	19,376	7	62,677	95,479	11

Source: Planet Retail, "Tesco," November 2006; "Metro Group," November 2006; "Wal-Mart," November 2006; and "Carrefour," November 2006.

^aAverage annual rate for 2001–05.

Home Depot, the largest global specialized retailer, has also expanded in developing markets. It entered the Mexican market in 2001 with six stores, expanded to 61 stores by the end of 2006, and is now the largest home improvement retailer in that market.¹⁶ In 2006, Home Depot entered the Chinese market by acquiring The Home Way, a Chinese home improvement retailer with a network of 12 stores in six cities in China.¹⁷

Increased demand for retail services in the developing world principally resulted from economic growth. From 2001 through 2006, while gross domestic product (GDP) grew at

¹⁶ Home Depot, *Annual Report, 2003*, 2; *Annual Report, 2006*, 4; and *Annual Report, 2004*, 2.

¹⁷ Home Depot, *Annual Report, 2006*, 4.

an average annual rate of 2 percent in advanced economies, developing markets grew at 7 percent.¹⁸ Over the period, China, India, Eastern Europe, and members of the Commonwealth of Independent States increased their share of global GDP from 8 percent to 12 percent.¹⁹ As the wealth disparity between advanced markets and some emerging markets decreases, the correlation between population and retail sales becomes more pronounced. In 2006, the population of developing markets was nearly six times that of advanced markets,²⁰ motivating large multinational retailers to enter emerging markets to maintain their global market shares.

After entering developing markets, large multinational retailers are able to use modern technology and expertise in supply chain management to compete with local retailers, which generally lack such advantages. Large multinational retailers implement new technologies to reduce labor costs, increase customer convenience, and cater to individual customers' needs. For example, retailers have introduced self-service checkouts intended to reduce customer waiting-time and labor costs. Home Depot, which has adopted a system where customers scan and bag their own merchandise, reports that a single staff person can monitor up to four self-service checkout kiosks.²¹ Other retailers are working to further simplify the self-service checkout process. Metro, as part of its Future Store Initiative, provides customers with a handheld scanner, thus allowing items to be scanned as they are placed into shopping carts.²² Lower labor costs associated with self-service checkout can further improve competitiveness, as lower costs can be passed on to consumers. However, due to resistance by labor unions, particularly in grocery retailing, the roll-out of self-service checkout will be limited in some markets. As such, retailers have developed other technologies to reduce customer waiting time. Tesco, for example, uses infra-red scanners to track customers' whereabouts in stores. The technology allows store managers to coordinate the number of cashiers with store traffic, with the stated goal that customers never need to wait in a check-out line longer than two persons in length.²³

Tesco is also the recognized leader in another technology, customer databases. Using bar-coded membership cards, Tesco tracks the purchases of individual customers, analyzes their purchasing patterns, and determines opportunities for increasing sales to those customers. For instance, if a customer has not previously purchased bread or meat at Tesco, coupons are mailed to the customer providing discounts on those items. The personalized marketing opportunities provided by the database have allowed Tesco to increase market share. Tesco also shares information from the database with suppliers, aiding those suppliers in developing new products and in assessing the effectiveness of promotions.²⁴

The use of advanced technologies to improve communications between retailers and manufacturers also creates opportunities to reduce inventory costs and improve competitiveness. Wal-Mart, for instance, uses its Retail Link system to relay sales information from point of sale scanners to vendors through an electronic data interchange, allowing the retailer to instantly order new supplies once an item is sold. Consequently, both

¹⁸ International Monetary Fund (IMF), World Economic Outlook Database, October 2007.

¹⁹ IMF, World Economic Outlook Database, October 2007.

²⁰ *Ibid.* In 2006, the population of developing nations was 5.5 billion, while the population of developed countries totaled 977.2 million.

²¹ Home Depot, *2004 Annual Report*, 14.

²² EIU, "World Retail: Key Player—Metro," October 8, 2007.

²³ *Economist*, "Watching as You Shop," December 8, 2007, 28–9.

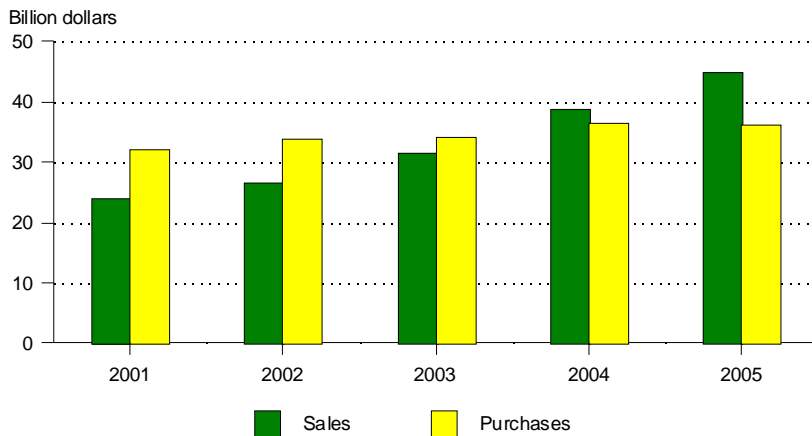
²⁴ Rigby, "Eyes in the Till," November 11, 2006.

Wal-Mart and its vendors are able to avoid costs associated with overstocking. By contrast, small local retailers, in both developed and developing economies, usually must purchase goods from wholesalers, reducing flexibility in inventory management and increasing costs (due to wholesalers' mark-up).

Trends in Affiliate Transactions

In 2005, sales of retail services provided by foreign affiliates of U.S. firms totaled an estimated \$44.9 billion (figure 7.2).²⁵ Such sales increased by 16 percent in 2005, marginally slower than the 17 percent average annual rate registered from 2001 through 2004. By contrast, purchases of retail services from U.S. retail affiliates of foreign firms declined by 1 percent in 2005 to an estimated \$36.1 billion.²⁶ The decline reversed the 4 percent average annual rate of increase registered from 2001 through 2004. Before 2004, the United States purchased more from U.S. affiliates than it sold through foreign affiliates, as foreign retailers were attracted to the size of the U.S. retail market, the world's largest. The large market size of the United States also previously limited the incentives for U.S. retailers to expand abroad, as their own home market provided ample opportunities for growth.²⁷ However, beginning in 2004, sales surpassed purchases for the first time, and by 2005, sales exceeded purchases by \$8.8 billion. The resulting "surplus" is a reflection of two phenomena: (1) the maturation of the U.S. retail market and (2) the high level of growth in developing economies such as China (box 7.2), which attracted U.S. firms to those markets.

FIGURE 7.2 Retail services: Sales by foreign affiliates of U.S. firms and domestic purchases from U.S. affiliates of foreign firms, 2001–05



Sources: U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), U.S. Direct Investment Abroad, Financial and Operating Data, table III.F.3, 2001–05; USDOC, BEA, Foreign Direct Investment in the U.S., Financial and Operating Data; and U.S. Census Bureau, Annual Benchmark Report for Retail Trade and Food Services: January 1992 Through February 2005, 49.

²⁵ Estimate based on total sales of \$160.5 billion by foreign retail affiliates in 2005.

²⁶ Estimate based on total purchases of \$130.0 billion from U.S. retail affiliates in 2005.

²⁷ Bowen, "Top Things to Learn from Successful European Retailers," October 17, 2006.

BOX 7.2 Affiliate trade in China

In China, the two largest global retailers, Carrefour and Wal-Mart, are both expanding their market presence. From 2003 through 2006, China's retail sales increased at an average annual rate of 12 percent, reaching \$742.2 billion.¹ Although sales by Carrefour and Wal-Mart currently account for less than 1 percent of total retail sales in China, growth in sales by both companies has been strong. From 2003 through 2006, growth in sales for Carrefour averaged 14 percent annually, reaching approximately \$3.1 billion, while Wal-Mart's growth in sales averaged 16 percent, reaching \$1.4 billion.²

The two retailers entered the Chinese market at approximately the same time, Carrefour in 1995 and Wal-Mart in 1996, but have followed different growth strategies.³ Since market entry, Carrefour has grown rapidly, expanding its geographic footprint to approximately 30 major cities across China.⁴ Going forward, Carrefour's strategy is to establish market leadership in each of these cities but the retailer does not plan further geographic expansion into China's 600 or so smaller cities.⁵ Wal-Mart, by contrast, initially expanded slowly, with growth concentrated in southern China, particularly in smaller cities.⁶ More recently, and again in contrast to Carrefour, Wal-Mart has used mergers and acquisitions to speed its growth in China. In 2007, Wal-Mart acquired a 35 percent stake in Bounteous Company Limited, the Taiwanese parent company of Trust-Mart, a hypermarket operator in China. As part of the purchase agreement, Wal-Mart, after meeting a series of conditions, will have the right to gain a controlling stake in Trust-Mart. The acquisition further strengthens Wal-Mart's position in southern China, where most of Trust-Mart's stores are located. The combined sales of Wal-Mart and Trust-Mart in 2006 were \$3.3 billion, a total larger than any other foreign-owned retailer in China.⁷

A final difference in strategy between Carrefour and Wal-Mart involves store format. In addition to Carrefour's 109 hypermarkets, the retailer has 255 discount stores.⁸ These small discount stores, located in metropolitan Shanghai and Beijing, offer prices 10 percent lower than those in hypermarkets. Wal-Mart, by contrast, has not developed a sizeable network of stores in any format other than its 88 supercenters in China.⁹ Carrefour's strategy in China attempts to capitalize on the growing middle class in China's large cities. Wal-Mart, on the other hand, is trying to scale-up operations in certain regions of China, in order to attain the scale necessary to use its hub and spoke system of distribution centers.

¹ Planet Retail, "Grocery Retailing in China," January 2008, 2.

² Planet Retail, "Carrefour in China," January 2008, 3; and "Wal-Mart in China," January 2008, 3. Sales derived by converting sales figures published in euros to dollars, using the average exchange rate in 2006 (1.25622 euros per dollar from <http://www.oanda.com>).

³ Carrefour China Company Web site, <http://www.carrefour.com.cn/about/history.asp> (accessed February 5, 2008) and Wal-Mart Company Web site, <http://www.walmartfacts.com/articles/5557.aspx> (accessed January 24, 2008).

⁴ Planet Retail, "Carrefour in China," January 2008, 40–41.

⁵ *Ibid.*, 11–12.

⁶ Planet Retail, "Wal-Mart in China," January 2008, 8, 11, 12.

⁷ *Ibid.*, 37.

⁸ Carrefour Company Web site, <http://www.carrefour.com/cdc/group/our-business/> (accessed February 5, 2008) and Planet Retail, "Company Profile, Carrefour in China," January 2008, 39, 48.

⁹ Wal-Mart Company Web site, <http://walmartstores.com/GlobalWMTStoresWeb/> (accessed January 24, 2008). Wal-Mart operates two "Neighborhood Market" supermarkets in Shenzhen, a city in Southern China, both of which opened in 2002, and operates a single Sam's Club warehouse store in three Chinese cities. There are currently 102 Trust-Mart hypermarkets in China.

Liberalization of Trade Impediments

Major barriers to expanding trade in retail services include economic needs testing, limitations on foreign equity, and restrictions on participation in certain sectors. Economic needs testing involves limiting the number of retailers permitted in a region based on capacity, as determined by government regulators. Factors in the determination of capacity include population and the number of retailers already conducting business in the region. In certain countries, applications of economic needs testing have contributed to reductions in regulatory transparency and have been identified as more burdensome than necessary.²⁸

In some nations, participation in local retail affiliates by foreign firms is limited to joint ventures. For instance, Malaysia limits foreign equity ownership in retail ventures to 70 percent.²⁹ Other nations limit foreign participation in certain retail sectors. India, for instance, limits foreign-owned retailers to single-brand retailing.³⁰

Efforts to liberalize trade in retail services have principally occurred within the context of multilateral WTO negotiations, although the proposed U.S.-Panama Trade Promotion Agreement (TPA) also contains liberalizing provisions. In multilateral negotiations, members have proposed several negotiating objectives relating to retail services, including removing barriers to foreign direct investment³¹ and improving the transparency of licensing procedures.³² Provisions of the U.S.-Panama TPA would grant initial market access to Panama's retail services sector, which has been closed to foreign participation. The provisions stipulate that upon ratification of the agreement, nationality restrictions shall not apply either to foreign-owned retailers selling products exclusively of their own brand or to foreign-owned retailers engaged primarily in the sale of services; and that by 2011, nationality restrictions shall not apply to foreign-owned retailers investing more than \$3 million in retail establishments that sell both goods and services.³³

²⁸ WTO, "Communication from the United States: Distribution Services," December 18, 2000 and "Distribution Services: Background Note by the Secretariat," June 10, 1998, 10–11.

²⁹ EIU, "Malaysia: Consumer Goods and Retail Profile," April 1, 2007. However, Malaysia does permit 100 percent foreign equity ownership if the retailer uses Malaysia as a regional distribution hub.

³⁰ Single-brand stores sell goods exclusively of one brand; examples include Coach (U.S.), Polo Ralph Lauren (U.S.), and Adidas (Germany).

³¹ WTO, "Communication from Australia: Negotiating Proposal," March 7, 2002; "Communication from Canada: Initial Negotiating Proposal on Distribution Services," March 14, 2001; "Communication from Colombia: Distribution Services," November 27, 2001; "Communication from Korea: Negotiating Proposal for Distribution Services," May 11, 2001; "Communication from Mercosur: Distribution Services," May 4, 2001; and "Communication from the United States: Distribution Services," December 18, 2000.

³² *Ibid.* and "Communication from Switzerland: GATS 2000," May 4, 2001.

³³ U.S. International Trade Commission (USITC), *U.S.-Panama Trade Promotion Agreement*, 2007. 3-15–3-16.

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CHAPTER 8

Global Initiatives to Improve Services Trade Statistics

Since the General Agreement on Trade in Services (GATS) entered into force in January 1995, demand has increased for more detailed and internationally comparable data on services trade to support trade negotiation and trade policy making.¹ The heightened significance of services trade data since the signing of the GATS has exposed inadequacies in the ways in which data on international trade in services have been defined, measured, and published.² In response, various international agencies and national governments and their statistical offices have engaged in an ongoing process seeking to improve conceptual frameworks for, and measurements of, services trade data.

This chapter provides an overview of the existing approach by international organizations in reporting data on worldwide services trade. Thereafter, it summarizes the extent to which countries have begun to report more detailed cross-border trade data on specific services and trading partners, and the initiation of or addition to countries' collection of affiliate transaction data. Next, the chapter summarizes issues that impede the measurement of trade in services supplied under mode 4, that is, the presence of natural persons (see box 2.2 in chapter 2 for a brief description of the four modes of supply). Finally, the chapter summarizes technical work by trade data experts on interrelated initiatives underway at various international organizations, which may ultimately better enable countries to provide more comprehensive and comparable trade statistics on services (table 8.1).

The current account of the balance of payments (BOP), which countries report to the International Monetary Fund (IMF),³ covers trade in the conventional sense, that is, transactions in goods and services between residents and nonresidents of an economy. In 2006, 189 countries reported services trade data to the IMF. The instructions to compilers of BOP statistics, the latest of which are in the IMF's Balance of Payments Manual, Fifth Edition (BPM5),⁴ contain definitions, valuation concepts, and classifications that, among other things, frame current reporting of trade in services. BPM5 subdivides services into 10

¹ World Trade Organization (WTO), Council for Trade in Services (CTS), "A Review of Statistics on Trade Flow in Services," July 11, 2006, 1 and WTO, Economic Research and Statistics Division, "Measuring Trade in Services," March 2006, 10. The demand for adequate services data extends beyond the realms of trade negotiation and policy making to include economic and industry analyses as well. The way in which services themselves and services trade are defined and measured impacts the definition and measurement of gross domestic product (GDP) and other key indicators of economic activity.

² WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 5, 9, 10, 15; Bensidoun and Ünal-Kesenci, "Mondialisation des services: de la mesure à l'analyse," August 2007, 6–7; and Regulation (EC) No. 716/2007 of the European Parliament and of the Council of 20 June 2007 on Community Statistics on the Structure and Activity of Foreign Affiliates, *OJ* No. L 171 (June 29, 2007), 17.

³ IMF, *Balance of Payments Compilation Guide*, 1995, 229–230. The IMF advises countries to report balance of payments data at least quarterly, which the IMF considers an adequate frequency for many users. Many countries report such data to the IMF monthly, although the IMF notes that monthly data may be volatile and subject to revisions.

⁴ IMF, *Balance of Payments Manual*, 1995, 6–9.

TABLE 8.1 Recent initiatives to enhance services trade data and timetable for other initiatives underway

Classification and/or definition revisions

- International Standard Industry Classification (ISIC) (UN, revision 4, issued 2007)
- Central Product Classification (CPC) (UN, revision (version 2), to be issued 2008)
- System of National Accounts (SNA) (UN and others,^a revisions/updates to SNA 1993 and the inclusion of definitions, to be completed 2008)
- Benchmark Definition of Foreign Direct Investment (OECD, revision 4, to be published 2008)

Regulations on statistics in the European Union

- Balance of Payments (BOP) (Regulation EC 184/2005, statistics on balance of payments, international trade in services, and foreign direct investment, adopted 2005)
- Foreign affiliates (Regulation EC 716/2007, statistics on structure and activity of foreign affiliates, adopted 2007)

Other activities

- Handbook on Economic Globalization Indicators (OECD, published 2005)
 - Methodological Soundness Questionnaire, comparison of methodological practices concerning services trade measurement in EU and OECD member states (OECD, published 2006)
 - Recommendations Manual on the Production of Foreign Affiliate Statistics (EU, published 2007)
 - Balance of Payments Manual (IMF, Revision 6 final draft, to be posted on the Internet December 2008)
 - Manual on Statistics of International Trade in Services (UN, update, to be issued 2010)
 - Asymmetries (mirror trade data discrepancies) between pairs of EU member states (EU, ongoing)
 - European Register of Enterprise Groups (important multinational firms) (EU, in development)
-

Sources: Compiled by Commission staff from BEA official, e-mail message to Commission staff, April 10, 2008, and papers and presentations at the OECD-Eurostat Meetings of Experts in Trade in Services Statistics, Paris, September 2006 and 2007.

^aThe System of National Accounts is published jointly by the United Nations, the Commission of the European Communities (EU), the International Monetary Fund, the World Bank, and the Organization for Economic Cooperation and Development (OECD).

categories of commercial services⁵ and one for government services, with subcategories under each commercial service which may be used by countries that choose to voluntarily supply additional service-specific detail. Countries are instructed to report total trade in the 11 basic BOP categories but are not obligated to supply such data by particular trading partner. Nor are countries instructed to report data to the IMF in conformity with the more detailed United Nations (UN) Central Product Classification (CPC), which was the basis upon which the Services Sectoral Classification list was developed to assist countries in scheduling commitments under the GATS.⁶ Likewise, data reported to the IMF do not conform to the four modes of supply of services for which countries scheduled GATS commitments. Trade data experts observe that suitable reporting of statistics consistent with GATS modes of supply is not currently feasible.⁷ BOP data include, but do not separately identify, data for mode 1, cross-border supply, and mode 2, consumption abroad.⁸ Moreover, BOP data do not provide for the measurement of transactions supplied under mode 3, commercial presence, and include only partial information on services supplied under mode 4, presence of natural persons. The limited statistical coverage of mode 4 results partly from differences between rules of residency used for BOP accounting and concepts of nationality that may be reflected in GATS commitments under mode 4.⁹

The United Nations Statistical Commission¹⁰ established the Interagency Task Force on Statistics of International Trade in Services (TFSITS)¹¹ in 1994 to begin to address ways to improve the availability, quality, and comparability of international trade in services statistics, among other terms of reference.¹² The task force developed and published the first internationally focused Manual on Statistics of International Trade in Services (MSITS) in 2002, currently under revision.¹³ The manual built upon international statistical compilation concepts and standards contained in BPM5 and the System of National Accounts (SNA) 1993, both of which also are being revised. Data improvements that received major emphasis in the manual include guidelines and recommendations for (1) more detailed cross-border data on particular services and trading partners and (2) the measurement of transactions and other data for affiliates owned or controlled by an entity from another country. The latter include measuring transactions by affiliates located outside the compiling country and owned

⁵ The 10 categories of commercial services are communications; computer and information; construction; financial; insurance; personal, cultural, and recreational; royalties and license fees; transportation; travel; and other business services.

⁶ WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 4.

⁷ Ibid., 5.

⁸ Karsenty, "The GATS Agreement and the Four Modes of Supply," August 14, 2003 and WTO, Economic Research and Statistics Division, "Measuring Trade in Services," March 2006, 11.

⁹ Bureau of Economic Analysis (BEA) official, e-mail message to Commission staff, April 10, 2008.

¹⁰ BEA official, e-mail message to Commission staff, April 10, 2008. The United Nations Statistical Commission is the highest authority of the global statistical system. Bringing together the chief statisticians from member states around the world, the commission is the principal decision-making body for international statistical activities, especially the setting of statistical standards, the development of concepts and methods, and their implementation at the national and international level. The commission oversees the work of the United Nations Statistical Division (UNSD).

¹¹ Participants in the task force include Eurostat, IMF, OECD, United Nations Conference on Trade and Development (UNCTAD), UNSD, World Tourism Organization, and the WTO Secretariat, with consultation by national statistical experts from various countries, including the United States.

¹² Moreover, the TFSITS was established in order to strengthen collaboration with other agencies or groups involved with international trade in services statistics; promote development of international standards, systems, and classifications for such statistics; and facilitate technical assistance provided to developing countries for compiling such statistics.

¹³ The publication *Manual on Statistics of International Trade in Services* may be found at <http://unstats.un.org/unsd/tradeserv/manual.htm>.

or controlled by an entity resident in the compiling country (termed “outward foreign affiliates statistics”) as well as by affiliates located in the compiling country and under ownership or control by an entity residing abroad (termed “inward foreign affiliates statistics”). In part due to the difficulty of discerning services trade under mode 4, the task force created a technical subgroup specifically charged with developing a conceptual framework to address measuring the movement of persons (broadly) and, in particular, under mode 4.

Cross-Border Data on Services in the Balance of Payments

Seeking Detailed Services Data

The MSITS contains guidelines and advice on national compilations of less aggregated data for particular categories of services. Since the manual’s publication, the number of countries—especially in Africa—voluntarily reporting detailed data by service categories has increased.¹⁴ In part, the increase is the result of the work of the World Bank and WTO in developing training modules and providing training in compilation, and of the TFSITS in monitoring countries’ adherence to the manual’s recommendations.¹⁵ In many detailed subcategories of services, the number of countries reporting data for 2003 more than doubled from the number that reported for 1995, e.g., telecommunications (up to 85 from 28) and reinsurance (up to 54 from 23). Countries have increased their data reporting in accordance with the Extended Balance of Payments in Services (EBOPS) classification included in the manual, which identifies more than 50 subcategories of the 10 broad commercial services categories in the BOP. For example, in the BOP category “transportation,” the EBOPS classification allows for collecting separate data for various means of transportation and for auxiliary and supporting transportation services. The manual advises countries to develop disaggregated EBOPS statistics in stages, beginning with those subcategories of greatest economic significance to the compiling country.

Seeking Partner Country Data

The MSITS recommends that countries compile services trade data by partner country for various services. Although fewer than 30 countries (mainly developed countries) were identified as collectors of services trade data by trading partner as of mid-2006,¹⁶ at least 10 additional countries reported partner country data as part of their EBOPS data made available to UNSD a year later, as of August 2007.¹⁷ The manual recommended that countries compile data by trading partners at least for services trade as a whole and for the 11 main BOP categories of services classified in BPM5. Where possible, compilation of trading partner data is sought at a more detailed level in accordance with EBOPS subcategories, starting with principal trading partners and with the services most economically important to the compiling country.

Limited partner country data currently are published by the Organization for Economic Cooperation and Development (OECD), Eurostat, and, most recently, UNSD (box 8.1 near the end of this chapter). Until 2007, the OECD database that contained partner country data reported data only for total services, transportation, travel, the broad category of other

¹⁴ WTO, CTS, “A Review of Statistics on Trade Flow in Services,” July 11, 2006, 8.

¹⁵ BEA official, e-mail message to Commission staff, April 10, 2008.

¹⁶ Wistrom, “OECD Proposals for Expansion of Partner Country Data,” September 13, 2006.

¹⁷ UNSD, “UNSD Trade in Services Statistics,” September 18–19, 2007.

commercial services,¹⁸ and government services, as reported by some OECD members, the Russian Federation, and Hong Kong, China (table 8.2).¹⁹ The number of trading partners for which such data were reported by OECD members varies widely from country to country, from zero to more than 60 partners. In the EU, a regulation adopted in 2005 requires, among other things, that member states collect and provide to Eurostat bilateral data on international trade in services and certain foreign direct investment (FDI) data.²⁰ Subsequently, Eurostat created a database entitled New Cronos to contain bilateral data beginning in 2002 on total trade in services for extra-EU trading partners. A data exchange agreement between the OECD and Eurostat has assisted OECD in estimating total world services trade flows by region and broad categories of services exports for the world and by region, beginning with data for 2003. The UNSD began to collect bilateral data on services trade for a few countries not covered in OECD or Eurostat databases. In recent years, UNSD has overlapped country coverage with OECD and Eurostat by uploading data obtained from Eurostat and the Web sites of certain OECD countries, including the United States, while also requesting data from national statistical offices in a wide range of countries.²¹

TABLE 8.2 Categories of services trade data by partner country as reported by OECD member countries in balance of payments data

Beginning in 2002: ^a
<ul style="list-style-type: none"> • Total services • Travel services • Transport services • Other commercial services • Government services
Beginning in 2007: ^b
<ul style="list-style-type: none"> • Total services • Travel services • Transport services • Communication services • Financial services • Computer and information services • Royalties and license fees • Other business services • Personal, cultural, and recreational services • Government services, not included elsewhere • Other services

Sources: OECD Statistics Directorate, “OECD Plan on Expansion of Trade in Services by Partner Country Statistics,” September 19, 2007, and Wistrom, “MSITS Implementation Update,” September 13, 2006, 3.

^aBy 2006, such data were collected for 56 trading partners by 28 countries.

^bOf the 30 OECD members, only Switzerland and Turkey could not provide data on all 11 principal categories of services trade.

¹⁸ This broad category of services includes communication; construction; insurance; financial; computer and information; royalties and licence fees; other business services; and personal, cultural, and recreational services.

¹⁹ OECD, Statistics Directorate, “OECD Plan on Expansion of Trade in Services by Partner Country Statistics,” September 19, 2007.

²⁰ Regulation (EC) No. 184/2005 of the European Parliament and of the Council of 12 January 2005 on Community Statistics Concerning Balance of Payments, International Trade in Services and Foreign Direct Investment, *OJ* No. L 35 (February 8, 2005), 23.

²¹ UNSD, “UNSD Trade in Services Statistics,” September 18–19, 2007. Since year-end 2006, UNSD has requested that countries provide statistics on international trade in services so that UNSD could augment the UN ServiceTrade database with annual data from 2000 through 2005.

Historically, existing partner country data on services trade have been problematic, which is also evidenced—although to a lesser extent—in goods trade data. A principal difficulty is that importing and exporting countries may not report the same value for a given service transaction (mirror data). For example, France reported services imports from Finland totaling \$220 million in 2001, while Finland reported services exports to France amounting to \$125 million. A regression analysis of services data of OECD member countries for 2001 indicated that the United States, Germany, and the United Kingdom reported lower exports than their trading partners reported imports, while the reverse was the case for seven other OECD countries. On the import side, 10 OECD countries, including the United States, appeared to report significantly higher imports than their trading partners reported exports. Trade data experts point to differences in data collection methods such as surveys, reporting of bank transactions, estimates, and enterprise declarations among various complex factors that contribute to such data discrepancies.²² Efforts to recognize and eventually minimize differences in mirror data are ongoing.

Data on Foreign Affiliates

Trade data experts and users consider foreign affiliate statistics at an early stage of development, available for only a small number of countries, and far from uniform in coverage.²³ Until 2000, the United States was the only country to publish data on both inward and outward foreign affiliate sales of services, although certain countries issued data limited to either one direction or the other.²⁴ Since publication of the MSITS, at least two dozen additional countries, mainly OECD members, have begun collecting data on the characteristics and activities of such affiliates, chiefly data on inward foreign affiliates (that is, located in the compiling country but owned or controlled by an entity residing abroad) (table 8.3).²⁵ The most widely available categories of data on foreign affiliates to date have been the number of employees and sales. In countries such as the United States, Australia, and Canada, separate totals for the sale of goods and services are reported, with affiliates classified according to the industry in which their sales predominate. Nevertheless, according to the WTO Secretariat, Australia is the only country known to have reported further statistical breakdowns of outward affiliates' sales of services by categories that identify the particular services sold, as is recommended by the MSITS.²⁶ By contrast in the United States, the BEA reports inward and outward affiliate transactions for total services, i.e., differentiated by the industry of the affiliate, but undifferentiated by the particular service product. There is also variation among countries as to how the definition of an affiliate is determined and even broader issues affecting the measurement of all foreign direct investment data, such as the extent to which countries employ different criteria to measure FDI. The MSITS extends the definition of international trade in services described in BPM5, which defined trade in services as transactions between residents and

²² Van Leeuwen and Lejour, "Bilateral Services Trade Data and the GTAP Database," July 17, 2006, 4, 6–7.

²³ Cave, "The Revision of the Manual on Statistics of International Trade in Services," September 19, 2007, 31.

²⁴ WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 19.

²⁵ WTO, Economic Research and Statistics Division, "Measuring Trade in Services," March 2006, 32.

²⁶ WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 23–24 and Australian Bureau of Statistics, "Australian Outward Foreign Affiliates Trade, 2002–03," October 26, 2004. Australia's experimental survey of outward foreign affiliates trade identified finance and insurance services as the principal services sold in the 2002–03 fiscal year by affiliates established abroad by Australian resident companies. Upon publication of the results of the first survey in 2004, the Australian Bureau of Statistics stated its intention to conduct the survey every four years.

TABLE 8.3 Foreign affiliate data provided to OECD by its member countries, pre-2007

Both inward and outward	Inward only	Outward only	Neither
Australia	Czech Republic	Canada	Iceland
Austria	Denmark		Korea
Belgium	Hungary		Mexico
Finland	Ireland		New Zealand
France	Italy		Slovak Republic
Germany	Luxembourg		Turkey
Greece	Netherlands		
Japan	Norway		
Portugal	Poland		
Sweden	Spain		
United States	United Kingdom		

Source: WTO, "A Review of Statistics on Trade Flows in Services: Note by the Secretariat, Addendum," July 11, 2006. The Secretariat incorporated information compiled in OECD, "Measuring Globalization: The Role of Multinationals in OECD Countries," 2002, and from national authorities.

Note: The method of measurement and the number of categories for which affiliate data were provided to OECD varied widely among reporting countries.

nonresidents, to include the value of services provided through foreign affiliates established abroad.²⁷

The evolution in requirements concerning foreign affiliate data collection in the European Union illustrates the growing importance assigned to developing such data. Various EU member states have voluntarily submitted data covering operations and characteristics of foreign affiliates to Eurostat since 1995.²⁸ Nevertheless, only a fragmented portrait exists concerning the operations of EU countries' multinational enterprises (MNEs) and their affiliates abroad, as well as non-EU-country MNEs' operations through affiliates in the EU.²⁹ For example, more than twice as many member states compiled inward as outward foreign affiliate data in 2006 for reference year 2003. Eurostat published outward foreign affiliate data for 2003 provided voluntarily by only eight EU member states.³⁰ The compilations varied considerably by country.³¹ In 2007, 5 additional countries provided outward foreign affiliate data for reference year 2004, increasing the total number of EU countries reporting this data to 13,³² which was still fewer than the 23 compilers of inward foreign affiliate data.

²⁷ BEA official, e-mail message to Commission staff, April 10, 2008.

²⁸ Eurostat, "Eurostat Activities in Trade in Services and Related Balance of Payments Areas," September 19, 2007, 15.

²⁹ Grell, "Globalization Projects at Eurostat," September 18, 2007, 7.

³⁰ Eurostat, "Eurostat Activities in Trade in Services and Related Balance of Payments Areas," September 13, 2006, 4.

³¹ For example, the Czech Republic and Portugal provided the most data sets, while only data on outward foreign affiliates' employment were compiled by all eight countries and only one country compiled data on the number of outward foreign affiliate establishments.

³² Eurostat, "Eurostat Activities in Trade in Services and Related Balance of Payments Areas," September 19, 2007, 3.

In order to improve the comparability and quality of EU member countries' foreign affiliate data, Eurostat, with input from EU members, produced a manual of rules in 2007 to guide the compilation of inward and outward affiliate data.³³ The manual presents a standard methodological approach for conducting data collection, compilation, transmission, and analysis in the EU. The agency also conducted a workshop on outward affiliate data to further inform the many member states still inexperienced in compiling such data. Additionally, in 2006, the EU began pilot testing for the mandatory compilation of a register of European enterprise groups, which are multinational businesses headquartered in, or whose entities operate in, EU member states. The new register, which is expected to include all of the largest enterprise groups in the EU by 2009 and which would replace the current voluntary compilation, is intended to facilitate collection of more complete foreign affiliate and FDI data in the EU.³⁴

The EU took a major step toward developing a legal framework whereby member states could produce more meaningful foreign affiliate statistics in the future, by adopting regulation EC 716/2007 in June 2007 (appendix B).³⁵ The regulation states that sales, employment, and other data on inward and outward foreign affiliates will be compiled and transmitted to Eurostat on a mandatory basis, beginning with 2007.³⁶ The regulation also calls for voluntary pilot testing to assess the feasibility and cost of compiling certain additional affiliate data, such as total and intragroup exports and imports of services and goods, with results completed in 2009 for inward data and 2010 for outward statistics. Meanwhile, Eurostat will continue to publish affiliate statistics voluntarily supplied by member states through reference year 2006 for the newly mandatory categories and throughout the pilot period for any additional affiliate data provided.

Development of a Mode 4 Data Framework Is Elusive

The current BOP framework is not designed to measure trade in services by mode of supply.³⁷ As noted above, the absence of a comprehensive conceptual framework for measuring trade and the economic impact of GATS mode 4, the presence of natural persons, led the Interagency Task Force on Statistics of International Trade in Services to form a technical subgroup in 2004.³⁸

Consensus exists among trade data experts that the types of information needed in order to measure mode 4 include the monetary values for the service provided and the quantity of natural persons moving.³⁹ A principal issue in discerning the value of the service is that if a service transaction involves more than one mode of supply, estimation by mode of supply

³³ Eurostat, *Recommendations Manual on the Production of Foreign Affiliates Statistics (FATS)*, July 6, 2007.

³⁴ Grell, "Globalization Projects at Eurostat," September 18, 2007, 7.

³⁵ Regulation (EC) No. 716/2007 of the European Parliament and of the Council of 20 June 2007 on Community Statistics on the Structure and Activity of Foreign Affiliates, *OJ* No. L 171 (June 29, 2007), 17.

³⁶ The regulation further states that mandatory assessments on the quality of the data must accompany member states' data submissions to Eurostat, which in turn must evaluate and publish the reports and its assessments, as well as an aggregated, EU-wide evaluation of such data quality.

³⁷ BEA official, e-mail message to Commission staff, April 10, 2008.

³⁸ WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 29; Becker, "International Trade in Services—Migration Statistics and Mode 4," August 14, 2003; and Interagency Task Force on Statistics of International Trade in Services, "Minutes of the Meeting," September 20–21, 2007, 5.

³⁹ WTO, CTS, "A Review of Statistics on Trade Flow in Services," July 11, 2006, 29.

may be difficult.⁴⁰ Issues also exist over measuring the number of natural persons, including, for example, varied definitions by country as to what constitutes a temporary stay of natural persons in the host country. Forthcoming revisions of the BOP manual and the MSITS would clarify another current issue wherein national laws and statistical frameworks differ in how to determine and measure whether a foreign worker is an employee or a self-employed contractor.⁴¹ Moreover, differences in definitions and other methodological factors exist between various data sources used to quantify mobility, such as labor/migration statistics as compared to trade statistics.⁴² Accordingly, trade data experts state that consensus on the development of meaningful measurements of mode 4 is a long-term goal.⁴³ Progress in developing estimates of mode 4 may be partly contingent on further improvements in the quality and comparability of other areas of services data measurement, which are higher priority for many countries, as well as favorable developments in data collection in areas of the economy other than international trade.⁴⁴

Evolving Initiatives and Timetables for Completion

Recent international-level initiatives aim to advance the methodological standards and classifications for services in order to assist countries in producing more comparable and extensive statistics on services firms, industries, and trade, as well as to estimate their economic impact. The work to advance the extent and quality of services trade data exists alongside initiatives to develop international methodologies to measure real output of service industries, producer prices for services, remittances, globalization and restrictiveness indices, and other indicators of the economic importance of services. International organizations and advisory groups of data experts have coordinated their efforts throughout the development of these revisions. The initiatives include the International Standard Industry Classification (ISIC) completed in 2007 and three landmark classification and definition revision initiatives scheduled for completion and publication in 2008—the System of National Accounts, the Central Product Classification, and the Benchmark Definition of Foreign Direct Investment. In turn, work on these initiatives and other projects has benefitted revisions of the Balance of Payments Manual, scheduled for completion by December 2008, and the revised Manual on Statistics of International Trade in Services, to be published in 2010. Some highlights of these initiatives with respect to services follow.

⁴⁰ WTO, “Background Note on GATS Mode 4 Measurement,” February 22–24, 2006.

⁴¹ *Ibid.*, 15–18 and International Labor Organization, “International Classification of Status in Employment (ICSE),” July 23, 2001. National laws differ in how to define an employee, although many such laws hinge on defining how an employee is subordinate to an employer and that remuneration of an employee is based on work done irrespective of profits or the potential for profits. As for the self-employed, the SNA 1993 states that income to the service supplier is a function of the outputs from a production process some part of which comes from the contribution of the service supplier, while another classification framework, the International Classification of Status in Employment of the International Labor Organization, states that a primary difference between an employee and a self-employed worker is that the latter worker assumes economic risk not present in the former.

⁴² WTO, “Background Note on GATS Mode 4 Measurement,” February 22–24, 2006, 25 and WTO, Economic Research and Statistics Division, “Measuring Trade in Services,” March 2006, 21–24. For example, labor/migration statistics often do not distinguish between a foreign worker engaged in a commercial versus noncommercial service activity or in a service-sector activity versus a non-service-sector activity.

⁴³ WTO, CTS, “A Review of Statistics on Trade Flow in Services,” July 11, 2006, 32.

⁴⁴ BEA official, e-mail message to Commission staff, April 10, 2008.

International Standard Industry Classification

A key goal of ISIC revisions was to assist the convergence of international and three regional industry classifications in effect in Europe, North America, and Australia and New Zealand.⁴⁵ ISIC revisions expanded detailed coverage of service categories, created a new information and communication section, and aligned information and communication technology categories to facilitate data aggregation in this key service sector.

System of National Accounts

Numerous issues stimulated revisions related to services in the SNA. Examples of such issues include changes in measuring the output of financial services and insurance services, especially reinsurance.⁴⁶ Another change would subdivide formerly large categories—previously classified as services—into several components, some of which would be reclassified as goods.

Central Product Classification

Changes to the CPC have been influenced by revisions to the SNA and by recent developments in the North American Product Classification System, which classifies the products produced by various industries, including services.⁴⁷ The CPC remains only partially similar to EBOPS, with the CPC more detailed than EBOPS with regard to certain services, while the reverse applies to certain other services. Moreover, the CPC differs from EBOPS by classifying activities such as repairs and processing as services, while EBOPS includes them with the value of goods. Trade data experts state that the CPC revisions as nearly completed would largely preserve these differences.

Benchmark Definition of Foreign Direct Investment

The Benchmark Definition is more detailed than the SNA and BPM5 because of its requirement to guide the measurement of economic activity of FDI enterprises, as well as data on direct investment flows and stocks in partner countries.⁴⁸ Revisions to the Benchmark Definition, SNA, and BPM are being prepared in collaborations between the IMF, OECD, Eurostat, and UNCTAD. The revised Benchmark Definition manual is to include a new chapter on globalization, mirroring the growing importance of developing more comprehensive statistics on globalization.⁴⁹

Balance of Payments Manual

Leading issues involving services trade which are addressed in the revision include resolving borderlines between goods and services.⁵⁰ An example of consensus reached in this regard includes classifying software delivered electronically as a service. However, durable goods

⁴⁵ Giovannini and Cave, "The Statistical Measurement of Services," 2005, 11.

⁴⁶ Cave, "Report of the Twenty-Second Meeting," September 13, 2006, 3 and Giovannini and Cave, "The Statistical Measurement of Services," 2005, 9, 11.

⁴⁷ Cave, "Report of the Twenty-Second Meeting," September 13, 2006, 3–4.

⁴⁸ Cave, "How Are Services Being Internationalized?" September 13, 2006, 4.

⁴⁹ Lindner, "OECD and Globalization," September 18, 2007, 4.

⁵⁰ TFSITS, "Minutes of the Meeting," January 22-24, 2007, 1–2.

purchased by travelers while abroad would be reclassified from part of travel services expenditures to trade in goods.⁵¹

Manual on Statistics of International Trade in Services

The principal changes agreed to date⁵² include:

- For transactions between residents and nonresidents: revising EBOPS classifications to include new items, such as processing (that is, manufacturing services on physical inputs that are owned by others); changing hierarchies, such as grouping telecommunication with computer and information services; and amending categories, such as adding elements to or redefining financial services and insurance services, and clarifying and renaming royalties and license fees.
- For foreign affiliate transactions: aligning methodological concepts such as the definition of majority ownership more consistently with those in other related initiatives. A principal clarification states that foreign affiliate data are key to measuring commercial presence and assessing market access but are separate from international trade data focused on transactions between residents and nonresidents.⁵³
- For measuring modes of supply: creating a new chapter and providing a fuller discussion than in the original manual, including a discussion of mode 4 and its applicability to the supply of services.

BOX 8.1 Web sites for international trade statistics in services

Organization (Web site)

- Eurostat (<http://www.eurostat.com>) (Subscription required)
- International Monetary Fund (<http://www.imfstatistics.org/imf/>)
- Organization for Economic Cooperation and Development (http://www.oecd.org/statsportal/0,3352,en_2825_293564_1_1_1_1_1,00.html)
- United States Department of Commerce, Bureau of Economic Analysis (<http://www.bea.gov/>)
- United Nations Statistical Division (<http://unstats.un.org/unsd/ServiceTrade/default.aspx>)
- World Trade Organization (http://www.wto.org/english/res_e/statis_e/statis_e.htm)
- World Bank (<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,menuPK:232599~pagePK:64133170~piPK:64133498~theSitePK:239419,00.html>)

⁵¹ European Central Bank, *European Union Balance of Payments*, May 2007, 26.

⁵² UN, *Newsletter of the Interagency Task Force on SITS*, December 2007.

⁵³ Trade experts state that experience with foreign affiliate data in analyses of international trade in services is still unknown in many countries. In October 2007, the IMF proposed preparing a joint educational paper on the topic with the OECD and Eurostat to encourage participation in such analysis in the future.

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APPENDIX A

Services Roundtable Discussion Summary

Summary

On December 7, 2007, the U.S. International Trade Commission hosted a roundtable discussion on services trade. The roundtable discussion was attended by staff from the United States Trade Representative's office, the International Trade Administration and the Bureau of Economic Analysis of the U.S. Department of Commerce, the World Bank, the Coalition of Services Industries, the American Council of Life Insurers, the House Committee on Ways and Means, and the Senate Committee on Finance. The roundtable was convened to address two basic issues: (1) emerging issues and distinctive themes in services trade and (2) critical information gaps in existing services trade literature and areas of potential Commission research. This document serves as a summary of topics covered and statements made by the participants in this roundtable discussion.⁵⁴ The Commission invites individuals to submit additional comments regarding the contents of the roundtable discussion or additional information that could be useful to the Commission's services research agenda by contacting Richard Brown (richard.brown@usitc.gov) or Jennifer Baumert (jennifer.baumert@usitc.gov).

Emerging Issues and Distinctive Themes in Services Trade

Regulation

Regulatory reform plays a key role in facilitating services trade, particularly for commercial presence. In certain cases, such as professional services, it is the presence of regulations which act as an impediment while in other cases, such as telecommunications, the lack of regulation can act as an impediment. It is often difficult to determine whether a given regulation is designed for legitimate purposes (e.g., to protect consumers or critical infrastructure) or if it is intended to discriminate against foreign service providers. Unlike sectors such as agriculture, where the Sanitary and Phytosanitary (SPS) Agreement sets a scientific standard against which the legitimacy of regulations can be measured, there generally are no internationally accepted standards against which services regulations can be judged. For instance, China has used measures it identifies as prudential to discriminate against U.S. insurance providers and delay opening its markets. The type of regulatory reform needed, however, differs substantially between developed and developing countries.

In developed countries, regulatory harmonization is of primary concern because market access has largely already been achieved. The challenge of regulatory harmonization applies not only between countries, but also within countries, as in the insurance industry, where the lack of a federal regulatory regime produces a fragmented market for domestic and foreign firms alike. One research proposal was that the Commission undertake efforts to quantify the benefits of regulatory harmonization.

In developing countries, however, effective regulatory reform is often a precondition to effective market access for services industries. Negotiated commitments to liberalize markets can be negated by the absence of complementary regulatory and oversight reform. In Zambia, for instance, nine out of ten banks licensed after liberalization subsequently went bankrupt due to inadequate oversight. There needs to be a bridge between liberalization and

⁵⁴ The roundtable discussion involved staff of the various organizations in attendance expressing their opinions in an open format. This appendix represents a summary of that discussion and does not imply consensus regarding the topics covered, nor does it represent the official position of any organization.

complementary reform. Regulatory reference papers, like that incorporated in the World Trade Organization (WTO) telecommunications agreement, might be one means to link the two, though similar papers on postal/express services, energy services, and insurance have failed to gain traction in subsequent WTO negotiations.

Negotiations

Despite the fact that there has been significant unilateral liberalization in recent years, the Doha Round WTO services negotiations have not achieved bindings to current practices, much less genuinely new market access opportunities. Many countries have not even offered national treatment commitments for sectors such as professional services, which are an effective precondition to meaningful market access. While the inclusion of emergency safeguard measures (ESMs) may make trade liberalizing commitments more palatable to developing countries, safeguards could damage the prospects of completing a WTO agreement or winning approval by Congress. An ESM would be viewed as weakening the gains in services, a sector of comparative advantage for the United States. Another difficulty in the WTO negotiations has been the inability of developed countries to make significant mode 4 (presence of natural persons) commitments despite their importance to developing countries.

Recent U.S. FTAs, on the other hand, have achieved genuine market liberalization and persuaded U.S. trading partners to modify their national laws and regulatory regimes. Additionally, these FTAs have provided additional regulatory transparency, which is often a major impediment to U.S. firms wishing to operate in foreign markets.

Critical Gaps in Current Services Trade Literature and Areas of Potential Research

Jobs

Participants expressed a particular interest in determining the impact of services trade liberalization on employment. Attendants expressed interest in examining the growth or decline in the number of jobs on national, state, and district levels. In the same vein, there was interest in the net effect on jobs—how many would be created in the home market and how many would be created or moved (off-shored) to host markets. It was proposed that the Commission examine the effect of the U.S. services trade surplus on net job creation, as well as wages. Another suggestion was that the Commission research the trends and dynamics of employment, trade, and sales between parent firms and affiliates abroad or follow the global spread of one industry or single firm and identify the benefits to the home country.

Data

Services data collection should be expanded to include services trade, receipts, value added, and employment by state. Improved international data on affiliate sales is of particular importance, given its dominant share of total services trade. BEA is conducting a feasibility study on generating services export statistics by state. There is common interest in seeing data on services trade by partner country expanded in order to explain existing levels of trade. The United States encourages other countries to expand services trade data, especially data on sales through affiliates.

Services Facilitation

There is common interest in trying to quantify the way in which services liberalization facilitates goods trade, including determining the services facilitation component of a goods sale.

Productivity

Attendees expressed interest in work focusing on services productivity, particularly comparing services productivity growth with productivity growth in other sectors such as manufacturing.

WTO Litigation

Research regarding countries involved in WTO litigation with the United States would be useful, particularly regarding the potential for cross-sectoral retaliation. Some of this work could be facilitated by better data regarding sectors and countries involved in WTO disputes with the United States.

Non-Tariff Measures

The Commission should continue to assess non-tariff measures, in particular noting the approach that exporting and importing firms take in dealing with them.

APPENDIX B

Summary of EU Regulation (EC) 716/2007

Appendix B Summary of EU regulation (EC) 716/2007 to establish a common framework for producing statistics on foreign affiliates

Mandatory compilations^a

- Inward statistics (statistics to describe the activity of “foreign affiliates that reside in the compiling country”)
 - Number of enterprises
 - Turnover (sales)
 - Production value at factor cost
 - Total purchases of goods and services
 - Purchases of goods and services purchased for resale in the same condition as received
 - Personnel costs
 - Gross investment in tangible goods
 - Number of persons employed^b
 - Total intra-mural Research and Development (R&D) expenditure^c
 - Total number of R&D personnel^c
- Outward statistics (statistics to describe the activity of “foreign affiliates abroad that are controlled by an institutional unit resident in the compiling country”)
 - Turnover (sales)
 - Number of persons employed^b
 - Number of enterprises

Voluntary pilot studies^d

- Inward statistics
 - Exports of goods and services
 - Imports of goods and services
 - Intra-group exports of goods and services
 - Intra-group imports of goods and services
 - Activities in entities classified in education; health and social work; and other community, social, and personal services industries
 - Intra-mural R&D expenditures and number of R&D personnel for activities in seven industry groups
 - Further breakouts of data in the mandatory compilations (above) according to an entity’s number of persons employed
- Outward statistics
 - Personnel costs
 - Exports of goods and services
 - Imports of goods and services
 - Intra-group exports of goods and services
 - Intra-group imports of goods and services
 - Value added at factor costs
 - Gross investment in tangible goods

Trading partner data to be collected pursuant to the regulation:

Corresponding level of activity data to be collected:

- | | |
|---|---|
| <ul style="list-style-type: none">• For inward foreign affiliates<ul style="list-style-type: none">• 27 EU member states individually and aggregated;
14 non-EU countries• More than 200 non-EU countries individually• For outward foreign affiliates<ul style="list-style-type: none">• 9 non-EU countries• 33 non-EU countries• Other non-EU countries | <p>All economic activities are to be included except agriculture, hunting, and forestry; fishing; public administration and defense; compulsory social security; education; health and social work; other community, social and personal service activities; activities of households; and extra-territorial organizations. Disaggregated data are to be included for many business economy activities, including for services.</p> <p>Data are to include only the sum of all economic activities, except for the activities excluded immediately above.</p> <p>The largest amount of detailed data by economic activity is to be collected, including for example separating financial intermediation services into three subcategories in order to differentiate insurance and pension funding, and activities auxiliary to financial intermediation, from other financial intermediation activities.</p> <p>Less detailed data by economic activity are to be collected, including for example by combining into a single category transportation, storage, and communication services, and by aggregating data on financial intermediation services.</p> <p>Data are to include only the sum of all economic activities, except for the activities excluded above.</p> |
|---|---|

Source: Regulation (EC) No. 716/2007 of the European Parliament and of the Council of 20 June 2007 on Community Statistics on the Structure and Activity of Foreign Affiliates, OJ No. L 171 (June 29, 2007), 17.

^aTo be compiled annually from 2007, except as noted, and transmitted within 20 months of the end of each reference year.

^bIf not available, number of employees.

^cReporting is required every other year and only after minimum statistical thresholds for an affiliate's sales and employment have been met. Data are required only with respect to activities of entities classified in mining; manufacturing; electricity, gas, and water supply; and construction industries.

^dThe studies will be used to assess the feasibility and cost of obtaining the data listed, to be completed by 2009 for inward statistics and 2010 for outward statistics.