

Recent Trends in U.S. Services Trade

2011 Annual Report

**July 2011
Publication No. 4243**

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



U.S. International Trade Commission

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ABSTRACT

Recent Trends in U.S. Services Trade: 2011 Annual Report focuses principally on exports and imports of professional and other related services, including audiovisual, computer, education, healthcare, and legal services. This sector provides essential inputs to various goods and service industries, as well as specialized services directly to individual consumers. The largest professional service firms are located in developed countries and offer their services globally through cross-border trade and affiliate transactions. However, professional service firms in developing countries are becoming more competitive in the global market, and increasing demand for services in these countries continues to create new opportunities for expansion and investment by professional service firms both within and outside the United States.

Professional service industries showed more resilience during the recent economic recession than infrastructure service industries such as telecommunications, banking, and logistics, with a smaller decline in employment and continued wage growth. As a result, the United States kept its surplus in cross-border trade in professional services in 2009, and remained competitive in the sales of services through foreign affiliates.

PREFACE

This report is the 15th in a series of annual reports on recent trends in U.S. services trade that the U.S. International Trade Commission (the Commission or USITC) has published. The Commission also publishes an annual companion report on U.S. merchandise trade, titled *Shifts in U.S. Merchandise Trade*. These annual reports are the product of a recurring investigation instituted by the Commission in 1993 under section 332(b) of the Tariff Act of 1930.¹ The information contained in this report reflects the knowledge, industry contacts, and analytic skills that are used by the Commission in providing expert analyses of service industries in its statutory investigations and in apprising its customers of global industry trends, regional developments, and competitiveness issues.

In recent years, the Commission has published several reports on the services sector in addition to the *Recent Trends* series. These reports include *Property and Casualty Insurance Services: Competitive Conditions in Foreign Markets* (USITC Publication 4068, March 2009) and *Renewable Energy Services: An Examination of U.S. and Foreign Markets* (USITC Publication 3805, October 2005). Services have also been addressed in *ASEAN: Regional Trends in Economic Integration, Export Competitiveness, and Inbound Investment for Selected Industries* (USITC Publication 4176, August 2009), as well as in the *Small and Medium-Sized Enterprises* series—three reports on small and medium-sized enterprises published in 2010 (USITC Publication 4125, January 2010; USITC Publication 4169, July 2010; and USITC Publication 4189, November 2010).

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 the services, agriculture, and manufacturing sectors.

ABBREVIATIONS AND ACRONYMS

ASEAN	Association of Southeast Asian Nations
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CTS	Council for Trade in Services
EIU	Economist Intelligence Unit
FTE	Full-time Equivalent
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
IT	Information Technology
ITU	International Telecommunications Union
IMF	International Monetary Fund
IPO	Initial Public Offering
MFN	Most-Favored-Nation
NHS	National Health Service
OECD	Organization for Economic Cooperation and Development
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USDOC	U.S. Department of Commerce
USDOL	U.S. Department of Labor
USITC	U.S. International Trade Commission
USTR	Office of the United States Trade Representative
WHO	World Health Organization
WTO	World Trade Organization

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Executive Summary

The United States is the world's largest service market and was the world's largest cross-border exporter and importer of services in 2009.¹ Over the past three years, global trade in services has weakened in response to the downturn in the global economy, and new competitors have emerged. Despite these challenges, U.S. services providers remained highly competitive in 2009. Much of the United States' competitiveness in the global services market can be attributed to its professional service industries, which are the focus of this year's report.² Trade in many professional services was weakened by the economic downturn because these services are used as intermediate inputs for other industries, but overall, professional services proved more resilient than infrastructure services.

The *2011 Recent Trends in U.S. Services Trade* report provides in-depth analyses of recent developments in the audiovisual services industry, which is highly influential both culturally and economically, as well as in four professional service industries—computer, education, healthcare, and legal services. These industries provide critical services that contribute to the U.S. economy at home and abroad. For example, computer services enhance productivity and support business activities across all industries; education and healthcare services contribute to a knowledgeable, skilled, and healthy workforce, while meeting foreign demand for U.S. expertise; and legal services facilitate trade and investment by mitigating risk in business activity. The United States remained a world leader in these industries, recording a cross-border trade surplus in all but the computer services industry in 2009 (figure ES.1).³

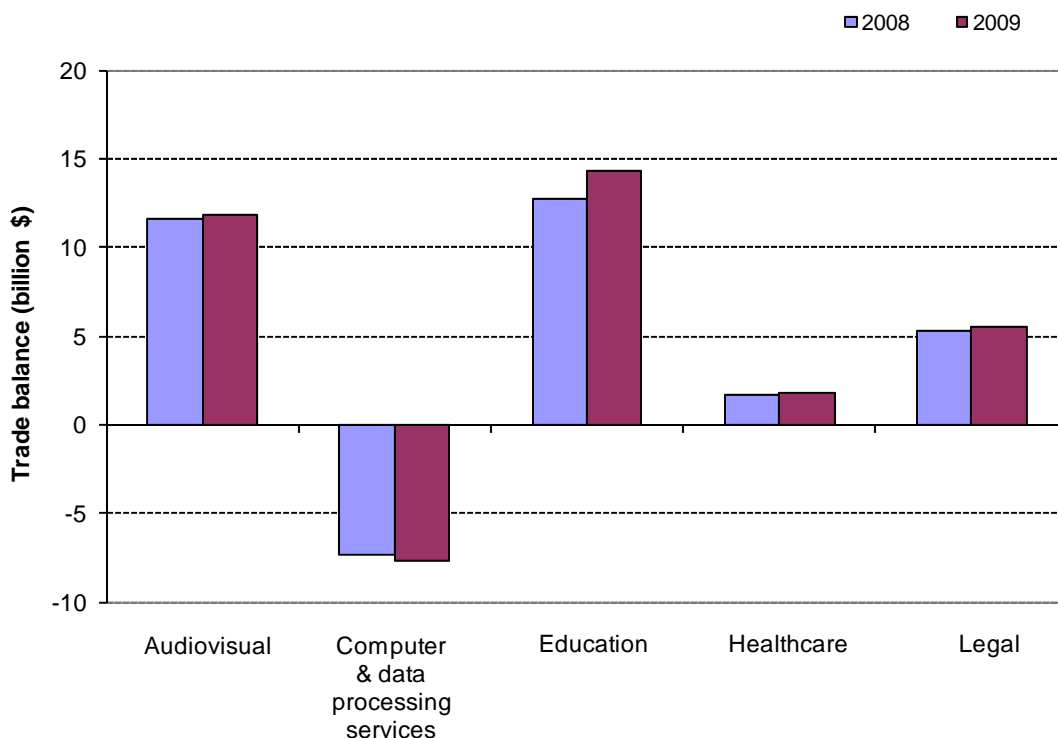
Leading firms in these industries have adapted to a number of economic challenges in markets at home and abroad, including shifting demand and changes in the way the industries operate. The recent economic downturn depressed demand for a number of these services, including computer, healthcare, and legal services. Reduced demand motivated suppliers in these and other service industries to cut costs. In industries inextricably related to government policy, such as education and healthcare, recent policy changes reflect government efforts to balance budgetary and social objectives. Demographic trends increased demand in mature audiovisual and healthcare services markets, and economic development in emerging markets stimulated demand in overseas markets for education and legal services and bolstered trade in computer services. Finally, innovations in technology-dependent industries, such as audiovisual and computer services, have reshaped these industries by enabling them to provide new services and use new methods of delivery.

¹ Cross-border trade occurs when suppliers in one country sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. Affiliate trade occurs when firms provide services to foreign consumers through affiliates established in host (i.e. foreign) countries.

² Beginning in 2008, the *Recent Trends* report has discussed the professional and infrastructure service subsectors in alternate years. This division allows more detailed analysis of the individual services industries. Professional services are characterized as labor-intensive industries employing highly skilled and highly educated individuals in positions that frequently require specialized licensing or training. Infrastructure services are capital intensive, providing critical inputs to industrial activity and economic growth, and are consumed by every firm irrespective of economic sector. For the purposes of this report, infrastructure services include banking, insurance, securities, transportation, telecommunications, electric power, and retail services.

³ For the computer services industry, sales through foreign affiliates are the predominant mode of supply.

FIGURE ES.1 Among the services discussed in this report, the United States recorded a cross-border trade surplus in all but the computer services industry in 2008 and 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, tables 1 and 2.

Key Findings

Total U.S. Trade in Services

The United States Remained Highly Competitive in the Global Services Market in 2008-09

The United States remained the world’s largest exporter and importer of services in 2009. In 2009, U.S. private service exports totaled \$483.9 billion, or 14.1 percent of global services exports—twice the share of the next largest exporter—and U.S. service imports totaled \$334.9 billion, or 10.5 percent of global services imports. The United States’ leading services trade partner was the United Kingdom (\$51.0 billion of exports and \$38.1 billion of imports), followed by Canada (\$42.0 billion exports and \$22.0 billion imports) and Japan (\$40.9 billion exports and \$20.8 billion imports). Travel services accounted for the largest single-industry share of U.S. services trade in 2009, accounting for 19.4 percent of exports and 21.9 percent of imports.

In 2008, the most recent year for which affiliate data are available, services supplied by foreign affiliates of U.S. firms (foreign affiliates) continued to exceed services supplied by U.S. affiliates of foreign firms (U.S. affiliates). Services supplied by foreign affiliates totaled \$1.1 trillion in 2008, representing 12 percent growth over the previous year. Growth in services supplied by U.S. affiliates was slower that year, increasing 6 percent

to \$727.4 billion. As in cross-border services trade, the United Kingdom was the United States' largest market for affiliate transactions, accounting for 20 percent of services supplied by foreign affiliates and 18 percent of services supplied by U.S. affiliates.

The U.S. Cross-border Trade Surplus Declined in 2009, Largely Due to the Economic Downturn

The total U.S. cross-border trade surplus in 2009 shrank for the first time since 2003: it was \$149.0 billion, down from \$161.4 billion in 2008. As in most previous years, many individual U.S. service industries recorded trade surpluses in 2009; the largest surpluses among all services—infrastructure and professional—were in royalties and license fees (\$64.6 billion) and financial services (\$40.0 billion). The insurance industry again netted the largest cross-border trade deficit, which totaled \$40.6 billion, largely due to payments by U.S. primary insurers to reinsurance firms in Europe and the Bahamas. Additionally, although service industries were more successful in weathering recent economic events than manufacturing industries, service industries with ties to goods industries netted cross-border services trade deficits owing in part to the indirect effects of the economic downturn. For example, the \$6.2 billion trade deficit in transportation services largely reflects the U.S. trade deficit in manufactured goods. However, the recovery in global demand during 2010 has had a positive impact on service industries; trade data for the first three quarters of 2010 indicate an increase in both global merchandise trade and U.S. services trade.

Professional Services

Professional Services Account for a Large and Growing Share of the U.S. Economy

In 2009, professional services contributed \$2.2 trillion, or 20 percent, to U.S. private sector GDP. Further, between 2004 and 2008, annual growth in professional services output of 3 percent surpassed output growth in infrastructure services (2.2 percent), as well as in the U.S. private sector as a whole (1.9 percent). Professional services employed 26 million persons, or 26 percent of U.S. private sector employment, in 2009. These workers are highly educated and highly skilled overall, and they earn higher wages, on average, than either infrastructure service providers or goods providers. Although wages vary widely among these industries, ranging from \$40,785 for education service workers to \$95,337 for computer systems design and related service employees, they have risen more rapidly than those for infrastructure services over the past five years.

Despite Wage Growth, Total Labor Productivity in Professional Services Weakened in 2009

Labor productivity for workers in all professional service sectors (calculated as industry value added or contribution to GDP per full-time equivalent employee) fell slightly, from \$84,628 in 2008 to \$84,042 in 2009. This drop represented the only decline among U.S. private sector industries; in that same year, labor productivity increased among goods manufacturers (4.9 percent) and infrastructure services providers (5.8 percent). The decline in productivity among professional services followed a period of slow growth: labor productivity increased less than 0.1 percent annually between 2004 and 2008. This creeping growth was due in part to rising employment. During 2004–08, full-time employment in professional services grew at an average rate of 3 percent per year, keeping pace with growth in professional services GDP. As a result, productivity gain was minimal.

However, not all professional service industries experienced productivity declines in 2010. The computer systems design and related services industry increased productivity by 4 percent in 2009. Providers of miscellaneous professional, scientific, and technical services increased productivity by 2 percent.

Regulation of Professional Services Balances Welfare Concerns and Economic Efficiency

Many professional services are subject to relatively heavy regulation, which is frequently enacted to protect consumer welfare or meet other non-market objectives. Research looking at the relationship between regulation and economic growth in OECD countries has suggested that such regulation may hinder labor productivity gains by reducing innovation and competition. However, many countries have prioritized social or other objectives over the potential economic benefits of deregulation.

Many Professional Services Are Outsourced to Offshore Firms

Professional services are increasingly outsourced to offshore locations as a result of firms' desire to contain labor costs and emphasize core competencies. Although this practice initially focused on low-skilled service jobs, more recently U.S. firms have moved certain high-skill jobs to developing countries. There is currently no consensus on the effect this trend will have on the U.S. professional services industry, as perspectives among researchers differ. Further, some studies on labor productivity suggest that the largest result of this trend may be to increase the productivity of the industries that consume professional services.

In 2008–09, Cross-border Trade in Professional Services Exceeded Sales through Affiliates

In 2009, professional services accounted for 20.2 percent of total U.S. cross-border services exports and 20.9 percent of total U.S. cross-border services imports. In that year, the United States recorded a cross-border trade surplus in professional services of \$27 billion, as U.S. exports of professional services (\$97.6 billion) substantially exceeded U.S. imports (\$70.1 billion). Among the professional service industries, management and consulting services accounted for the largest share of U.S. professional service exports (28.9 percent) and imports (31.7 percent).

Cross-border trade in professional services slightly exceeded sales through affiliates. Nonetheless, in 2008, foreign affiliates of U.S. firms supplied no less than \$91.8 billion in professional services, exceeding the \$82.2 billion in professional services supplied by U.S. affiliates of foreign firms.

Audiovisual Services

Global Box Office Revenues, Led by the U.S. Industry, Have Risen Steadily in Recent Years⁴

Global box office revenues reached an all-time high of \$29.5 billion in 2009, an increase of just over 5 percent from the previous year (\$28.0 billion). Notably, China ranked among the top 10 global markets in 2009 for the first time; in 2010, analysts predicted

⁴ The discussions of individual service industries use a wide variety of industry specific data sources; as a result, the time periods discussed in these chapters reflect the most recent data available.

that by the end of the year China would have joined the world's billion-dollar box office markets, of which there were six in 2009. The U.S. market, with box office revenues of \$9.7 billion, remained the world leader in 2009. U.S. cross-border exports of audiovisual services have consistently exceeded U.S. cross-border imports over the last decade. This trade surplus came to about \$12 billion in 2009. Several factors underlie global growth, including increasing demand for and availability of more expensive 3-D and high-definition titles; the construction of more digital-ready movie theaters; higher movie ticket prices; and the proliferation of lower-cost digital distribution channels.

International Trade in the Audiovisual Industry Has Suffered from Serious Impediments

In several important markets, growing online intellectual property piracy has hampered industry growth in terms of both international trade and domestic sector development. Other lingering impediments include content quotas and foreign equity restrictions. In response, the industry is looking to implement more cost-effective production processes, increase film co-productions in rapidly growing markets such as China's, and diversify into more international market segments by taking advantage of the increasing use and overall availability of digital filmmaking and distribution technologies.

Computer Services

Despite the Downturn, the Global Computer Services Industry Grew during 2004–09

In response to the economic downturn, global spending on computer services contracted to \$715.0 billion in 2009, following growth from \$588.6 billion in 2004 to \$745.0 billion in 2008 (representing average annual growth of 6.1 percent). Demand for computer services remained highest in Western Europe and North America, where most of the industry's leading firms are headquartered, but was most resilient to the downturn in the Asia-Pacific region, where several Indian companies have emerged as industry leaders. Sales dropped during the downturn due to the struggles of leading clients, notably financial firms, although persistent demand from government and healthcare firms helped offset the decline. Large computer hardware and software firms began to supply more computer services, especially over the Internet (via "cloud computing"), often delivered across borders due to the rapid growth of broadband infrastructure.

U.S. Cross-border Trade in Computer and Data Processing Services Ran a Deficit Each Year during 2006–09

The United States' trade deficit in computer and data processing services grew by 8.1 percent during 2006–09, totaling \$7.7 billion at the end of the period. India led the world in exports of these services, supplying one-third of U.S. imports in 2009. Sales by U.S. firms' foreign computer services affiliates far exceeded U.S. cross-border exports, and sales by foreign firms' computer services affiliates in the United States nearly doubled, from \$10.8 billion in 2003 to \$21.0 billion in 2008. While explicit barriers to trade and foreign investment in this sector are rare, the advent of cloud computing raised concerns about impediments to cross-border data flows. Forecasts suggest that demand for computer services, particularly those delivered over the Internet, will grow in the near future.

Education Services

International Trade in Education Services Continued to Expand

International trade in education services was influenced by diverse factors, including strong developing-country demand, especially from students in China and India; stricter regulations in several countries concerned about would-be immigrants posing as students; and government budget cuts. A growing number of universities are motivated to attract foreign students for financial reasons as well as to increase student body diversity. As competition among universities for foreign students—particularly the best-qualified students—intensifies, universities have sought to differentiate themselves from peer institutions by upgrading campus facilities and hiring foreign student recruitment firms, among other methods.

Worldwide, U.S. Universities Remained the Premier Destination for Foreign Students

The United States' cross-border trade surplus in education services expanded in 2009. Tuition increases and growing foreign student enrollments propelled U.S. export growth, whereas the increasing tendency of U.S. students to enroll in briefer, less costly study-abroad programs slowed import growth. Foreign students at U.S. universities mostly come from Asian countries, especially China, India, and Korea. By contrast, most U.S. students who attend foreign universities enroll in schools in the European Union, primarily in France, Italy, Spain, and the United Kingdom. International barriers to trade in education services largely involve restrictions on establishing campus facilities abroad and regulations governing the official acceptance of university degrees from other countries.

Healthcare Services

Global Spending on Healthcare Services Has Steadily Risen since 2003

From 2003 through 2008, global healthcare spending rose at an average annual rate of roughly 9 percent to reach \$5.9 trillion, or almost 10 percent of global GDP. The world's largest healthcare markets are still found in the United States and Europe. However, the fastest-growing markets are in developing countries, where private expenditures are rapidly increasing. Demand for privately financed care fell in developed markets, as people reduced spending following the economic downturn. However, the rising incidence of chronic illnesses has driven global demand for treatments to manage these conditions. Governments around the world have launched programs and reforms to meet the growing needs of their constituents and to address shortcomings in healthcare infrastructure and the supply of healthcare workers.

Despite Import Growth, High Quality Sustained the U.S. Cross-border Trade Surplus in Healthcare

The United States has maintained a trade surplus in healthcare services, which grew to \$1.74 billion in 2009, largely due to exports to its neighbors in North America. In 2009, the U.S. exported \$2.6 billion of healthcare services—triple the figure for U.S. imports, which totaled \$879 million. U.S. exports maintained a competitive advantage based on the quality and expertise of U.S. providers, but a growing share of U.S. residents, particularly those without insurance, traveled to Mexico and other countries offering low-cost healthcare. Purchases from U.S. affiliates of foreign firms continued to exceed sales

by foreign affiliates of U.S. firms, as the United States kept its position as the largest private healthcare market in the world.

Legal Services

Though Ascendant, U.S. and European Law Firms Lost Market Share to Providers in Developing Countries

In recent years, European and U.S. law firms have lost global market share to firms in the Asia-Pacific region. From 2005 to 2009, the Asia-Pacific share of the global legal services market doubled from 5.1 to 10.4 percent, while the shares accounted for by the Americas and Europe fell. During the global downturn, legal service providers in the Asia-Pacific fared better than in the United States or Europe, the traditional market drivers. Moreover, from 2005 through 2008, U.S. imports of legal services grew faster than exports, reflecting the growing competitiveness of foreign legal services providers. However, U.S. firms are taking advantage of commercial opportunities in developing countries. In 2009, direct investment abroad by U.S. law firms increased faster than in most other professional service industries, and although U.S. foreign affiliate sales remained concentrated in Europe, affiliates in the Middle East and Latin America are multiplying.

Despite the Global Legal Services Slowdown, U.S. Cross-border Trade and Affiliate Transactions Kept Growing

Although both U.S. exports and U.S. imports of legal services declined in 2009, exports declined more slowly; consequently, the U.S. legal services trade surplus grew to \$5.5 billion in 2009. Further, growth in exports to Latin America and the Asia-Pacific region offset decreases in exports to Europe and Canada. Moreover, in 2008, the last year for which data are available, sales by foreign legal service affiliates of U.S. firms grew 8.6 percent to \$3.4 billion and continued to exceed purchases from U.S. affiliates of foreign law firms, which totaled only \$117 million. U.S. law firms managed costs during the slowdown by laying off employees and reducing other business costs, such as marketing.

Recent USITC Roundtable Discussion

The Commission hosted its fourth annual services roundtable on December 8, 2010. Participants from government, industry, and academia offered a range of perspectives on issues affecting services trade. This year's discussion topics included the effect of globalization on U.S. service jobs and wages, the net welfare effects of establishing service affiliates abroad, and the effects of technological advancements on the production and delivery of services. Roundtable participants emphasized the difficulties in understanding trade trends in the absence of comprehensive data, debated the significance of globalization on employment trends in U.S. service industries, and concluded with a discussion of challenges facing U.S. service industries—in particular, the need to develop a competitive, well-educated workforce.

CHAPTER 1

Introduction

This annual report examines U.S. services trade, both in the aggregate and in selected industries; identifies important U.S. trading partners; and analyzes global competitive conditions in selected service industries. This year's report focuses on audiovisual services and the following professional services: computer, education, healthcare, and legal services.¹

Data and Organization

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

The balance of this chapter examines cross-border trade in services from 2004 through 2009 and affiliate sales of services from 2005 through 2008;³ compares the trade situation during the most recent year for which data are available to previous trends; and describes the nature and extent of cross-border trade and affiliate transactions. Chapter 2 discusses trends affecting professional service industries and examines the contribution of these industries in terms of economic output, employment, labor productivity,⁴ and trade. Chapters 3 through 7 analyze the audiovisual, computer, education, healthcare, and legal service industries. These chapters provide an overview of global competitiveness, examine recent trends in cross-border trade and/or affiliate transactions, summarize trade impediments, and discuss industry-specific trends. Lastly, Chapter 8 summarizes the discussion of the fourth annual USITC services trade roundtable, hosted by the Commission in December 2010.

¹ In addition to the industries identified above, subsequent editions of *Recent Trends* may discuss other professional services, including accounting, auditing, and bookkeeping services; advertising services; architectural, engineering, and other technical services; and construction services. Beginning in 2008, the *Recent Trends* report has discussed the professional and infrastructure service subsectors in alternate years. This division allows for more detailed analysis of the individual industries. Professional services are characterized as labor-intensive industries, employing highly skilled and highly educated individuals in positions that frequently require specialized licensing or training. Infrastructure services are capital-intensive: they provide critical inputs to industrial activity and economic growth, and are consumed by every firm irrespective of economic sector. For the purposes of this report, infrastructure services include banking, insurance, securities, transportation, telecommunication, electric power, and retail services.

² BEA data are compiled from surveys of services directed to specific service industries or types of investment. For more information, see USDOC, BEA, *Survey of Current Business*, October 2010.

³ Data on affiliate transactions lag those on cross-border services trade by one year. Thus, while analyses of cross-border trade data compare performance in 2009 to trends from 2004 through 2008, analyses of affiliate transactions compare performance in 2008 to trends from 2005 through 2007. Note also that in 2009, BEA changed its method of reporting affiliate trade data. New affiliate data report "services supplied," a measure that better reflects services output than the prior measure, "sales of services." The change is retroactive for data from years 2005–08. For more information, see USDOC, BEA, *Survey of Current Business*, October 2009, 34–36.

⁴ For purposes of this report, Commission staff calculated labor productivity by dividing gross domestic product for each industry by the number of full-time equivalent employees.

The U.S. Services Sector

Service industries account for an overwhelming majority of U.S. production and employment. In 2009, the U.S. services sector comprised 79 percent (or \$8.9 trillion) of total U.S. gross domestic product (GDP) and 81 percent (or 82.2 million) of U.S. full-time employees, compared to 21 percent and 19 percent, respectively, for the goods-producing sector. In that year, services sector workers earned an average salary of \$49,285, which was slightly lower than the non-service sector worker's average salary of \$55,505. Recent trends in the U.S. services sector have mirrored overall trends in the U.S. economy, as average annual increases in services sector GDP, employment, and wages were within 1 percent of the growth rates registered for the United States as a whole from 2004 through 2009.⁵ A more detailed description of production and labor trends in U.S. professional service industries, which are the focus of this year's report, is given in Chapter 2.

Global Services Trade

Services trade, which has grown faster than trade in goods, is an important contributor to global GDP. In 2007, the volume of international trade in services (i.e., imports plus exports) amounted to roughly 12 percent of worldwide GDP—nearly double its share in 1990.⁶ The United States is highly competitive in the global services market. As the world's top exporter of services, the United States accounted for \$473.9 billion, or 14.1 percent, of global cross-border commercial services⁷ exports in 2009 (figure 1.1). Other top single-country exporters included Germany and the United Kingdom (each accounting for approximately 7 percent). Although most of the world's top 10 services exporters in 2009 were developed countries, China tied Japan for fifth place among the largest services exporters. Overall, the top 10 exporting countries accounted for roughly 52 percent of global cross-border services exports in 2009.⁸

The United States was also the world's largest services importer in 2009, with \$330.6 billion, or 10.5 percent, of global commercial services imports. In that year, Germany and the United Kingdom respectively accounted for 8.1 percent and 5.1 percent of such imports, while the top 10 importing countries together accounted for one-half of global commercial services imports. China, which was the fourth-largest importer of commercial services in 2009, was the only developing country to rank among the top 10 global importers.

The U.S. services trade surplus (\$143.3 billion) in 2009 was the world's highest, followed by that of the United Kingdom (\$72.4 billion). Saudi Arabia and China had the world's largest services trade deficits, with imports exceeding exports by \$36.2 billion and \$29.6 billion, respectively.⁹

⁵ USDOC, BEA, "Real Value Added by Industry," May 25, 2010; USDOC, BEA, "Table 6.5D," August 5, 2010; USDOC, BEA, "Table 6.6D," August 5, 2010. Value added is a measure of an industry's contribution to gross domestic product; it is the difference between gross industry output and intermediate inputs.

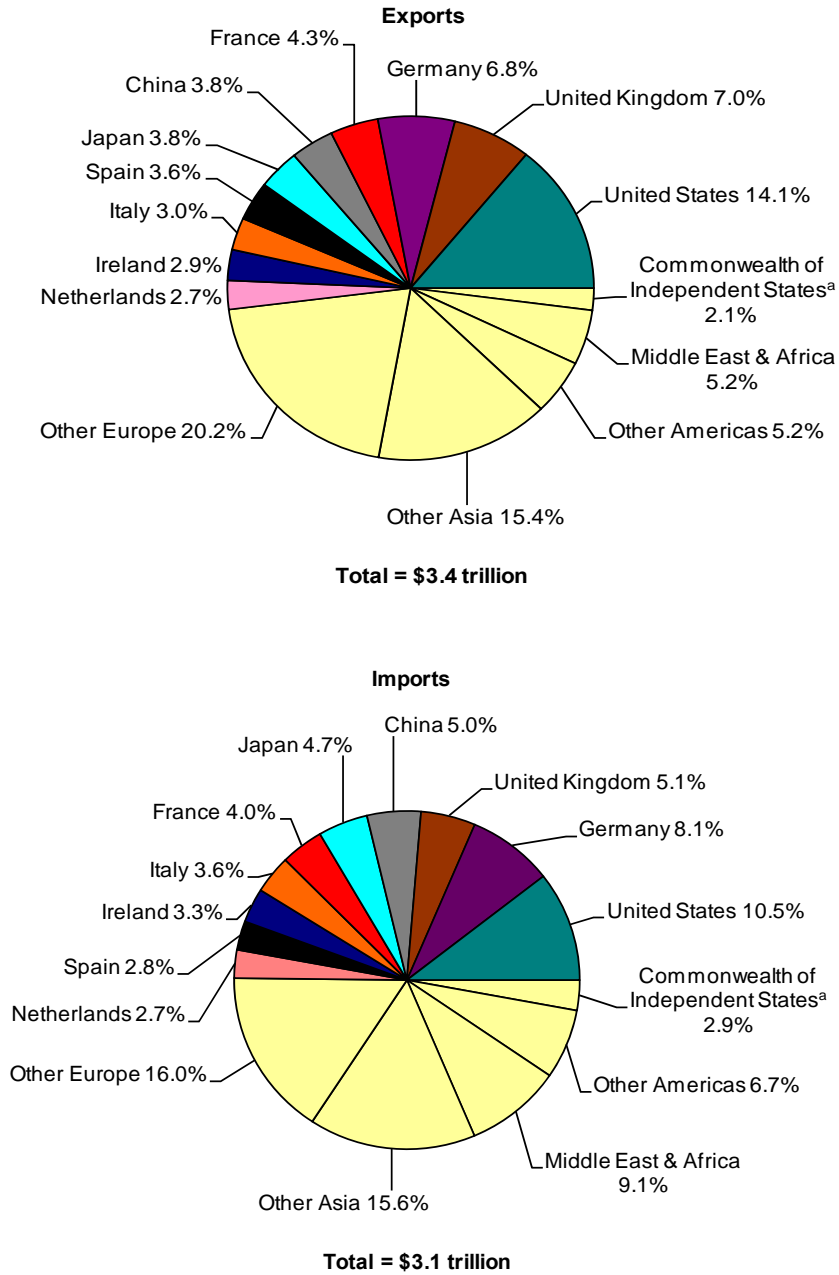
⁶ Cattaneo et al., *International Trade in Services*, 2010, 3.

⁷ USDOC, BEA representative, telephone interview by USITC staff, February 25, 2009. The term "commercial services," used by the World Trade Organization (WTO), is like the term "private services"; both refer to services offered by the private, rather than the public, sector. WTO trade data are sourced from the International Monetary Fund (IMF).

⁸ WTO, *International Trade Statistics 2010*, 2010, 189–91, table A8.

⁹ *Ibid.*, table A9.

FIGURE 1.1 Global services: The United States led the world in cross-border exports and imports of services in 2009



Source: WTO, *International Trade Statistics 2010*, 2010, 189–94, tables A8 and A9.

Notes: Excludes public-sector transactions. Geographic regions are shaded yellow.

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

U.S. Trade in Services

The BEA publishes data on both cross-border trade and affiliate transactions in services, which together account for a substantial portion of the services provided through all four modes of supply specified in the General Agreement on Trade in Services (GATS) (box 1.1). “Cross-border trade” occurs when suppliers in one country sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. Such transactions appear explicitly as imports and exports in the balance of payments. Firms also provide services to foreign consumers through affiliates established in host (i.e., foreign) countries, with the income generated through “affiliate transactions” appearing as direct investment income in the balance of payments. The channel of delivery used by service providers depends primarily on the nature of the service. For example, many services that require knowledge of and experience in the local market, such as advertising services, are supplied most effectively through affiliates located close to the consumer. Conversely, educational services to foreign consumers are predominantly provided through a form of cross-border trade known as consumption abroad, wherein a student from one country attends a university in another country. Affiliate transactions are the principal means of providing services to overseas customers, accounting for 66 percent of overall U.S. services trade volume in 2008 (box 1.2).

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

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

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

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

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

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

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

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

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

BOX 1.2 The Rise of Affiliate Transactions

Since 1986, when the U.S. Department of Commerce began collecting statistics on U.S. services trade, the relative importance of cross-border trade and affiliate transactions has shifted significantly.^a In each of the 10 years from 1986 through 1995, U.S. cross-border exports of services exceeded sales by majority-owned foreign affiliates of U.S. firms. Since 1996, however, sales by U.S. firms' foreign affiliates have exceeded cross-border services exports. In 2008, services supplied by U.S. firms' affiliates abroad (\$1.1 trillion) were more than double the value of U.S. cross-border exports of services (\$517.9 billion). Similarly, services supplied to U.S. citizens by foreign-owned affiliates have exceeded cross-border services imports since 1989. In 2008, services supplied to U.S. citizens by the U.S. affiliates of foreign companies (\$727.4 billion) were nearly twice the value of U.S. services imports (\$365.5 billion).^b

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

^a USDOC, BEA, *Survey of Current Business*, October 2006, 20–21.

^b USDOC, BEA, *Survey of Current Business*, October 2010, 18.

Cross-border Trade

According to the BEA, U.S. exports of private sector services totaled \$483.9 billion in 2009, while U.S. imports totaled \$334.9 billion, resulting in a \$149.0 billion trade surplus (figure 1.2).¹⁰ Professional services accounted for 20.2 percent of exports and 20.9 percent of imports (figure 1.3).¹¹ Travel services accounted for the largest single-industry share of U.S. services trade in 2009,¹² representing 19.4 percent of U.S. exports and 21.9 percent of U.S. imports.¹³

In 2009, U.S. cross-border services exports fell for the first time since 2003. According to BEA data on trade in private-sector services,¹⁴ U.S. cross-border services exports decreased by 7 percent in 2009, following average annual growth of 12 percent during the five-year period beginning in 2004. This decline spread broadly across service industries, led by trade-related services (31 percent);¹⁵ accounting, auditing, and

¹⁰ The \$149.0 billion trade surplus estimated by the BEA differs from the \$143.3 billion WTO estimate, presented above in the “Global Services Trade” section. The data are drawn from different sources, as both sets of data are not available in a single source. The WTO provides global services trade data whereas BEA provides U.S. services trade data.

¹¹ Values are reported before deductions for expenses and taxes, as gross values are most directly comparable across countries, industries, and firms.

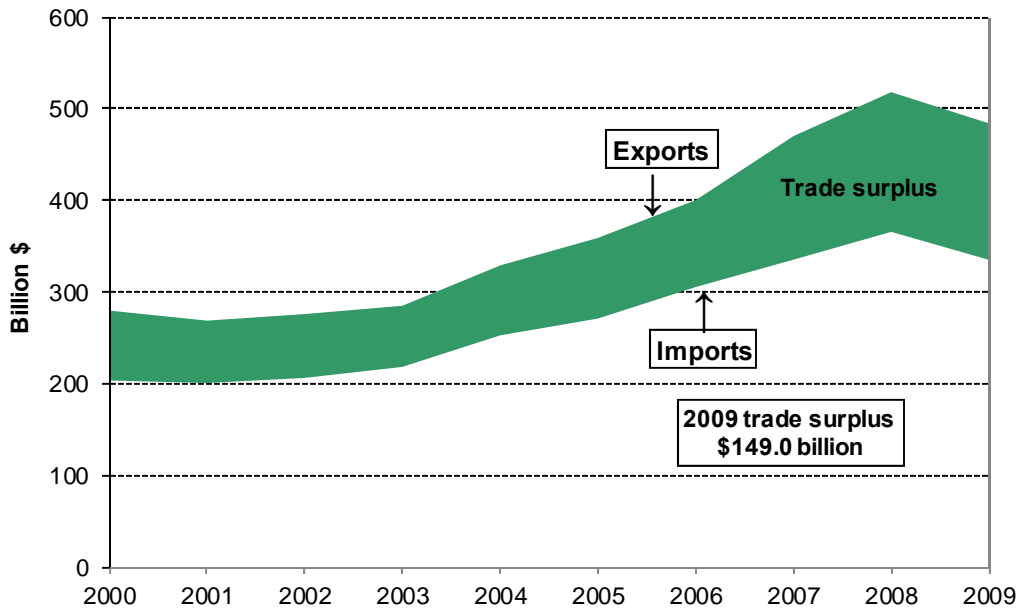
¹² USDOC, BEA, *Survey of Current Business*, October 2010, 34. Travel services are measured through the purchase of goods and services while traveling abroad. Such items include, for example, food, lodging, recreation, local transportation, and entertainment.

¹³ *Ibid.*, 36–37.

¹⁴ 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 when noted.

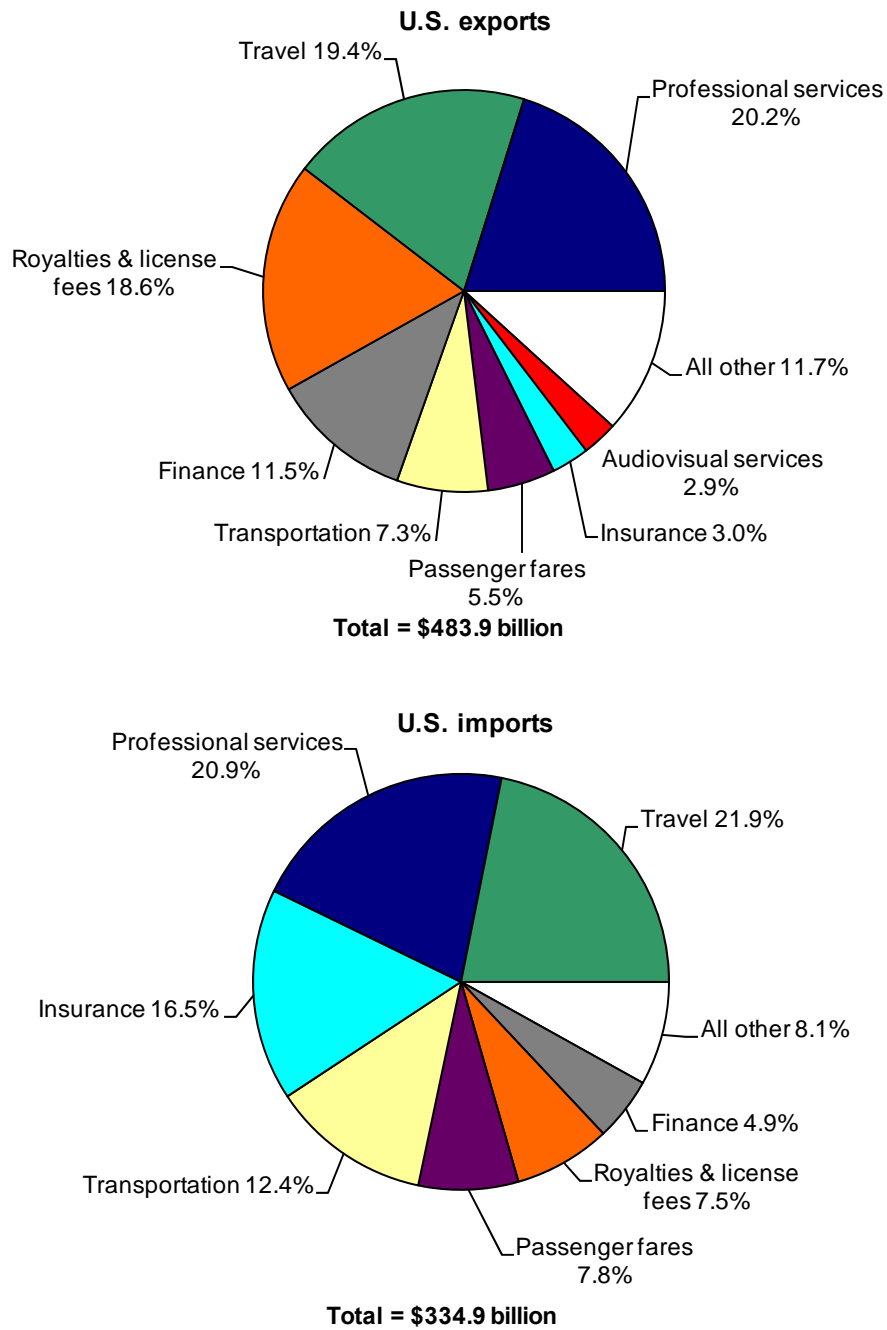
¹⁵ According to the BEA, “Trade-related services consist of auction services, Internet or online sales services, and services provided by independent sales agents. For exports, ‘merchandising’ services are also included; these exports are measured as the difference between the cost and resale prices of goods that are purchased and resold abroad with significant processing.” USDOC, BEA, *Survey of Current Business*, October 2010, 37.

FIGURE 1.2 U.S. services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2000–2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

FIGURE 1.3 U.S. services: Professional services accounted for a large share of U.S. cross-border exports and imports of services in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

Note: Trade data exclude public sector transactions.

bookkeeping services (27 percent); transportation services (19 percent);¹⁶ travel services (15 percent); and financial services (9 percent). Although overall services exports decreased, several service industries had double-digit increases. These industries include, sports and performing arts services (47 percent); mining services (31 percent); services related to the installation, maintenance, and repair of equipment (18 percent); and education services (11 percent). The impact of the global economic downturn on services trade is examined in box 1.3.

The value of U.S. services imports fell by 8 percent in 2009, following average annual growth of 12 percent from 2004 through 2008. Imports fell in over half of the reported service industries, with the largest decrease in transportation services (23 percent). U.S. imports in several other categories also dropped significantly, including passenger fares (20 percent), finance (18 percent), and legal services (15 percent).

As in most previous years, the majority of U.S. service industries registered cross-border trade surpluses in 2009. Royalties and license fees achieved the largest surplus in 2009 (\$64.6 billion), followed by financial services (\$40.0 billion),¹⁷ travel services (\$20.7 billion), education services (\$14.3 billion), and audiovisual services (\$11.9 billion). Service industries that netted cross-border trade deficits in 2009 include insurance services (\$40.6 billion), transportation services (\$6.2 billion), and computer and data processing services (\$7.7 billion). The deficit in insurance services principally reflects U.S. primary insurers' payments to European and Bermudian reinsurers in return for their assuming a portion of large risks. The deficit in transportation services (i.e., freight transport and port fees) largely reflects the U.S. deficit in manufactured goods trade and the way in which U.S. imports of freight transportation services are measured. For example, Chinese shipments of manufactured goods to the United States typically exceed U.S. shipments of goods to China, and payments to Chinese or other foreign shippers for the transport of U.S. merchandise imports are recorded by BEA as U.S. imports of transportation services. Lastly, the deficit in computer and data processing services largely reflects the outsourcing by U.S. firms of many of these services to Indian providers.¹⁸

A small number of developed countries account for a substantial share of U.S. cross-border services trade. Canada, Japan, and the United Kingdom collectively accounted for 28 percent of total U.S. cross-border services exports in 2009. The United Kingdom (11 percent), Canada (9 percent), Japan (8 percent), and Ireland and Germany (5 percent each) accounted for the largest single-country shares of U.S. services imports in 2009. The EU accounted for 36 percent each of U.S. services exports and imports in 2009.¹⁹

¹⁶ This encompasses freight transportation and port services, but does not include air passenger transport services (i.e., passenger fares). In 2009, U.S. exports of passenger fares decreased by 16 percent from the previous year.

¹⁷ Between 2008 and 2009, U.S. exports of financial services decreased 8.8 percent, whereas U.S. imports decreased by more than twice that amount, at 18.4 percent, contributing to a net U.S. surplus. The United States has maintained a trade surplus in financial services for at least the past 10 years which, prior to 2009, was due in part to a sharper rise in U.S. exports of financial services relative to U.S. imports.

¹⁸ USDOC, BEA, *Survey of Current Business*, October 2010, 54–55.

¹⁹ *Ibid.*, 36–37.

BOX 1.3 Effects of the Economic Recession on Global Trade Flows and Their Impact on the Service Sector

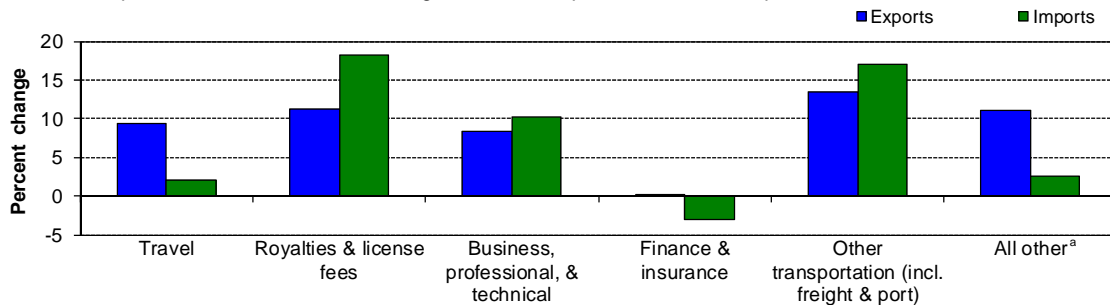
The worldwide economic recession substantially reduced global trade flows in 2009. According to the WTO, the volume of global merchandise trade declined by more than 12 percent among all countries during that year, with the most pronounced decline—15 percent—occurring among countries in the developed world.^a In the United States, exports and imports of manufactured goods fell 12 percent by value between 2008 and 2009.^b By contrast, U.S. trade in services exhibited more resilience, declining by only half that amount, or 6 percent, during the same period.^c

Nonetheless, many U.S. service sectors experienced a decrease in exports or imports in 2009. Industries that registered the largest declines were those inextricably linked to merchandise trade:^d trade-related services;^e transportation services;^f financial services; and accounting, auditing, and bookkeeping services. Financial, accounting, and trade-related services were most likely affected by the overall drop in merchandise shipments, as fewer businesses sought—or were able to access—credit from banks; inventory levels declined; and financially strapped consumers made fewer overseas purchases, whether online or through intermediaries.^g

Trade in transportation services—especially maritime freight transport—was particularly hard hit by the recession. A decline in consumer and industrial spending reduced the demand for cross-border shipments of manufactured goods. Maritime freight prices fell precipitously and this, together with the smaller volume of goods shipped, decreased the value of maritime trade flows. For example, U.S. maritime freight exports to Europe contracted by 60 percent in 2009 from the previous year, while U.S. exports to Asia fell by 12 percent.^h Trade in air freight services was similarly affected by the recession in 2009: U.S. airlines transported 15 percent fewer goods by volume to foreign countries than in 2008, leading to a 32 percent decrease in the value of U.S. exports of air freight and port services combined.^g

2010 brought a reversal in the downward trend. In the first half of that year, global merchandise trade increased as GDP grew in major economies such as Europe, Japan, the United States, and China. As a result, by the end of 2010, global merchandise trade rose an estimated 14 percent over the previous year.^a Such growth has had a positive impact on U.S. services trade: data from BEA for the first three quarters of 2010 show an overall increase in U.S. exports and imports of services over 2009, led principally by transportation services (see figure below).

U.S. trade in private services increased during the first three quarters of 2010 compared to the whole of 2009



Source: USDOC, BEA, "Table 3a," December 16, 2010.

^aIncludes passenger fares, education, insurance services, telecommunications, and other services.

^a WTO, "Trade Likely to Grow by 13.5% in 2010," September 20, 2010.

^b USDOC, BEA, *Survey of Current Business*, October 2010, table F.1.

^c Borchert and Mattoo, "The Crisis-Resilience of Services Trade," April 2009, 2–5. In a 2009 World Bank study examining the effects of the global economic recession on services trade, the authors found that, in general, U.S. services exports, as well as those from other countries, were less affected by the recession than exports of manufactured goods.

^d As noted, U.S. exports of passenger fares and travel services also decreased in 2009.

^e See footnote 15.

^f Not including passenger fares.

^g JP Morgan, "Global Trade," n.d. (accessed November 5, 2010).

^h Federal Maritime Commission, *48th Annual Report for Fiscal Year 2009*, 2009, 19, 29.

In 2009, the United States maintained large bilateral services trade surpluses with Japan (\$20.1 billion), Canada (\$20.0 billion), the United Kingdom (\$12.9 billion), Mexico (\$8.3 billion), and China (\$7.5 billion), as well as with the EU (\$50.5 billion). In that year, the United States registered its largest bilateral services trade deficit with Bermuda (\$14.1 billion), which primarily reflected payments for insurance and reinsurance services to affiliates of U.S. and foreign firms with operations in that country.²⁰

Affiliate Transactions

In 2008, services supplied by U.S.-owned foreign affiliates²¹ increased by 12 percent to \$1.1 trillion, similar to the 13 percent average annual growth rate registered from 2005 through 2007.²² Professional services accounted for roughly 8 percent²³ of services supplied by U.S.-owned foreign affiliates in 2008 (figure 1.4). By contrast, wholesale services accounted for approximately 21 percent of total services supplied by U.S.-owned foreign affiliates. The largest host-country markets for services supplied by U.S.-owned affiliates were the United Kingdom (20 percent of U.S.-owned affiliates services), Canada (10 percent), and Ireland and Japan (6 percent each). The EU accounted for 49 percent of total services supplied by U.S.-owned affiliates in 2008.²⁴

Services supplied by foreign-owned affiliates in the United States increased by 6 percent to \$727.4 billion in 2008, slower than the 9 percent average annual growth rate of 2005 through 2007. Professional services supplied by foreign-owned U.S. affiliates accounted for 11 percent of the total services supplied by such affiliates in 2008.²⁵ By comparison, wholesale services accounted for more than twice that proportion at 23 percent, making it the largest single service industry represented by foreign-owned affiliates in the United States. By country, the United Kingdom accounted for the biggest share of services supplied by foreign-owned affiliates in 2008 (18 percent) followed by Japan (14 percent) and Germany (13 percent). France and Canada rounded out the top five with 10 percent and 9 percent, respectively. Overall, 54 percent of services supplied by foreign-owned affiliates were from affiliates of EU-parent firms.

²⁰ Ibid. The vast majority of these payments are recorded as unaffiliated transactions, as they are undertaken on behalf of third-party policyholders.

²¹ U.S.-owned foreign affiliates are affiliates owned by a U.S. parent company and located abroad; conversely, foreign-owned U.S. affiliates are affiliates located in the United States and owned by foreign parent companies.

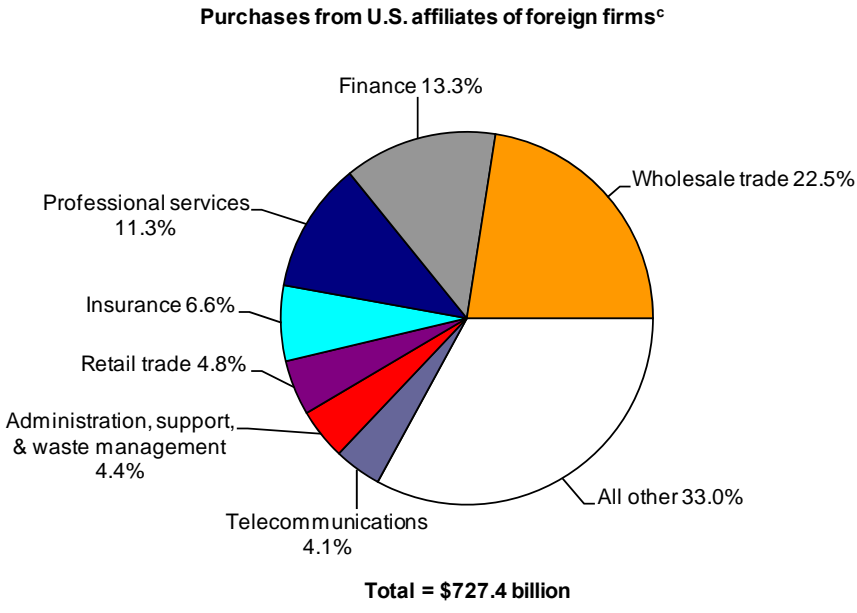
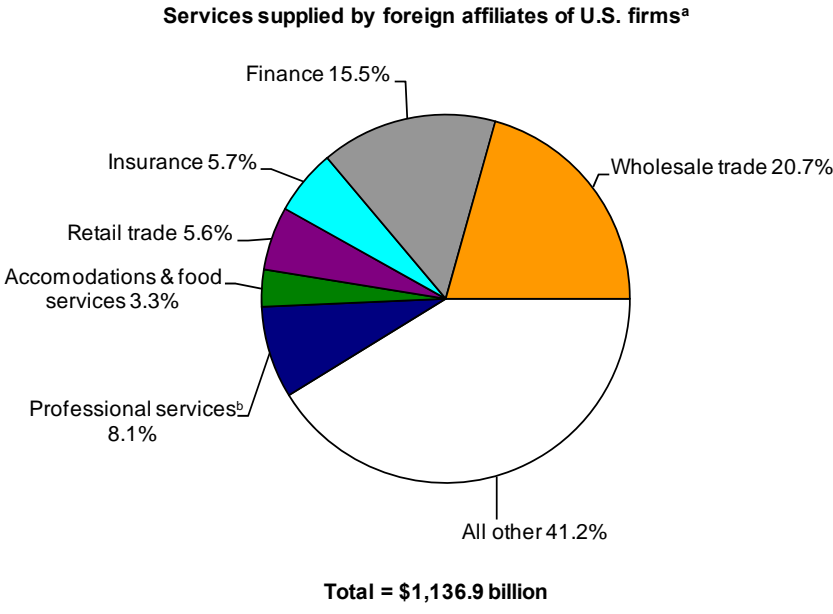
²² The main source for this section is the USDOC, BEA, *Survey of Current Business*, October 2006–October 2010.

²³ Data for professional services are underreported due to the suppression of data by BEA to avoid disclosure of confidential firm information.

²⁴ USDOC, BEA, *Survey of Current Business*, October 2010, 56–60, tables 8–10.2.

²⁵ See chapter 2 for an in-depth discussion on professional services.

FIGURE 1.4 U.S. services: Wholesale trade and finance led services transactions by affiliates in 2008; professional services ranked third



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 58, 60, tables 9.2 and 10.2.

Note: Trade data exclude public sector transactions.

^aServices supplied by majority-owned foreign affiliates of U.S. parent firms.
^bData are underreported due to suppression of data by the BEA.
^cServices supplied by majority-owned U.S. affiliates of foreign parent firms.

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CHAPTER 2

Professional Services Overview

Professional services represent a diverse group of industries—from education and healthcare to computer, engineering, legal, and accounting services—and employ a large proportion of highly educated and highly skilled workers.¹ A number of characteristics distinguish professional services from infrastructure services such as energy and transportation. Professional services are labor rather than capital-intensive; tend to be more regulated, especially through requirements to license and certify service providers; and are at the center of a growing trend for firms to outsource noncore functions to entities located abroad.² Moreover, professional services have withstood some ill effects of the economic recession better than infrastructure services; for example, wages among professional service workers continued to grow during 2008–09 (albeit slowly), while wages among workers in infrastructure services declined. This chapter discusses current trends in professional services, including the impact of the economic recession on the industry, and reviews key economic and trade data for the sector.

Impact of the Economic Recession on Employment in Professional Services

During the recession of 2008–09, employment in professional services proved more resilient than those in infrastructure services. The sector was nonetheless far from immune to the recession’s effects. According to the BEA, the number of full-time equivalent (FTE) employees in professional services, excluding those in the education and healthcare industries, decreased by 4 percent in 2008–09. At the same time, the average length of unemployment among professional service workers increased from 9.8 weeks in 2008 to 15.7 weeks in 2009.³ Not surprisingly, the 1.2 percent decrease in the value of professional services GDP in 2008–09 contrasted sharply with the 3.0 percent average annual increase during 2004–08.

¹ For the purposes of this report, professional services include accounting, auditing, and bookkeeping services; advertising services; architectural, engineering, and other technical services; construction services; industrial engineering services; computer and data processing services; computer systems design and related services; legal services; scientific research and research and development services; management of companies and enterprises; education services; and healthcare and social assistance services.

² Beginning in 2008, the *Recent Trends* report has discussed the professional and infrastructure service subsectors in alternate years. This division allows more detailed analysis of the individual services industries. Professional services are characterized as labor-intensive industries employing highly skilled and highly educated individuals in positions that frequently require specialized licensing or training. Infrastructure services are capital intensive, providing critical inputs to industrial activity and economic growth, and are consumed by every firm irrespective of economic sector. For the purposes of this report, infrastructure services include banking, insurance, securities, transportation, telecommunication, electric power, and retail services.

³ U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), “Table 32: Unemployed Persons by Occupation, Industry, and Duration of Employment, 2008,” 2008, and “Table 32: Unemployed Persons by Occupation, Industry, and Duration of Employment, 2009,” 2009. For education and healthcare services, the average (median) duration of unemployment was 9.2 weeks in 2008, and 13.6 weeks in 2009.

Of course, some job loss is normal in this sector during a downturn: because nearly 80 percent of services in this sector are used as intermediate inputs (i.e., they are used in the production of other goods and services),⁴ demand for these services generally decreases as the health of the economy declines. This is particularly true of business services, such as legal and accounting work. Owing to the severity of the 2008–09 recession, however, even white-collar professional service workers—including lawyers and computer software engineers—suffered layoffs.⁵ Moreover, employment growth slowed in professional service industries seldom affected by economic downturns, such as education and healthcare.⁶ Finally, the recession’s severity translated into unusually long periods of unemployment among many laid-off professionals, who risked having their skills erode as a result.⁷

Regulation

Regulation of professional services is principally intended to correct for asymmetry of information between service providers and consumers, as the latter often have too little knowledge to judge the quality of the service they are purchasing.⁸ In addition to protecting consumer welfare, regulations can also be designed to promote social, developmental, demographic, and cultural objectives. Some research suggests that regulation hinders labor productivity growth within professional services: highly regulated industries face less competition and therefore have less incentive to implement the types of innovative technology and management practices that raise productivity.⁹ Where deregulation among service industries has already occurred—most notably among certain infrastructure services, such as air transport and telecommunications—prices have dropped and less efficient providers have exited the market.¹⁰ Despite the potential economic benefits of deregulation, however, many countries have chosen to prioritize social or other objectives over economic efficiency, hoping to strike the optimal balance for their particular circumstances. In addition, incumbents’ opposition may hinder reform, as many fear that regulatory capacity is insufficient to achieve reforms’ desired objectives.¹¹

⁴ Triplett and Bosworth, “Productivity in the Services Sector,” January 2000, 8.

⁵ Von Bergen, “In Epidemic of Layoffs, No One Is Immune,” April 5, 2009; Spohr, “IBM Layoffs Hit Hundreds in Latest Round,” August 4, 2009.

⁶ Von Bergen, “In Epidemic of Layoffs, No One Is Immune,” April 5, 2009.

⁷ Nicoletti and Scarpetta, “Regulation, Productivity, and Growth,” January 2003, 6; *Economist*, “Smart Work,” October 7, 2010.

⁸ Cattaneo et al., *International Trade in Services*, 2010, 10; Conway and Nicoletti. “Product Market Regulation in the Non-Manufacturing Sectors of OECD Countries: Measurement and Highlights,” December 7, 2006, 20. Among OECD countries, professional services that face the largest degree of regulation are legal services, followed by accounting, architectural, and engineering services.

⁹ Nicoletti and Scarpetta, “Regulation, Productivity, and Growth,” January 2003, 9. Past studies cited by Nicoletti and Scarpetta indicate a positive relationship between competition and innovation. Competition is measured by market concentration, firm profits, and import penetration. Innovation is recognized in firm behaviors such as the adoption of new technology and investment in research and development. Further, studies have found a positive relationship between trade liberalization and productivity in that such liberalization increases competition and innovation in the market.

¹⁰ *Economist*, “Smart Work,” October 7, 2010; McKinsey Global Institute, “Beyond Austerity,” October 2010, 73; GAO, *Airline Deregulation*, March 1999, 2; Høj, Kato, and Pilat, “Deregulation and Privatisation in the Service Sector,” 1995, 55. In the telecommunications industry, price decreases occurred largely with respect to long-distance services.

¹¹ Hoekman, Mattoo, and Sapir, “The Political Economy of Services Trade Liberalization,” 2007, 384.

Offshore Outsourcing

The production of professional services is increasingly outsourced to firms located abroad.¹² This activity, known as offshore outsourcing (or “offshoring”), is largely the result of firms’ desire to reduce labor costs and to focus on their core competencies.¹³ Some have suggested that “tradable” service industries, and the occupations associated with them, have the greatest potential to be moved offshore (box 2.1).¹⁴ Jobs in professional services, including architecture, engineering, law, and computer programming, are among the primary examples of tradable occupations.¹⁵

The debate as to whether the offshoring of services by U.S. firms is good or bad for the domestic economy is evolving. Early in the discussion, when “offshoring” referred to the transfer abroad of low-skill service jobs (e.g., those related to data processing and call center operation), it was argued that such activity made room for higher-skilled, higher-wage jobs at home. More recently, however, U.S. firms have also moved certain high-skill jobs—such as software development and medical diagnostic services—to developing countries, where they are performed by workers of increasing education and ability.¹⁶ Some view this new trend as evidence of the emerging vulnerability of U.S. professional service workers.¹⁷ Nonetheless, current research is unclear as to whether there is a direct cause-and-effect relationship between the offshoring of U.S. high-skill jobs and the displacement of white-collar workers in the U.S. economy (box 2.2), although perspectives on this issue differ.¹⁸ In addition, some researchers suggest that whether certain intermediate services are produced at home or abroad is less important than the fact that these services may increase the productivity of the industries that consume them. If such productivity-enhancing services can be provided at lower cost to domestic industries, this will boost aggregate productivity growth in the domestic economy, in turn stimulating higher economic growth overall.¹⁹

¹² Molnar, Pain, and Taglioni, “Globalisation and Employment in the OECD,” December 2008, 4. Where firms outsource the production of intermediate goods and services to offshore entities, they may purchase such goods and services from either foreign affiliates (sometimes referred to as international insourcing) or from unaffiliated firms.

¹³ Wölfl, “Productivity Growth in Service Industries,” June 2003, 9.

¹⁴ Jensen and Kletzer, “Tradable Services,” September 2005, 11. Tradable services are those that can be provided “at a distance” (i.e., from foreign locations). Such services do not require face-to-face contact and may instead be delivered through electronic networks.

¹⁵ Ibid.

¹⁶ Garner, “Offshoring in the Service Sector,” 2004, 12–17. Garner distinguishes between two types of labor markets: one composed largely of unskilled labor that is both cheap and plentiful (China and India); the other, of an abundance of physical and human capital (United States). As education levels rise in developing economies that have historically been sources of unskilled labor, these economies acquire outsourced jobs of increasingly higher skill.

¹⁷ Jensen and Kletzer, “Tradable Services,” September 2005, 2–3; Levine, “Offshoring (a.k.a. Offshore Outsourcing),” May 2, 2005, 4.

¹⁸ See Brainard and Collins, *Brookings Trade Forum: 2005*, 2006, 107 and 121, for a number of papers discussing this issue. For example, Jensen and Kletzer find that, during the period 1999–2003, white collar workers in tradable occupations faced higher job displacement rates (9.4 percent) than white collar workers in non-tradable occupations (6.5 percent). However, other academic researchers suggest that the extent to which the former result may have been due to offshoring rather than the cyclical effects of the economy is uncertain.

¹⁹ Wölfl, “Productivity Growth in Service Industries,” June 2003, 9; Wölfl, “The Interaction between Manufacturing and Services,” November 2006, 4. In her 2006 paper, Wölfl states that services that are (1) relatively price elastic and (2) exposed to international competition experience a downward pressure on price, causing them to become more productive. These more productive services make higher contributions to “aggregate labor productivity.”

BOX 2.1 Impact of U.S. Trade in Services on U.S. Service Sector Employment

In a 2005 paper, J. Bradford Jensen and Lori Kletzer classified service industries and occupations as tradable or non-tradable based on the extent to which they were geographically concentrated within the United States. The rationale for this approach is that services that are highly concentrated in a particular region are more likely to be sold outside of that region than services that are more evenly distributed in proportion to the population. For example, services that were found to be more geographically concentrated and thus identified as tradable include architecture and engineering services, computer services, financial services, and legal services. The authors then examined employment growth and job displacement rates in these industries and occupations. For the period 1998–2002, they found that employment in the average tradable service industry grew by about 8 percent—about the same as in non-tradable services. Nonetheless, among service *occupations*, average employment growth was higher in tradable as opposed to non-tradable ones over the 1999–2003 period. The authors found that tradable service occupations in the U.S. service sector were jobs of higher wage and higher skill (e.g., those in professional services), and that workers in these occupations were potentially more vulnerable to job displacement through offshoring than workers in nontradable occupations. However, the authors also concluded that because tradable occupations in the U.S. service sector are those in which the United States has comparative advantage, these occupations are not necessarily destined to be moved offshore; in fact, it is possible that continued liberalization of global services trade, “would directly benefit workers and firms in the United States.”^a

^a Jensen and Kletzer, “Tradable Services,” September 2005; also published in Brainard and Collins, *Brookings Trade Forum: 2005*, 2006.

BOX 2.2 Effects of U.S. Offshore Outsourcing and Inshoring on Employment of U.S. White-Collar Workers

In 2008, Runjuan Liu and Daniel Trefler examined the effects on workers of U.S. purchases of services from unaffiliated parties in low-wage countries (“offshore outsourcing”) and U.S. sales of services to unaffiliated parties in those same markets (“inshoring”). In particular, they investigated the likelihood of workers switching occupation or industry as a result of either offshore outsourcing or insourcing and the effect on their employment and earnings. They used trade data from 1995–2005 and census data from 1996–2006 across a number of service industries and occupations, including business, professional, and technical services. Liu and Trefler found that the net effect of inshoring and offshore outsourcing across employment outcomes was small but positive. That is, if offshore outsourcing of business, professional, and technical services were to continue at the 1995–2005 rate for nine additional years, the cumulative effects on workers in occupations exposed to outsourcing would be a 2 percent *decline* in the likelihood of occupational switching, a 0.1 percent *decrease* in the time spent unemployed as a share of weeks in the labor force, and an *increase* in earnings of 1.5 percent. The authors of the study also found that in cases where offshore outsourcing produced a small yet adverse impact on the employment of certain workers, these workers tended to be the less educated and less skilled.^a

^a Liu and Trefler, “Much Ado about Nothing,” June 2008.

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

Professional services continue to represent a large and growing contribution to GDP²⁰ in the private sector (table 2.1). In 2009, professional services GDP reached \$2.2 trillion, accounting for nearly 20 percent of total U.S. private sector GDP and approximately 25 percent of total U.S. service sector GDP. From 2004 through 2008, professional services GDP grew at an average annual rate of 3.0 percent, surpassing GDP growth in both infrastructure services (2.2 percent) and the private sector as a whole (1.9 percent). During 2004–08, computer systems design and related services accounted for the largest share of GDP growth in professional services, increasing at an average annual rate of 10 percent (table 2.2). This was followed by average annual GDP growth in miscellaneous professional, scientific, and technical services (4 percent) and healthcare services (3 percent). Overall, healthcare services represented the largest segment of professional services GDP in 2009 (41.9 percent)—a trend that remained unchanged from previous years (figure 2.1).²¹

Employment in professional service industries made up a significant share of total private sector employment in 2009. In that year, the number of FTE employees in professional services stood at 26 million, comprising roughly 26 percent of total U.S. private sector employment. Healthcare services accounted for slightly more than half of total professional services employment in 2009 at 15 million workers (figure 2.2). Between 2004 and 2008, professional services employment grew at a robust average annual rate of 3.0 percent, five times the rate of employment growth in infrastructure services (0.6 percent) and more than twice the rate of employment growth in the private sector overall (1.1 percent). During the recession of 2008–09, employment in professional services fell 0.5 percent. However, this decrease was modest compared to that recorded in infrastructure services (5.9 percent) and in goods-producing industries (13.4 percent).

Average wages among U.S. professional service workers increased by 0.6 percent in 2009, much slower than the 4.0 percent average annual growth rate for this category during 2004–08. Average wages among professional service workers varied widely in 2009—from a high of \$95,337 for computer system design and related services employees to a low of \$40,785 for education service employees. Average wages among U.S. infrastructure service workers were dispersed throughout a similar range, although such wages grew at a slightly lower rate (3.4 percent) during the 2004–08 period than in professional services.²²

²⁰ BEA official, e-mail correspondence with USITC staff, March 30, 2011. BEA measures professional services' contribution to GDP as "value added by industry," which represents the contribution of each industry's labor and capital to its gross output and the overall GDP. USDOC, BEA, "Gross-Domestic-(GDP)-by-Industry Data," 1998–2010.

²¹ USDOC, BEA, "Full-Time Equivalent Employees by Industry," August 5, 2010; USDOC, BEA, "Real Value Added by Industry," May 5, 2010.

²² Ibid.

TABLE 2.1 Full-time equivalent (FTE) employees, wage and salary accruals, gross domestic product, and labor productivity, by goods and service industries, 2004–09

	2004	2008	2009	Average annual growth, 2004–08 (%)	Percent change, 2008–09 (%)
Full-time equivalent employees (FTEs) (thousands)					
Private sector	103,318	108,037	101,331	1.1	(6.2)
Goods	22,642	22,123	19,169	(0.6)	(13.4)
Manufacturing	14,024	13,149	11,529	(1.6)	(12.3)
Nonmanufacturing	8,618	8,974	7,640	1.0	(14.9)
Services	80,676	85,914	82,162	1.6	(4.4)
Professional services	23,597	26,567	26,444	3.0	(0.5)
Infrastructure services	31,668	32,488	30,573	0.6	(5.9)
Other services	25,410	26,858	25,147	1.4	(6.4)
Wage and salary accruals (\$ per FTE)					
Private sector	43,207	50,144	50,462	3.8	0.6
Goods	46,436	54,587	55,505	4.1	1.7
Manufacturing	49,423	56,373	57,374	3.3	1.8
Nonmanufacturing	41,577	51,972	52,686	5.7	1.4
Services	42,300	49,000	49,285	3.7	0.6
Professional services	50,424	59,102	59,436	4.0	0.6
Infrastructure services	47,298	54,088	53,756	3.4	(0.6)
Other services	28,529	32,854	33,172	3.6	1.0
Gross domestic product^a (billion \$)					
Private sector	10,714	11,546	11,198	1.9	(3.0)
Goods	2,482	2,472	2,314	(0.1)	(6.4)
Manufacturing	1,518	1,609	1,470	1.5	(8.6)
Nonmanufacturing	964	864	845	(2.7)	(2.2)
Services	8,233	9,076	8,887	2.5	(2.1)
Professional services	1,996	2,248	2,222	3.0	(1.2)
Infrastructure services	3,539	3,864	3,847	2.2	(0.4)
Other services	2,701	2,965	2,827	2.4	(4.7)
Labor productivity^b (\$ per FTE)					
Private sector	103,697	106,874	110,505	0.8	3.4
Goods	109,964	111,861	120,851	0.4	8.0
Manufacturing	108,236	122,336	127,479	3.1	4.2
Nonmanufacturing	112,776	96,512	110,851	(3.8)	14.9
Services	102,054	105,643	108,156	0.9	2.4
Professional services	84,587	84,628	84,042	0.0	(0.7)
Infrastructure services	111,747	118,927	125,833	1.6	5.8
Other services	106,289	110,407	112,435	1.0	1.8

Sources: USDOC, BEA, "Full-Time Equivalent Employees by Industry," December 14, 2010; USDOC, BEA, "Table 6.6D," August 5, 2010; USDOC, BEA, "Table 6.3D," August 5, 2010; USDOC, BEA, "Real Value Added by Industry," December 14, 2010.

Note: Totals may not add due to rounding.

^aReal value added by industry using 2005 chained dollars.

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

TABLE 2.2 Full-time equivalent (FTE) employees, wage and salary accruals, gross domestic product, and labor productivity, by selected service industries, 2004–09

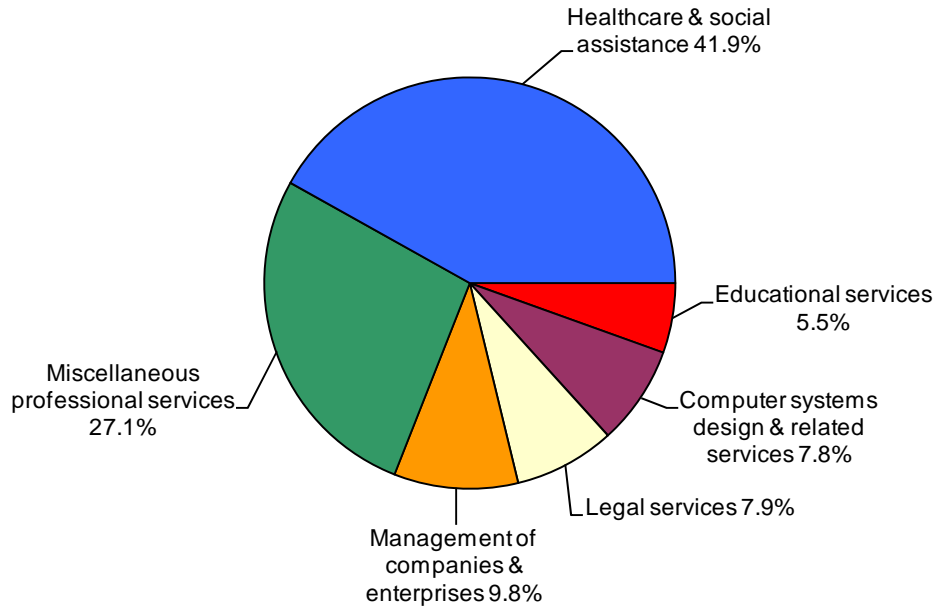
	2004	2008	2009	Average annual growth, 2004–08	Change, 2008–09
Full-time equivalent employees (FTEs) (thousands)				%	
Computer systems design & related services	1,091	1,379	1,343	6.0	(2.6)
Educational services	2,510	2,782	2,807	2.6	0.9
Healthcare & social assistance	12,907	14,431	14,662	2.8	1.6
Legal services	1,113	1,123	1,083	0.2	(3.6)
Management of companies & enterprises	1,669	1,816	1,797	2.1	(1.0)
Miscellaneous professional, scientific, & technical services	4,307	5,037	4,752	4.0	(5.7)
Wage and salary accruals (\$ per FTE)					
Computer systems design & related services	83,311	94,733	95,337	3.3	0.6
Educational services	33,854	39,221	40,785	3.7	4.0
Healthcare & social assistance	41,080	47,071	48,354	3.5	2.7
Legal services	71,991	85,387	85,752	4.4	0.4
Management of companies & enterprises	82,418	101,450	96,586	5.3	(4.8)
Miscellaneous professional, scientific, & technical services	61,785	73,667	74,470	4.5	1.1
Gross domestic product ^a (billion \$)					
Computer systems design & related services	116.2	171.3	173.5	10.2	1.3
Educational services	123.5	123.9	122.1	0.1	(1.5)
Healthcare & social assistance	813.9	918.8	932.5	3.1	1.5
Legal services	191.3	188.6	176.5	(0.4)	(6.4)
Management of companies & enterprises	221.1	222.0	217.3	0.1	(2.1)
Miscellaneous professional, scientific, & technical services	530.3	625.7	604.0	4.2	(3.5)
Labor productivity ^b (\$ per FTE)					
Computer systems design & related services	106,508	124,220	129,188	3.9	4.0
Educational services	49,203	44,536	43,498	(2.5)	(2.3)
Healthcare & social assistance	63,059	63,668	63,600	0.2	(0.1)
Legal services	171,878	167,943	162,973	(0.6)	(3.0)
Management of companies & enterprises	132,475	122,247	120,924	(2.0)	(1.1)
Miscellaneous professional, scientific, & technical services	123,125	124,221	127,104	0.2	2.3

Sources: USDOC, BEA, "Full-Time Equivalent Employees by Industry," December 14, 2010; USDOC, BEA, "Table 6.6D," August 5, 2010; USDOC, BEA, "Table 6.3D," August 5, 2010; USDOC, BEA, "Real Value Added by Industry," December 14, 2010.

^aReal value added by industry using 2005 chained dollars.

^bLabor productivity, calculated by USITC staff, is GDP by industry divided by full-time equivalent employees.

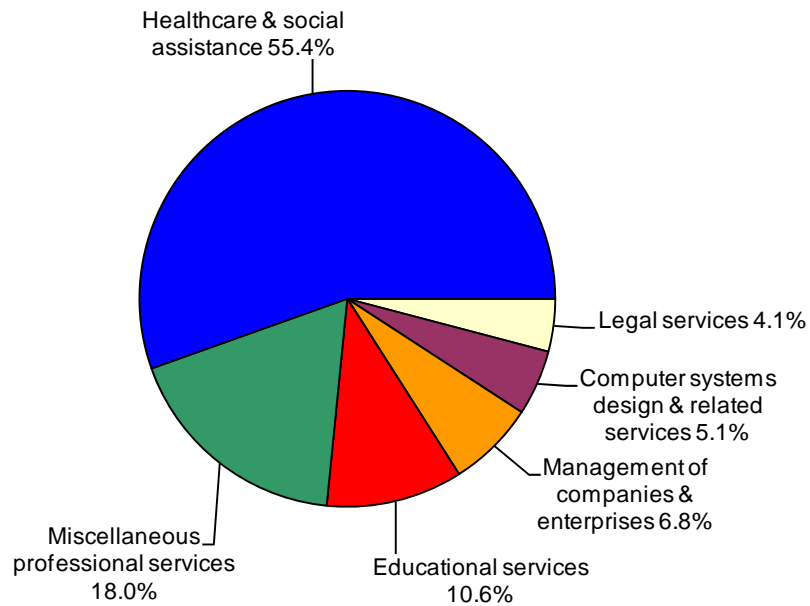
FIGURE 2.1 U.S. professional services: Healthcare and social assistance services had the largest contribution to GDP in 2009



Total professional services GDP = \$2.2 trillion

Source: USDOC, BEA, "Real Value Added by Industry," December 14, 2010.

FIGURE 2.2 U.S. professional services: Healthcare and social assistance accounted for the largest share of professional services employment, by industry, in 2009



Total professional services employment = 26 million workers

Source: USDOC, BEA, "Full-Time Equivalent Employees by Industry," August 5, 2010.

Despite the growth in wages among U.S. professional service workers in 2009, labor productivity among professional services industries fell by 0.7 percent that year—the only productivity decline recorded among all private sector industries (see table 2.1).²³ By comparison, labor productivity within the manufacturing sector grew by 4.2 percent in 2009, and in infrastructure services, by 5.8 percent. During 2004–08, labor productivity in professional services increased by less than 0.1 percent annually, significantly lower than the 0.8 percent average annual increase registered by the private sector as a whole. As noted, employment in professional services has grown rapidly in recent years, and that growth has diluted gains in professional services productivity. Nonetheless, certain professional service industries have experienced productivity growth: namely, computer systems design and related services, where productivity grew by 4 percent in 2009, equal to the industry’s average annual productivity increase during 2004–08; and miscellaneous professional, scientific and technical services, where productivity grew by 2 percent in 2009 (see table 2.2). In contrast, education, healthcare, and legal services experienced either zero productivity growth or a decrease in labor productivity during the years 2004 through 2009.²⁴

U.S. Trade in Professional Services

In 2009, professional services accounted for 20.2 percent of total U.S. cross-border services exports and 20.9 percent of U.S. cross-border services imports. The United States posted a cross-border trade surplus in professional services in 2009, with U.S. exports of such services (\$97.6 billion) substantially exceeding U.S. imports (\$70.1 billion). Management and consulting services represented the largest share of U.S. professional services exports (28.9 percent) and imports (31.7 percent) in 2009 (figure 2.3). By country, the United Kingdom accounted for approximately 9 percent of U.S. professional services exports in 2009, followed by Ireland (7 percent), Canada and Japan (6 percent each), and China (5 percent). The United Kingdom also supplied the largest share (15 percent) of U.S. professional services imports in 2009; a substantial portion of these were imports of management, consulting, and public relations services (table 2.3).²⁵ Other significant suppliers of U.S. professional services imports that year were India (11 percent), Canada (10 percent), Germany (7 percent), and Japan (5 percent).²⁶

The United States remains competitive in the provision of professional services through foreign affiliates. Professional services supplied by U.S.-owned foreign affiliates equaled

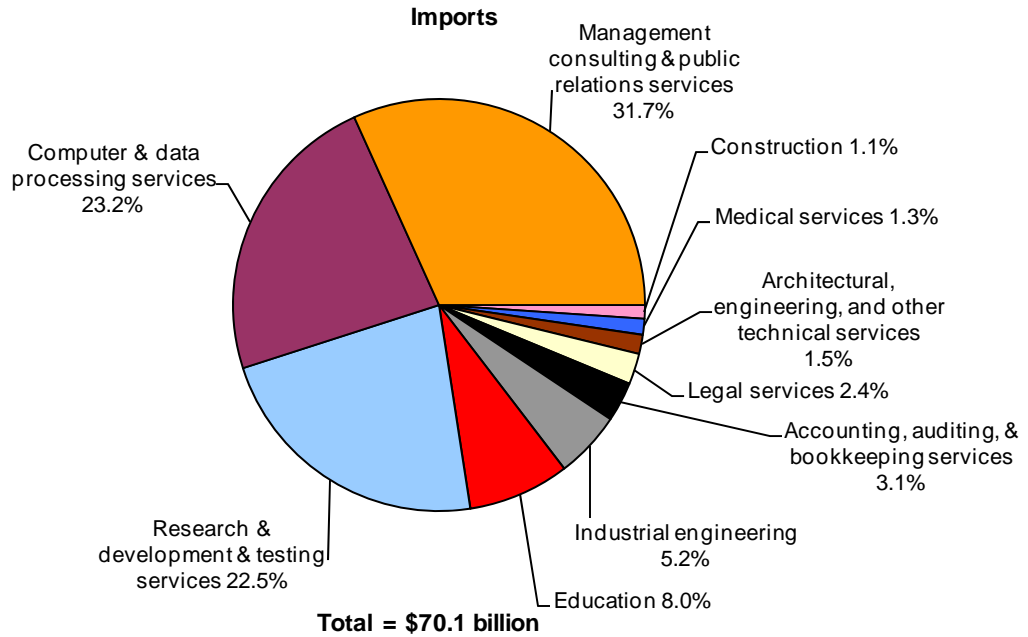
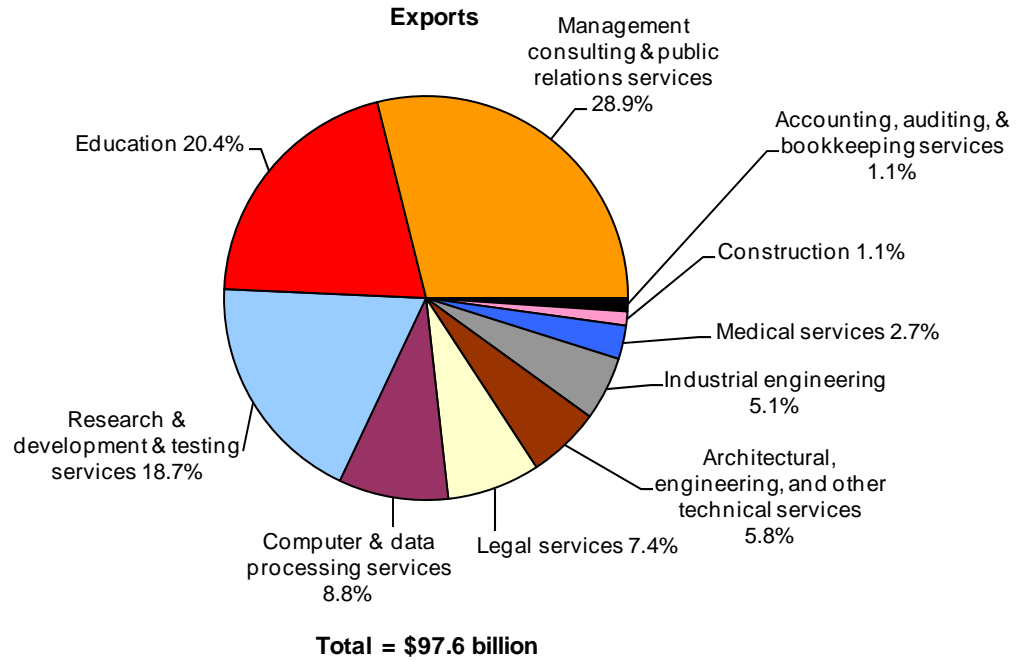
²³ For purposes of this report, USITC staff calculated labor productivity by dividing GDP by industry by full-time equivalent employees.

²⁴ USDOC, BEA, “Full-Time Equivalent Employees by Industry,” August 5, 2010; USDOC, BEA, “Real Value Added by Industry,” May 5, 2010.

²⁵ Management consulting includes administrative, human resources, management, marketing, and logistic services, but also includes allocated expenses received by parent companies from affiliates for general overhead and expenses.

²⁶ USDOC, BEA, *Survey of Current Business*, October 2010, 54–55, table 7.2. For the purposes of the cross-border trade discussion, data on professional services include management, consulting, and public relations services; education, R&D and testing services; computer and data processing services; legal services; architectural, engineering, and other technical services; industrial engineering; medical services; and construction services.

FIGURE 2.3 U.S. professional services: Management consulting and public relations led U.S. cross-border exports and imports of professional services in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

Note: Trade data exclude public-sector transactions.

TABLE 2.3 U.S. professional services: Top five export and import markets and leading industries, 2009

Rank	Country	Top export to country
1	United Kingdom	Management, consulting, and public relations services
2	Ireland	Management, consulting, and public relations services
3	Canada	Management, consulting, and public relations services
4	Japan	R&D and testing services
5	China	Education services

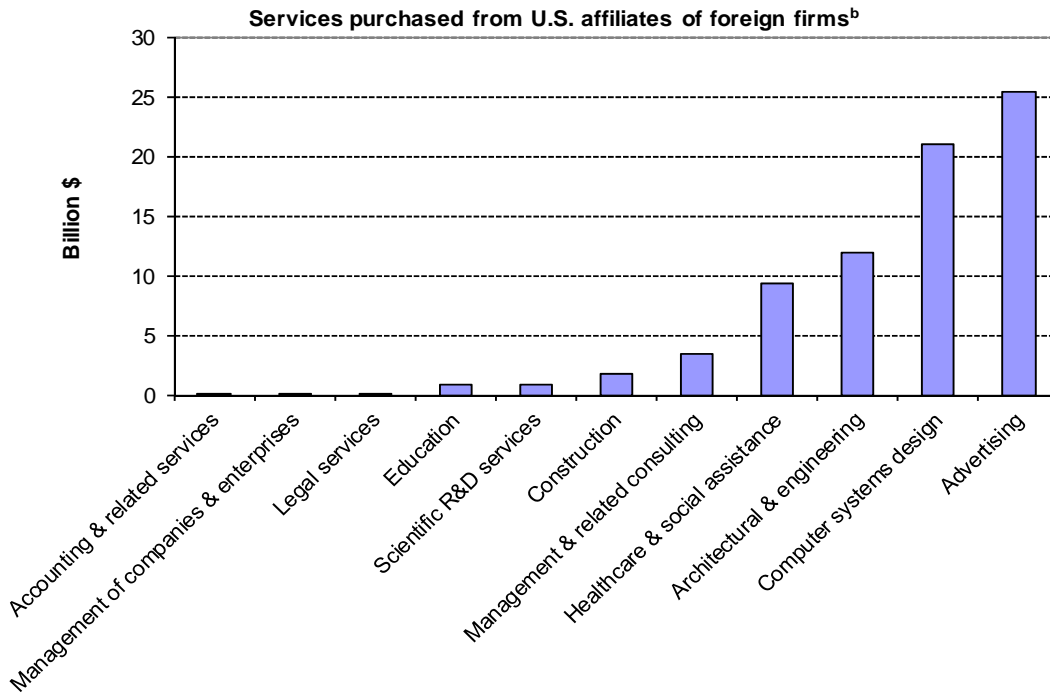
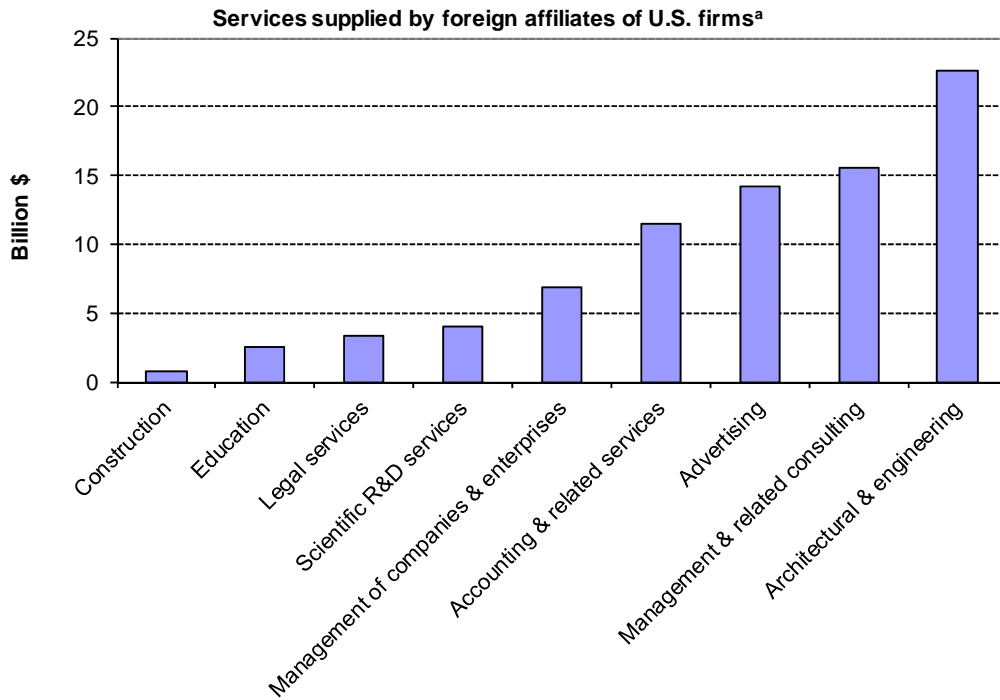
Rank	Country	Top import from country
1	United Kingdom	Management, consulting, and public relations services
2	India	Computer and data processing services
3	Canada	Computer and data processing services
4	Germany	Management, consulting, and public relations services
5	Japan	Education services

Source: USDOC, BEA, *Survey of Current Business*, October 2010, 54–55, table 7.2.

no less than \$91.8 billion in 2008.²⁷ This surpassed the \$82.2 billion of professional services supplied by foreign-owned U.S. affiliates. Overall, however, professional services represented a small portion of total U.S. affiliate services transactions, accounting for 8 percent of services supplied by U.S.-owned foreign affiliates and 11 percent of services supplied by foreign-owned U.S. affiliates in 2008. In that year, architectural, engineering, and related services accounted for the single largest category of professional services supplied by foreign affiliates of U.S. firms (\$22.6 billion), whereas advertising services accounted for the highest amount (\$25.4 billion) of services supplied from U.S. affiliates of foreign firms (figure 2.4).

²⁷ Affiliate transactions data include architectural, engineering, and related services; management, scientific, and technical services; advertising and related services; accounting, tax preparation, bookkeeping, and payroll services; scientific research and development; healthcare and social assistance; educational services; computer systems design and related services; and construction services. For 2008, complete data for U.S.-owned foreign affiliate sales of computer system design and related services, specialized design services, healthcare and social assistance, and other professional services were not available.

FIGURE 2.4 U.S. professional services: In 2008, architectural and engineering services led transactions by foreign affiliates of U.S. firms; advertising services led transactions by U.S. affiliates of foreign firms



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 58, 60, tables 9.2 and 10.2.

Note: Trade data exclude public sector transactions.

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

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

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CHAPTER 3

Audiovisual Services

Summary

The recent global economic downturn has depressed overall movie production levels, as investment in small to medium-sized movie producers and developing national film industries dropped considerably. However, overall box office revenues, both globally and in the United States, have risen steadily in recent years. Several factors underlie this growth, including increasing demand for and availability of 3-D and high-definition titles; the construction of more digital-ready movie theaters; higher movie ticket prices; and the proliferation of lower-cost digital distribution channels. U.S. cross-border exports of audiovisual services have consistently exceeded U.S. cross-border imports over the last decade. This trade surplus came to about \$12 billion in 2009.

Nonetheless, in several important markets, growing online intellectual property piracy has hampered industry growth in terms of both international trade and domestic sector development. Other lingering impediments include content quotas and foreign equity restrictions. In response, the industry is looking to implement more cost-effective production processes, increase film co-productions in rapidly growing markets such as China, and diversify into more international market segments by taking advantage of the increasing use and overall availability of digital filmmaking and distribution technologies.

Introduction

Providers of audiovisual services¹ collect royalties, rental fees, license fees, and sales revenue in return for granting rights to display, broadcast, reproduce, or distribute audiovisual works. The U.S. motion picture industry² serves as a major supplier of

¹ For the purpose of this discussion, “audiovisual services” refers to the production and distribution of motion pictures, comprising primarily feature films, television programs, and documentaries. These services are distributed to consumers through projection in theaters, commercial flights, and other public venues; rental or sale of prerecorded works; broadcast, cable, and satellite television, including DVDs (digital video discs), Blu-ray discs, video on demand, and the Internet. Sound recording industries have been excluded from this discussion since most of their official trade data are either unavailable or have been suppressed to avoid disclosure of data of individual companies.

² The motion picture industry consists of a three-part industrial structure. After a movie or a video has been (i) produced, it is usually transferred to a (ii) distributor, which in turn arranges to make the product accessible to the consumer through (iii) movie theaters, video rental and/or sale outlets, and television broadcasts.

entertainment and information to the world by producing videos, television programs, and movies that can be seen in more than 100 countries.³

Government policies (by way of trade impediments) often play a significant role in the production and distribution abroad of audiovisual services since the sector can, in some cases, influence audiences through its content and messaging. Hence, important policy issues can include the promotion of cultural values, restrictions on illicit content, protection of intellectual property rights, the regulation of advertising practices, and the provision of investment and tax incentives.⁴

Competitive Conditions in the Global Audiovisual Services Market

Global box office revenue has increased by almost \$12.0 billion in the last decade (it was valued at \$17.6 billion in 1999).⁵ Despite the global economic downturn, this revenue reached an all-time high of \$29.5 billion in 2009, about a 5 percent increase from the previous year (\$28.0 billion). Vogel (2004) theorized that when an economy enters a recessionary phase, the leisure-time spending preferences of consumers shift more toward lower-cost, closer-to-home entertainment activities than when economic growth is strong. Hence, this would explain why ticket sales often remain steady or rise during the early-to-middle stages of a recession, faltering only near the recession's end, when budgets are reserved for essential goods and services.⁶

Although all world regions reported revenue growth from the previous year, in 2009 growth was less robust for emerging markets in Central and Eastern Europe and Asia, largely due to currency fluctuations (particularly for the Russian ruble)⁷ and to box office declines in India.⁸ Latin America, by contrast, recorded the largest gains, thanks to rapid movie screen construction throughout the region.⁹ Japan was the second largest international box office market (behind the United States), followed by France, the United Kingdom, and India, respectively (table 3.1).¹⁰ Notably, China ranked among the top 10 global markets in 2009 for the first time, accounting for over \$906 million in box

³ *HighBeam.com*, "Industry Report," n.d. (accessed November 23, 2010). Success in the film production industry is largely predicated on two factors: a wide distribution network and access to the substantial capital required for film production. Thus major film companies, which are primarily based in the United States, enjoy obvious economy-of-scale advantages. In addition to distribution capabilities, many of the major studios have been operating long enough to build up sizable film libraries, which provide revenue through video sales or through sale or rental to television stations. These well-established companies are likely to wield substantial financial leverage and control physical production facilities.

⁴ WTO, "Audiovisual Services: Background Note," January 12, 2010, 1.

⁵ *Screen Digest*, "Global Box Office Hits New High," November 2010, 337–40.

⁶ Vogel, *Entertainment Industry Economics*, 2004, 50–51.

⁷ *Screen Digest*, "Global Box Office Hits New High," November 2010, 338. The Russian box office dropped by about 12 percent in dollar terms, masking an actual increase in local currency values in the region of about 13 percent. The number of admissions in Russia actually rose by over 11 percent to reach 132 million, confirming that the box office fall was attributed largely to currency issues.

⁸ *Ibid.*, 337–40. The decline in Indian box office revenue is largely due to the recent multiplex-producer strike, but local observers also point to poorer movie content and unforeseen factors such as swine flu and turbulent general elections.

⁹ *Ibid.*, 339. Total screens rose to reach 5,334 in 2009. Exhibitors, in particular, have been investing heavily in digital cinema, primarily for 3-D screenings, and by the midpoint of 2010, there were over 600 3-D screens across Latin America, up from just 84 at the end of 2008.

¹⁰ *Ibid.* In terms of overall cinema attendance in 2009, the top five markets were India (2.9 billion), the United States (1.3 billion), China (264 million), France (201 million), and Mexico (174 million).

TABLE 3.1 Audiovisual services: Top 10 countries, by estimated global box office revenue, 2009

Rank	Country	Estimated revenue (million \$)	Share of global revenues (%)
1	United States	9,740	33
2	Japan	2,199	8
3	France	1,731	6
4	United Kingdom	1,478	5
5	India	1,417	5
6	Germany	1,360	5
7	Spain	935	3
8	China	906	3
9	Korea	906	3
10	Canada	885	3

Source: *Screen Digest*, "Global Box Office Hits New High," November 2010, 339.

office receipts. In recent years, China has become a significant box office market in Asia largely because of the rapid construction of new cinemas and rising ticket prices. By the end of 2010, China is forecast to join the ranks of the six (as of 2009) billion-dollar box office markets.¹¹ Overall, the top 10 box office markets accounted for about 73 percent of global box office dollars, with much of the growth being buoyed by an influx of titles available in digital 3-D.¹²

The worldwide volume of film production, by contrast, dropped about 2 percent to 5,360 films in 2009, making it the second consecutive annual decline since reaching an all-time production high of 5,560 films in 2007. About 100 fewer feature films were produced year-over-year since 2007. This decline is largely due to the economic downturn's negative effect on advertising revenue and private and public financing, which are of particular importance to "indie" film producers¹³ and developing film markets, such as those in Central and Eastern Europe and Southeast Asia.¹⁴

Overall, only 12 countries can be reliably stated to have produced more than 100 feature films in 2009. Films from these countries accounted for over 75 percent of the global feature film volume that year, which is consistent with previous years.¹⁵ India, the United States, China, Japan, and France were the top five film-producing countries by volume in 2009 (table 3.2). China surpassed Japan for the first time, with an output of 456 feature films. Russia, a major film producer within its region, dropped out of the top 10 film producing-nations due to a dearth of available international financing. However, despite

¹¹ *Ibid.*, 340.

¹² *Ibid.*, 337.

¹³ *HighBeam.com*, "Industry Report," n.d. (accessed November 23, 2010). Production companies can be classified into three major categories: the "majors," the "mini-majors," and the "independents" or "indies." The majors include large conglomerates such as Disney, Sony, and Viacom. In such companies, a single corporate structure often controls both the production and distribution of films, as well as an array of related operations through which the corporation can market movie soundtracks, toys, and other promotional tie-ins. Slightly smaller companies, often called "mini-majors" (e.g., United Artists, Columbia Pictures), may have weaker distribution power and may specialize in a specific segment of the film market, such as art films or action films. Small independent filmmakers (e.g., Republic Pictures, Monogram Pictures) often have no distribution capability at all and must depend entirely on outside distribution companies.

¹⁴ *Screen Digest*, "World Film Production Drops Again," August 2010, 1–9.

¹⁵ *Ibid.*, 1.

TABLE 3.2 Audiovisual services: Top 10 film producers, by estimated global feature film production (including co-productions), 2009

Rank	Country	Number of films	Share of global production (%)
1	India	1,288	24
2	United States	677	13
3	China	456	9
4	Japan	448	8
5	France	230	4
6	Spain	186	4
7	Germany	150	3
8	Korea	139	3
9	Italy	131	2
10	United Kingdom	126	2

Source: *Screen Digest*, "World Film Production Drops Again," August 2010, 4–5.

Note: Nigeria has been excluded from this list due to lack of reliable and timely data (See box 3.1).

rapid theater construction and increasing cooperation with international co-productions, many Chinese films do not receive a theatrical release largely due to a lack of modern screens, which causes a logjam in distribution. Consequently, a large number of these films instead go straight into a DVD market that has been plagued by piracy.¹⁶ Often overlooked due to a lack of consistent and reliable data, the Nigerian film industry, referred to as "Nollywood," is reportedly the second largest producer of films¹⁷ behind India and ahead of the United States, according to a 2009 UNESCO study (box 3.1).

The global motion picture industry is dominated by a handful of large U.S.-based movie studios, which account for about 60 percent of total global box office receipts (table 3.3). U.S. movies earn a significant portion of their total revenue from international audiences: for example, *Avatar* (Fox), the world's top-grossing movie of 2009, generated \$2.8 billion in global box office revenue that year, of which 73 percent came from foreign markets.¹⁸ Further, according to a European Audiovisual Observatory report,¹⁹ in 2008, U.S. movies accounted for the lion's share of the box office market share in countries such as Canada (88 percent), Australia (84 percent), Russia (75 percent), Germany (73 percent), Spain (72 percent), Italy (71 percent), and the United Kingdom (65 percent). Outside the United States, only in India, Egypt,²⁰ China, and Japan did domestically produced films account for more than 50 percent of total box office receipts. (Foreign films accounted for only 8 percent of U.S. domestic box office revenue).²¹

¹⁶ Ibid., 1–9; WTO, "Audiovisual Services: Background Note by the Secretariat," January 12, 2010, 7–9.

¹⁷ In the year 2006.

¹⁸ *BoxOfficeMojo.com*, "2009 Worldwide Grosses," n.d. (accessed November 3, 2010).

¹⁹ European Audiovisual Observatory (EAO), *Focus 2009*, 2009.

²⁰ *Screen Digest*, "Global Box Office Hits New High," November 2010, 340. Egypt's film market has been growing rapidly, with overall attendance reaching about 29.1 million in 2009, an increase of about 10 million since 1999. Egypt has the highest cinema attendance level in the Middle East region and the 23rd highest level worldwide, just ahead of the Netherlands (27.2 million) and only slightly behind Thailand (29.9 million).

²¹ WTO, "Audiovisual Services: Background Note," January 12, 2010, 9. Domestic films accounted for about 91 percent of India's market; Egypt, 85 percent; China, 61 percent; and Japan, 60 percent.

BOX 3.1 The Nigerian Film Industry: Nollywood's Growing Influence in Africa

In 2006, Nollywood was estimated to have the second-largest film industry in the world. Its output included 872 films in video format (with more than half produced in English), which was roughly 400 more than Hollywood produced that year.^a Nigeria's approach to film production and distribution is significantly different from Western models: producers primarily use handheld video camcorders; production costs are much more limited (on average, about \$20,000); the videos are not viewed in theaters; production is typically domestically owned; and the videos are distributed informally, with illegal piracy being the most common method of transmission across borders.^b

Despite the official figures documented in the UNESCO study, it is reported on the ground that Nollywood produces, on average, more than 50 full-length features a week, with most being shown in airports, hotels, public buses, and restaurants all across Africa. With DVDs usually selling for \$1 or less, slow Internet connections, and little competition from poorly run state television broadcasts, Nigerian films have continued to proliferate on the continent. Other factors such as the declining price of digital cameras, a rise in average incomes, the use of English in most films, diverse casting, and clever plot lines have made the films even more ubiquitous.^c

The popularity of Nigerian films on the continent has grown so much that certain governments have enacted trade barriers in order to stem the "Nigerianization" of Africa. For example, Ghana has imposed fees of \$1,000 on visiting actors and \$5,000 on producers and directors, and the Democratic Republic of Congo has tried to ban the import of all Nigerian-produced films in an effort to limit their cultural influence on the Congolese.^d

Arguably the most important player in Nollywood's pan-African success has been the distribution network set up by copyright pirates. Sources report that it takes copyright pirates only about two weeks to distribute a Nollywood film all across the continent after its initial release. Consequently, legitimate merchants have about a fortnight to make as much profit as they can before the pirates commoditize the films (this two-week time period is locally referred to as the "mating season"). By the end of the two weeks, most Nollywood filmmakers are usually already in the process of planning their next production.^e

Despite the rampant piracy, Western film producers have begun teaming up with Nollywood directors to co-produce movies, and several Nollywood films have been shown in international film festivals such as Sundance and at exhibitions in London through the British Film Institute.^f Nollywood's success has also spurred other African countries to develop their own film industries. For example, Cameroon, South Africa, and Tanzania are now producing hundreds of films a year, Kenyan films are beating Nollywood films at Nigerian award ceremonies, and Ghana and Liberia have already dubbed their nascent film industries "Ghallywood" and "Lolliwood."^g

^a United Nations Education, Scientific, and Cultural Organization (UNESCO), Institute for Statistics (UIS), *Analysis of the UIS International Survey of Feature Film Statistics*, March 3, 2010.

^b WTO, "Audiovisual Services: Background Note by the Secretariat," January 12, 2010, 8; Ryan, "Nollywood Comes of Age," October 1, 2010.

^c *Economist*, "Nollywood," December 16, 2010. Many of the films' plots revolve around the travails of new arrivals in big cities, an experience many Africans can relate to.

^d *Ibid.*

^e *Ibid.*

^f *Ibid.*; Ryan, "Nollywood Comes of Age," October 1, 2010.

^g *Economist*, "Nollywood," December 16, 2010.

TABLE 3.3 Audiovisual services: Top 10 movie studios, by estimated global gross box office revenue and market share, 2009

Company	Country	Estimated revenue (million \$)	Estimated market share (%)
Warner Brothers	U.S.	4,307	16.1
Twentieth Century Fox	U.S./Australia	3,964	14.8
Buena Vista (Disney)	U.S.	2,683	10.0
Sony Pictures	Japan	2,554	9.5
Universal Pictures	U.S.	2,001	7.5
Paramount Pictures	U.S.	1,191	4.4
Toho	Japan	763	2.8
PPI (Philips)	U.S.	671	2.5
Lion's Gate	U.S.	554	2.1
Paramount/Dreamworks	U.S.	519	1.9
Top 10 total		19,207	71.7
All others		7,580	28.3
Grand total		26,787	100.0

Source: ShowBizData.com, "Worldwide Global Theatrical Market Shares for 2009," n.d. (accessed October 20, 2010).

Note: Gross box office revenue figures at the company level may not precisely match *Screen Digest's* estimates due to slight differences in collection methods and data availability.

U.S. movie studios also lead the world in terms of budget, access to technology, and skilled labor.²² Despite declining production levels overall, films produced in the United States had higher production budgets, on average, than other major film-producing markets. When all movie studios, large and small, are considered, a U.S. film production investment averaged about \$20 million in 2009, versus about \$12 million in the United Kingdom, \$9 million in Australia, \$1.5 million in China, and \$150,000 in India (table 3.4).²³ Larger U.S. production budgets allow greater use of special effects technologies, such as 3-D, high-definition, or digital graphics, and computer-generated imagery, as well as access to the most well-known and marketable talent. Moreover, with the predominance of English as an international language, U.S. movies are distributed globally at lower cost than non-English films, since dubbing is unnecessary in many cases.²⁴

The top six major U.S. movie studios²⁵ produce most of the content seen on U.S. television and movie theaters. Since the economic downturn, smaller, independent filmmakers have found it more difficult to finance new productions or pay for a film's

²² Ibid., 8.

²³ *Screen Digest*, "World Film Production Drops Again," August 2010, 7.

²⁴ Amobi, "Movies and Entertainment," September 9, 2010, 3–5.

²⁵ *ShowBizData.com*, "Worldwide Global Theatrical Market Shares for 2009," n.d. (accessed October 20, 2010). The studios are Warner Brothers (part of Time Warner Inc.), Twentieth Century Fox (News Corp.), Buena Vista/Disney (Walt Disney Co.), Sony Pictures (Sony Corp.), Universal Pictures (General Electric Co.), and Paramount Pictures (Viacom Inc.).

TABLE 3.4 Audiovisual services: Top 10 countries, by average investment per film production (million \$), 2009

Rank	Country	Estimated investment
1	United States	19.6
2	United Kingdom	12.0
3	Australia	8.9
4	Germany	7.7
5	Estonia	7.5
6	France	6.7
7	Latvia	5.9
8	Japan	5.8
9	Belgium	4.9
10	Ireland	4.5

Source: *Screen Digest*, "World Film Production Drops Again," August 2010, 7.

distribution, which is the primary driver behind the decline in overall film production levels in recent years.²⁶

Although thousands of movies are produced each year, only a small number of them account for the majority of box office receipts. Unlike blockbusters like *Avatar*, which reportedly cost Fox about \$387 million to film and promote²⁷ (and earned about \$750 million in U.S. box office receipts alone),²⁸ the majority of films do not make a full return on their investment from domestic box office revenue alone. Instead, filmmakers rely on profits from foreign markets and other distribution channels such as broadcast, cable, and satellite television, DVD/Blu-ray sales, and the Internet.²⁹ However, in the United States, cumulative sales from DVDs, Blu-ray discs, and digital copies of films have fallen by 8 percent since 2005. According to industry sources, DVD sales of new films fell by 17 percent between 2008 and 2009 alone. These sales drops have largely been attributed to the emergence of inexpensive and convenient rental services such as Netflix and Redbox. Internationally, although drops in sales have been less steep, foreign consumers have never been major purchasers of legal DVDs compared to U.S. consumers.³⁰

²⁶ WTO, "Audiovisual Services: Background Note," January 12, 2010, 8–11; Amobi, "Movies and Entertainment," September 9, 2010, 3–5; U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), *Motion Picture and Video Industries*, 2010–11. Although studios and other production companies are responsible for financing, producing, publicizing, and distributing a film or program, the actual making of the film is done by hundreds of local small businesses and independent contractors hired by the studios on an as-needed basis. These companies provide a wide range of services, such as equipment rental, lighting, special effects, set construction, and costume design. The industry also contracts with a large number of workers in other industries that supply support services to the crews while they are filming, such as truck drivers, caterers, electricians, and makeup artists. Many of these workers, particularly those in Los Angeles and Mumbai, are wholly dependent on the motion picture industry.

²⁷ Dickey, "Avatar's True Cost," December 3, 2009.

²⁸ Amobi, "Movies and Entertainment," September 9, 2010, 3–5.

²⁹ DOL, BLS, *Motion Picture and Video Industries*, 2010–11.

³⁰ *Economist*, "The Worldwide Cinema Boom," May 6, 2010.

Consequently, in response to the uncertainty of movie revenues, co-productions have been a way for movie studios to spread their financial risk.³¹ In particular, international co-productions have been an important feature of the audiovisual services industry for many years. Most commonly, U.S. studios have cooperated in the production of motion pictures with companies in Canada, the United Kingdom, continental Europe, Australia, New Zealand, and Japan.³² Often, these co-productions are based on investment treaties that provide incentives to partnering countries in the form of tax credits or other cost rebates if certain budgetary and employment limits are reached during a film's production, a factor that will be discussed in further detail later in the chapter. European-based production companies, in particular, have been most active in the making of co-productions, either with U.S. studios or with other production companies within Europe. On average, between one-third and one-half of the movies produced in the top European filming nations (e.g., France, Germany, Italy, Spain, and the United Kingdom) have been co-productions.³³

Demand and Supply Factors

Changing Demographics Shift Demand for Movies

The demand for entertainment and leisure services—in this case, motion picture viewing—has been significantly affected by changes in the relative growth of different age groups.³⁴ Younger, more technology-savvy consumers have driven box office growth in the motion picture industry due to their increasing demand for 3-D films. In the United States, for example, the broad demographic shifts most important to the entertainment industry include an increase in the number of 18- to 34-year olds in the early 2000s; there were approximately 4.8 million more in this age group in 2010 than in 2000.³⁵ According to industry surveys, people under the age of 39 tend to be the most avid moviegoers overall, and those under 35 tend to be the most frequent viewers of 3-D films.³⁶ Hence, the recent gains in box office revenue have largely been driven by these younger audiences.³⁷ The largest U.S.-based movie studios have met much of this demand due to their near monopoly on 3-D titles.³⁸ In North America alone, 3-D films drove almost all of the growth in box office receipts in 2009, generating gross box office earnings of about \$1.1 billion that year with the release of 20 3-D films. By comparison, total North American gross box office earnings from 3-D films amounted to approximately \$240 million from 2005 through 2008.³⁹

Although younger audiences account for a large part of 3-D movie going in Europe, particularly in Eastern European markets,⁴⁰ the EU's overall age demographic is expected

³¹ Hanson and Xiang, "International Trade in Motion Picture Services," January 2008, 8–11. An important issue in using data on box office revenue is how to classify the nationality of a motion picture. *Screen Digest*, the primary box office and production data source for our discussion, defines the origin country for a film by the location of the company that produces the film. However, double-counting of reported revenue and production levels often becomes a problem when two or more international studios collaborate to produce a single film.

³² WTO, "Audiovisual Services: Background Note," January 12, 2010, 8.

³³ *Ibid.*; *Screen Digest*, "World Film Production/Distribution," June 2006, 205.

³⁴ Vogel, *Entertainment Industry Economics*, 2004, 13.

³⁵ *Ibid.*

³⁶ Motion Picture Association of America (MPAA), *Theatrical Market Statistics 2009*, 9; *Film Journal International*, "Moviegoer Quick Facts," July 15, 2009.

³⁷ Vogel, *Entertainment Industry Economics*, 2004, 12–14.

³⁸ *Ibid.*, 13; *Economist*, "The Worldwide Cinema Boom," May 6, 2010.

³⁹ *Economist*, "The Worldwide Cinema Boom," May 6, 2010; EAO, *Focus 2010*, 2010, 43.

⁴⁰ *LiveTradingNews.com*, "The Worldwide Cinema Boom," May 8, 2010.

to “gray” at a much faster rate than in the United States. According to estimates, the median age in the United States in 2050 is expected to be 35.4, only a very slight increase from what it was in the early 2000s. In Europe, by contrast, it is expected to rise from 37.7 to 52.3.⁴¹ Nonetheless, the rapid growth of 3-D screens allowed 3-D movies such as *Ice Age 3* (Fox), *Up* (Disney), and *Avatar* to sell about 86 million more tickets throughout the European Union in 2009, helping to boost EU movie admission levels by 6 percent over the previous year. Moreover, premium pricing for 3-D screenings drove up average global ticket prices by \$1 to \$3 or more, further bolstering box office revenue figures.⁴²

Although at the forefront of the digital rollout in its early years, Asia has lagged behind North America and Europe in the last few years with regard to 3-D technology. This in large part has been due to a lack of theaters that support such technology (China and India), the predominance of domestically produced non-3-D films (China, India, and Japan), and cultural differences.⁴³ Japan also faces demographic challenges. Japanese aged 60–65 represent the country’s largest population segment, and people over 65 already make up 23 percent of Japan’s population—the world’s highest such percentage. That figure is forecast to jump to about 40 percent by 2050, according to government data.⁴⁴

Infrastructure Investment and Digital Technology Streamline the Industry

Technological advances have made it easier, in terms of cost, quality, and time, to transmit a greater amount of content across borders; enabled content to be distributed on a variety of platforms and devices by diverse operators; and granted greater control to consumers over what, when, where, and how they watch audiovisual content. Investment in digital-ready theaters and the implementation of uniform transmission standards has become a major priority for many governments and national film associations in order to realize the efficiencies offered by digital technology. The adoption of digital technology makes it possible to distribute movies to theaters through the use of satellite or fiber-optic cable. Bulky metal film canisters can be replaced by easy-to-transport hard drives. Moreover, by establishing a common set of content requirements, distributors, studios, exhibitors, digital cinema manufacturers, and vendors can be assured of interoperability and compatibility. In the United States and Europe, for example, major investments have been made by both the private and public sectors to accelerate the digitization process through the acceptance of Digital Cinema Initiatives⁴⁵ as the international standard for digital film formatting and through the development and promotion of the Virtual Print Free (VPF) model, by which distributors contribute, through third-party investors, to financing the digitization of cinemas.⁴⁶

⁴¹ Bernstein, “An Aging Europe May Find Itself on the Sidelines,” June 29, 2003.

⁴² *Economist*, “The Worldwide Cinema Boom,” May 6, 2010; EAO, *Focus 2010*, 2010, 14.

⁴³ EAO, *Focus 2010*, 2010, 53.

⁴⁴ Gallagher, “In Japan, 3D films Get Kicked by New Samurai Flicks,” October 14, 2010.

⁴⁵ Digital Cinema Initiatives, “About DCI,” n.d. (accessed January 29, 2011). The initiative was created in March 2002 and is a joint venture of Disney, Fox, Paramount, Sony, Universal, and Warner Brothers to establish and document voluntary specifications for an open architecture for digital cinema that ensures a uniform high level of technical performance, reliability, and quality control. Because of the relationship of DCI to many of Hollywood’s key studios, conformance to DCI’s specifications is considered a requirement by software developers or equipment manufacturers targeting the digital cinema market.

⁴⁶ EAO, *Focus 2010*, 2010, 7. The VPF model’s basic premise is that a third party pays up front for the digital equipment, and then recoups the cost of the equipment over time, through payments from distributors and exhibitors.

To illustrate the growing importance of digital and 3-D technology in the movie industry, the number of screens served by digital projectors worldwide rose from about 3,000 to 16,400 between 2006 and 2009.⁴⁷ In 2009, the number of digital 3-D screens worldwide more than tripled from the previous year, rising from 2,543 to 8,989, with most of the increases seen in North America and Europe.⁴⁸

Tighter Budgets, Digital Technology, and Government Incentives Drive Production Abroad

Digital technology and computer-generated imaging have started to transform the industry's production strategies by allowing content to be transmitted across borders more efficiently and at lower cost. As a result, more movie producers are moving certain production or post-production activities (e.g., special effects, animation, editing) abroad. In an environment of sluggish economic growth, MGM's bankruptcy filing in November 2010, and Universal and Disney's poor return on investments in 2009 (e.g., *G-Force*, *Confessions of a Shopaholic*), all of the major Hollywood studios have committed to becoming more cost-conscious in their film budgeting.⁴⁹ Hence, movies are increasingly being shot in foreign sites, which often compete to attract large-budget productions through tax breaks and other cost or labor incentives.⁵⁰

As a consequence, all but seven U.S. states and territories and 24 other countries now offer or are preparing to offer rebates, grants, or tax credits that cut 20–40 percent off the cost of filming a movie.⁵¹ Industry sources note that producers often first compare the incentives offered by the different locations and only then look at their scripts to see which of the places on the list make sense. The phenomenon of “runaway production” has been a major issue in California since 1998, when Canada began to attract producers and their crews away from Los Angeles with tax breaks.⁵² California's world share of studio films (i.e., those made by the six largest studios) dropped from 66 percent in 2003 to 34 percent in 2008.⁵³ Competition for movie productions has been fierce because such projects can provide the location with almost immediate economic benefits. A U.S. industry source estimates that the average big-budget feature film costing about \$32 million leads directly to 141 jobs, from caterers to make-up artists, and indirectly to another 425 jobs. Such a production can generate up to \$4.1 million in sales and income tax revenue.⁵⁴ Some of the most popular foreign filming sites for U.S.-based studios include Australia, Canada, Ireland, New Zealand, the United Kingdom, and various countries in Eastern Europe.⁵⁵

⁴⁷ *Economist*, “The Worldwide Cinema Boom,” May 6, 2010.

⁴⁸ MPAA, *Theatrical Market Statistics 2009*, 15.

⁴⁹ Garrahan, “Hollywood Braced for Budget Cuts,” October 6, 2009.

⁵⁰ WTO, “Audiovisual Services: Background Note,” January 12, 2010, 10; DOL, BLS, *Motion Picture and Video Industries*, 2010–11.

⁵¹ *Economist*, “Hollow-wood,” March 11, 2010.

⁵² *Ibid.*; WTO, “Audiovisual Services: Background Note,” January 12, 2010, 10.

⁵³ *Economist*, “Hollow-wood,” March 11, 2010; WTO, “Audiovisual Services: Background Note,” January 12, 2010, 10.

⁵⁴ *Economist*, “Hollow-wood,” March 11, 2010.

⁵⁵ Center for Entertainment Industry Data and Research (CEIDR), *The Global Success of Production Tax Incentives*, 2006, 2–3; Schwinke, “Will Cheap Deals Tempt the Bargain Hunters?” July 2, 2009. For instance, Bulgaria, Hungary, Poland, Romania, and Serbia have been particularly active in offering production incentives to foreign filmmakers.

Moreover, making changes to a picture is much easier using digital techniques. Backgrounds can be inserted after the actors perform on a sound stage, or locations can be digitally modified to reflect the script. Even actors can be created digitally.⁵⁶ Since these technologies have increased the divisibility of production tasks, more firms have taken advantage of offshoring or outsourcing opportunities in developing countries or with lower-cost foreign firms that specialize in certain activities. In 2004–05,⁵⁷ Lucasfilm opened its first overseas special effects studio in Singapore, making Lucasfilm the first major production studio to set up shop in Asia.⁵⁸ The Singapore studio’s less experienced artists required lower salaries than their California counterparts, proved easier to hire abroad since the company didn’t have to navigate U.S. immigration laws, and used the 16-hour time difference between Singapore and San Francisco to essentially double Lucasfilms’ productive capability. Currently, more than 90 percent of the animation for American films and television shows is processed in Asia, mainly in Japan and Korea. However, the \$100 billion animation industry is rushing to tap the deep pools of young, well-trained, and relatively inexpensive artists in countries such as China, India, the Philippines, and Singapore.⁵⁹

Technological Advances Further Challenge Intellectual Property Rights

Advances in technology have made the regulation and protection of intellectual property rights more difficult for audiovisual service providers, national governments, and industry associations.⁶⁰ According to an industry source, the sale and distribution of illicit content have reportedly cost the movie industry several billion dollars in lost revenue in recent years, making the production and distribution of films even more expensive for legitimate producers operating in a highly leveraged market.⁶¹ The Motion Picture Association of America, which represents the six largest movie studios in Hollywood, mentions illegal camcording in theaters, the expanding network of peer-to-peer file sharing and illicit video streaming, and user-generated content sites on the Internet as some of the primary threats to their industry.⁶² They also note that Internet piracy has become a growing problem in key markets such as China, Europe, Korea, North America, South Africa, and Taiwan.⁶³

⁵⁶ WTO, “Audiovisual Services: Background Note,” January 12, 2010, 10; DOL, BLS, *Motion Picture and Video Industries*, 2010–11.

⁵⁷ The first year in which the U.S.-Singapore Free Trade Agreement (FTA) went into effect.

⁵⁸ *GlobalServicesMedia.com*, “Lights, Camera, Action...,” February 27, 2008. Lucasfilm’s overseas projects have included the creation of special effects for the movie *Rush Hour 3* and the Star Wars-based television series, *Clone Wars*.

⁵⁹ *Ibid.*

⁶⁰ WTO, “Audiovisual Services: Background Note,” January 12, 2010, 1.

⁶¹ Industry official, interview by USITC staff, Washington, DC, November 9, 2010.

⁶² *Ibid.*

⁶³ MPAA, *Trade Barriers to Exports of U.S. Filmed Entertainment*, October 2010 and industry official, interview by USITC staff, Washington, DC, November 9, 2010. The MPAA as well as the International Intellectual Property Alliance (IIPA) has advocated the establishment of stronger online legal protections for copyright owners, which include: adequate notice and takedown provisions; clearly defined Internet service provider (ISP) liability guidelines; the protection of temporary copies; and stronger enforcement of the World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) and the WIPO Performance and Phonograms Treaty (WPPT). See also, the USITC’s report, *China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy*.

Consequently, new technologies are emerging in order to better identify and root out pirated materials online.⁶⁴ Current methods of protection, such as digital “watermarking,” are insufficient, since they only recognize and flag duplicates. Movies that are illegally camcordered from theaters can easily sidestep these online interventions. These new systems offer two benefits: they automate what is currently a manual procedure for checking whether an uploaded video on the Internet is pirated or not, and they would better detect whether a work is authentic, even if it has been illicitly filmed or digitally altered in any way.⁶⁵

Trade Trends

Cross-border Trade

U.S. exports substantially exceeded imports of audiovisual services in 2009 (box 3.2). U.S. cross-border exports of audiovisual services amounted to \$13.8 billion, reflecting a growth rate of about 3 percent over 2008 (figure 3.1). This was below the growth trend from 2004 through 2007, when U.S. exports increased by close to 7 percent annually on average. The decline in exports observed in 2008 is likely related to several factors during that period, including slow growth in demand in several developing economies, financial constraints on movie production due to the economic downturn, and a dearth of strong feature films from Hollywood and other major film industries.⁶⁶ By a wide margin, the United Kingdom was the largest U.S. export market for audiovisual services in 2009, accounting for revenues of \$3.7 billion (27 percent). Other important export markets included Canada (\$1.3 billion), Germany (\$1.2 billion), Japan (\$1.1 billion), and France (\$829 million). Europe, by far the most significant regional consumer of U.S. audiovisual services exports, accounted for about 63 percent of such exports in 2009 (figure 3.2).⁶⁷ U.S. films have long dominated most European markets,⁶⁸ for reasons that include the widespread use of English in the region, the popularity of A-list American actors and actresses throughout most of Europe, the predominance of U.S.-made films in European film festivals such as Cannes and Venice, and the multicultural make-up of most U.S. films (largely due to the United States’ diverse ethnic and cultural population).⁶⁹

⁶⁴ *Economist*, “To Catch a Thief,” May 13, 2010. The technique developed by NEC, a Japanese technology company, and Mitsubishi Electric, has been adopted by the International Organization for Standardization (ISO) for MPEG-7, the latest standard for transmitting audiovisual content.

⁶⁵ *Ibid.*

⁶⁶ Amobi, “Movies and Entertainment,” September 9, 2010, 3–5.

⁶⁷ USDOC, BEA, *Survey of Current Business*, October 2010, 46–49.

⁶⁸ Pells, “Is American Culture ‘American?’” February 1, 2006.

⁶⁹ *Ibid.*

BOX 3.2 Understanding Available Trade Data in Audiovisual Services

Overall, publicly available data on motion picture trade flows are of limited quality and quantity. The UN Comtrade database reports trade in motion pictures in terms of the value of “cinematographic film exposed or developed,” which is a commodity rather than a service.

Available Balance of Payments data significantly understate global trade in this sector, as many WTO members do not collect statistics at this level of disaggregation.^a Data used in the trade discussion below are prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (USDOC).

BEA data on cross-border trade in audiovisual services reflect payments for rights to display, reproduce, or distribute motion pictures and television programs.^b In other words, cross-border trade data reflect the exchange of limited intellectual property rights. BEA’s statistics, however, do not reflect global box office receipts, which broadly measure demand for movie-going and, in turn, affect cross-border trade.^c

Data on affiliate transactions reflect sales to foreign consumers of motion pictures, television tapes, and films by U.S.-owned production and distribution affiliates, as well as purchases by U.S. consumers from foreign-owned motion picture affiliates located in the United States.^d The data presented by the BEA provide a limited view of bilateral trade flows for the film industry, as most of the numbers are suppressed to avoid disclosure of data of individual companies. As a result, U.S. affiliate transactions are not included in this trade discussion.^e

^a WTO, “Audiovisual Services: Background Note by the Secretariat,” January 12, 2010, 4.

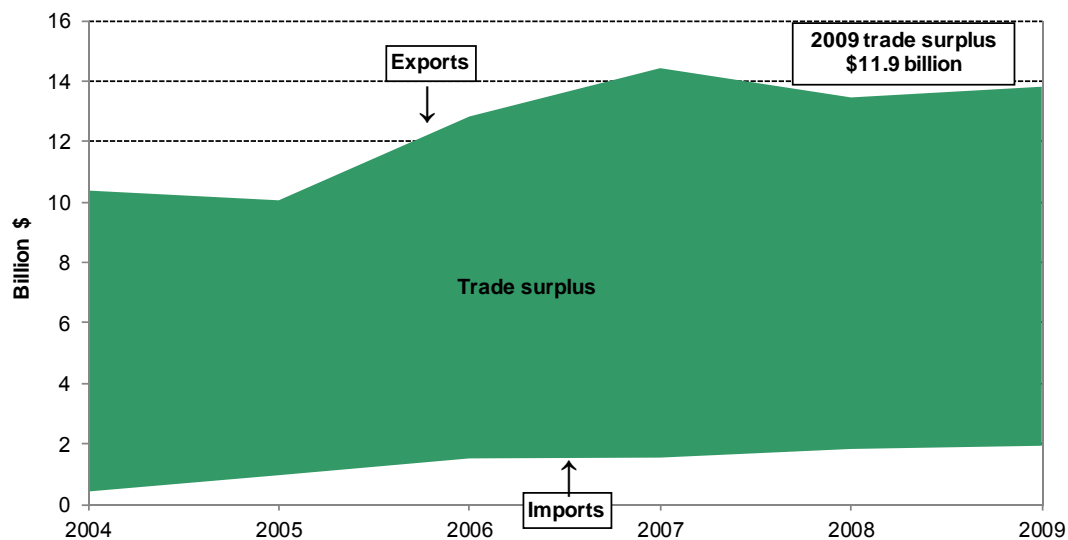
^b USDOC, BEA, *Survey of Current Business*, October 2010, 46–49.

^c Specific box office revenue data are not analyzed in the “Trade Trends” discussion.

^d USDOC, BEA, *Survey of Current Business*, October 2010, 46–49.

^e Hanson and Xiang, “International Trade in Motion Picture Services,” January 2008, 3–9.

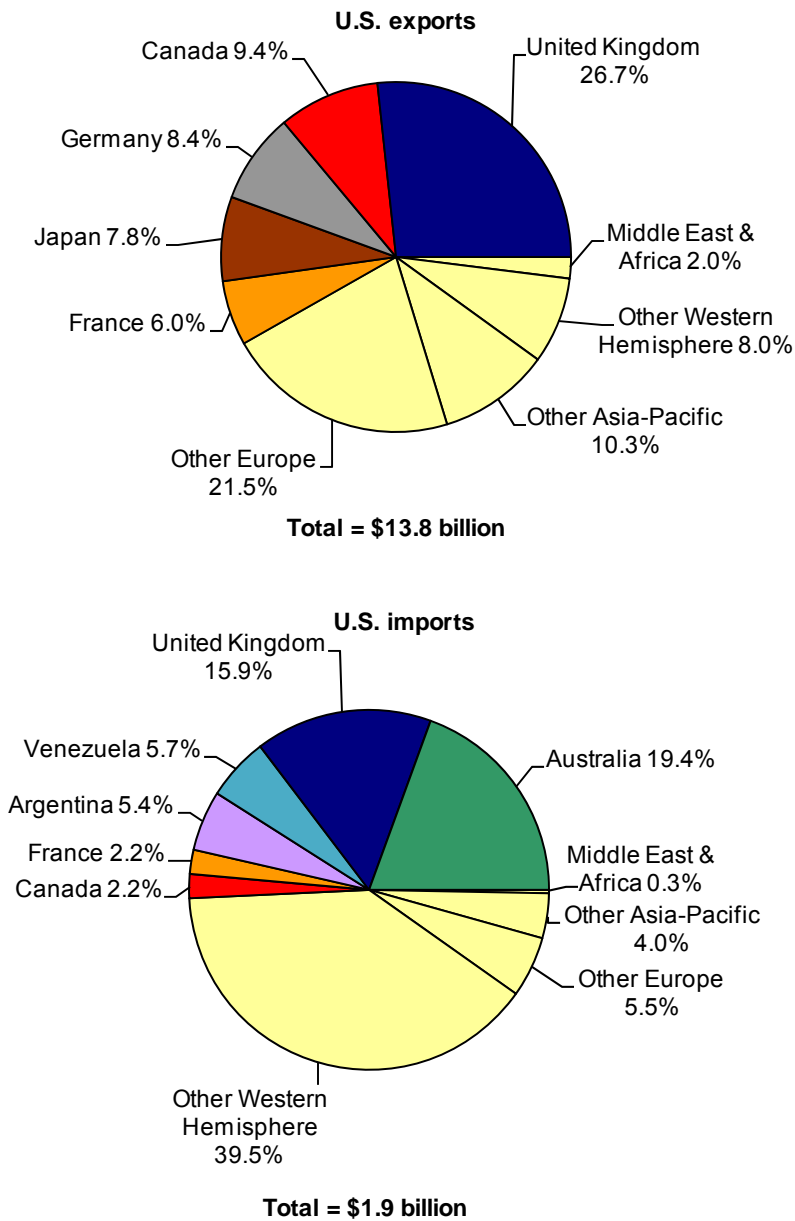
FIGURE 3.1 Audiovisual services:^a U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2004–09



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

^aCross-border trade data measure films and television tape rentals.

FIGURE 3.2 Audiovisual services:^a Europe was the largest market for audiovisual services exports, while Latin America and Other Western Hemisphere countries were the largest exporters of audiovisual services to the U.S. market in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 48–49, table 5.2.

Note: Geographic regions are shaded in yellow.

^aCross-border trade data measures films and television tape rentals.

Imports of foreign films and television programs have continued to capture an increasing share of the U.S. market, though it is still relatively small. Cross-border imports in 2009 totaled about \$1.9 billion, a 6 percent increase over the previous year. By comparison, imports grew at an average annual rate of 44 percent from 2004 through 2008. Such growth can be attributed to increasing imports from Latin America.⁷⁰ Venezuela, in particular, has been a major source of audiovisual services imports in recent years. This influx can largely be attributed to the Venezuelan government's concerted efforts to boost this sector by building up its infrastructure to support its state distribution company, Amazonia Films.⁷¹ Australia accounted for \$377 million, or 19 percent, of U.S. audiovisual services imports in 2009, while imports from the United Kingdom and Venezuela totaled \$308 million (16 percent) and \$110 million (6 percent), respectively. In contrast to its high importance as a regional market for U.S. exports, Europe supplied only about 24 percent of U.S. imports of audiovisual services in 2009.⁷²

Multilateral Negotiations, Liberalization, and Remaining Barriers

Audiovisual services is among the services sectors with the lowest number of WTO members with commitments (30, as of January 31, 2010), although many of the most important producing countries have some commitments. The sector is also characterized by a high number of exemptions to most-favored-nation (MFN) or nondiscriminatory treatment, which largely focus on concessions allowed for international film co-productions.⁷³

Following the Hong Kong Ministerial Declaration of December 2005, a group of developing and developed country members prepared a plurilateral request for audiovisual services. Essentially, the request seeks more commitments on cross-border supply (mode 1) and consumption abroad (mode 2). For commercial presence (mode 3), the request noted important lingering barriers to trade in the sector, particularly content quotas, foreign equity restrictions, limits on the number of suppliers, discriminatory taxes, and other trade-inhibiting requirements.⁷⁴ The request also sought to reduce the scope and content of MFN exemptions in the sector.⁷⁵ Although negotiations have stalled at the multilateral level, these barriers to trade remain important topics for discussion, particularly within pending bilateral trade agreements such as the U.S.-Korea Free Trade Agreement.⁷⁶ Nonetheless, in most trade negotiations (both bilateral and multilateral), many governments continue to incorporate special carve-out measures, such as those mentioned above, for the provision of audiovisual services, since the importation of foreign movies and other content can have (perhaps unintended) cultural and societal influences. Hence, the effects of trade liberalization in this sector are not solely economic in nature.⁷⁷

⁷⁰ USDOC, BEA, *Survey of Current Business*, October 2010, 47–49.

⁷¹ Márquez, “Petrodollars for Local Film Industry,” January 12, 2007. In 2006, the government opened the “Villa del Cine” just 30 kilometers east of Caracas. The complex offers soundproof studios with fully equipped lighting, audio and video equipment, and facilities for casting, wardrobe, and post production.

⁷² USDOC, BEA, *Survey of Current Business*, October 2010, 46–49.

⁷³ WTO, “Audiovisual Services,” 2010–11.

⁷⁴ For a more detailed explanation of the modes of services trade, see box 1.1 on p. 1-4.

⁷⁵ WTO, “Audiovisual Services,” 2010–11.

⁷⁶ USTR, “Korea-U.S. Free Trade Agreement,” n.d. (accessed April 6, 2011).

⁷⁷ WTO, “Audiovisual Services,” 2010–11.

Outlook

Box office revenue for 2010–11 is forecast to be lower than previous years due to increasing market saturation in developed markets and the proliferation of inexpensive entertainment options such as Netflix and Redbox rental services, video on demand, hand-held tablet devices, and video game systems. However, the emergence of MGM Studios from bankruptcy with \$500 million in new financing indicates some renewed interest in the highly leveraged movie industry.⁷⁸ Major U.S.-based movie studios will likely increase content available in 3-D and high-definition Blu-ray discs and will look to shorten the release window between the time a film debuts theatrically and when it becomes available for home viewing in order to take fuller advantage of lower-cost digital distribution options.⁷⁹

Weakness in consumer spending on discretionary services, such as audiovisual services, is expected to continue in key markets in Europe and Asia due to relatively flat-to-negative forecast economic growth.⁸⁰ However, China's spending and production will likely continue to grow rapidly, according to SARFT,⁸¹ China's state film agency. SARFT estimated that 1.65 new cinema screens were built every day in China during 2009, and there are no signs this rapid pace will slow any time soon. In the first six months of 2010, total box office revenue had already reached 4.6 billion yuan (about \$697 million), surpassing the total for the entire year of 2008.⁸² As mentioned previously, China is on track to break into the select group of countries with over \$1.0 billion in annual box office revenue. In addition, China has been linked to co-production deals with film companies in France, India, New Zealand, and the United Kingdom, further bolstering its future movie production potential.⁸³

⁷⁸ Garrahan, "MGM Studio Emerges from Bankruptcy," December 21, 2010.

⁷⁹ Amobi, "Movies and Entertainment," September 9, 2010, 1–9; IBISWorld, "Global Movie Production and Distribution," April 15, 2010, 40.

⁸⁰ Amobi, "Movies and Entertainment," September 9, 2010, 5, 9; IBISWorld, "Global Movie Production and Distribution," April 15, 2010, 49–50.

⁸¹ State Administration of Radio, Film, and Television.

⁸² *Screen Digest*, "Global Box Office Hits New High," November 2010, 340.

⁸³ *Screen Digest*, "World Film Production Drops Again," August 2010, 9.

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CHAPTER 4

Computer Services

Summary

Despite the 2008–09 economic downturn, the global computer services industry grew during much of the past decade. Demand remained highest in Western Europe and North America, where most of the industry’s leading firms are headquartered, but showed the most resistance to the effects of the downturn in the Asia-Pacific region, where several Indian companies have emerged as industry leaders. Sales dropped during the downturn due to the struggles of leading clients, notably financial firms, although resilient demand from government and healthcare firms helped offset the decline. Large computer hardware and software firms began to supply more computer services, especially over the Internet (via “cloud computing”), often delivered across borders due to the rapid growth of broadband infrastructure.

The United States’ trade deficit in computer and data processing services grew during 2006–09, totaling \$7.7 billion at the end of the period. India led the world in exports of these services, supplying one-third of U.S. imports of them in 2009. Sales by U.S. firms’ foreign computer services affiliates far exceeded cross-border exports, and sales by foreign firms’ computer services affiliates in the United States nearly doubled, from \$10.8 billion in 2003 to \$21.0 billion in 2008. While explicit barriers to trade and foreign investment in this sector were rare, the advent of cloud computing raised concerns about impediments to cross-border data flows. Forecasts suggested that demand for computer services, particularly those delivered over the Internet, would grow significantly in the near future.

Introduction

The computer services industry is growing rapidly in many countries, including the United States.¹ Between 1994 and 2009, the share of U.S. economic output from computer systems design and related services² rose from 0.6 percent to 1.2 percent,³

¹ Nordas, “Trade and Regulation,” June 24, 2008, 7.

² The computer services industry comprises numerous business segments. Much of the analysis in this chapter focuses on “computer systems design and related services” as defined in the North American Industry Classification System (NAICS). It has been selected because it spans a variety of services requiring specialized skills and training, in keeping with the focus of this report on professional services. It is defined as “establishments primarily engaged in providing expertise in the field of information technologies through one or more of the following activities: (1) writing, modifying, testing, and supporting software to meet the needs of a particular customer; (2) planning and designing computer systems that integrate computer hardware, software, and communication technologies; (3) on-site management and operation of clients’ computer systems and/or data processing facilities; and (4) other professional and technical computer-related advice and services.” USDOC, U.S. Bureau of the Census, “2007 NAICS Definition,” 2007.

³ USDOC, BEA, “Value Added by Industry,” December 14, 2010. The shares of output correspond to value added as a percentage of gross domestic product.

while employment in that industry segment grew from 505,000 to 1.4 million.⁴ Trade in computer services has also increased markedly: between 2006 and 2009, U.S. trade (imports plus exports) in computer and data processing services increased at a compound annual rate of 10.2 percent.⁵ The industry's principal activities include design, installation, and management of computer systems; development of customized software; delivery of noncustomized software over the Internet; Web page development and hosting; data processing and hosting; and computer consultancy.⁶

Competitive Conditions in the Global Computer Services Market

The computer services industry grew rapidly during much of the past decade due to steadily increasing demand in North America and Western Europe and even stronger demand growth in emerging markets. Global spending on computer services grew at an average annual rate of 6.1 percent between 2004 and 2008, from \$588.6 billion to \$745.0 billion. It then contracted to \$715.0 billion in 2009, as the economic downturn caused demand to slump in North America and Western Europe and to stagnate in much of the Middle East, Africa, and Latin America. However, spending continued to grow in the Asia-Pacific region in 2009—notably in China, where the economy continued to grow rapidly, as well as in Japan, where spending on computer services grew strongly despite a weak economy. As a result, Asia-Pacific's share of the industry's global spending rose from 15.5 percent in 2005 to 18.1 percent in 2009, while North America's share fell from 49.6 percent to 46.8 percent (figure 4.1).⁷

Table 4.1 lists the 10 largest global firms in the computer systems design and related services industry segment. The table captures two of the most important trends among computer services companies. First, computer hardware is or once was the chief source of revenue for 3 of the top 10 companies—IBM, Hewlett-Packard (HP), and Cisco. Like many firms whose original specialty was software or hardware, these firms saw services as a promising area for growth. Second, while the top 10 is dominated by companies from the United States and Europe, the presence of an Indian firm, Tata Consultancy Services, points to India's emergence as a leading producer of computer services.⁸ The leading Indian firms offer high-quality services with lower labor costs than their counterparts in the United States and Europe.⁹

⁴ U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Employment, Hours, and Earnings—National Database. Statistics cited are for January 1994 and January 2009.

⁵ USDOC, BEA, "Table 7," 2006–09.

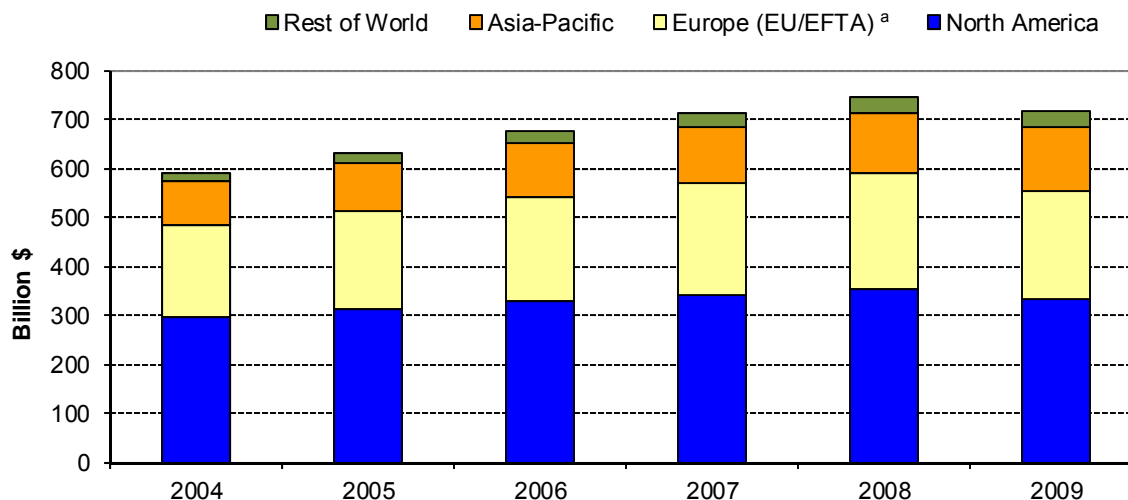
⁶ This definition corresponds to that found in United Nations Statistical Commission, *Manual on Statistics of International Trade in Services 2010* (MSITS 2010), February 2010. The previous edition of the MSITS (2002) left unresolved whether non-customized software delivered over the Internet should be classified as a computer service within international trade statistics. MSITS 2010 clarified that it should.

⁷ IHS Global Insight, *Digital Planet 2010*, October 2010, 26. This source defines computer services as "outsourced services—whether domestic or offshore—such as information technology consulting, computer systems integration, outsourced custom software development, outsourced world wide web page design, network systems, network systems integration, office automation, facilities management, equipment maintenance, web hosting, computer disaster recovery, and data processing services." The data represent spending by country and region rather than revenues. Mexico is grouped within North America in the dataset.

⁸ Two other Indian firms, Wipro and Infosys, were just outside the top 10.

⁹ Gilmore et al., "Salary Survey 2008," December 2008, 4.

FIGURE 4.1 Computer services: North America accounted for nearly half of all computer services spending in 2009



Source: IHS Global Insight, *Digital Planet2010*, October 2010, 26.

^aEU is the European Union. EFTA is the European Free Trade Association. It includes Iceland, Liechtenstein, Norway, and Switzerland.

TABLE 4.1 Computer services: Top 10 computer systems design and related services companies, 2009^a

Rank	Company	Country	Services revenue (billion \$)	Services' share of total revenue (%)
1	International Business Machines Corporation (IBM)	U.S.	55.0	58
2	Hewlett-Packard Company (HP) ^d	U.S.	34.7	30
3	Computer Sciences Corporation (CSC) ^c	U.S.	16.1	100
4	NTT Data Corporation ^d	Japan	12.3	100
5	Capgemini	France	11.7	100
6	Science Applications International Corporation (SAIC) ^e	U.S.	10.8	100
7	Cisco Systems Inc. ^f	U.S.	7.6	19
8	Atos Origin	France	7.2	100
9	Tata Consultancy Services Limited (TCS) ^d	India	6.4	75
10	Logica PLC	UK	5.8	100

Source: Bureau van Dijk, Orbis Companies Database (accessed December 27, 2010); company Web sites, annual reports, and SEC filings.

^aIncludes only firms for which Orbis reported computer systems design and related services as a primary industry. Ranking based on revenues from services.

^bRevenues for the 12 months ending on October 31, 2009.

^cRevenues for the 12 months ending April 2, 2010. May include some revenues from software licensing fees.

^dRevenues for the 12 months ending March 31, 2010.

^eRevenues for the 12 months ending January 31, 2010.

^fRevenues for the 12 months ending July 31, 2010.

Western firms have responded to the competition by establishing their own facilities in India and other developing countries, such as Malaysia and Egypt. For example, Electronic Data Systems (EDS)—one of the largest computer services firms before its acquisition by HP in 2008—had 41,000 workers outside the United States at the end of 2007 (including 27,000 in India). Its non-U.S. workforce numbered 32,000 (18,000 in India) a year earlier.¹⁰

Numerous companies whose primary activity is not computer systems design and related services are also leading players in the industry. For example, U.S. management consulting firms Accenture, Booz Allen Hamilton, and Deloitte were among the global leaders in terms of information technology (IT) consulting revenues in 2008.¹¹ These firms seek to advise and assist clients across the full range of business operations, including computing.

Large and small firms play different roles in the computer services industry. A select cadre of very large firms, such as those named above, compete for multiyear “outsourcing” contracts to undertake computing-related tasks, such as management of data centers, remote data processing,¹² and software programming and maintenance, for large clients. For example, in November 2010, IBM was awarded a contract to manage the IT operations of the Bank of Ireland, including its data centers, desktop computers, servers, mainframes, and service center.¹³

Most computer services firms in the United States are small. For example, in the computer systems design and related services industry segment, 72 percent of firms were nonemployers in 2007.¹⁴ Small firms are also important providers of computer services in the EU¹⁵ and India.¹⁶ Small computer services companies often offer specialized services, such as virus protection and database construction, to smaller corporate clients. Competition among these firms tends to be high because barriers to entry are low. There are few regulatory obstacles to entry in most countries,¹⁷ and the capital requirements for start-up are minimal. Recruitment of staff is the primary constraint to supply.¹⁸

Computer services firms deliver their services via three channels: in person, remotely via information and communication technologies, and combinations of the two. International “multimodal” service delivery is common. For example, a company might establish a commercial presence in a country (mode 3), source selected tasks through cross-border supply (mode 1), and arrange periodic visits by staff from headquarters (mode 4).¹⁹ In-person consultations are particularly important for high-value-added services,²⁰ such as

¹⁰ Cathers, “Computers,” May 6, 2010, 10.

¹¹ IDC, cited in Cathers, “Computers,” May 6, 2010, 17. IT consulting is defined in this source as “a service provider providing an analysis or assessment of the clients’ IT operations or strategy.”

¹² Data processing is the use of computers to perform operations on data, such as merging, sorting, and tabulation. Data processing also includes data entry, retrieval, analysis, and reporting.

¹³ Crosman, “Inside IBM’s Mega Outsourcing Projects,” January 21, 2011.

¹⁴ USDOC, U.S. Bureau of the Census, 2007 Nonemployer Statistics Database. The database states that nonemployer firms are typically “self-employed individuals operating very small unincorporated businesses, which may or may not be the owner’s principal source of income.”

¹⁵ Nordas, “Trade and Regulation,” June 24, 2008, 8.

¹⁶ NASSCOM, *The IT-BPO Sector in India*, February 2009, 185.

¹⁷ Nordas, “Trade and Regulation,” June 24, 2008, 25.

¹⁸ Some observers believe the United States has a shortage of computer specialists, but others disagree. Herbst, “Study: No Shortage,” October 28, 2009.

¹⁹ Nordas, “Trade and Regulation,” June 24, 2008, 23–24. For a more detailed explanation of the modes of services trade, see box 1.1 on p. 1-4.

²⁰ Rubalcaba and Kox, “The Growth of European Business Services,” August 10, 2007, cited in OECD, “Services Trade Restrictiveness,” July 2009, 7.

design and management of complex software systems. For example, in March 2009, Infineon, a German manufacturer of semiconductors, awarded a multiyear contract to India-based TCS to operate and maintain software for supply chain management, marketing, and sales. To manage this complex system, TCS placed four employees at Infineon's headquarters, supported by an additional 30 TCS employees located outside Germany.²¹

Demand and Supply Factors

Demand for Computer Services Weakens as Key Clients Struggle

Computer services firms' success is tightly linked to that of their clients, making them vulnerable to the economic turbulence of recent times. For example, financial services firms in the United States and Western Europe are among the most important consumers of computer services.²² The financial industry's struggles in 2008 and 2009, along with the broader economic downturn in the United States and Europe, weakened demand for computer services. However, relatively robust demand in several other sectors, such as government and health care, partially offset the decline among financial clients.²³

Diverse factors explain this resilient demand. Demand from governments was buoyed by major economic stimulus programs, such as the United States' American Recovery and Reinvestment Act of 2009.²⁴ Demand from healthcare firms in developed countries for services such as claims processing and management of patient records remained relatively strong due to long-term trends (such as aging populations) and governments' reluctance to cut healthcare expenditures too deeply.²⁵ By late 2009, there were signs that demand for computer services from North American financial services firms was recovering.²⁶

Large Hardware and Software Firms Move Increasingly into Services

Provision of services has become increasingly important for large companies that once drew (or still draw) the bulk of their revenues from hardware or packaged software. IBM is the foremost exemplar of this trend: it drew 57 percent (\$55 billion) of its total revenues from services in 2009,²⁷ compared to 16 percent (about \$11 billion) in 1990.²⁸ Other large hardware companies followed in IBM's footsteps by acquiring leading services providers: HP acquired EDS in 2008, Dell Inc. purchased Perot Systems in 2009, and Xerox Corporation bought Affiliated Computer Services in 2009. Companies that traditionally sold packaged software have also moved into services. For example,

²¹ TCS, "TCS Enters into a Long-term Engagement," March 10, 2009; TCS, "Infineon," December 14, 2010, 2.

²² To illustrate, in fiscal year 2010, financial services firms accounted for 41 percent of India's export revenues from IT and business process outsourcing. NASSCOM, "India Inc." April 2010, 19. The statistic quoted here is for banking, other financial services, and insurance. India's fiscal year begins on April 1 and ends on March 31. The 2010 fiscal year ended on March 31, 2010.

²³ NASSCOM, "Executive Summary," February 2010, 6; Dai, "IBISWorld Industry Report 54151," August 2010, 7.

²⁴ Dai, "IBISWorld Industry Report 54151," August 2010, 7; Recovery Accountability and Transparency Board, Recovery.gov database.

²⁵ EIU, "World: Healthcare Outlook," December 9, 2010.

²⁶ NASSCOM, "Executive Summary," February 2010, 6.

²⁷ IBM, *2009 Annual Report*, March 5, 2010, 26.

²⁸ Company representative, interview by USITC staff, December 14, 2009. IBM's total revenues grew from \$68.9 billion in 1990 to \$95.8 billion in 2009. IBM, *2009 Annual Report*, March 5, 2010, 19, and *Form 10-K Annual Report*, March 31, 1994, 70.

Microsoft's services include a consulting arm²⁹ and software delivered over the Internet, such as Office 365.³⁰

These firms have focused more on services for several reasons. First, during the past decade, much hardware (and some software) became "commoditized." Consumers came to view many products as homogenous, forcing their manufacturers to compete more aggressively on price. For example, HP lowered the prices of its desktop printers in the early 2000s in order to compete with lower-cost competitors that were gaining market share.³¹ Hardware and software firms have seen services as a way to recapture higher margins. Secondly, the recession highlighted the advantages of multiyear service contracts, which offer more predictable streams of revenue than one-time sales of hardware and software. Finally, firms have sought to capitalize on businesses' growing interest in cloud computing (see discussion, next section).³²

Cloud Computing Expands the Range and Volume of Activities Delivered as Services

Cloud computing is "a standardized IT capability delivered via the Internet in a pay-per-use and self-service way" that is altering the supply of computer services.³³ It enables users to replace capital expenditures on hardware and packaged software with services paid for on a subscription or utility basis (i.e., fees that vary based on the amount of computing power used).³⁴ Cloud computing comprises IT infrastructure services, such as data processing and storage; platforms for designing and hosting Web applications;³⁵ and Internet-delivered software (box 4.1).

While Internet-based delivery of computer services is not new,³⁶ it is growing. By one estimate, cloud computing revenues totaled \$58.6 billion in 2009.³⁷ Many companies whose IT budgets were squeezed during the recession saw cloud services as cost-effective alternatives to hardware and packaged software. IT suppliers, in turn, expanded their cloud offerings.³⁸ Cloud computing has, however, raised concerns about data privacy³⁹ and spurred new debates about how to regulate cross-border data flows (see "Multilateral Negotiations, Liberalization, and Remaining Barriers" below).⁴⁰

²⁹ Microsoft, "Microsoft Services Overview."

³⁰ Microsoft, "Microsoft Office 365."

³¹ West, "Carly Reconsidered (II)," February 15, 2010; Fried, "HP Revamps," July 1, 2003.

³² Das, "The Rise and Rise of Services," January 22, 2010.

³³ Staten, "Cloud Computing for the Enterprise," February 3, 2009, 11.

³⁴ Dzubeck, "Five Cloud Computing Questions," August 5, 2008.

³⁵ A platform is a set of resources that a developer uses to create software. It may include an operating system, databases, Web servers, and other software and hardware. Salesforce, "What is PaaS?"

³⁶ Larry Ellison, the CEO of Oracle Corporation, called cloud computing "everything that we already do." Farber, "Oracle's Ellison Nails Cloud Computing," September 26, 2008.

³⁷ Gartner, "Gartner Says," June 22, 2010.

³⁸ Ibid.

³⁹ Dzubeck, "Five Cloud Computing Questions," August 5, 2008.

⁴⁰ European Commission, *The Future of Cloud Computing*, 2010, 52.

BOX 4.1 Cloud Computing Helps Businesses Improve Performance and Reduce Costs

Cloud computing is transforming how businesses invest in and benefit from IT. The three types of cloud computing services—Infrastructure as a Service, Platform as a Service, and Software as a Service—enable users to perform vital computing functions without large investments in hardware or packaged software.

Infrastructure as a Service (IaaS) allows businesses to purchase computing capacity and data storage space on an as-needed basis.^a IaaS providers include Amazon Web Services (AWS) and VMware vCloud Express. One representative of an online marketing firm explained how his firm uses IaaS. The firm built and managed a Web site for a company selling nutrition bars. One of its promotions attracted an unusually high number of Web site visitors, causing the site to crash. The marketing firm bought time on “virtual machines” from AWS in order to manage the data generated by the additional traffic. When traffic to the site declined, the marketing firm simply stopped paying for the virtual machines. AWS allowed the firm to solve its problem rapidly without investing in hardware that would be redundant in normal circumstances.^b

Platform as a Service (PaaS) lets software developers create computer applications without investing in the hardware they would otherwise need.^c Examples of PaaS include Google’s App Engine and Microsoft’s Windows Azure. The City of Miami used Windows Azure to create an online application for Miami 311, a service that allows citizens to report nonemergency problems (such as potholes) and track progress on resolving them. Windows Azure gave the city’s IT Department the capacity to complete all stages of development and process the data required to run Miami 311.^d

Software as a Service (SaaS) refers to software delivered to customers over a network (most commonly the Internet).^e It includes software oriented to business users, such as Salesforce, and products for individual consumers, such as Google’s Gmail e-mail service and its Docs word processor. SaaS eliminates the need to procure packaged software and install it on users’ individual machines. It also makes it easier to connect users. For example, Restoration Hardware, a distributor of home furnishings, adopted Salesforce for a sales program targeting “trade” customers, such as property developers, hotels, and interior designers. Restoration used Salesforce to create a centralized database of these customers and to build a portal through which staff in Restoration’s stores can forward leads to a specialized sales team. The software improved staff collaboration, customer service, and conversion of leads into sales.^f

^a Amazon, “What is AWS?”

^b Industry representative, interview by USITC staff, December 30, 2010.

^c Gray, “Cloud Computing,” October 21, 2010.

^d Microsoft, “City of Miami,” February 24, 2010, 5.

^e Gray, “Cloud Computing,” October 21, 2010.

^f Salesforce, “Restoration Hardware,” n.d. (accessed January 4, 2011).

Broadband Internet Facilitates Trade in Computer Services

Cross-border trade in computer services has grown rapidly since the mid-1990s. Among Organization for Economic Cooperation and Development (OECD) countries, imports of computer services nearly quadrupled from 1996 to 2005, and exports quintupled.⁴¹ The rapid expansion of the global broadband Internet⁴² infrastructure has facilitated this growth in trade.⁴³ In India, for example, the total number of fixed broadband subscriptions grew from 180,000 in 2004 to over 7.7 million in 2009, while the country’s

⁴¹ Nordas, “Trade and Regulation,” June 24, 2008, 9.

⁴² Díaz-Pinés, *Indicators of Broadband Coverage*, December 10, 2009, 38. Broadband is defined by the OECD as “a communication service that enables access to the Internet at data transmission rates above a specific threshold.” The OECD and the International Telecommunications Union (ITU), two widely consulted sources of data, use a download speed of 256 kilobits per second as the threshold for their broadband statistics.

⁴³ Nordas, “Trade and Regulation,” June 24, 2008, 9; WTO Secretariat, “Computer and Related Services,” June 2009, 17.

computer services exports nearly tripled and its imports nearly quintupled.⁴⁴ Over this same period, Malaysia's broadband subscribership grew by 58 percent⁴⁵ and its computer services exports and imports quadrupled.⁴⁶ Broadband connections facilitate trade by allowing computer service providers and their clients to exchange large amounts of data quickly. This is particularly important for many cloud computing services.⁴⁷ Broadband connections are costly and unreliable in many lower-income countries, which limits their ability to competitively produce computer services for export.⁴⁸ In 2009, the average cost of a monthly broadband subscription was \$322 in sub-Saharan Africa and \$96 in Latin America and the Caribbean, compared to \$6 in India.⁴⁹

Trade Trends

*Cross-border Trade*⁵⁰

In 2009, U.S. cross-border exports of computer and data processing services (box 4.2) totaled \$8.6 billion and cross-border imports totaled \$16.3 billion, producing a trade deficit of \$7.7 billion (figure 4.2). The United States ran a deficit in cross-border trade in computer and data processing services every year from 2006 through 2009.⁵¹ The deficit grew by 5.0 percent from 2008 to 2009, a steeper annual increase than in the two previous years.

U.S. exports of computer and data processing services grew by 1.4 percent in 2009, compared to an average annual rate of 21.4 percent during 2006–08. The slowdown was due largely to weaker demand in Europe in response to the economic downturn. During the 2006–09 period, affiliated (intra-firm) exports grew faster than unaffiliated ones. Intra-firm exports by U.S.-owned companies grew fastest (figure 4.3). Most exporters of computer and data processing services to affiliated parties were not firms whose primary industry was computer services.⁵² Thus, exports grew fastest among firms in other industries providing computer services to their affiliates.

⁴⁴ IMF, Balance of Payments Statistics Database.

⁴⁵ ITU, ICT Statistics Database.

⁴⁶ IMF, Balance of Payments Statistics Database.

⁴⁷ Golden, "The Skinny Straw," August 6, 2009.

⁴⁸ Sudan et al., *The Global Opportunity in IT-Based Services*, 2010, 16 and 21.

⁴⁹ ITU, *Measuring the Information Society*, 2009, cited in Engman, "Exporting Information Technology Services," 2010, 231.

⁵⁰ Unless otherwise indicated, the analysis in this section is based on data found in USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, 54–55, tables 1 and 7.2.

⁵¹ For years before 2006, BEA's data for trade in computer and data processing services reflect transactions between unaffiliated parties only. BEA's data for 2006–09 also include affiliated (intrafirm) trade, which comprises transactions between U.S. parents and their foreign affiliates and between U.S. affiliates and their foreign parents.

⁵² BEA representative, e-mail to USITC staff, January 31, 2011.

BOX 4.2 Understanding Data on Trade in Computer Services

This chapter's data on cross-border trade were prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (USDOC). In analyzing cross-border trade, the chapter focuses on "computer and data processing services" as defined by BEA, which include data entry; computer systems design; custom software and programming; hardware and software integration; and other computer services, such as maintenance and Web site management. Fees for database services and software usage are classified separately.^a

BEA records cross-border trade data by type of service. A single firm may report imports and exports of a variety of services, and each service may be produced by firms in multiple industries. For example, if a manufacturing firm designed custom software for a foreign affiliate, the transaction would be counted as an export of computer and data processing services.

The data on affiliate transactions also come from BEA. It collects these data through surveys of U.S. direct investment abroad and of foreign investment in the United States. However, BEA compiles these data differently, classifying them by primary industry of the affiliate rather than by the type of service. For example, if an affiliate whose primary industry was computer systems design also sold other services, BEA would record all of the affiliate's sales under computer systems design. Computer services supplied by affiliates in other industries, such as computer manufacturing, software publishing, or wholesale trade, are captured separately in the BEA data.^b

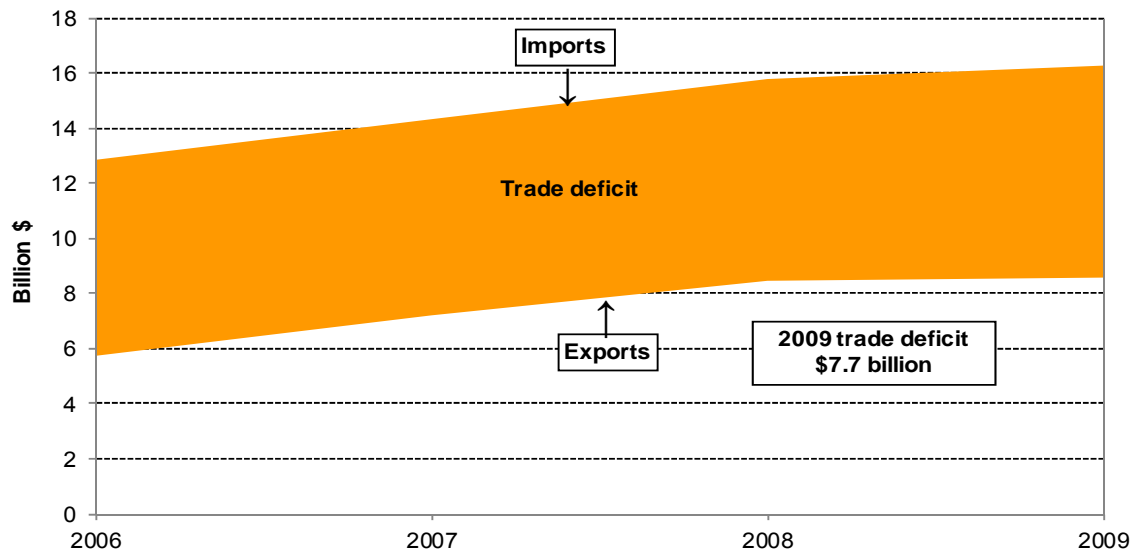
For this reason, the data on affiliate sales cannot be directly compared with those on cross-border trade. The analysis of affiliate transactions in this chapter therefore focuses on firms whose primary industry is "computer systems design and related services" as defined in the NAICS (see footnote 2).

The computer services trade data are described by BEA as reflecting "services supplied"; for computer systems design and related services, services supplied correspond to sales. The two terms are used interchangeably below.

^a USDOC, BEA, "Quarterly Survey of Transactions," January 2010, 16; USDOC, BEA, "International Services Surveys," January 2010, 9.

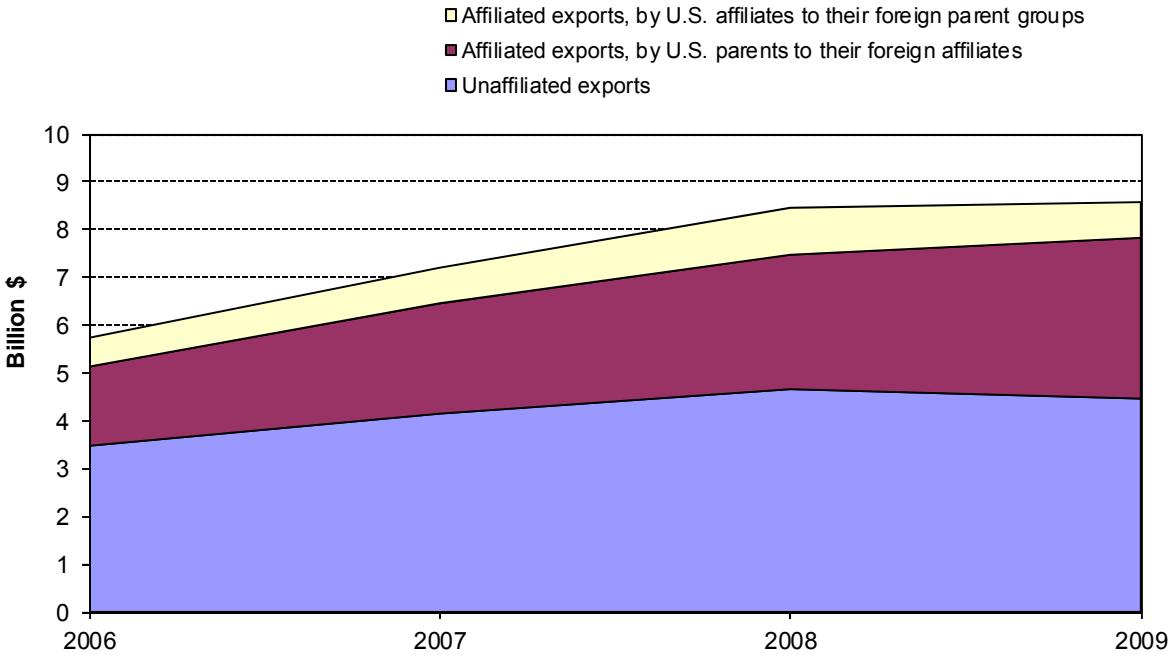
^b USDOC, BEA, "Where Can I Find Information?" November 3, 2010.

FIGURE 4.2 Computer services: U.S. cross-border trade in private-sector services resulted in a U.S. trade deficit each year during 2006–09



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

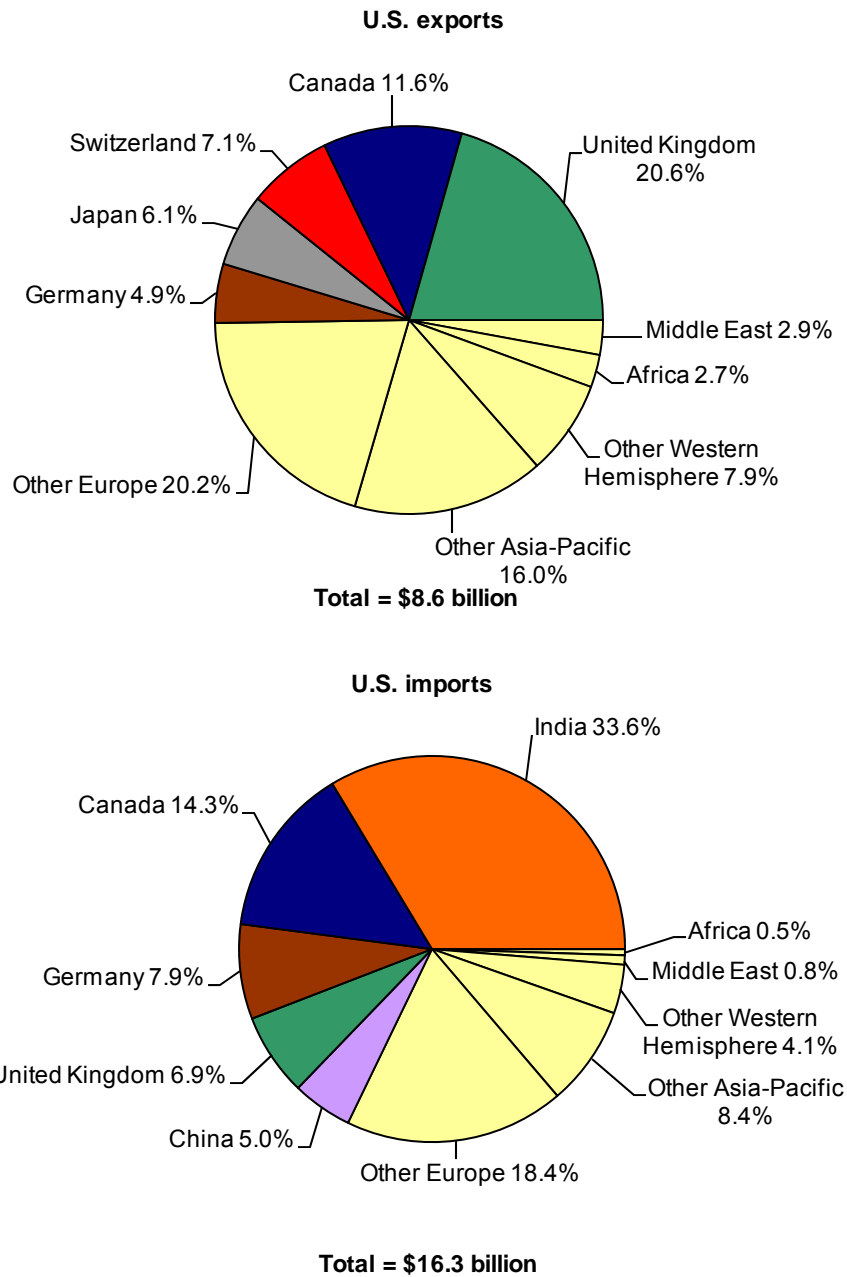
FIGURE 4.3 Computer services: Cross-border exports of computer and data processing services from U.S. parents to their foreign affiliates grew faster than both unaffiliated exports and exports from U.S. affiliates to their foreign parents during 2006–09



Source: USDOC, BEA, "Table 7a," 2006–09.

Over half of U.S. exports of computer and data processing services were destined for Europe from 2006 through 2009. The United Kingdom was the most important single export market in each of these years, while Germany was consistently among the top five. However, in 2009, exports to Europe contracted while those to the Asia-Pacific region grew. As a result, Europe’s share of exports declined from 58.9 percent in 2008 to 52.9 percent in 2009, while Asia-Pacific’s share grew from 18.5 percent to 22.1 percent (figure 4.4).

FIGURE 4.4 Computer services: The United Kingdom and India, respectively, were the top markets for U.S. exports and imports of computer and data processing services in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 54–55, table 7.2.

Note: Geographic regions are shaded in yellow.

Growth of imports of computer and data processing services into the United States also slowed in 2009, falling to 3.1 percent compared to average annual growth of 10.8 percent during 2006–08. The slowdown in import growth reflected the decline in U.S. demand for computer services during the economic downturn. Over three-quarters of all imports during this period were intra-firm.⁵³ Most affiliated imports involved firms whose primary industry was computer services. This suggests that multinational computer services firms operating in the United States often combine imported inputs with locally produced ones.⁵⁴

India accounted for 33.6 percent of U.S. imports of computer and data processing services in 2009. It has been the leading source of imports since at least 2006, and its lead over its competitors widened steadily through 2009. U.S. imports from India in 2009 were more than twice those from the second-largest source, Canada, and more than those from all of Europe combined (see figure 4.4). Factors that have contributed to India’s emergence as a premier computer services exporter include a large pool of skilled, English-speaking workers; competitive wages well below those in developed countries; government incentives favorable to the industry’s growth; a liberal environment for domestic and foreign investment; and low telecommunications costs.⁵⁵ Additional factors that have favored India’s success in exporting to the United States include similar political and legal institutions and a time zone differential between the two countries that fosters “round-the-clock” service provision.⁵⁶

*Affiliate Transactions*⁵⁷

U.S. firms’ sales of computer services through foreign affiliates⁵⁸ tend to be larger than cross-border exports, reflecting the importance of having a local presence when delivering these services.⁵⁹ In 2006, sales by U.S.-owned foreign affiliates whose primary industry was computer systems design and related services totaled \$52.5 billion—over nine times the value of U.S. cross-border exports of computer and data processing services.⁶⁰ The top six countries for these sales included the five leading markets for cross-border exports (the United Kingdom, Canada, Germany, Australia, and Japan).⁶¹ Recent literature suggests that cross-border trade and affiliate sales of computer services are complements.⁶² This may explain why the lists of leading destinations for exports and affiliate sales are similar.

⁵³ USDOC, BEA, “Table 7,” 2006–09.

⁵⁴ BEA representative, e-mail to USITC staff, January 31, 2011.

⁵⁵ Schifferes, “Multinationals Lead India’s IT Revolution,” January 24, 2007.

⁵⁶ Alejandro et al., “An Overview and Examination,” August 2010, 14.

⁵⁷ Unless otherwise indicated, the analysis in this section is based on data found in USDOC, BEA, “Table 9,” 2006–08, and “Table 10,” 2006–08.

⁵⁸ BEA reports “services supplied” by foreign affiliates. In the affiliate statistics for the computer systems design and related services industry, services supplied correspond to sales. Thus, sales and services supplied are used interchangeably in this section.

⁵⁹ USDOC, BEA, “Where Can I Find Information?” November 3, 2010.

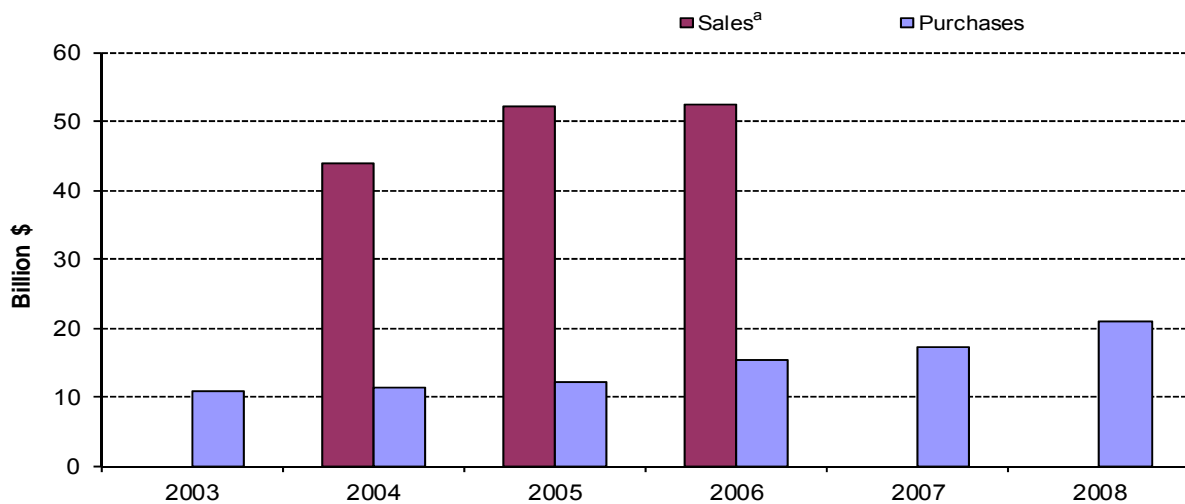
⁶⁰ 2006 is the latest year for which total data are available. BEA suppressed them for later years to avoid disclosure of individual company data.

⁶¹ BEA provided only limited data by country for affiliate sales. “Top six” here refers to the top six among the eight individual countries for which BEA provided this information for 2006. The six were, in descending order, Japan, the United Kingdom, Canada, the Netherlands, Australia, and Germany.

⁶² See, for example, Nordas, “Trade and Regulation,” June 24, 2008, 23–24.

Sales by foreign-owned U.S. affiliates in the computer systems design and related services industry totaled \$21.0 billion in 2008, an increase of 22.2 percent over 2007 and nearly double their sales of \$10.8 billion in 2003 (figure 4.5).⁶³ Growth of sales by foreign parents' U.S. affiliates outpaced the growth of cross-border imports in 2007 and 2008, suggesting that the importance of commercial presence for delivery of computer services to clients in the United States may be increasing vis-à-vis other modes. In part, this may reflect the recent expansion of a number of the leading Indian computer services companies within the United States. One example is Wipro, which established a large service center in Atlanta, Georgia, in 2008. It has expanded within the United States to make it easier to work on complex projects that require more face-to-face interaction with customers, and to attract clients that may not allow their data to cross U.S. borders, such as government agencies and defense contractors.⁶⁴

FIGURE 4.5 Computer services: Purchases of computer system design and related services from U.S. affiliates of foreign firms showed a marked increase in 2008 from 2007, while the latest data show sales by foreign affiliates of U.S. firms remained steady



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

^aBEA reports "services supplied" by foreign affiliates. In the computer systems design and related services industry, services supplied correspond to sales. Data were suppressed in 2003, 2007, and 2008 to avoid disclosure of individual company data.

Multilateral Negotiations, Liberalization, and Remaining Barriers

International trade agreements rarely contain explicit barriers to trade and investment in computer services. Ninety-four World Trade Organization (WTO) members have made commitments on computer and related services under the General Agreement on Trade in Services (GATS), and few have included sector-specific limitations to market access and national treatment within those commitments.⁶⁵ However, members' limits on the entry of temporary workers can seriously hinder industry operations. For example, after Switzerland lowered its quota of foreign workers in December 2009, Google, IBM, and

⁶³ BEA provided country-specific data for only five countries in 2008: the United Kingdom, France, Canada, Japan, and the Netherlands. Together these countries accounted for only about a fifth of sales by foreign parents' U.S. affiliates in computer systems design and related services.

⁶⁴ Barnes, "Why Indian IT Companies Are Outsourcing," April 12, 2010.

⁶⁵ WTO Secretariat, "Computer and Related Services," June 2009, 7.

Accenture announced that they might move projects out of the country because they could not bring in enough foreign IT specialists.⁶⁶

The advent of cloud computing has introduced a host of new concerns related to the flow of data across borders. Because cloud services providers store and transmit clients' data across multiple locations, it is not always clear which country's regulations apply with respect to issues such as data privacy and protection of intellectual property. Moreover, countries' policies may conflict. For example, one country's law enforcement officials might request access to data, but that access could violate the data owner's privacy rights under another country's laws.⁶⁷ Companies have voiced particular concern about the heterogeneity of regulations among members of the European Union. While certain EU-wide statutes exist, such as the Data Protection Directive, member countries do not always implement the statutes consistently.⁶⁸ In some cases, a company that wants to send data across the territories of multiple members must get separate authorizations from each country.⁶⁹

Countries are trying to ensure that international agreements keep up with the rapid pace of change in the computer services industry. At the WTO, a number of members, including the United States, have sought to clarify the coverage of computer services under the United Nations Provisional Central Product Classification, which is used by many WTO members for scheduling GATS commitments.⁷⁰ The European Commission announced its intention to revise its data protection regulations in 2011;⁷¹ it and the United States agreed on a set of "Trade Principles for Information and Communication Technology Services" in April of that year.⁷² Similarly, the proposed U.S-Korea Free Trade Agreement calls for the parties to avoid creating unnecessary barriers to cross-border data flows.⁷³

Outlook

Numerous observers have predicted that demand for computer services will continue to grow in the coming years. Forrester, a technology market research firm, forecast robust growth of demand for software and services in 2011, notably IT consulting and system integration. Forrester noted that hardware led IT spending growth in 2010, as companies made investments that they deferred during the recession, but that software and services were likely to be the drivers moving forward.⁷⁴ The forecasting firm IHS Global Insight largely concurred: it predicted that global computer services spending would grow at an

⁶⁶ Dacey, "Opposition to Work Permit Quotas Grows," April 21, 2010. The United States is another country that limits the entry of temporary workers. It raised fees for some temporary worker visas in 2010. A leading computer services industry association in India suggested that the measure could negatively affect Indian investment in the United States. Conneally, "U.S. Border Security Bill," August 6, 2010.

⁶⁷ Kirk, "Microsoft: Cloud Computing," November 10, 2010.

⁶⁸ Kristensen, "Revising the EU Data Protection Directive," April 1, 2010. Formally known as "Directive 95/46/EC of the European Parliament and of the Council of 24.10.1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data," the directive adopts principles from the OECD's Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, issued in 1980. Shimanek, "Do You Want Milk with Those Cookies?" 2001.

⁶⁹ O'Brien, "Cloud Computing Hits Snag in Europe," September 19, 2010.

⁷⁰ WTO, CTS, "Communication from Albania," January 26, 2007, 1.

⁷¹ European Commission, "Communication from the Commission," November 4, 2010, 18.

⁷² European Union-United States Trade Principles for Information and Communication Technology Services, April 4, 2011.

⁷³ Free Trade Agreement between the United States of America and the Republic of Korea, Article 15.8. As of June 2011, the agreement had not been approved by Congress.

⁷⁴ Forrester, "Forrester: Mixed Economic Outlook," January 10, 2011.

average annual rate of 8.1 percent during 2010–13, and that services would grow more than hardware or software.⁷⁵

The IT consultancy Gartner predicted that cloud computing services would continue to grow rapidly due to increasing interest from business consumers and an “explosion of supply-side activity.” Gartner forecast that global spending on cloud services would increase from \$58.6 billion in 2009 to \$148.8 billion in 2014. It predicted that firms in the United States and Western Europe would remain the most important consumers of these services, but that other regions would also experience growth.⁷⁶

⁷⁵ IHS Global Insight, *Digital Planet 2010*, October 2010, 15.

⁷⁶ Gartner, “Gartner Says,” June 22, 2010. Other analysts’ forecasts vary according to the specific cloud services and geographic markets they examine, but they generally point toward robust growth for cloud-based services. For a summary of a number of forecasts, see Columbus, “Roundup of Cloud Computing Forecasts,” January 1, 2011.

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CHAPTER 5

Education Services

Summary

International trade in education services continues to expand, as an increasing number of students study outside their home country each year. U.S. universities are highly regarded around the world and, as a result, host more foreign students than the institutions of any other country. A growing number of universities are motivated to attract foreign students for financial reasons as well as to increase student body diversity. As competition among universities for foreign students—particularly the best-qualified students—intensifies, universities have sought to differentiate themselves from peer institutions by upgrading campus facilities and hiring foreign student recruitment firms, among other methods. Leading factors driving international trade in education services include strong developing-country demand, especially from students in China and India; stricter immigration regulations in several countries; and government budget cuts.

The United States' cross-border trade surplus in education services expanded in 2009, although this figure may be somewhat overstated due to data limitations. Tuition increases and growing foreign student enrollments propelled U.S. export growth, whereas enrollment in briefer, less costly study-abroad programs by U.S. students slowed import growth. Foreign students at U.S. universities mostly come from Asian countries, especially China, India, and Korea. By contrast, most U.S. students attend universities in the European Union, primarily in France, Italy, Spain, and the United Kingdom. International barriers to trade in education services largely involve restrictions on setting up campus facilities abroad and regulations governing the official acceptance of university degrees from other countries.

Introduction

Education services include formal academic instruction at primary, secondary, and tertiary (higher education) institutions, as well as instructional services offered by libraries and vocational, correspondence, language, and special education schools. This chapter presents information on the pursuit of instruction at universities and colleges (hereafter referred to as universities) by students from other countries. University studies are the only education services for which data on cross-border trade are reported. Cross-border trade is the primary means of providing education services to foreign students. Such trade consists of expenditures for tuition, fees, and living expenses of students who study in institutions abroad. Although comparable worldwide estimates are not available, industry sources estimate that foreign students contributed \$18.8 billion to the U.S. economy in 2010, a \$1.2 billion (6 percent) increase from the previous year.¹

¹ NAFSA: "The Economic Benefits of International Education," 2010; additional data for each academic year beginning in 2003–04.

Competitive Conditions in the Global Education Services Market

The United States is recognized around the world as having an extensive and top-quality system of higher education. For example, rankings developed by the Institute for International Education at Jiao Tong University in China placed U.S. universities in 13 of the top 20 spots worldwide (table 5.1). U.S. universities owe this position to several interrelated factors, including highly regarded professors, world-class academic facilities, cutting-edge research on a variety of subjects, and decades of substantial funding from both public and private sources.

Universities in many countries seek to attract foreign students. One of their most important aims is to increase the international flavor of their campuses, a process that not only broadens the experience of domestic students but also heightens academic competition, often leading to higher academic performance by both domestic and foreign students.² However, one of the most notable trends in higher education is that universities increasingly seek to enroll foreign students for financial reasons as well (see below).³ Globally, competition among universities for foreign students is intense, with many actively taking steps to differentiate themselves from peer institutions. Moreover, the world's best universities—so-called “super-league” institutions like Harvard University and the University of Cambridge—compete fiercely for the world's best students.⁴

One of the most important distinguishing factors among universities is an institution's reputation, which is often based on a subjective assessment of factors including name recognition, perceptions of academic quality and students' post-graduation job prospects, and even a school's history and heritage.⁵ In recent years, competitive pressures for highly qualified students—both domestic and foreign—have led universities to redesign curricula, upgrade campus facilities, install state-of-the-art communications networks, and enhance campus amenities. Universities attract top students by providing financial aid as well, including low-interest loans, tuition grants, scholarships, and on-campus employment. Universities' efforts to attract foreign students also include active marketing and recruitment campaigns, such as extensive informational Web sites aimed at foreign students, foreign “road shows,” and the use of specialized international student recruiting consultants.⁶

Due to the reputation of U.S. universities and to the sheer number of options available, the United States was the most common destination for foreign students in 2008, hosting approximately 21 percent of all students studying abroad. Nevertheless, international competition has increased over the past few decades, and U.S. universities' share of all foreign students studying abroad has consistently declined, from approximately 37 percent in 1970 to 21 percent in 2008. In 2008, other important host countries included the United Kingdom (12 percent), France (8 percent), Australia (8 percent), and Germany (6 percent) (figure 5.1).

² *Economist*, “Will They Still Come?” August 5, 2010.

³ Fischer, “American Colleges Look to Private Sector,” May 30, 2010.

⁴ *Economist*, “Wandering Scholars,” September 8, 2005; *Economist*, “The Brains Business,” September 8, 2005.

⁵ Culbert, *Colleges & Universities in the United States*, December 2010, 22, 25.

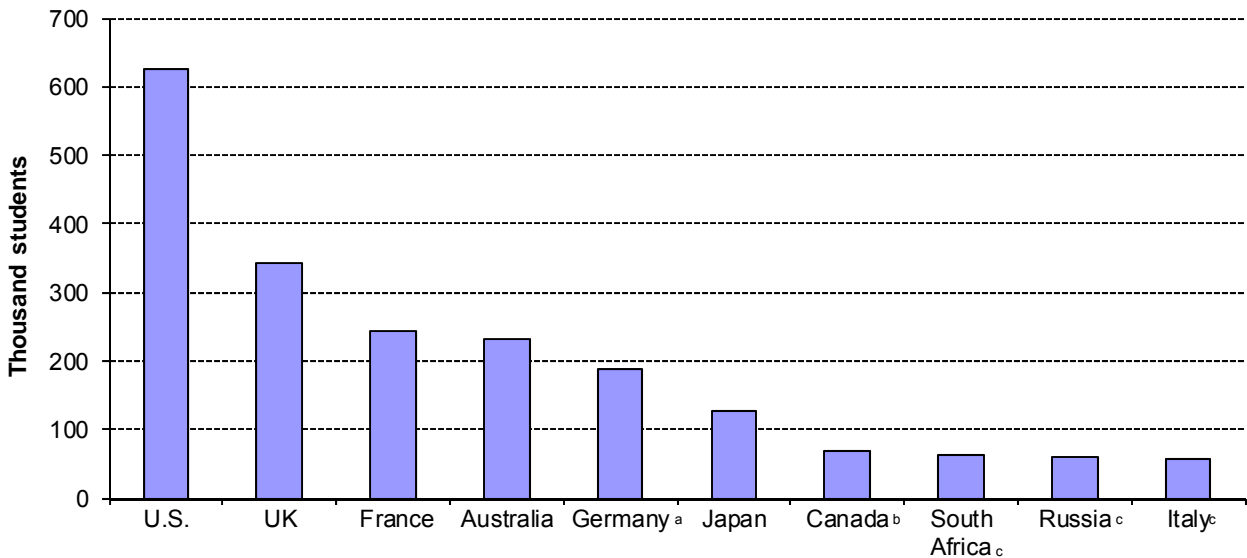
⁶ Fischer, “American Colleges Look to Private Sector,” May 30, 2010.

TABLE 5.1 Education services: Institute for International Education's world university rankings, 2010

Rank	University	Country
1	University of Cambridge	UK
2	Harvard University	U.S.
3	Yale University	U.S.
4	UCL (University College London)	UK
5	Massachusetts Institute of Technology	U.S.
6	University of Oxford	UK
7	Imperial College London	UK
8	University of Chicago	U.S.
9	California Institute of Technology (Caltech)	U.S.
10	Princeton University	U.S.
11	Columbia University	U.S.
12	University of Pennsylvania	U.S.
13	Stanford University	U.S.
14	Duke University	U.S.
15	University of Michigan	U.S.
16	Cornell University	U.S.
17	Johns Hopkins University	U.S.
18	ETH Zurich (Swiss Federal Institute of Technology)	Switzerland
19	McGill University	Canada
20	Australian National University	Australia
21	King's College London (University of London)	UK
22	University of Edinburgh	UK
23	University of Hong Kong	Hong Kong
24	University of Tokyo	Japan
25	Kyoto University	Japan

Source: Top Universities, "World University Rankings 2010."

FIGURE 5.1 Education services: United States led as host to foreign students in 2008



Source: United Nations Education, Scientific, and Cultural Organization (UNESCO), Institute for Statistics (UIS), *Global Education Digest 2010*, 2010, 172, 174, table 9.

^aData reported are in complete.

^bData are for 2006, the latest year available, and data reported are in complete.

^cData are for 2007, the latest year available.

Demand and Supply Factors

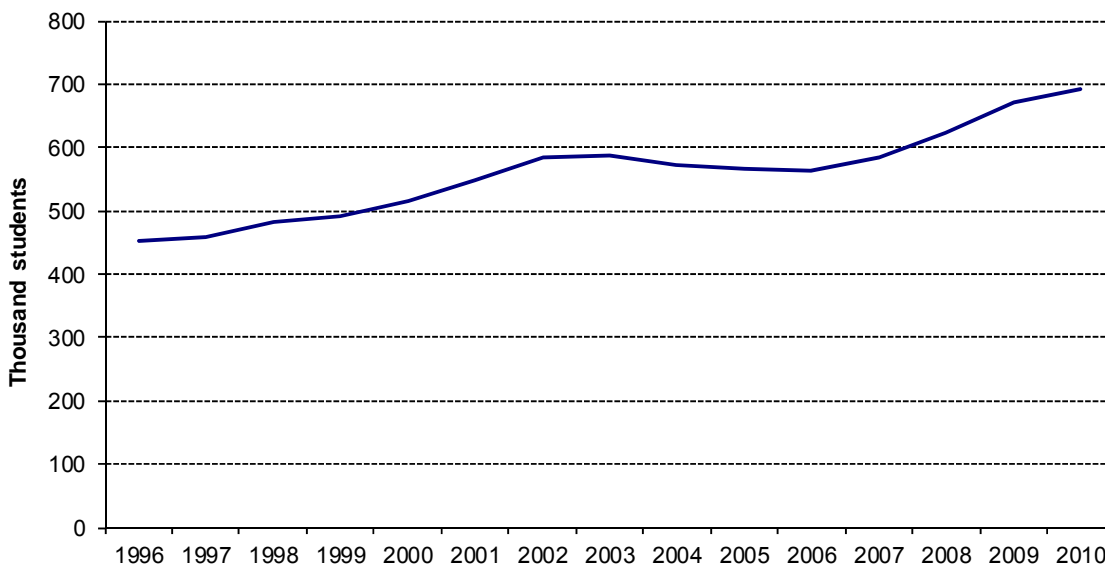
Foreign Demand for U.S. Education Services Surges

From 2007 through 2010, the number of foreign students enrolled in U.S. universities surged to new heights. During 2008 and 2009, the number of foreign students rose by 7 percent and 8 percent respectively, the fastest annual growth rates in nearly 30 years. Although annual growth slowed to 3 percent in 2010, a record 691,000 foreign university students were studying in the United States by the end of the year (figure 5.2). Over the past several years, the largest number of foreign students studying in the United States came from mainland China, India, and Korea (table 5.2), with China taking the number one slot in 2010 as a result of 30 percent growth during the 2009/10 academic year.

China's position as the number one source of foreign students enrolled at U.S. universities was driven in large part by enrollments at the undergraduate level. Although historically the majority of Chinese students studying at U.S. universities focused on graduate-level programs, the number enrolled in undergraduate programs has grown very rapidly over the past couple of years, increasing by 65 percent in 2008 and 60 percent in 2009. In contrast, enrollment by Chinese students in graduate programs increased by 15 percent in 2008 and 10 percent in 2009. In part, the surge in undergraduates from China is attributable to the expanded use, both by Chinese students' families and by U.S. universities, of firms that recruit foreign students into undergraduate programs.⁷

⁷ Redden, "A Shifting International Mix," August 25, 2010.

FIGURE 5.2 Education services: Growth in number of foreign students in U.S. universities tapered off in 2010



Source: Institute of International Education (IIE), "Open Doors 2010 Fast Facts," 2010; Koh Chin, ed., *Open Doors 2003*, 2003, 3.

TABLE 5.2 Education services: Top 10 countries of permanent residence among foreign students at U.S. universities, 2008–09 and 2009–10

Rank	Country of origin	2008–09	2009–10	2009–10, share of total (%)	Percent change, 2008/09–2009/10 (%)
1	China	98,235	127,628	18.5	29.9
2	India	103,260	104,897	15.2	1.6
3	Korea	75,065	72,153	10.4	(3.9)
4	Canada	29,697	28,145	4.1	(5.2)
5	Taiwan	28,065	26,685	3.9	(4.9)
6	Japan	29,264	24,842	3.6	(15.1)
7	Saudi Arabia	12,661	15,810	2.3	24.9
8	Mexico	14,850	13,450	1.9	(9.4)
9	Vietnam	12,823	13,112	1.9	2.3
10	Turkey	12,148	12,397	1.8	2.0
11	Nepal	11,581	11,233	1.6	(3.0)
12	Germany	9,679	9,548	1.4	(1.4)
13	UK	8,701	8,861	1.3	1.8
14	Brazil	8,767	8,786	1.3	0.2
15	Thailand	8,736	8,531	1.2	(2.3)
	World total	671,616	690,923		2.9

Source: IIE, "Open Doors 2010 Fast Facts," November 15, 2010.

Changing Visa Requirements in Australia and the United Kingdom May Divert Demand for Education Services

The legislatures of two English-speaking countries that are important suppliers of education services—Australia and the United Kingdom—recently made (or proposed) student visa policy changes that may lead to a decrease in the number of foreign students attending universities in those countries. In both cases, the governments were responding to foreigners' increased use of student visas to obtain permanent residency and/or employment, as opposed to temporary residence while pursuing a degree.⁸

For example, many foreign students who choose to study in Australia are partly motivated by the long-term prospect of permanent residency. Until recently, many students could reasonably expect to remain in Australia after graduation. However, a surge of immigrants into Australia in recent years, partly through the student visa system, led the Australian government to strengthen regulations on universities and other international education providers in 2009 and 2010. The government also amended requirements pertaining to student visa and skilled migration programs, increasing its scrutiny of visa applications and toughening student visa qualifications.⁹ Some Australian university officials predicted that these changes would lead to a decline in the number of Chinese students attending Australian universities.¹⁰ These fears/predictions appear to have been well founded. In 2010, the number of student visas issued by the Australian government declined for the first time in at least 25 years,¹¹ prompting the government to launch a strategic review of the current student visa program and relax documentation requirements on visa applications by students from China, India, and other countries of particular importance to Australia's education services exports.¹²

The UK government is also taking steps to crack down on the abusive use of student visas to obtain residency and/or work permits. Fueled by an estimate that at least 40 percent of UK student visa holders failed to enroll in classes in 2009, the government proposed legislation in November 2010 that would significantly tighten student visa requirements, with the intention of issuing student visas to fewer, but more qualified,

⁸ OECD, "Highlights from Education at a Glance 2010," 2010, 33.

⁹ Council of Australian Governments, "International Students Strategy for Australia," November 1, 2010. For example, revised rules require applicants to deposit into an Australian financial institution sufficient tuition and living expenses for the entire program of study instead of, as formerly, for one year only. Foreign students must also demonstrate greater English-language proficiency than previously required. Moreover, the government sharply reduced the number of occupations in prime demand in the economy and for which completed coursework tended to offer the most rapid path to permanent residency under the skilled migration program. This action could affect several hundred thousand foreign students enrolled in now unapproved courses and over 100,000 applicants for permanent residency.

¹⁰ Australian Visa Bureau, "China Says Australian Visa Barriers Are Steering Chinese Students Away," November 3, 2010; Maslen, "Australia: Alarming Fall in Chinese Student Numbers," November 7, 2010.

¹¹ Maslen, "Australia: Uncertain Times Ahead for Universities," January 9, 2011; Hannah, "Indian Students Continue to Shun Australia Visas," November 30, 2010; Redden, "Downturn Down Under," November 30, 2010. In addition to amendments to student visa and skilled migrant programs, the decline in student visa issuance can also be attributed to a strong Australian dollar, the adverse impacts of the global recession on foreign students' financial resources, delays in processing student visas under revised requirements, and a decline in applications for student visas from India following violent attacks on several Indian students in 2009.

¹² Australian Government, Department of Immigration and Citizenship, "Terms of Reference: Strategic Review of the Student Visa Program," "Overview of Student Visa Changes to Assist International Education Sector," December 2010; Maslen, "Australia: Uncertain Times Ahead for Universities," January 9, 2011; Australian Government, "Submissions Invited for Student Visa Review," February 3, 2011.

degree-seeking students.¹³ If passed, one likely consequence would be the diversion of legitimate degree-seeking students to universities in other countries, particularly to English-speaking universities in the United States and Canada.

Budget Cuts Force Universities to Look Abroad

The economic downturn has placed financial pressure on universities around the world, particularly institutions in developed countries. In the United States, the downturn has undermined state governments' financial support for universities,¹⁴ largely due to a decline in tax receipts, which are estimated to have fallen 12 percent (adjusted for inflation) over the last three years.¹⁵ Accordingly, more than 40 state governments cut financial support to public universities, where at least 70 percent of U.S. students are enrolled, in the fiscal years ending in 2009 and 2010.¹⁶ Such funding shortfalls have led the governing boards of many state universities to authorize reductions in student financial aid, tuition increases of 10 percent or more, staff furloughs and layoffs, expanded class sizes, the consolidation or termination of degree programs, and reductions in student and academic support services, among other measures.¹⁷ Though less dependent on public financial assistance, U.S. private universities are also facing funding problems, with approximately 15 percent reporting decreased revenues in 2010 and the same percentage anticipating flat or declining revenues during 2011.¹⁸

The economic downturn and associated decline in government support is also impacting universities in Europe and Asia. For example, in 2010, the UK government announced a 40 percent reduction in funds for university instruction.¹⁹ To cover the decline in financial support, the Parliament voted to increase the maximum allowable amount that British universities can charge for annual tuition to \$15,000, three times the previous cap.²⁰ This move prompted massive student street protests in London. Similarly, in 2010, the government of Japan reduced subsidies to universities and salaries to faculty and staff.²¹

One potential effect of declining governmental financial assistance may be increased international trade in education services, as cash-strapped universities increasingly pursue foreign students as a means to offset funding shortfalls. Foreign students are often courted by universities because foreign students usually pay full tuition rates, typically

¹³ The visas would be awarded contingent upon applicants enrolling mostly in courses predetermined to be required for degrees. Applicants would be required to demonstrate a higher level of English-language competency before entering the country. Moreover, the proposals would inter alia place new limits on allowable employment during study, as well as on the entry and employment of dependents, and would require graduates to leave the country on graduating unless progressing to the next level of education.

¹⁴ American Association of State Colleges and Universities, "State Outlook," November 2010, 1, 5.

¹⁵ McNichol, Oliff, and Johnson, "States Continue to Feel Recession's Impact," January 21, 2011. State-based financial support for universities will likely decline even further, with 44 state governments projecting budgetary shortfalls totaling approximately \$125 billion in 2012 and 20 states anticipating further shortfalls in 2013.

¹⁶ Johnson, Oliff, and Williams, "An Update on State Budget Cuts," November 5, 2010. In most states, the fiscal year ends on June 30.

¹⁷ American Association of State Colleges and Universities, "State Outlook," November 2010, 6, 7.

¹⁸ Stripling, "More Tuition Struggles Projected," December 17, 2010.

¹⁹ The decline in funding would begin in 2011 and continue for four years; funding for instruction in science, technology, engineering, and mathematics was not reduced.

²⁰ *Economist*, "Reassuringly Expensive," March 10, 2011.

²¹ Douglass, "Higher Education Budgets and the Global Recession," February 2010; Kakuchi, "Japan: University Internationalization Scaled Back," November 28, 2010.

from personal resources.²² For example, U.S. universities, motivated partly by the need to develop new sources of revenue, are aggressively pursuing measures to expand and diversify foreign student enrollments, with methods ranging from recruiting trips in foreign countries to hiring overseas agencies that recruit students for a per-student commission.²³ Similarly, in the United Kingdom, the revenues derived from foreign students are often an essential source of funding for universities,²⁴ with schools ranging from the London School of Economics to Middlesex University to the University of Oxford actively calibrating foreign student numbers as a means of funding operations and research programs.²⁵

A number of universities have also opened campuses abroad. U.S. universities, for example, maintain 78 campuses in foreign countries, while Australian universities operate campuses in Malaysia, Singapore, and the United Arab Emirates. Although less international than their American and Australian peers, British universities are also opening campuses abroad, including campuses in Malaysia and Qatar operated by the University of Nottingham and University College London, respectively.²⁶

Trade Trends

Cross-border Trade

In 2009, the value of U.S. cross-border exports of education services (box 5.1) increased by 11 percent to \$19.9 billion, exceeding the average annual growth rate of 7 percent recorded from 2004 through 2008 (figure 5.3) and reflecting a 13 percent tuition increase as well as a growth in enrollment of foreign students (see above). U.S. imports of education services increased by 8 percent in 2009, which was somewhat slower than the 10 percent average annual growth rate reported from 2004 through 2008. The slower growth rate is attributable to the increasing tendency of U.S. students to choose brief study-abroad programs as well as the tighter budgets of many such study-abroad programs, especially at public universities. The latter development has prompted many universities to introduce less expensive destinations among study-abroad options. As a result of these trends, the U.S. trade surplus in education services in 2009 widened by 12 percent to \$14.3 billion, double the 6 percent average annual increase from 2004 through 2008. In 2009, the principal markets for U.S. exports of education services were the same as in 2004, except that Canada (ranked fourth after India, China, and Korea) surpassed Japan in 2009. In 2009, exports to the United States' top three education services markets—China, India, and Korea—accounted for 42 percent of total education services exports, up from 36 percent in 2007 and 26 percent in 2002.²⁷ By region,

²² Redden, "Ethical Debates Surround U.S. Colleges' Use of International Recruiters," June 1, 2010; *Economist*, "Will They Still Come?" August 5, 2010; *Economist*, "Can Foreigners Prop Them Up?" January 13, 2005. In some countries, foreign students are charged substantially higher tuition than their domestic counterparts.

²³ Fischer, "American Colleges Look to Private Sector for Global Recruiting," May 30, 2010; Redden, "Ethical Debates Surround U.S. College's Use of International Recruiters," June 1, 2010.

²⁴ *Economist*, "Build It and They Will Come," January 15, 2009.

²⁵ *Economist*, "Will They Still Come?" August 5, 2010; *Economist*, "Can Foreigners Prop Them Up?" January 13, 2005; *Economist*, "Repointing the Spires," January 27, 2005.

²⁶ *Economist*, "Learning without Frontiers," October 28, 2010.

²⁷ Fischer, "China Props Up Foreign Students' Numbers in U.S.," November 19, 2010, A22. The increasing concentration of these countries' students at U.S. institutions is described by some education industry representatives as inconsistent with universities' stated goals of promoting cultural and national diversity among foreign student populations on U.S. campuses.

BOX 5.1 An Explanation of BEA Data on Cross-border Trade in Education Services and Transactions by Education Affiliates

U.S. cross-border exports of education services reflect estimated tuition (including fees) and living expenses of foreign residents (which exclude U.S. citizens, immigrants, or refugees) enrolled in U.S. colleges and universities. Cross-border imports of education services represent the same expenses for U.S. residents studying abroad.^a

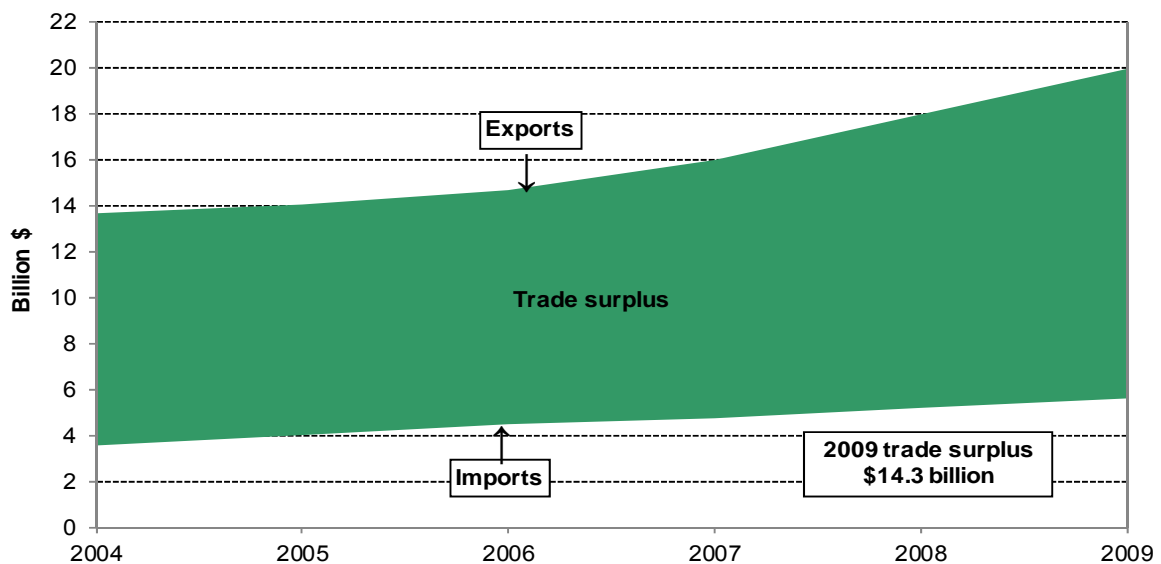
Data on U.S. imports of education services are estimated by the BEA based on two pathways by which U.S. permanent residents study in a foreign country. In the first, U.S. residents receive academic credit for study abroad from accredited U.S. colleges and universities, whether or not the U.S. residents also receive academic credit from the foreign institution. The BEA does not include the tuition and living expenses of students whose academic credits for study abroad do not transfer to U.S. institutions (with three country exceptions, as explained below), or who study abroad on an informal basis. The second pathway—from 2002 onward—supplements U.S. import data on education services by also including estimated tuition and living expenses for U.S. permanent residents who enroll in a degree program at a university in Australia, Canada, or the United Kingdom and reside temporarily in these countries in order to pursue their education. Because only formal study for credit toward a degree is included in estimates of tuition and living expenses that account for U.S. imports of education services, the full extent of studying abroad by U.S. students is understated in the trade data and, accordingly, the U.S. trade surplus in education services is overstated.

Data on education affiliate transactions are limited, especially data concerning transactions by education affiliates located in the United States but owned by a foreign firm. Because transaction data from education affiliates cover a wide range of education providers other than the higher education segment, which is the focus of this chapter, education affiliate transaction data are not presented herein.

Sources: BEA representative, e-mail to USITC staff, December 7, 2010, and February 9–10, 2009; Koh Chin, ed., *Open Doors 2004*, 2004, 92.

^a Estimates for cross-border online instruction are included in “Other business, professional, and technical services” in the balance of payments, rather than the education services category.

FIGURE 5.3 Education services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2004–09



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

students from Asia accounted for more than three-fifths of U.S. exports in 2009 (figure 5.4), followed by students from the European Union (9 percent), with other European countries providing an additional 5 percent of receipts.

As with exports, the five leading sources for U.S. imports of education services were the same in both 2004 and 2009, with expenditures flowing primarily to the United Kingdom, followed by Italy and Spain (by Spain and Italy in 2004), respectively, Mexico, and France. By region, the European Union received 55 percent of U.S. payments for study abroad by U.S. students in 2009 (down 5 percentage points from 2004), followed by countries in the Western Hemisphere, which received 23 percent.

Multilateral Negotiations, Liberalization, and Remaining Barriers

Services supplied in the exercise of governmental authority, such as public education services provided without charge to a country's citizens, are excluded from the scope of the General Agreement on Trade in Services (GATS).²⁸ Other education services are included in the GATS. However, only about 30 percent of signatories have made commitments to any portion of the education services sector under the GATS. A 2008 World Trade Organization report stated that some (unnamed) governments were prepared to make new commitments in the Doha Round of multilateral negotiations on private education services, removing existing provisions that discriminate against foreign providers. Several governments signaled their intention to seek additional commitments on private education services.²⁹ Some governments proposed that negotiations should take into account changes in the delivery of certain education services and the emergence of new education providers that are outside the traditional education system, while continuing to uphold governments' responsibility to maintain and improve service quality and to establish education-related regulatory measures based on policy objectives.

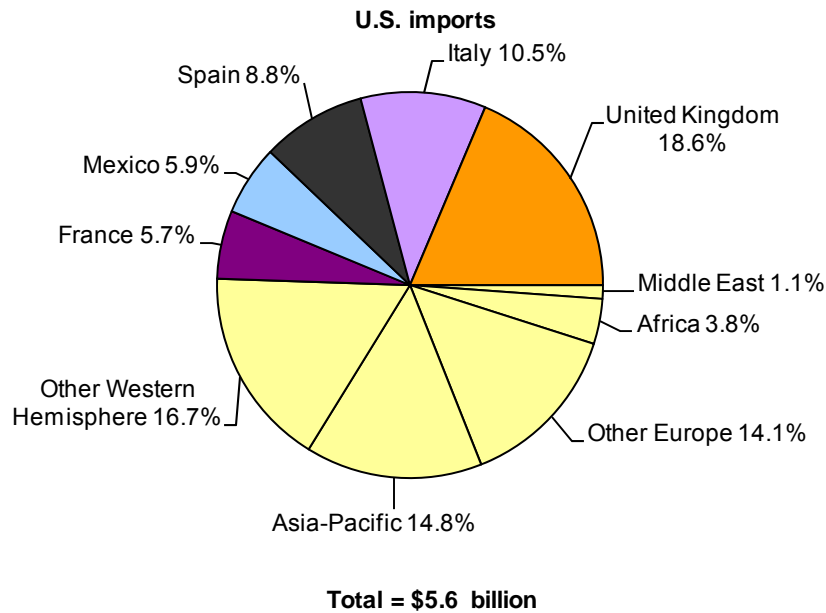
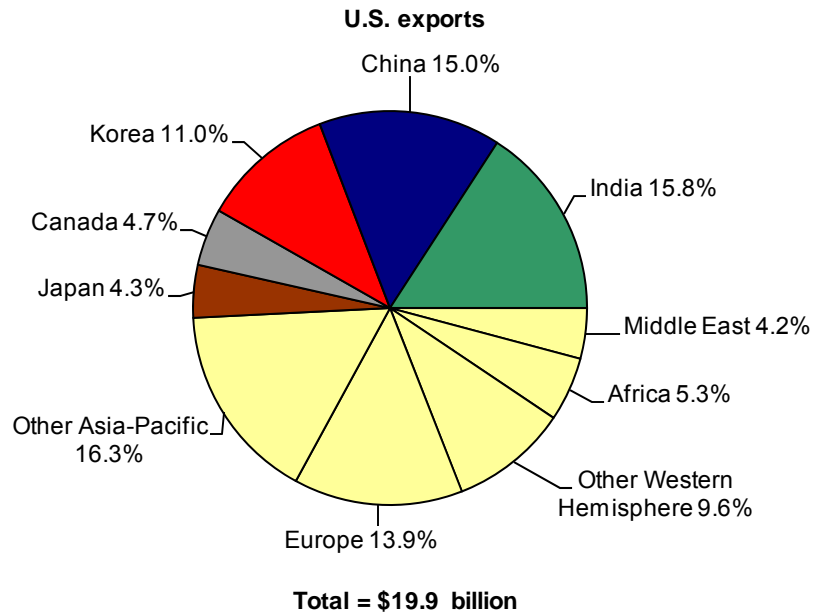
Few countries impose trade barriers expressly limiting the movement of students or the movement of personal funds to obtain higher education services across borders. More commonly, barriers take the form of restrictions on the establishment of campus facilities. For example, universities of another country are not allowed to establish branch campus universities in India for the purpose of awarding degrees recognized in India, although they may establish offices in India for other purposes, such as student recruitment or engagement in partnerships, research collaborations, or dual-degree programs with Indian universities. National regulations limiting the official acceptance of degrees or course credits from foreign universities, or of academic credentials of faculty seeking to cross borders, also may inhibit education services trade.

In recent years, governments and education industry stakeholders within and between regions have collaborated to increase the comparability, accessibility, and transparency of higher education systems while sustaining universities' autonomy. An important goal of these collaborations is to achieve greater ease of movement between countries for faculty, researchers, and students, starting with countries within a single region. For example, the European Higher Education Area officially began in March 2010, following a 10-year reform process that encouraged the development of credit-transfer policies, quality assurance mechanisms, commonality in university degrees, and measurement standards

²⁸ VanDuzer, "Navigating between the Poles," 2005, 183.

²⁹ WTO, "Services Signaling Conference," July 30, 2008, 3.

FIGURE 5.4 Education services: The Asia-Pacific region was the leading destination for U.S. education services exports in 2009, while the leading sources of U.S. education imports were in Europe



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 48–49, table 5.2.

Note: Geographic regions are shaded in yellow.

for higher education learning outcomes. A similar process begun by the Association of Southeast Asian Nations (ASEAN) in 2005 is targeted for completion in 2015. Other related activities in Asia include (1) a dialogue on these subjects between members of ASEAN, China, and Australia, motivated by mutual interests in developing skilled workforces and advancing economic growth, and (2) a project begun in 2010 to increase foreign student mobility at universities in Korea, Japan, and China. Dialogues in other regions and between regions, such as the EU, Latin America, and North Africa, have recently gained momentum. In the United States, some of the reforms undertaken in Europe have begun to be adopted, such as the acceptance by some U.S. graduate programs of three-year undergraduate degrees from European universities, as well as the introduction of accelerated three-year undergraduate degrees at certain U.S. universities to complement traditional four-year undergraduate degrees.³⁰

Outlook

The trends and issues discussed above will likely continue to drive international trade in education services over the next several years. Demand for education services should continue to grow as students from China, India, and other developing countries seek to study abroad.³¹ Additionally, fiscal constraints faced by many developed-country governments are expected to continue to cut into funds available for university operations.³² As a result, a growing number of universities around the world will likely be forced to offset declining revenues by raising annual tuition levels and by stepping up efforts to recruit and enroll foreign students, particularly full-paying students.³³ The market share of one important segment—foreign university students being educated in English—that is held by universities in Australia, the United Kingdom, and the United States will likely shrink as universities located in countries such as Canada, Germany, and Malaysia offer increasing competition in the form of growing reputations and English-language curricula.³⁴

³⁰ West, “Ripple Effects: The Bologna Process,” November–December 2010, 25–29.

³¹ *Economist*, “Will They Still Come?” August 5, 2010.

³² McNichol, Oliff, and Johnson, “States Continue to Feel Recession’s Impact,” January 21, 2011.

³³ Redden, “Ethical Debates Surround U.S. Colleges’ Use of International Recruiters,” June 1, 2010; Fischer, “American Colleges Look to Private Sector,” May 30, 2010.

³⁴ *Economist*, “Will They Still Come?” August 5, 2010.

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CHAPTER 6

Healthcare Services

Summary

Since 2003, global spending on healthcare has steadily risen. The world's largest markets are still found predominantly in the United States and Europe. However, the fastest-growing markets are in developing countries, where private expenditures are rapidly growing. Demand for privately financed care has fallen in developed markets, as people have reduced spending following the economic downturn. Nonetheless, the rising incidence of chronic illnesses has driven global demand for treatments to manage these conditions. Governments around the world have launched programs and reforms to meet the growing needs of their constituents and address shortcomings in healthcare infrastructure and the supply of healthcare workers.

The United States has maintained a trade surplus in healthcare services, which grew to \$1.74 billion in 2009, largely due to exports to its neighbors in North America. U.S. exporters maintained a competitive advantage based on the quality and expertise of U.S. providers, but a growing share of U.S. residents, particularly those without health insurance, imported care from Mexico and other lower-cost providers. Purchases from U.S. affiliates of foreign firms continued to exceed sales for foreign affiliates of U.S. firms, as the United States kept its position as the largest private healthcare market in the world. Measures that impede trade remain in place, such as policies and procedures related to healthcare financing and reimbursement. However, rapidly rising demand and growing public sector budget concerns have led to increased integration of public and private healthcare sectors.

Introduction

Healthcare is a fundamental service, demanded by almost everyone and provided in every market around the world.¹ Providing such services requires cooperation among a number of different parties, including public and private providers, financiers, and regulators. Governments take an interest in the healthcare industry due to its critical role in

¹ The healthcare industry comprises providers (doctors, nurses, and other health professionals) who offer individualized and specialized services in medical facilities, including hospitals; medical offices, clinics, and other ambulatory facilities; and nursing and residential care facilities. Swiss Re, "To Your Health," 2007, 8.

economic growth² and development.³ Further, in many countries, access to healthcare is considered a constitutional right, requiring these governments to play a larger role in the healthcare industry. However, medical advances, growing demand that is exceeding the capacity of public systems, and steadily rising healthcare prices all create profitable opportunities for private firms, particularly healthcare providers and insurers. Hence, most healthcare systems comprise a mix of public and private providers, financed by a combination of public and private sources.

Competitive Conditions in the Global Healthcare Services Market

Robust growth in global healthcare expenditure since 2003 has largely been driven by public spending, which grew more rapidly than private spending and accounted for an increasing share of overall expenditure.⁴ From 2003 through 2008, global healthcare spending rose at an average annual rate of roughly 9 percent to reach \$5.9 trillion dollars, or nearly 10 percent of global GDP.⁵ Although public and private healthcare spending maintained steady growth, public spending grew more rapidly, rising at an average annual rate of 10 percent from 2003 through 2007, compared to 8.5 percent average growth in private spending. This disparity was further magnified in 2008, as advanced economies began to feel the effects of the economic downturn: growth in private spending slowed to 6.7 percent, while public spending rose 10.3 percent (figure 6.1). The slowdown in global private expenditure in 2008 is largely attributed to lagging growth in the U.S. market,⁶ which slowed from an average annual rate of 5.9 percent during 2003–07, to 2.6 percent in 2008, primarily due to the decline in employer-sponsored health insurance.⁷ As a result, between 2003 and 2008, the share of global expenditure attributed to public spending increased from 58.3 percent to 60.4 percent.

² The inverse relationship is also true; higher national incomes promote health through access to better nutrition, sanitation, and quality care. Bloom and Canning, “Population Health and Economic Growth,” 2008, 1.

³ The health of their constituents is of interest to governments because an individual’s earning potential and labor productivity is affected by personal health. If a citizen suffers catastrophic illness, the cost of treatment may exceed the citizen’s accumulated savings. Further, ongoing illness may limit the ability of such persons to work, reducing the labor force and possibly increasing the state’s burden. Additionally, healthier populations have longer life expectancies and save accordingly, resulting in higher levels of national savings and wealth. Mortensen, “International Trade in Health Services,” 2008, 5; Suhrcke et al., “The Contribution of Health,” August 23, 2005, 22, 38, and 67; Swiss Re, “To Your Health,” 2007, 10.

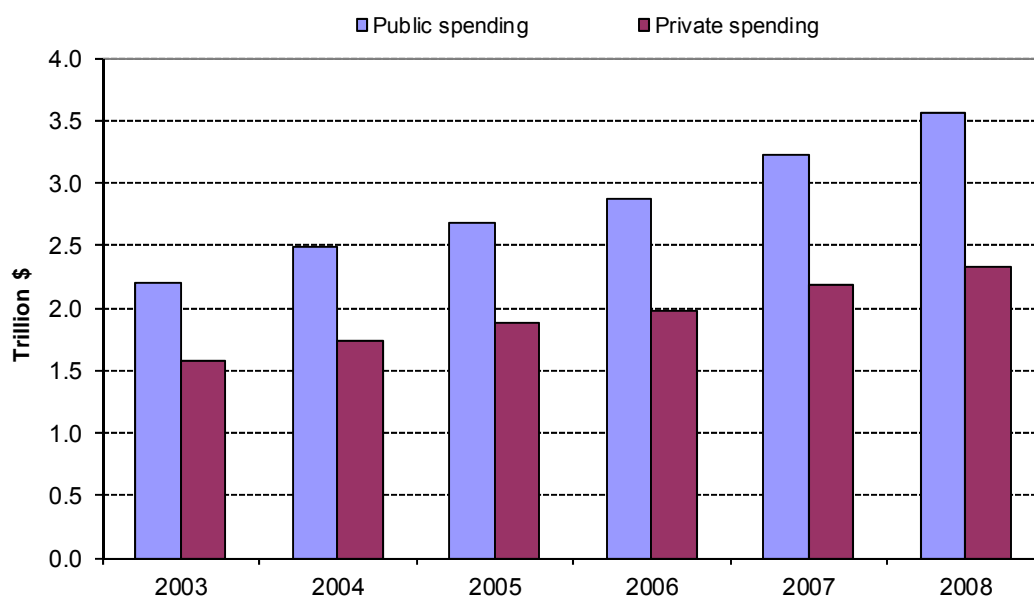
⁴ Global healthcare expenditure consists of public (government) spending and private spending. Private expenditure comprises spending by private prepaid plans, households’ out-of-pocket expenditure, and other private resources for health, such as nonprofit organizations which provide households with goods and services free or for negligible prices. WHO, National Health Accounts, “Glossary of Terms and Financing Flows,” n.d. (accessed January 25, 2011).

⁵ Data from 2008 are the most recent available. Data on healthcare expenditure is reported by the WTO as ratios. Expenditure volumes are estimated by USITC staff using these ratios and nominal GDP data reported by the World Bank to get estimated nominal healthcare expenditure. World Health Organization (WHO), Global Health Observatory (GHO) Database and World Bank, World dataBank Database.

⁶ The United States accounted for over 60 percent of global private spending in 2008. WHO, GHO Database.

⁷ U.S. private spending on healthcare accounted for a relatively steady share of GDP (around 8.5 percent) during 2003–08, but growth in actual spending on health slowed, due to the slow growth of the U.S. GDP during the recent recession. USITC staff calculations using data from the WHO’s GHO Database and the World Bank’s World dataBank database.

FIGURE 6.1 Healthcare services: Global spending on healthcare rose steadily during 2003–08, largely driven by public spending



Source: USITC staff calculations based on data from WHO, GHO Database and World Bank, World dataBank Database.

During 2003 through 2008, spending by developed countries rose, though growth in private expenditure slowed during 2008. Global healthcare spending is driven by trends in healthcare spending in developed countries, particularly in the United States and Europe, where the bulk of healthcare expenditure occurs. The United States is the world’s largest market, spending an estimated \$2.3 trillion on healthcare in 2008 (table 6.1). By comparison, in that same year, total European healthcare expenditure was estimated at \$2 trillion. High levels of spending in these countries are driven by a combination of factors, including higher incomes, lower mortality rates, a higher incidence of chronic diseases,⁸ and higher patient expectations due to the availability of expensive new treatments and advanced technologies.⁹ However, as these advanced economies began to feel the effects of the economic downturn in 2008, private spending fell, although public spending remained steady. The decline in private spending was most pronounced in the United States, where private expenditure accounts for the majority of the market, while growth in public spending occurred in Europe, where governments play a large role in the healthcare industry.¹⁰

⁸ The incidence and implications of chronic diseases are discussed in detail in the Demand and Supply Factors section.

⁹ WHO Regional Office for Europe, *The European Health Report 2009*, 2009, 71–72.

¹⁰ The European region is consistent with the WHO’s definition. Healthcare spending by European governments remained steady at roughly 6.8 percent of GDP throughout the period. USITC staff calculations using data from the WHO’s, GHO Database and the World Bank’s World dataBank Database.

TABLE 6.1 Healthcare services: Top 10 global healthcare markets, 2008

Rank	Country	Total expenditure (billion \$)	Share of total expenditure from private expenditure (%)	Private expenditure (billion \$)	Share of private spending from out-of-pocket expenditure (%)
1	United States	2,299.1	54	1,230.0	23
2	Japan	395.8	19	75.6	81
3	Germany	380.2	23	88.2	57
4	France	316.8	21	66.5	33
5	United Kingdom	239.6	17	41.2	63
6	Italy	206.7	23	46.7	86
7	China	194.9	53	103.9	92
8	Canada	154.4	30	46.6	50
9	Spain	138.7	27	37.7	75
10	Brazil	137.6	56	77.1	59

Source: USITC staff calculations based on data from WHO, GHO Database and World Bank, World dataBank Database.

In contrast, demand for high-quality services drove rapid growth in healthcare expenditure, particularly private expenditure, in developing countries during 2003 through 2008. Healthcare spending in Africa more than doubled between 2003 and 2008. Similarly, spending in the Asia-Pacific region increased 14.7 percent in 2008, following average annual growth of 7.9 percent from 2003–07. Growth in these markets is largely attributable to a rapid rise in private healthcare spending. In Brazil, private expenditure tripled, from \$24 billion in 2003 to over \$77 billion in 2008; similar growth was seen in Africa and the Middle East during that period, although outlays remained low relative to developed economies.¹¹ This growth is often driven by a rising middle class that demands higher-quality services. For example, in China, urban middle class consumers have demonstrated a growing preference for private hospitals over China’s nonprofit public facilities.¹² As a result, China and Brazil were among the top 10 global healthcare markets in 2008 (see table 6.1), but are the second- and fourth-largest private healthcare markets (figure 6.2).

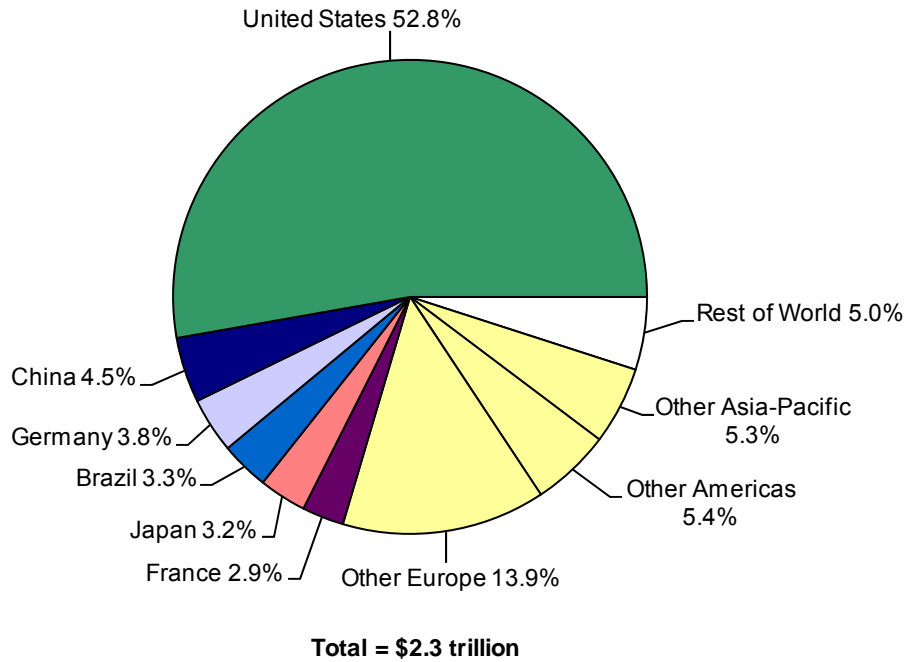
The world’s largest healthcare providers are located in the United States, and most are private; in other countries, the largest providers are frequently public organizations. The global healthcare market is largely fragmented along national lines. Although many healthcare facilities treat foreign patients who either travel specifically seeking foreign care or require emergency treatment while traveling, very few operate in multiple markets. Firms that do expand into foreign markets often operate only a few facilities. To illustrate, of the 10 largest healthcare systems¹³ in the United States (table 6.2), only 1—HCA—has foreign operations. HCA operates 6 hospitals and 4 outpatient centers in London; in the United States, it operates over 150 hospitals and over 100 outpatient

¹¹ The Middle East region corresponds to the region defined as East Mediterranean by the WHO. From 2003 through 2008, private expenditure more than doubled in the Middle East, reaching \$41.1 billion, while in Africa it rose from \$18.8 billion to \$35.1 billion. USITC staff calculations using data from the WHO’s GHO Database and the World Bank’s World dataBank database.

¹² PricewaterhouseCoopers, “Emerging Trends in Chinese Healthcare,” 2010, 10.

¹³ Healthcare systems are networks of individual providers and facilities that operate as a group to offer healthcare services to a specific population, such as members of an insurance plan or residents of a specific geographic location.

FIGURE 6.2 Healthcare services: The United States remained the world leader in private spending on health in 2008



Source: USITC staff calculations based on WHO, GHO Database and World Bank, World dataBank Database.

Note: Geographic regions are shaded in yellow.

TABLE 6.2 Healthcare services: 10 largest U.S. healthcare systems, ranked by net patient revenue (million \$), 2009

Rank	Company	Net patient revenue
1	U.S. Veterans Affairs Department	46,545
2	HCA	30,052
3	Ascension Health	13,628
4	Community Health Systems	12,108
5	Catholic Healthcare West	8,719
6	Tenet Healthcare Corp	8,672
7	New York-Presbyterian Healthcare System	8,533
8	Catholic Health Initiatives	8,258
9	Sutter Health	7,410
10	Mayo Clinic	6,474

Source: *Modern Healthcare*, "10 Largest Healthcare Systems, By Revenue," June 7, 2010 and company Web sites.

centers.¹⁴ Few health firms establish foreign operations because doing so requires complying with a host of new regulations,¹⁵ understanding new market systems,¹⁶ and, for markets with universal health coverage, entering into government reimbursement networks, among other things—all of which add time and expense to new investments.

Governments intervene in healthcare markets¹⁷ to address distortions caused by information asymmetry and the presence of insurers or other third-party payers.¹⁸ Information asymmetry exists because healthcare providers have more information about procedures and costs than patients. Patients generally seek a given service only once, as treatment for a particular malady, leaving them unfamiliar with the procedure.¹⁹ Additionally, healthcare services are highly specialized due to the discipline's inherent complexity and each patient's unique characteristics and history, making it difficult for patients to evaluate the quality or cost of care received. The participation of third-party payers also distorts the market by insulating patients from the true cost of healthcare services, resulting in higher demand for services and less comparison shopping. In the United States, which is also the largest third-party payer market in the world, the prevalence of employer-sponsored health insurance further distorts the market, because employers rather than employees choose the array of services offered and thus consumed.²⁰

In response to these market failures, governments frequently provide, finance, or regulate the industry. National markets differ in the degree of government participation in these activities. To illustrate, in some countries, such as China, Spain, and the United Kingdom, the government both finances and provides health services; in other countries, such as France and Japan, the government finances care provided by a mix of public and private facilities. In the United States, the government generally does not provide healthcare services directly,²¹ but instead finances care for at-risk populations through the Medicare and Medicaid programs.²²

In almost all markets, including those with public provision of care, healthcare systems comprise a mix of public and private providers and a combination of public and private financing. For example, China and the United Kingdom both have universal health coverage, but individuals can elect to pay out of pocket for private healthcare providers.²³ In 2008, private spending in the United Kingdom was less than 20 percent of total health spending, due to the public's satisfaction with the public provider, the National Health

¹⁴ HCA, "About Our Company," n.d.; HCA International, "Key Facts and Figures," n.d.

¹⁵ No international regulatory body exists to govern healthcare industries across countries; instead, the industry is regulated by national or regional agencies.

¹⁶ There is wide variation in a number of healthcare factors across countries, including methods of delivery and sources of financing. Ma and Sood, "A Comparison of Health Systems in China and India," 2008, 1.

¹⁷ Governments generally intervene in markets to achieve noneconomic objectives, to redistribute income, or to address market distortions. Deardorff, "The Economics of Government Market Intervention," February 10, 2000, 3.

¹⁸ Third-party payers refer to organizations that intervene in the relationship between the individual patient and a healthcare provider. These may be insurance carriers, nonprofit organizations, health maintenance organizations (HMOs), or governments.

¹⁹ Swiss Re, "To Your Health," 2007, 8–9.

²⁰ Employers and employees generally have different criteria in choosing insurance plans. Employers tend to focus on cost, while employees consider the types of services or treatments they need. *Ibid.*

²¹ Government provision of healthcare is limited to public hospitals, such as Veterans Affairs facilities; the majority of care in the U.S. market is provided by private entities.

²² The Medicare program provides healthcare for elderly populations, while Medicaid serves the low-income population.

²³ PricewaterhouseCoopers, "Emerging Trends in Chinese Healthcare," 2010, 10.

Service (NHS);²⁴ in contrast, China's growing middle class population was largely unsatisfied with public hospitals, driving private expenditures upward to over 50 percent of total spending.²⁵

Government participation and the system of healthcare financing in a national healthcare market play a large role in determining how much a country participates in international trade and investment in healthcare services. Traditionally, government policies in these areas have led most of a country's healthcare industry to focus inward on domestic provision of services. However, rising costs, growing demand, and supply limitations have motivated governments and private payers alike to access healthcare resources outside domestic markets. Consequently, the international healthcare market has expanded over the past decade, though data on its size and growth are limited. The following discussion focuses on broad trends in the global healthcare industry, paying special attention to how they relate to trade and the international healthcare market.

Demand and Supply Factors

Healthcare Demand Falls in Developed Markets Due to the Economic Downturn

The financial crisis and the ensuing economic downturn during 2008–09 resulted in sharply rising unemployment rates across Europe and North America, which reduced individuals' ability to pay for healthcare services; however, the degree to which demand fell depended on each country's system of healthcare financing.²⁶ Demand for healthcare services is inversely related to the direct or out-of-pocket cost borne by individuals. However, healthcare financing, specifically third-party payers, can shift demand for healthcare services by reducing or eliminating the direct cost to patients, as illustrated by a survey of medical care usage in developed countries following the economic downturn. In countries where national health insurance requires individuals to share the cost of physician services and inpatient care, such as France and Germany, more individuals reported forgoing medical care since the financial crisis, whereas in countries with universal health coverage, such as the United Kingdom and Canada, demand for healthcare remained robust, with fewer individuals reporting forgoing care.²⁷

The U.S. market was hit especially hard by rising unemployment due to its system of employer-sponsored health insurance, which covered the majority of the population. Between 2007 and 2009, the number of U.S. residents covered by employer-sponsored health insurance fell by 8.3 million, or 5 percent, as unemployment rates rose and workers shifted from full-time to part-time positions.²⁸ In the survey of medical care usage following the downturn, U.S. respondents reported the greatest fall in demand for healthcare—26.5 percent of U.S. respondents said they had reduced their use of medical

²⁴ Prince, "Recession Sees First Fall in Private Health Spending in 20 Years," April 4, 2009; WHO, National Health Accounts, "United Kingdom," March 2010.

²⁵ Private expenditure on healthcare in China accounted for 53.3 percent of total healthcare spending in 2008; this was almost identical to the share of private spending in the U.S. market (53.5 percent). See table 6.1. WHO, GHO Database.

²⁶ Statistics Canada, "Study," November 12, 2009; European Commission, Eurostat, "Impact of the Economic Crisis," February 9, 2011.

²⁷ In France, 12 percent of respondents reported a reduction in seeking medical care since the financial crisis, compared to 10.3 percent in Germany, 7.6 percent in the United Kingdom, and 5.6 percent in Canada. Lusardi, Schneider, and Tufano, "The Economic Crisis and Medical Care Usage," March 2010, 7.

²⁸ Holahan, "The 2007–09 Recession and Health Insurance Coverage," January 2011, 148.

care since the onset of the financial crisis.²⁹ Although Congress passed legislation³⁰ to subsidize insurance premiums for the newly unemployed, many still could not afford to keep their health insurance, and the growth rate of U.S. healthcare spending in 2009 was the slowest in 50 years.³¹

Faced with high healthcare costs and a troubled economy, some individuals in developed countries sought affordable care outside their home market. Generally, individuals who travel for care are self-financed and do so within the geographic region of their home country.³² For example, Mexico has reported treating growing numbers of U.S. patients in recent years.³³ U.S. demand for healthcare services from Mexico has likely grown due not only to the growing number of uninsured U.S. residents (box 6.1), but also to the inability of some U.S. patients to pay for elective surgeries in more distant medical travel destinations, such as India or Thailand.³⁴ Common procedures chosen by U.S. residents include services not covered by insurance, such as dental care and weight-loss surgeries.³⁵ Exceptions to this rule included many European patients, who traveled to the United States to receive elective procedures in late 2007 and 2008. Reportedly, a weak dollar made the price of cosmetic surgeries performed in the United States up to 25 percent less than that of comparable services in the United Kingdom.³⁶ In addition, U.S. providers marketed specifically to European patients, fueling demand for such services by patients from the United Kingdom, Germany, Spain, and France.³⁷

²⁹ Lusardi, Schneider, and Tufano, “The Economic Crisis and Medical Care Usage,” March 2010, 7. A different survey found 36 percent of Americans reported seeing a healthcare professional less frequently in 2009 due to the recession. Martin et al., “Recession Contributes to Slowest Annual Rate,” January 2011, 18.

³⁰ The American Recovery and Reinvestment Act passed by Congress extended the Consolidated Omnibus Budget Reconciliation Act (COBRA) premium subsidies for 2009. These premium subsidies temporarily allow recently unemployed individuals to keep their health insurance coverage for a cost below market price.

³¹ Martin et al., “Recession Contributes to Slowest Annual Rate,” January 2011, 11.

³² In some cases, national health plans cover care in a foreign market—usually for care not available in the home market. For example, some Middle Eastern governments will reimburse care sought abroad because local infrastructure lacks capacity; similarly, in special cases and with preapproval, the Canadian government will reimburse care received in the United States for treatments not available in Canada. Mortensen, “International Trade in Health Services,” 2008, 18; Cattaneo, “Health Without Borders,” 2010, 105.

³³ *International Medical Travel Journal (IMTJ)*, “Mexico, USA,” October 21, 2010. Two Mexican hospitals in the Angeles Health International hospital system report providing an estimated \$11.5 million worth of care to U.S. citizens and residents annually. The hospitals reported serving an average of 1,600 American patients, offering services at an average cost of \$7,200; the majority of services were weight-loss surgeries. Warner and Jahnke, “U.S.-Mexico Mode 2,” March 3, 2010, 8.

³⁴ *IMTJ*, “Mexico, USA,” October 21, 2010. Also see USITC, *Caribbean Region*, May 2008, 2-24–2-25 for a discussion of Caribbean destinations.

³⁵ Avila, “Mexico/USA Spending,” March 24, 2009; Warner and Jahnke, “U.S.-Mexico Mode 2,” March 3, 2010, 8.

³⁶ The British pound had a favorable exchange rate against the U.S. dollar for several years, beginning around 2004, but the euro gained strength in late 2007. Most reports suggest Europeans took advantage of this exchange rate during the first half of 2008, before the dollar strengthened against the euro and the pound towards the last quarter of the year. European Central Bank, “Euro Exchange Rates USD,” April 11, 2011; Board of Governors of the Federal Reserve System, “U.S./U.K Foreign Exchange Rate,” April 1, 2011; Rundle, “Europeans Take Beauty Trip to U.S.,” July 8, 2008; Daswani, “My You Look Rested,” September 29, 2008.

³⁷ U.S. plastic surgeons specifically targeted European patients by taking out advertisements in trans-Atlantic in-flight magazines. Rundle, “Europeans Take Beauty Trip to U.S.,” July 8, 2008.

BOX 6.1 Lack of Health Insurance Drives U.S. Imports of Healthcare Along the U.S. Border with Mexico

Studies of U.S. cities and regions along the U.S. border with Mexico have consistently found that the low rate of health insurance among these populations has driven imports of healthcare services from Mexico. Incomes in the four southwest border states^a are lower than the U.S. average, and residents who may be offered insurance through their employers frequently cannot afford the premiums.^b In 2005, these four states accounted for 30 percent of the U.S. uninsured population.^c As a result, border residents often see healthcare in Mexico as an affordable alternative to expensive care in the United States.

Comprehensive data on U.S. residents who travel to Mexico seeking care and treatment are currently unavailable;^d however, estimates suggest that most U.S. imports are demanded by U.S. residents living along the U.S.-Mexican border. One study of the U.S. border region around El Paso, Texas, and Ciudad Juárez, Mexico, reported 32.5 percent of respondents had crossed the border for healthcare in the past two years. Of these, 27.1 percent reported seeking healthcare services and 63.2 percent reported seeking dental services.^e A 2010 report estimated annual expenditure by residents of the four border states on healthcare-related products and services in Mexico to be roughly \$191–350 million, approximately half of which paid for medical services.^f Older Americans living near the Mexican border have long crossed the border for prescriptions and dental care—two areas Medicare does not completely cover.^g Mexico's private healthcare sector enjoys a cost advantage over U.S. facilities, and many Mexican clinics, particularly those near the border, advertise in the U.S. market, offer bilingual personnel, and in some cases offer transportation across the border.^h

The majority of U.S. residents who seek care in Mexico finance such services out of pocket.ⁱ However, growing awareness of the number of patients seeking care in Mexico has driven some advances in portable financing options. In 1999, California approved cross-border health insurance, allowing individuals enrolled in such plans to seek care in either the United States or Mexico. Currently, a number of insurers offer or are developing such plans, including Blue Cross Blue Shield, Aetna, and United Health.^j

^a The four southwestern states on the U.S.-Mexico border are California, Arizona, New Mexico, and Texas.

^b Institute for Population Health Policy, "Use of Health Care in the US-Mexico Border," February 2009; Peng, "Ultimate Outsourcing," November 19, 2008.

^c Bastida, Brown, and Pagán, "Health Insurance Coverage," 2007, 222.

^d Neither the BEA (the primary source for U.S. services trade statistics) nor the UN Service Trade Database report discrete bilateral trade data for U.S. imports from Mexico.

^e Additionally, 82 percent reported using pharmacies and 9.8 percent reported seeking traditional healers. Byrd and Law, "Cross-border Utilization of Health Care Services," 2009, 97.

^f Warner and Jahnke, "U.S.-Mexico Mode 2," March 3, 2010, 3.

^g Peng, "Ultimate Outsourcing," November 19, 2008.

^h Rivera, Ortiz, and Cardenas, "Cross-Border Purchase of Medications and Health Care," February 2009, 172; Institute for Population Health Policy, "Use of Health Care in the US-Mexico Border," February 2009; Byrd and Law, "Cross-border Utilization of Health Care Services," 2009, 99.

ⁱ Su et al., "Cross-border Utilization of Health Care," December 15, 2010.

^j Warner and Jahnke, "U.S.-Mexico Mode 2," March 3, 2010, 5; *IMTJ*, "USA/Mexico," May 20, 2010.

Patients with Chronic Diseases Demand More Healthcare to Manage Their Conditions

The number of individuals with chronic diseases, such as cardiovascular disease, diabetes, and cancer, has risen worldwide, and these conditions have become the leading cause of global mortality, accounting for 60 percent of deaths in 2005.³⁸ People with chronic conditions demand more medical services than the healthy population. For example, a study of diabetes in the United States found that diabetic individuals use healthcare facilities much more than nondiabetics, and make up to 3.5 times as many physician visits annually.³⁹ Higher utilization of facilities often reflects the introduction

³⁸ Chronic diseases are defined as long-term, incurable conditions with generally slow progression. WHO, "Health Topics: Chronic Diseases," n.d. (accessed January 31, 2011); Al-Maskari, "Lifestyle Diseases," 2010.

³⁹ Dall et al., "The Economic Burden of Diabetes," February 2010, 299–301.

of new treatments to prevent complications or the worsening of a condition, allowing individuals to manage chronic illnesses over time.⁴⁰

The rise in the incidence of chronic conditions can be attributed to two trends. First, mortality rates from chronic conditions have fallen as medical advances, such as the availability of new drugs or surgical procedures, allow earlier diagnosis and a better quality of life afterward. To illustrate, U.S. mortality rates from cardiovascular disease have fallen over the past 30 years⁴¹ while incidence rates have remained steady, suggesting that while death is delayed, a growing number of patients return home with this disease as a chronic condition.⁴² In 2005, 133 million people in the United States, or close to 50 percent of adults, were living with at least one chronic illness.⁴³ The decline in mortality rate has largely been achieved in developed countries, where advanced treatments are more widely available. At the same time, however, the incidence of risk factors for chronic diseases⁴⁴ has been rising in developing countries. For example, it is currently estimated that, worldwide, 1 in every 10 adults is obese—a condition which is linked to a number of chronic diseases.⁴⁵ As a result, many developing countries, such as India and China, have joined the United States and Europe in facing the burden of long-term conditions.⁴⁶

In response to the rise in incidence of chronic illnesses, governments in developing countries have begun to improve access to and quality of care. Currently, 80 percent of global mortality resulting from chronic diseases occurs in developing countries.⁴⁷ However, recent government programs in these markets have allowed earlier diagnosis and more treatment options for people with chronic conditions. For example, in 2005, Chile implemented a healthcare reform that expanded insurance coverage to include many chronic conditions.⁴⁸ Since the reform went into effect, data show earlier detection of cancer and increased demand from individuals with other chronic diseases; treatment for type 2 diabetes and hypertension has increased 30 percent.⁴⁹

Healthcare Systems Face Shortages of Professionals

Currently, the global workforce is estimated to need an additional 4.2 million health workers, a shortage which affects developed and developing countries alike.⁵⁰ As global demand for healthcare services has increased, many countries have addressed shortfalls in their healthcare workforces by recruiting foreign workers. Both Canada and the United

⁴⁰ Schoen et al., “In Chronic Condition,” November 13, 2008, w1.

⁴¹ Better acute cardiac care and secondary prevention after cardiovascular disease onset have contributed to declines in mortality. For example, CT scans have increased early detection of the disease, which can then be managed using statins (a pharmaceutical) or intracoronary stents. Weisfeldt and Zieman, “Advances in the Prevention and Treatment of Cardiovascular Disease,” January/February 2007, 28–33.

⁴² Pearson, “Cardiovascular Disease,” January/February 2007, 50.

⁴³ Center for Disease Control and Prevention, “Chronic Disease Prevention and Health Promotion,” July 7, 2010.

⁴⁴ The four largest risk factors leading to chronic diseases are physical inactivity, poor nutrition, tobacco use, and excessive alcohol consumption.

⁴⁵ Obesity leads to cardiovascular disease, diabetes, some cancers, and arthritis, among other conditions. Steenhuisen and Kelland, “Obesity Epidemic Risks Heart Disease,” February 4, 2011.

⁴⁶ Currently, India has the world’s highest incidence of diabetes, with 50.8 million diabetics, followed by China, with 43.2 million. World Diabetes Foundation, “Diabetes Facts,” February 5, 2010.

⁴⁷ WHO, “Chronic Diseases and Health Promotion,” n.d. (accessed January 31, 2011).

⁴⁸ The reform required the social health insurance system to provide coverage for 56 conditions, many of which are chronic conditions. Chile’s social health insurance system comprises a large public program and a number of private insurers. Bitrán, Escobar, and Gassibe, “After Chile’s Health Reform,” December 2010, 2162.

⁴⁹ *Ibid.*, 2168.

⁵⁰ Boseley, “Health Worker Shortage,” January 18, 2011.

States currently have a shortage of nurses, which is forecast to grow substantially over the next 20 years.⁵¹ In developed countries, education systems frequently lack the capacity to train enough providers to meet demand; in 2009, nearly 55,000 qualified applicants were turned away from baccalaureate and graduate nursing programs in the United States due to faculty shortages and budget constraints.⁵² As a result, these countries import healthcare, in the form of foreign professionals to staff their healthcare systems. In 2005–06, 22 percent of Canadian doctors and 7.7 percent of nurses were trained in a foreign country, and 8 percent of registered nurses in the United States were foreign educated in 2006.⁵³

Rapid development of healthcare infrastructure in regions such as the Middle East has led developing economies to recruit foreign healthcare professionals as well. For example, Saudi Arabia's domestic workforce is not large enough to staff existing hospitals, resulting in recent recruitment of foreign medical professionals, including 1,000 doctors from Pakistan. Continued development of the Saudi healthcare infrastructure will exacerbate this shortage, as the country plans to add 750 health clinics and 15 hospitals over the next 5 years.⁵⁴ However, the practice of importing healthcare professionals has been criticized for weakening healthcare systems in the workers' countries of origin. For example, 23 percent of doctors trained in sub-Saharan Africa emigrated to work in Organization for Economic Cooperation and Development economies, attracted by higher wages and a better quality of life.⁵⁵ Partly as a result, Africa is estimated to need at least another 818,000 doctors, nurses, or midwives to meet the World Health Organization's minimum threshold of care.⁵⁶

Governments, particularly in developed countries, have recognized that recruitment of foreign professionals is a temporary solution to the healthcare shortage, and is increasingly unsustainable as global healthcare demand continues to grow. Instead, governments have launched policies and programs intended to increase the domestic supply of educated, trained workers. For example, Canada has focused on increasing both capacity and enrollment in Canada's nursing schools. As a result, enrollment in nursing schools increased 60 percent from 1997 to 2005.⁵⁷ Recent U.S. legislation initiated similar measures: the American Recovery and Reinvestment Act of 2009 and the Affordable Care Act, passed in fall 2010, included provisions to fund training of healthcare professionals. The Affordable Care Act also included measures to address the pay disparities between primary care physicians, whose relatively low pay threatens supply, and other specialists.⁵⁸

⁵¹ The Canadian Nurses Association estimated a shortage of 11,000 full time Registered Nurses (RNs) in 2007, and in the United States, the national RN vacancy rate was reported to be 8.1 percent in 2008. American Association of Colleges of Nursing (AACN), "Nursing Shortage Fact Sheet," September 20, 2010; Canadian Nurses Association, "Tested Solutions," May 2009.

⁵² AACN, "Nursing Shortage Fact Sheet," September 2010.

⁵³ Dumont et al., "International Mobility of Health Professionals," 2008, 9; Robert Wood Johnson Foundation, "Nursing Study Analyzes Trends," September 2007.

⁵⁴ Fakkar, "Health Ministry to Hire 3,000 Foreign Doctors," October 12, 2010; Al-Dibyani, "Demand for Foreign Health Workers to Increase," February 7, 2011.

⁵⁵ Boseley, "Health Worker Shortage," January 18, 2011; WHO, "Migration of Health Workers," July 2010.

⁵⁶ Scheffler et al., "Estimates of Health Care Professional Shortages," August, 2009, w849.

⁵⁷ Dumont et al., "International Mobility of Health Professionals," 2008, 22–24.

⁵⁸ Iglehart, "Despite Tight Budgets," January 2011, 191.

Governments Look to the Private Sector to Increase the Quality and Supply of Healthcare Facilities

Around the world, governments have entered into partnerships with private sector healthcare firms in order to meet growing demand for higher-quality health services. Governments have worked with private healthcare firms in the past, but in most countries private sector participation was limited to owning and maintaining infrastructure, such as hospitals, which the government used to provide services.⁵⁹ Now, governments are increasingly allowing private firms to provide healthcare services.⁶⁰ These relationships with the private sector take two forms: in countries with ample infrastructure, such as markets where public and private healthcare systems run in tandem, governments are including local private firms in the public system; in countries where there is not enough infrastructure to meet local demand, governments are trying to attract foreign investment in the healthcare sector.

Increasingly, governments have begun allowing private domestic firms to provide services or enter reimbursement networks. For example, between 2001 and 2005, reforms in the UK increased competition by allowing greater participation of private firms in healthcare provision in the NHS, and reforms currently under debate would further increase their participation.⁶¹ Similarly, in Malaysia, government reforms allowed private dialysis firms to enter the government reimbursement network and qualify for public subsidies. These changes expanded the number of providers available to dialysis patients and subsequently increased treatment rates more than eightfold between 1990 and 2005.⁶²

In contrast, in countries where construction of healthcare infrastructure may lag behind rapidly growing incomes, governments partner with the private sector by creating opportunities for foreign firms and investors. For example, in 2010, representatives from Ethiopia traveled to India in an effort to entice India's private hospital chains to set up branches in Addis Ababa.⁶³ China has also reached out to foreign healthcare investors in order to increase its healthcare infrastructure and meet growing demand for private healthcare facilities.⁶⁴ In December 2010, China announced it would liberalize restrictions on foreign investment in healthcare, gradually removing foreign equity limitations and eventually allowing wholly foreign-owned hospitals on a trial basis, as well as allowing foreign facilities to participate in the state medical reimbursement system.⁶⁵

⁵⁹ PricewaterhouseCoopers, "Build and Beyond," December 2010, 7.

⁶⁰ EIU, "United Kingdom: Healthcare and Pharmaceuticals Report," November 9, 2010.

⁶¹ These reforms would allow general practitioners to contract for services from hospitals and clinics, including those in the private sector.

⁶² Lim et al., "How Public and Private Reforms Dramatically Improved Access," December 2010, 2216.

⁶³ *Economic Times*, "Ethiopia Woos Indian Hospitals to Set Up Branches," June 18, 2010.

⁶⁴ *IMTJ*, "China," January 12, 2011.

⁶⁵ Ross and Xu, "China Opens the Door Wider to Private and Foreign Investment in Health Care," December 17, 2010.

Trade Trends

Cross-border Trade

U.S. exports have always been competitive in the global market, as U.S. hospitals are known for advanced treatments and complex care.⁶⁶ Such facilities often market to foreign patients, who visit the United States for treatments not available in their home country or to seek care from globally recognized specialists or facilities.⁶⁷ U.S. cross-border exports of healthcare services (box 6.2) continued to substantially exceed cross-border imports during 2004 through 2009 (figure 6.3), principally because foreign individuals sought treatment from U.S. healthcare facilities. In 2009, U.S. exports totaled \$2.6 billion, while the United States imported \$879 million of healthcare services. Overall, the U.S. healthcare trade surplus increased from \$1.24 billion in 2004 to \$1.74 billion in 2009.

However, U.S. exports of healthcare services slowed to 6.3 percent in 2009, compared to average annual growth rates of 10.4 percent during 2004–08. This slowdown is likely a result of the economic downturn. The depressed global economy caused foreign currencies to fall against the dollar, making U.S. exports more expensive and reducing the number of foreign patients seeking costly treatment at U.S. facilities.

The leading U.S. export destinations in 2007 demonstrate the importance of geographic proximity for trade in healthcare services: over 25 percent of U.S. exports went to Mexico and Canada (figure 6.4).⁶⁸ During 2007, Mexico was the top single country destination for U.S. exports, which totaled \$434 million, following average annual growth of almost 80 percent between 2004 and 2007.⁶⁹ This growth was likely driven by affluent Mexican patients who sought higher-quality care or complicated treatment in the United States.⁷⁰ Cross-border exports to Canada totaled \$160 million in 2007, making Canada the third-largest export market (following the United Kingdom). Although Canada has universal healthcare, Canadians frequently visit the United States to avoid long waits or to receive treatments unavailable locally.⁷¹ Markets in Europe were also important destinations for U.S. exports of healthcare services, accounting for over 44

⁶⁶ For example, U.S. hospitals are known for coronary bypass surgery, cosmetic procedures, and oncology treatments. Lee and Davis, “International Patients,” 2004, 43.

⁶⁷ Many U.S. hospitals market their healthcare exports because exports are profitable for U.S. providers. Most foreign patients use out-of-pocket private funds to pay for services and, on average, return 80 to 100 cents on the dollar; publicly or privately insured domestic patients generally return 40 to 60 cents on the dollar. Lee and Davis, “International Patients,” 2004, 42; *IMTJ*, “USA,” January 19, 2011.

⁶⁸ 2007 is the most recent year available for which geographic detail is provided for U.S. cross-border trade in healthcare services. BEA does not break down healthcare imports and exports by country. Data reported in the UN Service Trade Database appear to correspond to BEA estimates of cross-border trade, and as such, are used to analyze major U.S. markets. Mortensen, “International Trade in Health Services,” 2008, 18; USITC staff calculations based on data from UN Service Trade Database.

⁶⁹ USITC staff calculations based on data from UN Service Trade Database.

⁷⁰ Rivera, Ortiz, and Cardenas, “Cross-border Purchase of Medications and Health Care,” February 2009, 167.

⁷¹ This care is often financed out of pocket, but in some cases, provincial governments have entered into arrangements with U.S. providers to offer services not available locally or, if pre-approved, will reimburse Canadian residents for care received in the United States with funds drawn from the national health insurance. For example, Detroit Hospital Center and Henry Ford Medical Center (Michigan) have entered formal partnerships with Ontario, Canada’s Ministry of Health and Long Term Care to supply imaging services, bariatric procedures, and other tests not readily available in the province. Anstett, “Canadians Visit U.S. to Get Healthcare,” August 20, 2009; Greene, “Canadian Patients Give Detroit Hospitals a Boost,” April 18, 2008.

BOX 6.2 Understanding Available Data on Trade in Healthcare Services

Healthcare services are traded via all four modes of services trade,^a but very little usable data exist on global trade in these services.^b Trade in healthcare services may be included with trade in other services. For example, healthcare services provided using information and communication technologies may be reported as trade in computer services. Further, the variety among sources of healthcare financing, coupled with disparities in pricing for services and the absence of an international standard for data collection, frequently result in statistics that are not comparable across countries.^c

This chapter's discussion of cross-border trade primarily uses data from the Bureau of Economic Analysis (BEA), of the U.S. Department of Commerce (USDOC), supplemented by United Nations (UN) data for analysis of specific export markets. The BEA data on cross-border trade in medical services estimate spending on healthcare services purchased abroad (consumption abroad or mode 2) through 2009.^d

U.S. export figures estimate spending on care provided by U.S. hospitals to foreign patients, and include both emergency services required during travel and services for individuals who travel to the United States for the express purpose of receiving medical treatment. Such statistics are calculated using estimates of foreign patient volumes and cost of care in a hospital setting, including both inpatient and outpatient services.^e

Data on U.S. imports estimate medical expenditures by U.S. residents traveling abroad. Import statistics are based on the number of U.S. travelers, the estimated share of U.S. travelers who require incidental care due to accident or illness while outside the United States, and an estimate of the average cost per treatment. In addition, import estimates also capture spending by U.S. residents who travel to Mexico or Canada specifically seeking medical services, such as dental treatments or cosmetic surgery.^f

Cross-border trade data reported in the UN Service Trade database likewise estimate spending by those traveling for medical reasons through 2007; however, unlike the BEA data, the UN offers information on bilateral trade flows between the United States and selected countries.

Data on affiliate transactions in medical services also come from the BEA. Such statistics capture sales to foreign consumers by foreign healthcare affiliates of U.S. firms and purchases by U.S. consumers from U.S. healthcare affiliates of foreign firms.

^a For example, foreign specialists provide remote consultations using information and communication technologies (mode 1); individuals seek treatment outside their home countries (mode 2); healthcare facilities establish branches in foreign markets (mode 3); and individual medical professionals migrate across borders (mode 4). For a more detailed explanation of the modes of services trade, see box 1.1 on p. 1-4.

^b Mortensen, "International Trade in Health Services," 2008, 11.

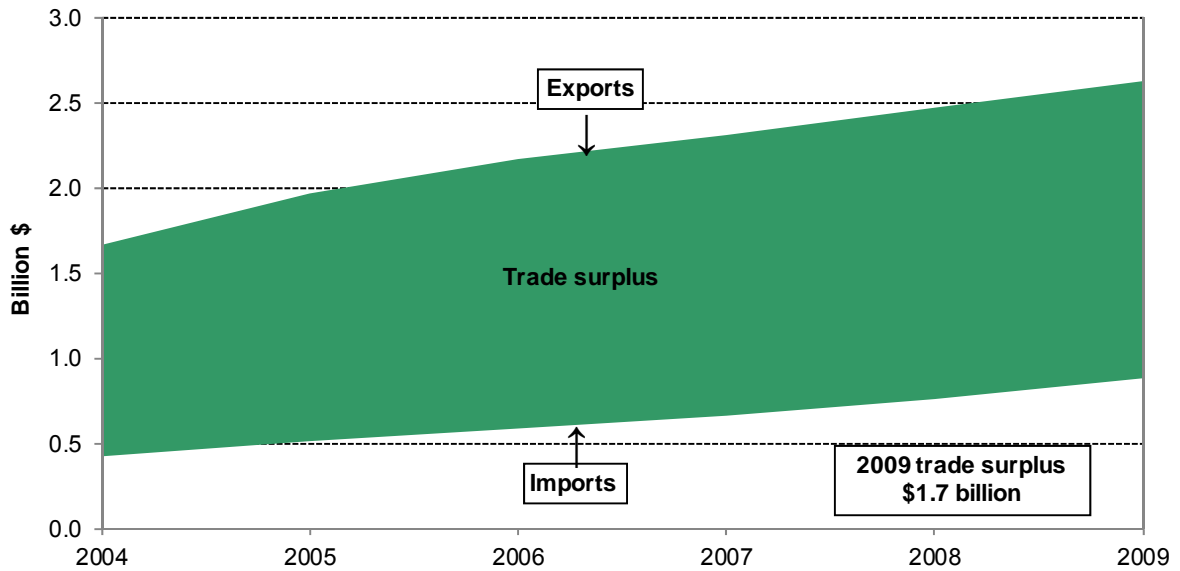
^c Helble, "The Movement of Patients across Borders," November 26, 2010.

^d BEA also reports data on trade in healthcare services via mode 1, which occurs when the service supplier and consumer remain in their respective countries. Discrete data on such trade are not available, but are included in the subcategory "Other" within "Other business, professional, and technical services." USDOC, BEA representative, e-mail to USITC staff, October 22, 2008.

^e Export estimates do not include spending on ambulatory treatment or prescriptions received outside the hospital setting. USDOC, BEA representative, e-mail message to USITC staff, October 22, 2008; Bach, "U.S. International Transactions," July 1999.

^f Bach, "Annual Revision of the U.S. International Accounts," July 2005, 67.

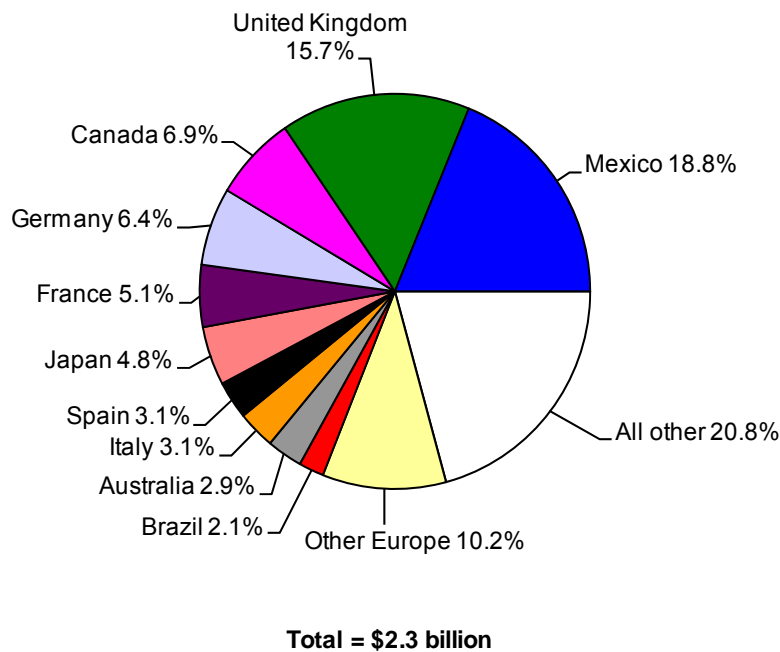
FIGURE 6.3 Healthcare services: The United States maintained a surplus in cross-border trade^a in medical services, 2004–09



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

^aCross-border trade consists of expenditures on medical services by patients in foreign countries and thus are transactions between unaffiliated parties.

FIGURE 6.4 Healthcare services: Mexico was the United States' largest export market for healthcare services in 2007



Source: United Nations, UN Service Trade Database.

percent of such exports in 2007. During 2004 through 2007, U.S. exports to Europe more than doubled, growing from \$434.7 million to over \$1 billion in 2007 as Europeans took advantage of a weak dollar to seek healthcare—in particular, high-quality elective procedures—in the United States.⁷²

U.S. imports of healthcare services grew steadily in recent years, increasing 16 percent in 2009 (reaching \$879 million) following growth of 15.8 percent during 2004–08.⁷³ Unfortunately, very few market data exist that indicate the specific countries from which the United States imports healthcare services. A handful of countries report exports of healthcare-related travel expenditure to the United States (table 6.3).⁷⁴ Of the few countries that report, Poland had the largest volume (\$26.1 million), followed by France (\$23.7 million) and the United Kingdom (\$12.5 million); however, these countries report exporting less than 10 percent of all healthcare services imported by the United States in 2009. Although a number of Southeast Asian countries have marketed cost competitive care for Western patients, anecdotal evidence suggests that the majority of U.S. healthcare imports are purchased from North American trading partners,⁷⁵ particularly Mexico.⁷⁶ The steady growth trajectory in imports during recent years is likely a result of the growing number of uninsured Americans, who drive demand for competitively priced healthcare imports.

Affiliate Transactions

Trends in affiliate transactions reflect the importance of the U.S. market for global healthcare firms. Purchases from U.S. affiliates of foreign firms substantially exceed sales by foreign healthcare affiliates of U.S. firms (figure 6.5).⁷⁷ In 2006 (the last year for which comparable data are available), purchases from U.S. affiliates totaled \$9.2 billion, far outpacing sales by foreign affiliates of U.S. firms, which totaled \$1.6 billion.⁷⁸ During 2005 through 2007,⁷⁹ healthcare purchases from U.S. affiliates of foreign firms declined slightly before rebounding in 2008.

By virtue of being the largest healthcare services market in the world, the U.S. market offers a desirable and potentially profitable opportunity for foreign healthcare firms. As a result, foreign firms have sought opportunities to invest in the U.S. market, either by acquiring U.S. healthcare firms or establishing new U.S. affiliates. For example, in 2006,

⁷² The British pound and the Euro progressively strengthened against the U.S. dollar through mid-2008. European Central Bank, “Euro Exchange Rates USD,” April 11, 2011; Board of Governors of the Federal Reserve System, “U.S./U.K Foreign Exchange Rate,” April 1, 2011.

⁷³ BEA estimates for 2004 through 2009 show steady growth in total U.S. import volumes. These data primarily estimate incidental care sought by U.S. travelers; however, they do include spending by individuals who traveled to Mexico and Canada specifically seeking medical treatment.

⁷⁴ Reported exports of healthcare services to the United States roughly correspond to U. S. imports of such services from these countries.

⁷⁵ BEA does not report medical services trade data on a country basis, nor does the United States report healthcare-related travel expenses by country in the UN Services Trade database. A limited number of countries report exports of healthcare services to the United States; however, these data are neither comprehensive nor complete, and so will be used for illustrative purposes only.

⁷⁶ U.S. residents who purchase healthcare services in Mexico include the large population of uninsured Americans who reside along the border (for more information see box 6.1), Mexican immigrants who return home for treatment, retirees who reside in Mexico at least part of the year, and individuals who travel to Mexico for specific treatments or procedures. Warner and Jahnke, “U.S.-Mexico Mode 2,” March 3, 2010, 1.

⁷⁷ BEA reports “services supplied” by affiliates; for healthcare and social assistance services, services supplied correspond to sales. Thus, “sales” and “services supplied” are used interchangeably in this section.

⁷⁸ USDOC, BEA, *U.S. International Services*, “Table 9,” and “Table 10” (accessed December 21, 2010).

⁷⁹ Data on purchases from U.S. affiliates of foreign firms during 2003 and 2004 were not reported.

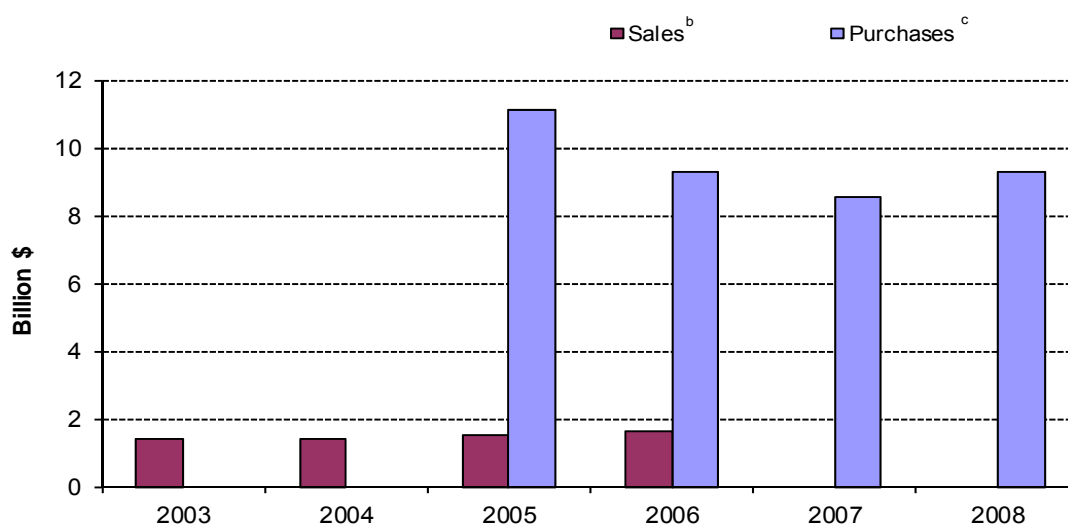
TABLE 6.3 Healthcare services: Countries that report exports of healthcare services to the United States, 2009

Reporter	Exports (\$)
Poland	26,116,273
France	23,720,411
UK	12,528,954
Czech Republic	6,584,889
Sweden	4,073,308
Slovenia	147,904
Hungary	144,805
Estonia	43,073

Source: UN, UN Service Trade Database.

Note: Since most countries do not report trade in healthcare services broken down by country of recipient, we estimate that these figures probably represent less than 10 percent of total healthcare exports to the United States.

FIGURE 6.5 Healthcare services: Purchases from U.S. affiliates of foreign firms declined due to the downturn in the economy, but still exceeded sales by foreign affiliates of U.S. firms,^a 2003–08



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

^aBEA reports “services supplied” by foreign affiliates. In the healthcare services industry, “services supplied” correspond to “sales.”

^bData were suppressed in 2007 and 2008 to avoid disclosure of individual company data.

^cData were suppressed in 2003 and 2004 to avoid disclosure of individual company data.

Fresenius Medical Care, a German manufacturer of dialysis supplies, became the largest outpatient supplier of dialysis services in the United States after acquiring U.S.-based Renal Care Group, Inc.⁸⁰ Acquisitions such as these drive up the numbers for affiliate transactions because, following the acquisition, spending by U.S. patients on dialysis supplied by Renal Care Group, Inc., is now a purchase from a U.S. affiliate of a foreign firm.

In contrast, foreign affiliates of U.S. firms report lower sales in foreign markets. Such sales totaled \$1.6 billion in 2006, representing average annual growth of about 4 percent since 2003.⁸¹ In general, it is more difficult for U.S. firms to operate in foreign markets than for foreign firms to operate in the U.S. market, largely due to the presence of universal health coverage or public healthcare in other countries. This is best illustrated by U.S. and foreign investment data: in 2008, foreign investment in healthcare services in the United States reached \$8.3 billion, compared to \$1.1 billion of direct investment abroad in healthcare by U.S. firms.⁸² However, shifts in government policies toward privatization of healthcare (as in the UK) and aging populations have created opportunities for U.S. firms such as U.S.-based Sunrise Senior Living, which operates retirement communities in the United Kingdom and Canada.⁸³ The majority of sales by affiliates of U.S. firms appear to be to European consumers; in 2003, such sales accounted for \$1.1 billion of a total \$1.4 billion.

Multilateral Negotiations, Liberalization, and Remaining Barriers

A number of barriers remain to trade in healthcare services. They are difficult to address through multilateral agreements such as the General Agreement on Trade in Services (GATS)⁸⁴—partly due to the extent of government participation in healthcare services,⁸⁵ but also because many barriers either fall outside the scope of the GATS or are related to economy-wide policies such as immigration. For example, the largest barriers to trade in healthcare services—reimbursement policies and procedures of health insurance, both public and private—fall outside the scope of the GATS. Health insurers' reimbursement networks impede trade conducted via foreign presence (mode 3) if such networks exclude foreign providers or establishments; additionally, insurance coverage is frequently restricted to a given region or country, which impedes trade via consumption abroad (mode 2) by giving patients disincentives to seek medical treatment outside their home markets.⁸⁶ Economy-wide policies that impede trade in healthcare services are most frequently related to immigration. For example, tighter immigration policies implemented in the United Kingdom over the past decade impeded trade via movement of professionals (mode 4) and exacerbated the UK shortage of physicians as foreign

⁸⁰ The acquisition was valued at \$3.5 billion. Bureau van Dijk, Zephyr Mergers and Acquisitions Database; Federal Trade Commission, "Maintaining Competition," March 30, 2006; Fields, "God Help You," December 2010.

⁸¹ Data for 2006 are the most recent data available, as data for 2007 and 2008 are suppressed by BEA to avoid disclosing individual firms' data.

⁸² USDOC, BEA, "U.S. Direct Investment Abroad," n.d. and "Foreign Direct Investment in the United States," n.d.

⁸³ Bureau van Dijk, Zephyr Mergers and Acquisitions Database.

⁸⁴ Currently, only 39 percent of WTO members have made commitments in the health sector—among the lowest percentage across all sectors. Cattaneo, "International Trade in Services," 2010, 137.

⁸⁵ Public healthcare is outside the scope of the GATS under article XIV, which stipulates exceptions for services related to human life or health.

⁸⁶ Waeger, "Trade in Health Services," October 2008, 16.

physicians left the country and fewer entered.⁸⁷ Immigration policies can also impede consumption abroad; surveys in the U.S.-Mexico border region have found that among respondents, more restrictive border regulations over the past 5–10 years have deterred U.S. residents from seeking care in Mexico.⁸⁸

On the other hand, market forces and economic interest have driven liberalization and integration in the healthcare industry. For example, new policies that permit cross-border portability of healthcare insurance were largely motivated by rising demand in developed economies for affordable healthcare. To illustrate, Singapore, which faces high healthcare costs, now allows its Medisave funds⁸⁹ to be used in approved foreign healthcare facilities in neighboring Malaysia, providing Singaporean workers with a lower-cost alternative for healthcare services.⁹⁰ Similarly, as mentioned earlier, rising demand for lower cost Mexican healthcare services motivated the development of cross-border health insurance policies that offer savings of 40 to 50 percent to U.S. citizens living in California who are willing to seek care in Mexico.⁹¹ Additionally, regional integration is occurring in certain areas, such as in Southeast Asia, where the 10 members of the Association of Southeast Asian Nations have committed to create a more integrated regional healthcare services market. The EU is also in the process of developing an integrated healthcare services market. In the most recent action, the EU parliament voted in favor of an EU directive on patient's rights in cross-border healthcare.

Outlook

The global healthcare industry is expected to maintain the current trajectory of steady growth in the near future, as global demand for healthcare continues to rise.⁹² Rapid growth in healthcare spending is forecast for the Asia-Pacific, the Middle East, and Africa, as per capita healthcare spending climbs toward global averages.⁹³ In China, for example, McKinsey has projected a minimum of 11 percent average annual growth in private healthcare expenditure among urban middle-class consumers over the next 20 years, based on their current high rates of saving specifically for healthcare expenses.⁹⁴

However, markets in Western Europe and the United States are expected to continue to feel the lingering effects of the economic downturn as well as government budget cuts going forward. Some European countries have already begun to implement measures aimed at both reducing the state's share of healthcare costs and limiting price inflation for services. These reforms are expected to continue as governments face the growing burden of increasing demand and shrinking funds available for healthcare programs.⁹⁵

Around the world, chronic disease is expected to continue to drive demand for healthcare. An epidemic of obesity-related diseases is expected in the near future; by 2030, the incidence of diabetes in the Middle East and North Africa is forecast to nearly double to

⁸⁷ Buchanan, "Doctor Shortage Sees New Recruitment Drive in India," June 1, 2010.

⁸⁸ Rivera, Ortiz, and Cardenas, "Cross-border Purchase of Medications and Health Care," February 2009, 172.

⁸⁹ Medisave is the mandatory individual health savings fund to which Singaporean workers automatically contribute.

⁹⁰ *Straits Times*, "Use of Medisave Overseas," February 10, 2010; industry representative, interview by USITC staff, March 9, 2010.

⁹¹ Cortez, "Recalibrating the Legal Risks of Cross-Border Health Care," 2010, 69.

⁹² EIU, "World: Healthcare Outlook," December 9, 2010.

⁹³ *Ibid.*; EIU, "Asia and Australasia: Healthcare Outlook," June 14, 2010.

⁹⁴ PricewaterhouseCoopers, "Emerging Trends in Chinese Healthcare," 2010, 9.

⁹⁵ EIU, "World: Healthcare Outlook," December 9, 2010.

51.7 million people and chronic diseases are expected to account for 70 percent of global mortality.⁹⁶ Facing growing demand, countries are expected to continue to reform their healthcare systems to increase access to care and improve quality.⁹⁷ However, as a similar reform in Brazil in the 1990s demonstrated, the success of these reforms will depend on an adequate healthcare workforce. For example, the U.S. Affordable Health Care for America Act, which expanded coverage for the uninsured and introduced Accountable Care Organizations, is expected to exacerbate the strain on healthcare professionals;⁹⁸ the United States is predicted to have a shortfall of 63,000 physicians by 2015, and a shortage of at least 300,000 nurses by 2020.⁹⁹

⁹⁶ Ibid.; *Global Health Resources*, “International Factoid,” February 24, 2011; WHO, “Health Topics: Chronic Diseases,” n.d. (accessed January 31, 2011).

⁹⁷ KPMG, “The Future of Global Healthcare Delivery and Management,” 2010, 12.

⁹⁸ Accountable Care Organizations are a concept wherein hospitals, primary care physicians, and specialists would jointly be accountable for the quality and cost of healthcare provided to a group of Medicare patients. KPMG, “The Future of Global Healthcare Delivery and Management,” 2010, 12; Association of American Medical Colleges (AAMC), “AAMC Releases New Physician Shortage Estimates Post-Reform,” September 30, 2010.

⁹⁹ Aiken, Cheung, and Olds, “Education Policy Initiatives,” June, 2009, w646; AAMC, “AAMC Releases New Physician Shortage Estimates Post-Reform,” September 30, 2010.

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CHAPTER 7

Legal Services

Summary

While the global legal services industry experienced a slowdown in 2009, the United States sustained growth in its cross-border trade surplus in legal services. In 2008, the latest year for which data are available, U.S.-related affiliate transactions in this section also displayed this trend. Sales by foreign legal service affiliates of U.S. firms in 2008 continued to exceed purchases from U.S. affiliates of foreign law firms; affiliate transactions in both directions continued to grow, albeit more slowly than during 2003–07. U.S. law firms managed costs during the slowdown by laying off employees and reducing other business costs, such as marketing. Offering better value or flexible payment terms may give firms an edge in the future.

In recent years European and U.S. law firms have lost global market share to firms from countries in the Asia-Pacific region. In 2009, because the total volume of legal work in the United States declined, U.S. imports of legal services decreased faster than exports of legal services. However, from 2005 through 2008 U.S. imports of legal services grew faster than exports, reflecting the growing competitiveness of foreign legal services providers. During the global downturn, markets in Asia-Pacific fared better than in the United States or Europe, the traditional market drivers. Although U.S. foreign affiliate sales remained concentrated in Europe, affiliates in the Middle East and Latin America are multiplying. In 2009, direct investment abroad by U.S. law firms increased faster than in most other professional service industries. Law firms setting up overseas often face restrictions on forms of establishment and local collaboration, and most lawyers practicing abroad can serve only as foreign legal consultants.

Introduction

Legal services¹ are a key input to international commerce: they facilitate trade and investment by increasing predictability and decreasing risk in business transactions.² The global increase in demand for legal services over the past few decades is largely attributed to increased international trade and capital flows.³ In recent years, established firms in Europe and North America have confronted new challenges resulting from the global economic downturn. At the same time, other regions have expanded their legal services markets; in particular, the Asia-Pacific region has significantly increased its

¹ United Nations (UN), *Manual on Statistics of International Trade in Services (MSITS)2010*, 2010, 67; U.S. Department of Commerce (USDOC), U.S. Census Bureau Web site, “Industry Statistics Sampler: NAICS 5411—Legal Services” (accessed January 3, 2011). MSITS defines legal services as “legal advisory and representation services in any legal, judicial and statutory procedures; drafting services of legal documentation and instruments; certification consultancy; and escrow and settlement services.”

² Cattaneo and Walkenhorst, “Legal Services,” 2010, 69.

³ Hook, “Sectoral Study on the Impact of Domestic Regulation,” February 15–16, 2007, 6.

share of the global market since 2005.⁴ This chapter discusses the effects of the downturn, the growth of emerging markets, and other factors affecting international trade in legal services as provided by law firms.⁵

Competitive Conditions in the Global Legal Services Market

The global legal services market grew at a 4.5 percent annual average rate between 2001 and 2005, and at 4.2 percent between 2005 and 2009.⁶ In 2009, however, this substantial growth faltered due to the economic downturn. Global legal services revenue totaled \$546.8 billion, reflecting only 0.5 percent growth in 2009 compared with 5.4 percent average annual growth during 2005–08.⁷ Legal services markets in the Asia-Pacific fared better than those in the United States or Europe, due to the uneven severity of the downturn across regions.⁸ While the U.S. market grew by 0.6 percent and the European market declined by 1.3 percent in 2009, the Asia-Pacific market grew by 3.9 percent.⁹

Although the Americas and Europe remained the world's largest legal services markets, their shares of the world market have declined.¹⁰ In 2005, the Americas and Europe accounted for 61.3 percent and 33.6 percent of the global legal services market, respectively, while Asia-Pacific accounted for only 5.1 percent.¹¹ In 2009, the shares accounted for by the Americas and Europe had declined to 59.2 percent and 30.4 percent, while the share of the Asia-Pacific market had risen to 10.4 percent (figure 7.1).¹²

While each region was dominated by one or two key countries, this phenomenon is especially striking in the Americas. In 2009, the United States market accounted for 80.4 percent of the Americas' legal services market and 47.6 percent of the global legal

⁴ Datamonitor, "Industry Profile: Global Legal Services," July 2010, 11; Datamonitor, "Industry Profile: Global Legal Services," December 2006, 11.

⁵ Industry representative, telephone interview by USITC staff, April 27, 2011. For example, revenue data from Datamonitor (the primary source of global and comparative country-level data for legal services), likely refers to revenue from law firms and excludes other types of firms that have lawyers.

⁶ Datamonitor, "Industry Profile: Global Legal Services," July 2010, 9; Datamonitor, "Industry Profile: Global Legal Services," December 2006, 9. Continuous series using data between 2001 and 2009 are not calculated, since data for the two sets of years (2001–05 and 2005–09) are published in separate reports and differ when they overlap. The annual average rate between 2005 and 2009 includes the significant slowdown in growth between 2008–09, discussed below.

⁷ Datamonitor, "Industry Profile: Global Legal Services," July 2010, 9.

⁸ Lloyd, "The 2009 Global 100," October 1, 2009.

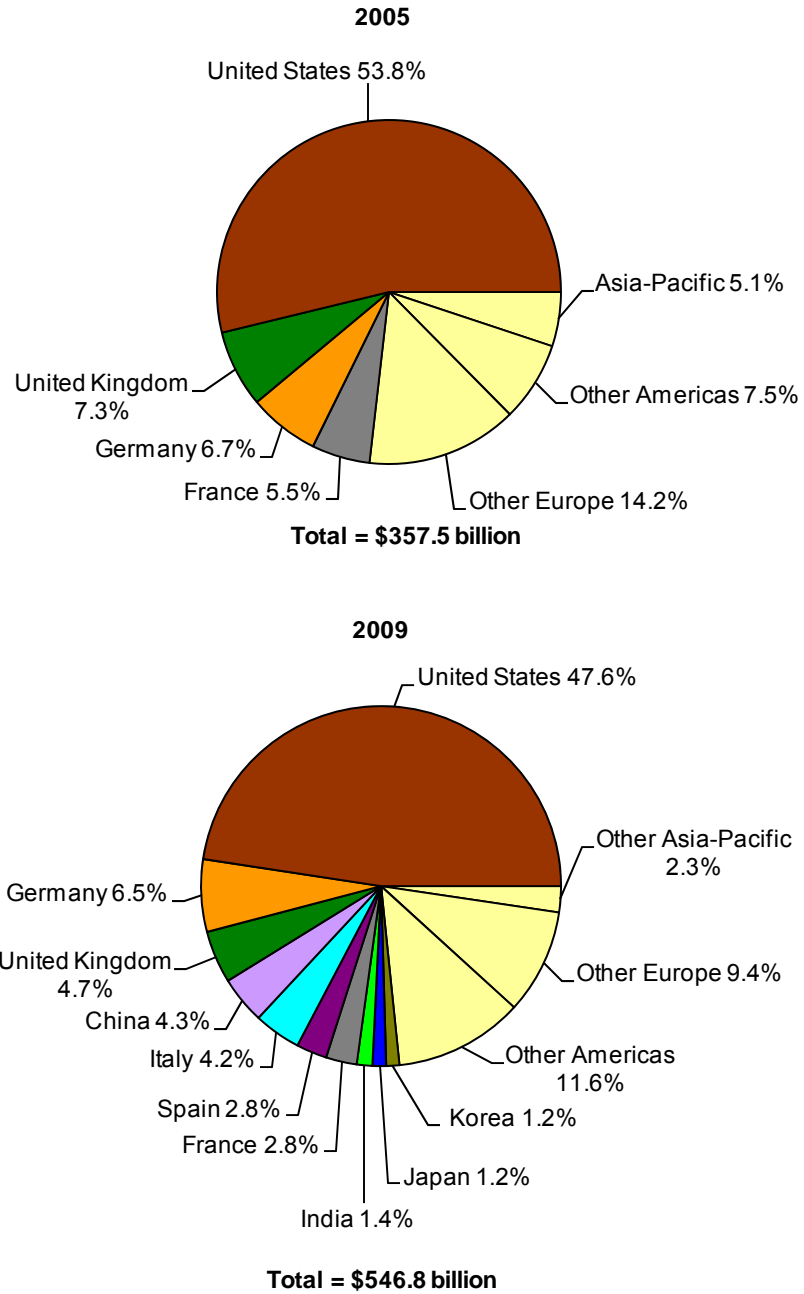
⁹ Datamonitor, "Industry Profile: Legal Services in the United States," July 2010, 9; Datamonitor, "Industry Profile: Legal Services in Europe," July 2010, 9; Datamonitor, "Industry Profile: Legal Services in Asia-Pacific," July 2010, 9.

¹⁰ Datamonitor, "Industry Profile: Global Legal Services," July 2010, 6, 11. The valuation of the global legal services market reflects only the largest legal services markets in Europe, Asia-Pacific, North America, and South America. Thus while countries in North America in this analysis include Canada, Mexico, and the United States, countries in South America include only Argentina, Brazil, Chile, Colombia, and Venezuela. Countries in Europe include Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden, Ukraine, and the United Kingdom. Countries in the Asia-Pacific total include Australia, China, India, Japan, Singapore, Korea, and Taiwan.

¹¹ Datamonitor, "Industry Profile: Global Legal Services," December 2006, 11; Datamonitor, "Industry Profile: Global Legal Services," November 2007, 11; Datamonitor, "Industry Profile: Global Legal Services," July 2010, 11. A country or region's share of the global is calculated market based on revenue. The share for the Asia-Pacific region first increased between 2005 and 2006 (when the region's global share jumped from 5.1 percent to 11.2 percent). In the same year, Europe's share declined from 33.6 percent to 26.9 percent, while the Americas' share increased slightly from 61.3 percent to 61.9 percent.

¹² Datamonitor, "Industry Profile: Global Legal Services," July 2010, 11; Datamonitor, "Industry Profile: Legal Services in the United States," July 2010, 11.

FIGURE 7.1 Legal services: The Asia-Pacific region increased its global market share,^a 2005 and 2009



Sources: Datamonitor, "Industry Profile: Global Legal Services," July 2010, 11; Datamonitor, "Industry Profile: Global Legal Services," December 2006, 11.

^aMarket share calculated by value.

services market.¹³ China accounted for the largest share of the of the Asia-Pacific legal services market in 2009, with 41.0 percent,¹⁴ and Germany and the United Kingdom were the two largest legal services markets within Europe, with market shares of 21.4 percent and 15.5 percent, respectively.¹⁵

U.S. and UK firms remain among the highest-grossing firms in the world, accounting for 91 of the 100 top-grossing firms and all of the world's top 10 law firms (table 7.1).¹⁶ Nonetheless, profits declined for firms in both markets during the economic downturn. Among the 100 top-grossing firms, U.S.-based firms experienced a decline of 2 percent in profits per partner from 2007 to 2009, while UK-based firms experienced a decline of 7 percent.¹⁷ Since U.S.-based firms derive more of their revenue from litigation than their counterparts in the United Kingdom, the lower rate of decline in the United States is attributed to a heavier share of countercyclical litigation work,¹⁸ as well as the lower cost to firms of laying off employees in the United States.¹⁹

Larger law firms tend to focus on commercial work and are more likely to export their legal services. For example, in both the United States and China, larger firms tend to assist corporate or government clients on diverse commercial legal issues, which are typically more complex and require greater resources, while smaller firms tend to offer services in either noncommercial areas of law or specialized areas of commercial law.²⁰ The nature of the business conducted by large law firms makes them more likely to

¹³ USITC staff calculations using data from Datamonitor, "Industry Profile: Global Legal Services," July 2010, 11 and "Industry Profile: Legal Services in the United States," July 2010, 11.

¹⁴ Datamonitor, "Industry Profile: Legal Services in Asia-Pacific," July 2010, 11. The remaining Asia-Pacific market shares in 2009 were as follows: India (13.5 percent), Japan (11.7 percent), and Korea (11.4 percent).

¹⁵ Datamonitor, "Industry Profile: Legal Services in Europe," July 2010, 11. The remaining European markets shares in 2009 were as follows: Spain (9.1 percent), France (9.1 percent), and the rest of Europe (31 percent).

¹⁶ *American Lawyer*, "The Global 100 2010," October 2010. The remaining firms included five Australian firms and one firm each from Canada, France, Spain, and the Netherlands.

¹⁷ Goldhaber, "The Global 100 2010," October 2010.

¹⁸ Culbert, "Law Firms in the US," September 2010, 15; Hildebrandt Baker Robbins and Citi Private Bank, "2010 Client Advisory," March 3, 2010, 7. During economic downturns, demand for and revenues from bankruptcy, insolvency, and litigation typically increase; during periods of economic growth, demand for legal services related to commercial activities, such as mergers and acquisitions, increases and drives revenue. For example, results of a survey of 193 firms, including firms from the 200 highest-grossing U.S. firms and 52 additional participants, indicated that only bankruptcy and litigation practice areas grew during most of 2009, while other practice areas, such as general corporate and capital markets, grew only during the last quarter of the year.

¹⁹ Goldhaber, "The Global 100 2010," October 2010.

²⁰ IBISWorld, "Attorney and Legal Services in China," January 2010, 7, 14; Culbert, "Law Firms in the US," September 2010, 14, 15. According to IBISWorld, in both the United States and China, the commercial segment makes up the largest share of industry revenue and is defined as follows. In the United States, commercial legal services involve "merger and acquisition activity, capital raisings involving debt and equity markets, activities relating to initial public offerings (IPOs) and legal services associated with private equity transactions including leveraged buyouts" and also include bankruptcy, insolvency, and litigation. In China, commercial legal services involve commercial disputes, litigation, and arbitration. In the United States, noncommercial segments of the industry include personal injury, intellectual property, trademark and patent law, property, and other law. In China, non-commercial segments include civil, criminal, nonlitigious, and other legal services.

TABLE 7.1 Legal services: Top 10 global law firms, by gross revenue, 2010

Rank	Firm	Country	Gross revenue (million \$)
1	Baker & McKenzie	U.S.	2,104
2	Skadden, Arps, Slate, Meagher & Flom	U.S.	2,100
3	Clifford Chance	UK	1,875
4	Linklaters	UK	1,853
5	Latham & Watkins	U.S.	1,821
6	Freshfields Bruckhaus	UK	1,787
7	Allen & Overy	UK	1,645
8	Jones Day	U.S.	1,520
9	Kirkland & Ellis	U.S.	1,428
10	Sidley Austin	U.S.	1,357

Source: *The American Lawyer*, “The Global 100 2010,” October 2010.

Note: Revenue figures refer to firms' most recently completed fiscal year.

export (table 7.2).²¹ In addition, large firms and exporters have higher labor productivity than smaller firms and nonexporters (box 7.1).²²

Demand and Supply Factors

Demand for Legal Services Reflects Economic Conditions

Demand for legal services correlates with the level of business activity in an economy, and consequently fell in many developed markets as a result of the economic downturn. For example, in the United States, the decline in investment and corporate activity beginning in 2007 led to less commercial work for lawyers.²³ Large law firms were hit hardest:²⁴ the 100 highest-grossing law firms fared worse than smaller firms²⁵ in terms of

²¹ Data exclude nonemployer firms. In 2007, 91.7 percent of all U.S. legal establishments were firms with fewer than 20 employees, with only 1.8 percent of them exporting. On the other hand, establishments with more than 500 employees accounted for only 1.5 percent of all establishments, but for 15.7 percent of firms that exported legal services. This pattern of concentrated exports (by large law firms) is similar to the relationship between firm size and the level of exports for providers of many types of goods and services in the United States.

²² A similar pattern is seen in China, where larger Beijing-headquartered law firms have also entered the global market. For example, King & Wood and Jun He have expanded their presence internationally in recent years. Both have offices in New York and Silicon Valley, and King & Wood has an office in Tokyo as well. Their foreign branches support international clients with business and investments in China, as well as Chinese clients with business abroad. King & Wood Web site, “Offices,” (accessed December 7, 2010); Jun He Web site, “About Us,” (accessed December 7, 2010). King & Wood has maintained their Silicon Valley office since 2001. They opened their Tokyo and New York locations more recently—in 2005 and 2008, respectively.

²³ Culbert, “Law Firms in the US,” September 2010, 5, 8.

²⁴ *Ibid.*, 6; Hildebrandt Baker Robbins and Citi Private Bank, “2010 Client Advisory,” March 3, 2010, 2–5. Based on a survey of 193 U.S. law firms, demand dropped 4.1 percent in 2009 and revenue dropped by 3.4 percent.

²⁵ The 100 highest-grossing firms are referred to as “Am Law 100” firms. The smaller firms include firms ranked 101–200 by gross revenue (the “Am Law 200”) and smaller midsize firms.

TABLE 7.2 Legal services: Number of U.S. exporting establishments and labor productivity, by size of firm, 2007

	Number of establishments	Exporting establishments (%)	Labor productivity ^a (\$/FTE)	Exporter labor productivity premium ^b
Firms with 0–19 employees				
All establishments	173,186		153,954	
Establishments with revenue from exported services	3,173	1.8	243,720	1.6
Firms with 20–99 employees				
All establishments	9,468		175,180	
Establishments with revenue from exported services	433	4.6	247,703	1.5
Firms with 100–499 employees				
All establishments	3,324		218,369	
Establishments with revenue from exported services	322	9.7	253,962	1.2
Firms with less than 500 employees				
All establishments	185,978		170,417	
Establishments with revenue from exported services	3,928	2.1	250,351	1.5
Firms with more than 500 employees				
All establishments	2,865		348,992	
Establishments with revenue from exported services	450	15.7	372,461	1.1
All firms				
All establishments	188,843		201,508	
Establishments with revenue from exported services	4,378	2.3	317,436	1.6

Sources: Data tabulated by USDOC, U.S. Census Bureau, Service Sector Statistics Division, and USITC staff calculations.

Note: Data are from the 2007 Economic Census and are tabulated by 2002 NAICS code 5411 (legal services).

^aLabor productivity is calculated as revenue per full-time equivalent employee (FTE).

^bThe export labor productivity premium is the ratio of labor productivity of exporters to that of nonexporters.

BOX 7.1 Legal Services Productivity in the United States

In the United States, large legal services firms tend to be more productive than small firms.^a Establishments of large firms (over 500 employees) had twice the labor productivity^b of establishments of small firms (less than 500 employees) in 2007 (table 7.2, column 3).^c

Additionally, legal services exporters tend to be more productive than nonexporters. Exporting establishments of firms of all sizes had 1.6 times the labor productivity of establishments which only served the domestic market in 2007 (table 7.2, column 4). The difference in productivity between exporters and nonexporters was driven by small firms. While there was only a slight difference in labor productivity between exporting and nonexporting establishments of large firms, exporting small and medium-sized enterprises (SMEs) had 1.5 times the labor productivity of nonexporting SMEs.^d The largest difference in productivity between exporters and non-exporters was among firms with less than 20 employees.

^a See USITC, *Small and Medium-Sized Enterprises*, November 2010, 2-1 to 2-2.

^b The difference in labor productivity is referred to as the labor productivity premium, measured as ratio of labor productivity of large firms to that of small firms.

^c Data are from the U.S. Census Bureau's Economic Census, conducted every five years. The most recent Economic Census was in 2007. When describing data in table 7.2, "Establishments" refer to a single physical location where business is conducted or where services are performed. While the data were tabulated according to the firm size categories presented in table 7.2, the data refer to establishments (rather than the firms themselves).

^d See USITC, *Small and Medium-Sized Enterprises*, November 2010, 2-5 to 2-7, for a more detailed comparison of labor productivity for exporting versus nonexporting SMEs.

demand, revenues, and productivity.²⁶ This was due to large firms' heavier reliance on commercial activities and the presence of large financial firms, which were especially vulnerable during the economic downturn.²⁷ Overall, the growth rate for U.S. legal services revenue slowed to 0.6 percent in 2009, compared to an average annual rate of 5.3 percent during 2005–08.²⁸ The situation was worse in the United Kingdom, where legal services revenue declined by 4.3 percent in 2009 after growing at an average annual rate of 3.4 percent during 2005–08.²⁹

Among other developed countries, the German market did relatively well, experiencing only a modest slowdown in revenue growth. In 2009, the legal services market grew

²⁶ Hildebrandt Baker Robbins and Citi Private Bank, "2010 Client Advisory," March 3, 2010, 7. In particular, demand declined by 4 percent for the Am Law 100 compared to about 1 percent for the Am Law 200 and by about 3 percent for smaller, midsize firms; productivity dropped by about 4 percent for the Am Law 100, by 2.5 percent for the Am Law 200, and by 2 percent for midsize firms; and revenue declined by 2 percent for the Am Law 100 compared to an increase of 2 percent of the Am Law 200 and a decline of about 0.5 percent for midsize firms. Numbers published in a different source show similar trends for these groups of firms, though the percentage changes differ. See DiPetro, "Priced to Sell," May 1, 2010; *American Lawyer*, "Behind the Numbers," May 2010, 96; Press and Mulligan, "Lessons of the Am Law 100," May 1, 2010. See Combs, "No Place to Hide," June 1, 2010, for a fuller comparison between the Am Law 100 and the Am Law 200. Using different metrics, the comparison showed varying relationships between the two groups of firms.

²⁷ DiPetro, "Priced to Sell," May 1, 2010. Additionally, smaller firms typically charge lower or more flexible rates than their larger counterparts, which helped to maintain demand for their services.

²⁸ Datamonitor, "Industry Profile: Legal Services in the United States," July 2010, 9. U.S. revenue grew by 4.8 percent in 2008 (similar to 4.6 percent in 2007). Legal services market value represents law firms' total revenues.

²⁹ Datamonitor, "Industry Profile: Legal Services in the United Kingdom," July 2010, 9; Lloyd, "The 2009 Global 100," October 1, 2009; Datamonitor, "Industry Profile: Legal Services in France," July 2010, 9; Datamonitor, "Industry Profile: Legal Services in Japan," July 2010, 9. Between 2008 and 2009, profits per partner at large British firms such as Clifford Chance and Latham fell by over 40 and 20 percent, respectively, which is very different from their peak performance during 2004–08. As in the United Kingdom, legal services revenue in France and Japan grew 0.1 and 0.2 percent in 2009, respectively, versus annual average rates of 4.3 and 5.6 percent, respectively, during 2005–08.

3.2 percent, compared with an average annual rate of 4.8 percent during 2005–08.³⁰ Additionally, Germany’s legal service firms are typically smaller and less specialized in areas like finance compared to U.S. or UK firms.³¹

Among developing legal services markets, the Chinese market experienced significant growth in 2009, though the pace was slower than earlier in the decade.³² Industry revenue increased 7.1 percent in 2009, compared to an average annual rate of 13.7 percent from 2005 to 2008.³³ China’s demand for legal services was driven by a rising volume of commercial activities, including mergers and acquisitions, initial public offerings (IPOs), and international trade.³⁴ For example, U.S. and UK law firms advised Chinese clients on international investments in the natural resource and automobile industries,³⁵ and were involved in the Agricultural Bank of China’s 2010 IPO.³⁶ These types of commercial activities accounted for 65 percent of China’s legal service industry revenue by the decade’s end.³⁷ To meet growing demand, the number of Chinese law firms increased from approximately 13,100 in 2006 to 15,200 in 2010.³⁸

Developing Markets Are Increasingly Important for U.S. and UK Firms

Reforms involving investment, trade, and other economic activities in developing countries have provided commercial opportunities for U.S. and UK law firms.³⁹ Whereas U.S. law firms’ foreign mergers and partnerships have historically been with law firms in

³⁰ IMF, World Economic Outlook Database; Datamonitor, “Industry Profile: Legal Services in Germany,” July 2010, 9. This sustained growth does not seem to be clearly associated with the performance of the German economy relative to other developed countries. While GDP in 2008 declined in the United Kingdom, stayed the same in the United States, and grew by only 0.1 percent in France, it continued to grow in Germany (by 1.0 percent). However, in 2009, GDP fell between 2.5 and 4.9 percent in all four countries. A similar pattern emerged with respect to employment of legal professionals. The United States experienced the sharpest drop in employment, with a decline of 4.1 percent in 2009, followed by the United Kingdom and France, where growth slowed to 0.6 percent, whereas Germany’s legal services employment grew 1.1 percent in 2009.

³¹ Lloyd, “Storm Averted,” May 1, 2010; Culbert, “Law Firms in the US,” September 2010, 7.

³² IBISWorld, “Attorney and Legal Services in China,” January 2010, 36.

³³ *Ibid.*, 11–33. See Ministry of Commerce, 2–5, for additional estimates of industry growth, reported as 17.0 percent in 2008; revenues of foreign law firms’ representative offices in China, which may be included in the domestic aggregate on which 17 percent growth figure is based, grew by 23.4 percent in 2008.

³⁴ IBISWorld, “Attorney and Legal Services in China,” January 2010, 36.

³⁵ Vinson & Elkins Web site, “V&E Assists Sinopec International Petroleum Exploration and Production Corporation” (accessed January 20, 2011); Bronstad, “Asia Practice Special Report,” November 16, 2010; Freshfields Bruckhaus Deringer Web site, “Freshfields Advises Geely,” March 29, 2010. Examples of such investments include the acquisition by China Petroleum and Chemical Corporation (Sinopec) of Canadian Addax Petroleum Corporation in 2009 (Sinopec was represented by U.S. law firm Vinson & Elkins) and the 2010 purchase of Volvo from Ford Motor Co. by Zhejiang Geely Holding Group Co. (represented by UK firm Freshfields Bruckhaus Deringer).

³⁶ Bronstad, “Asia Practice Special Report,” November 16, 2010; Wines, “China Bank I.P.O. Raises \$19 Billion,” July 6, 2010. In 2010, Agriculture Bank of China raised \$22.1 billion; U.S. firm Davis Polk & Wardwell and UK firm Herbert Smith were involved with the IPO. In 2006, the Industrial and Commercial Bank of China raised \$21.9 billion in IPOs.

³⁷ IBISWorld, “Attorney and Legal Services in China,” January 2010, 7. It is not clear in which year commercial legal services were 65 percent of the industry revenue, though the statistics likely refer to 2009 or 2010. USITC staff derived the 65 percent figure by adding commercial legal services (commercial disputes, litigation, and arbitration) and nonlitigious legal services (consultation, mediation, services for mergers and acquisitions, conveyancing, bankruptcies, and IPOs).

³⁸ *Ibid.*, 4; Datamonitor, “Industry Profile: Legal Services in Asia-Pacific,” July 2010, 10. The number of legal professionals in Asia-Pacific grew in 2009 by 4.2 percent, just under the rate for 2005–2008 (4.6 percent). This growth was largely due to China’s legal services market where, according to statistics by the Chinese Ministry of Justice (see Ministry of Commerce), employment in China’s legal services industry grew 9.0 percent in 2008 to 216,701.

³⁹ Cattaneo and Walkenhorst, “Legal Services,” 2010, 70.

Europe and Asia, these arrangements are increasingly being pursued with firms in Latin America and the Middle East.⁴⁰ Having a presence in multiple foreign markets helped firms maintain workload during the economic downturn, which affected regions differently.⁴¹

Economic development has generated rising demand for legal services in the Middle East,⁴² which became the fastest-growing destination for U.S. cross-border legal services exports.⁴³ In Saudi Arabia, for instance, private sector involvement (e.g., in infrastructure projects) has increased demand for legal services.⁴⁴ Major U.S. and UK firms such as Clifford Chance, Baker & McKenzie, and White & Case have established offices in Saudi Arabia.⁴⁵ Similarly, at least 14 U.S. and UK law firms have branches in Abu Dhabi (most of these offices were opened after 2007).⁴⁶ The branch offices assist with local clients' business activity, including the Emirati government's outbound investments. The Abu Dhabi office of Hogan Lovells (a law firm headquartered in both the United States and the United Kingdom) advises the Abu Dhabi National Energy Company,⁴⁷ and clients of the U.S. firm Dewey & LeBoeuf include the Abu Dhabi Islamic Bank and the Abu Dhabi Sewerage Services Company.⁴⁸

Similarly, Brazil's economic growth has driven the expansion of the legal services market. Brazil was among the top 10 fastest-growing U.S. legal services export destinations between 2005 and 2008.⁴⁹ At least 17 U.S. and UK legal firms have established branches in São Paulo, 9 of which have opened since 2009.⁵⁰ These firms advise clients in several sectors, including infrastructure, banking, mergers and acquisitions, capital markets transactions,⁵¹ and outbound investments.⁵²

Clients Have Become Increasingly Price Sensitive

As costs for outside counsel⁵³ rose over the last several decades, the in-house legal departments of corporations increased in size and scope.⁵⁴ Corporations reduced expenditures and increased efficiency by handling more matters internally and relying on

⁴⁰ Culbert, "Law Firms in the US," September 2010, 26.

⁴¹ Kessenides, "The AM Law 100 2010," May 12, 2010.

⁴² Breitman, "Overseas Practices Keep British Firms Afloat," September 9, 2008.

⁴³ USDOC, BEA, *U.S. International Services*, 2005–09, table 7. U.S. legal services exports to the Middle East grew at an average annual rate of 30.3 percent in 2005–09, almost double the rate (17.6) of exports to Asia-Pacific, the second fastest growing region.

⁴⁴ Haberbeck, "Bridging the Gulf," May 28, 2007.

⁴⁵ Legal 500 Web site, "Saudi Arabia" (accessed January 20, 2010).

⁴⁶ Lloyd, "Abu Dhabi," October 1, 2009; LexisNexis, Martindale-Hubbell Law Directory (accessed December 8, 2010).

⁴⁷ Hogan Lovells Web site, "Offices: Abu Dhabi," (accessed December 7, 2010); TAQA Web site, <http://www.taqa.ae/en/index.html> (accessed December 7, 2010).

⁴⁸ Dewey & LeBoeuf Web site, "Abu Dhabi" (accessed December 8, 2010).

⁴⁹ USDOC, BEA, *U.S. International Services*, 2005–09, table 7. See the trade trends section of this chapter for a fuller explanation.

⁵⁰ Zillman, "Brazil," October 1, 2009; LexisNexis, Martindale-Hubbell Law Directory (accessed December 8, 2010); Todd, "The Future is Now," October 1, 2010; Legal 500 Web site, "Brazil" (accessed January 4, 2010).

⁵¹ Allen & Overy Web site, "People & Offices: Brazil" (accessed December 8, 2010); Squire Sanders Web site, "São Paulo" (accessed December 8, 2010).

⁵² See *American Lawyer*, "Field Reports," October 2009, for information on developing legal services markets in India, Russia, and Singapore. Also see Zillman, "Brazil," October 1, 2009.

⁵³ Outside counsel refers to legal services law firms provide to corporations, while in-house counsel refers to corporations' own legal departments.

⁵⁴ Burk and McGowan, "Big But Brittle," 2010, 14–61.

external counsel only for specialized services. For example, in the past decade DuPont decreased the number of law firms it retained to 39, from over 300 in the early 1990s.⁵⁵

During the economic downturn, corporations continued to increase staffing in their internal law departments.⁵⁶ In a survey of U.S. corporate law departments, the share of respondents with over 30 in-house attorneys rose from 3.4 percent in 2005 to 34.1 percent in 2010.⁵⁷ Further, the share of corporate law departments that planned to decrease their use of outside counsel in the next year rose from 19.8 percent in 2005 to 40.4 percent in 2009.⁵⁸ Major European corporations also reduced their use of external law firms: Royal Dutch Shell cut its list of outside legal firms from 60 to 8, and Nokia cut by half its list of 500 law firms.⁵⁹ This trend is projected to continue, as U.S. corporations' spending on outside legal counsel, which dropped by approximately 11 percent in 2009,⁶⁰ is likely to drop by more than 25 percent in 2011.⁶¹

U.S. Firms Cut Labor Costs

U.S. legal services labor productivity (measured as output per unit of labor) declined during the past decade, while law firms' expenses increased. From 1999 through 2009, labor productivity declined at an average annual rate of 0.3 percent, with the sharpest drop occurring in 2009 (figure 7.2).⁶² The decline in productivity can be attributed to slower growth in output than in employment; while employment grew at an annual average rate of only 0.7 percent during those 10 years, output grew at an even lower annual average rate of 0.4 percent.⁶³ Employment growth has coincided with rising wages, which increased at an annual average rate of 1.0 percent during 2001–09 and accounted for an estimated 40 percent of costs in 2010.⁶⁴ In total, law firm expenses rose by an estimated 10 percent per year from 2001 through 2008.⁶⁵

⁵⁵ DuPont Legal Web site, "Primary Service Providers" (accessed January 25, 2010). According to this site, DuPont has "39 Primary Law Firms (PLFs), 9 Primary Service Providers (PSPs) and Diverse Legal Suppliers." See *New Legal Review*, "Inside the DuPont Legal Model," May 11, 2010.

⁵⁶ Passarella, "GCs Want Firms to Change with Times," June 8, 2009; Burk and McGowan, "Big but Brittle," 2010, 61. Companies (as well as law firms) have also used legal process outsourcing (LPO) in overseas markets for legal research and document review/drafting. However, the Indian LPO industry has not grown as swiftly as foreseen a couple of years ago, and LPOs tend to focus more on back-office functions than substantive legal work. See Lin, "Inside the Revolution," October 1, 2010, and Blakely and Spence, "Brief for India's Outsourcing Lawyers," January 15, 2010, on law firms' use of LPOs.

⁵⁷ Association of Corporate Counsel and Altman Weil, Inc., "2005 Chief Legal Officer Survey," 2005, 12; Altman Weil, Inc., "2010 Chief Legal Officer Survey," 2010, 17.

⁵⁸ Association of Corporate Counsel and Altman Weil, Inc., "2005 Chief Legal Officer Survey," 2005, 4; Altman Weil, Inc., "2010 Chief Legal Officer Survey," 2010, 5. This number decreased to 29.1 percent in 2010.

⁵⁹ Johnson, "Letter from London," September 17, 2010.

⁶⁰ Hildebrandt Baker Robbins and Citi Private Bank, "2010 Client Advisory," March 3, 2010, 2.

⁶¹ Lippe, "General Counsel to Cut Legal Spending up to 25%," October 22, 2010; Lamb, "25% Cut in In-House Legal Spending," October 27, 2010.

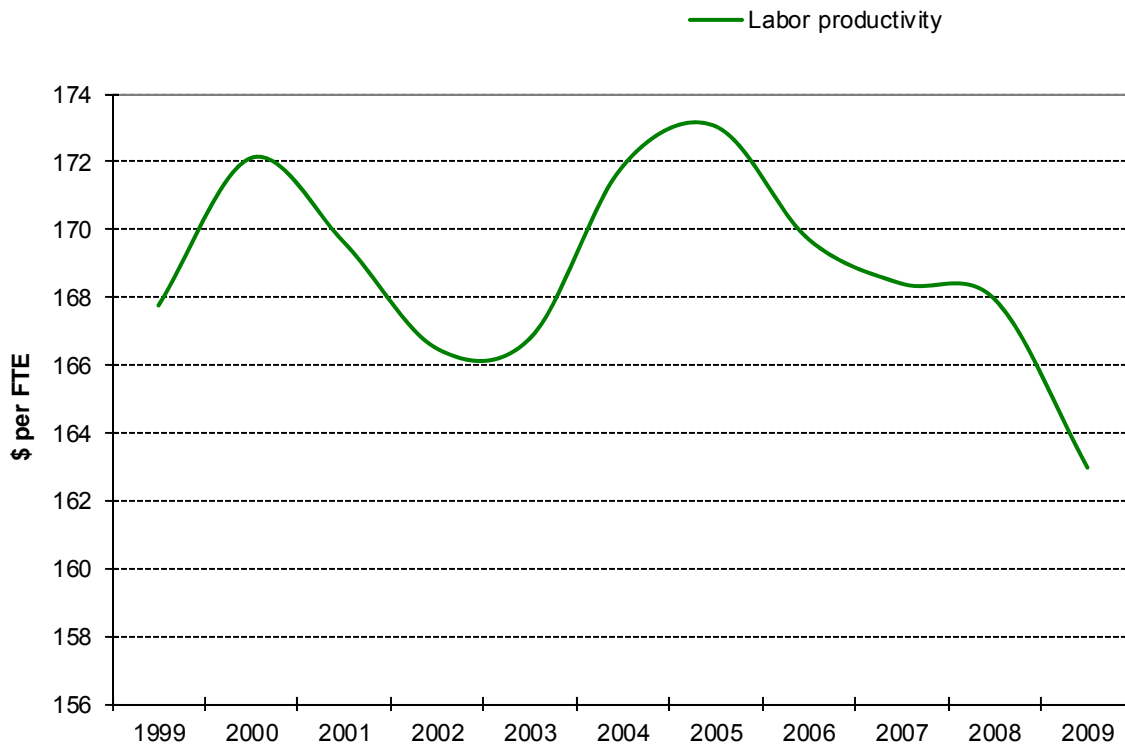
⁶² Data are from the BEA, and labor productivity is calculated as real value added divided by full-time equivalent employees. Legal services labor productivity did grow during 1999–2000 and again during 2003–05.

⁶³ Output started to decline after 2005, while employment was still growing (employment started to decline only in 2008). The sharpest drops in both employment (3.6 percent) and output (6.4 percent) occurred in 2009. By the end of the period, in 2009, employment levels matched those between 2002–03, while output reverted to the 2000 level, making labor productivity the lowest it had ever been in the ten year period from 1999 through 2009.

⁶⁴ Culbert, "Law Firms in the US," September 2010, 22, 35.

⁶⁵ Hildebrandt Baker Robbins and Citi Private Bank, "2010 Client Advisory," March 3, 2010, 5. The expenses refer to a sample of 193 firms, including firms from the 200 highest-grossing U.S. firms and 52 additional participants, from 2001 through 2008.

FIGURE 7.2 Legal services: U.S. labor productivity^a mostly declined during 1999–2009



Source: USITC staff calculations based on data from USDOC, BEA, *Industry Economic Accounts*.

^aLabor productivity is calculated as real value added by industry divided by full-time equivalent employees (FTEs) by industry.

In response to rising expenses and declining demand, law firms adopted cost-cutting measures, particularly freezing or reducing salaries of existing associates, delaying (deferring) hiring, and laying off employees.⁶⁶ For example, in 2009, the firm Latham & Watkins laid off 444 lawyers (the highest number of layoffs among the 250 largest U.S. law firms), and Fried, Frank, Harris, Shriver & Jacobson laid off 26.4 percent of their attorneys (the largest share of laid-off lawyers among the 250 largest U.S. law firms).⁶⁷ Overall, the number of attorneys employed by the 250 largest U.S. law firms fell by 4 percent from 131,928 attorneys in 2008 to 126,669 in 2009,⁶⁸ in contrast to 4 percent average annual growth of attorneys since 1978.⁶⁹

⁶⁶ Burk and McGowan, “Big but Brittle,” 2010, 20–23.

⁶⁷ Jones, “2009 Worst Year for Lawyer Headcount in 3 Decades,” November 9, 2009.

⁶⁸ *National Law Journal*, “The 2009 NLF 250,” November 9, 2009; Jones, “So Long, Farewell,” November 9, 2009; Jones, “Headcount Declined Sharply in New York, Atlanta, and Philadelphia,” November 10, 2009. Labor declines were highest in New York City (13.3 percent, which also includes firms that closed during the survey year), followed by Philadelphia (9.6 percent) and Atlanta (9.4 percent). The least hard-hit large U.S. cities were Chicago (4.1 percent) and San Francisco (3.9 percent).

⁶⁹ The 2009 decline was also steeper than the previous two (in 1992 and 1993), when the number of attorneys fell by less than 1 percent.

This decline was concentrated among associates⁷⁰ and an average of 25 new associates were deferred per firm.⁷¹ A high proportion of the decline was due to reductions in the number of attorneys in foreign offices of large global firms; for example, the U.S. firm Jones Day cut the number of attorneys in its Hong Kong and Beijing offices.⁷² However, Jones Day also opened an office in Dubai, which suggests that firms continued opening offices in potentially profitable markets while reducing their total workforce. There was a 4.1 percent decline in overall employment among the legal professionals in 2009 (table 7.3).⁷³ Smaller firms were somewhat shielded from the economic downturn because they offered lower prices across a variety of practice areas, but still cut staff, marketing, and other business expenses.⁷⁴

As a result of cutting labor and other costs, firms reduced expenses by 5.6 percent in 2009 and experienced less of a decline in profits per equity partner than in 2008.⁷⁵ However, there was little correlation between layoffs and increased revenue per lawyer.⁷⁶ Firms will likely have to adopt strategies, such as expanding their geographic reach and undergoing structural changes, in order to maintain competitiveness in the long run.⁷⁷

⁷⁰ The number of associates declined 8.7 percent while the number of partners increased 0.9 percent. Jones, “So Long, Farewell,” November 9, 2009.

⁷¹ Jones, “2009 Worst Year for Lawyer Headcount in 3 Decades,” November 9, 2009.

⁷² Jones, “Big Firms Slashed Headcount at International Offices,” November 12, 2009.

⁷³ Datamonitor, “Industry Profile: Legal Services in the United States,” July 2010, 10. Table 7.3 also presents employment in legal services for the United States as reported by the U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS) Current Employer Statistics, which show a 3.4 percent decline in the same year. While the BLS estimates of total employees in legal services are classified by NAICS code (5411) and exclude the self-employed (see <http://www.bls.gov/ces/cesfaq.htm>), Datamonitor refers to the total number of legal professionals according to its definition of the legal services market. The decline was relatively even across states in the BLS sample. Four of the five states with the highest employment in legal services—California, Florida, Illinois, and Texas—all experienced declines ranging between 3.3 and 3.5 percent; New York experienced the highest decline at 5.1 percent. Note that the numbers given for total employees in the BLS estimate but are representative of large and small firms and include all employees in legal services. These numbers show a decline of 0.2 percent between 2005–08, while the National Law Journal (NLJ) 250 (the largest 250 U.S. firms by employment) enjoyed positive growth rates of attorneys during those years. See table 7.2 on the number of firms in the U.S. legal services industry by size. Also see Culbert, “Law Firms in the US,” September 2010, 21, where it is reported that approximately 60 percent of legal services establishments are non-employer firms and 95 percent of employer firms have fewer than 20 employees.

⁷⁴ Culbert, “Law Firms in the US,” September 2010, 7.

⁷⁵ Hildebrandt Baker Robbins and Citi Private Bank, “2010 Client Advisory,” March 3, 2010, 5–8. Expense and profit estimates refer to a survey of 193 firms, including firms from the 200 highest-grossing U.S. firms and 52 additional participants. Profits per equity partner declined 0.3 percent in 2009 versus 3.0 percent in 2008, compared with 11.5 percent growth during the 2001–07 period. Also see DiPetro, “Priced to Sell,” May 1, 2010; *Economist*, “Laid-off Lawyers, Cast-off Consultants,” January 21, 2010.

⁷⁶ Kolz, “No Easy Answers,” May 1, 2010.

⁷⁷ Marek, “What to Expect in the Decade Ahead,” November 9, 2009.

TABLE 7.3 Legal services: Change in total employees by location, 2005–09 (%)

	Annual average growth rate, 2005–08	Growth rate, 2008–09		Average annual growth rate, 2005–08	Growth rate, 2008–09
United States			World		
National sectors:			Regional:		
Professional services	3.6	(3.7)	Asia-Pacific	4.6	4.2
Legal services	(0.2)	(3.4)	Europe	3.3	1.6
			Global	2.6	(0.6)
Legal services, selected state:			Countries:		
California	(0.9)	(3.4)	Germany	3.5	1.1
Florida	(0.9)	(3.4)	France	3.9	0.6
Illinois	0.6	(3.5)	Japan	3.0	4.0
New York	0.1	(5.1)	United Kingdom	3.9	0.6
Texas	(0.5)	(3.3)	United States	1.5	(4.1)

Sources: USDOL, BLS, Current Employment Statistics; Datamonitor Legal Services Industry Profiles; USITC staff calculations.

Note: BLS estimates refer to all employees classified under NAICS code 5411 (legal services). Datamonitor estimates refer to total number of legal professionals within the following subsectors of the legal services market: commercial, criminal, legal aid, insolvency, labor/industrial, family, and taxation law.

Trade Trends

Cross-border Trade

Although both U.S. exports and U.S. imports of legal services (box 7.2) declined in 2009, exports declined more slowly; consequently, the U.S. legal services trade surplus grew to \$5.5 billion in 2009 (figure 7.3). Overall, U.S. cross-border exports of legal services decreased by 1 percent to \$7.3 billion in 2009, in contrast to an average annual growth rate of 14.8 percent from 2005 through 2008.⁷⁸ U.S. imports of such services decreased by 14.5 percent to approximately \$1.7 billion in 2009, compared with a 22.1 percent average annual growth rate from 2005 through 2008.

⁷⁸ USDOC, BEA, *U.S. International Services*, 2005–09, table 7. Note that 2005 export data for legal services refer to unaffiliated services (i.e., services not provided by foreign affiliates of U.S. firms); affiliated services are reported in “other” affiliated services. From 2006 on, export data for legal services include both affiliated and unaffiliated trade.

BOX 7.2 BEA Data on Cross-border Trade and Affiliate Transactions in Legal Services

This chapter's data on cross-border trade are prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (USDOC). Such data on legal services capture services provided when legal professionals travel abroad to provide services to clients, when clients travel abroad to engage the services of foreign attorneys, or when legal documents or advice are exchanged across national borders via the postal service, fax transmissions, the Internet, or other means.^a Data are collected through surveys broken down by the type of service provided; companies report their sales of legal services, defined as transactions involving "legal advice or other legal services."^b Cross-border sales of legal services therefore encompass all legal services rendered by U.S. companies through cross-border channels, irrespective of whether companies are law firms. For example, legal services rendered by a corporation's in-house counsel would be captured by cross-border trade data (though in-house attorneys would more commonly be dispensing advice internally).^c

BEA data on affiliate transactions capture sales by foreign legal services affiliates of U.S. law firms and purchases from U.S. affiliates of foreign law firms.^d These data are also collected through surveys; however, they are categorized based on the industry classification of the affiliate, rather than the type of service provided.^e Thus sales of legal services by foreign affiliates of U.S. firms include only sales by affiliates which are classified under NAICS code 5411 (legal services). Consequently, the data may theoretically exclude sales by affiliates of firms in other industries that also provide legal services or include sales by legal services affiliates with secondary activities in another industry. However, neither possibility is an issue for legal services in practice.^f

^a BEA representative, e-mail messages to USITC staff, February 26, 2009.

^b USDOC, BEA, form BE-125 (1-2010), "Quarterly Survey of Transactions in Selected Services," 2010, 5, 6, 8, 12; USDOC, BEA, form BE-120 (12-2006), "Benchmark Survey of Transactions in Selected Services and Intangible Assets with Foreign Persons," 3, 5; BEA representative, e-mail messages to USITC staff, January 3, 2011, February 25, 2010, and February 26, 2009; BEA representative, telephone interview by USITC staff, May 13, 2010. Statistics for cross-border trade in legal services are collected quarterly through Survey BE-125, and every five years through Survey BE-120. Both surveys collect data on affiliated and unaffiliated cross-border trade. Data for affiliated cross-border trade in legal services became available for the first time beginning in 2006; such trade accounts for a very small share of total cross-border trade in legal services. Surveys BE-125 and BE-120 can be found at <http://www.bea.gov/surveys/pdf/be125.pdf> and <http://www.bea.gov/surveys/pdf/be12006.pdf>.

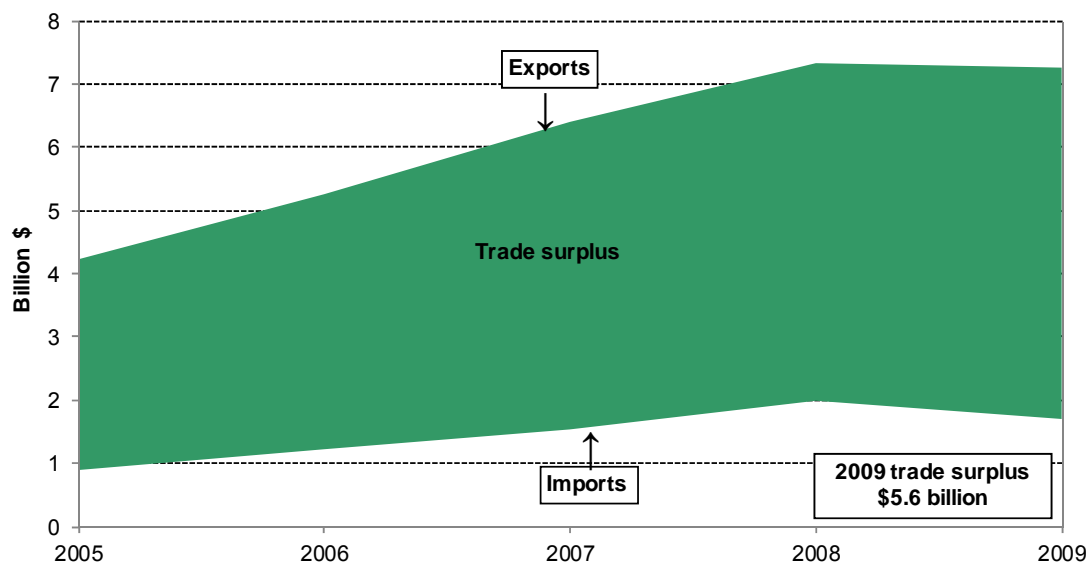
^c BEA representative, e-mail messages to USITC staff, January 3, 2011, and April 4, 2011. Similarly, any secondary (non-legal services) activity by a law firm would be classified as the type of service provided. However, both activities (secondary activities by legal services providers, and legal services provided by firms in other industries) tend to be low.

^d BEA reports "services supplied" by affiliates; for legal services, services supplied correspond to sales.

^e BEA representative, telephone interview by USITC staff, May 13, 2010; USDOC, BEA, form BE-10D (rev. 1/2010), "2009 Benchmark Survey of U.S. Direct Investment Abroad;" BEA representative, e-mail message to USITC staff, February 26, 2009. Statistics for transactions by majority-owned legal services affiliates are collected through BEA's surveys of U.S. Direct Investment Abroad and Foreign Direct Investment in the United States, which can be found at <http://www.bea.gov/surveys/diasurv.htm> and <http://www.bea.gov/surveys/fdiusurv.htm>.

^f BEA representative, e-mail messages to USITC staff, January 3, 2011, and April 4, 2011.

FIGURE 7.3 Legal services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2005–09



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 36–37, table 1.

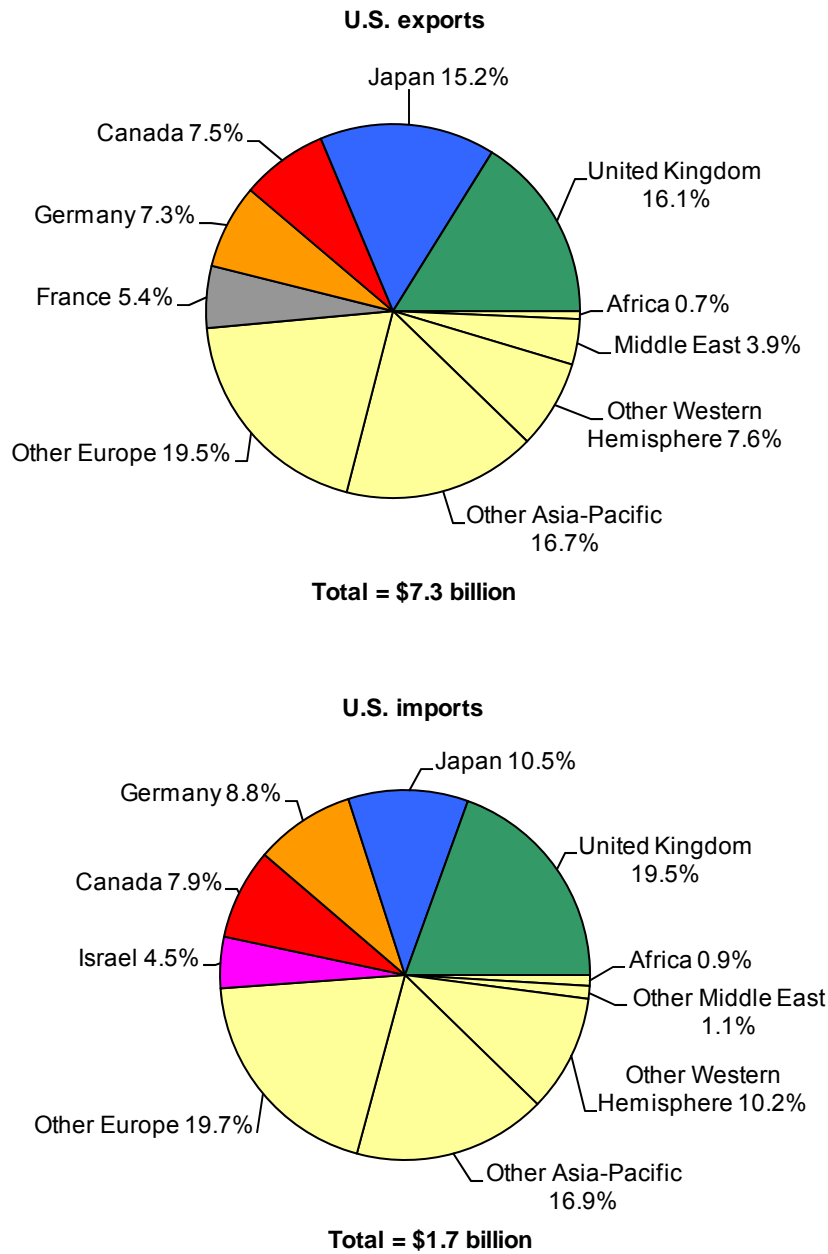
U.S. exports of legal services are concentrated among a small number of destinations. In 2009, the top five export markets for legal services accounted for 51.5 percent of total U.S. exports of such services, a decrease from 59.0 percent in 2005.⁷⁹ The United Kingdom and Japan were the two leading markets for U.S. legal services exports in 2009, accounting for 16.1 percent and 15.2 percent of such exports, respectively (figure 7.4). The other top export markets in 2009, as in 2005, included Canada, Germany, and France.

In 2009, U.S. legal exports continued to grow in Latin America (11.9 percent) and the Asia-Pacific (4.1 percent), partially offsetting decreases in Canada and Europe, where exports declined (by 2.3 percent and 5.2 percent, respectively).⁸⁰ The largest increases in U.S. cross-border legal service exports occurred in countries in the Asia-Pacific, Latin America, and the Middle East. For example, from 2005 through 2008 exports to India, Indonesia, and Malaysia grew by 52.3, 58.7, and 54.2 percent, respectively; exports to

⁷⁹ USDOC, BEA, *U.S. International Services*, 2009, table 7; USDOC, BEA, *U.S. International Services*, 2005, table 7. Regionally, Europe’s share shrank from 51.9 percent in 2005 to 48.3 percent in 2009, while the Middle East increased from 2.3 percent in 2005 to 3.9 percent in 2009, and the Asia-Pacific increased from 28.6 percent in 2005 to 31.9 percent in 2009.

⁸⁰ USDOC, BEA, *U.S. International Services*, 2008–09, table 7. Exports declined by 18 percent in Africa and grew by 0.7 percent in the Middle East.

FIGURE 7.4 Legal services: Five countries accounted for over half of U.S. exports and imports in 2009



Source: USDOC, BEA, *Survey of Current Business*, October 2010, 54–55, table 7.5.

Note: Geographic regions are shaded in yellow.

Brazil grew by 33.8 percent; and exports to Saudi Arabia grew by 44.2 percent.⁸¹ Economic reforms, growth, and foreign direct investment have increased demand for legal services in these markets.⁸²

As with exports, five countries account for over half of U.S. legal services imports. In 2009, the United Kingdom (19.5 percent), Japan (10.5 percent), Germany (8.8 percent), Canada (7.9 percent), and Israel (4.5 percent) were the top suppliers of U.S. cross-border imports (see figure 7.4). Although imports from Europe were particularly impacted by the economic downturn, Europe's share of legal services imports had already begun a steady decline in 2005.⁸³ Imports from Canada followed a similar trend.⁸⁴ Although imports from the Asia-Pacific also declined in 2009, the region's share of total U.S. imports of legal services increased between 2005 and 2009.⁸⁵

Regions outside of Europe developed their legal services markets and became competitive suppliers of legal services during the last decade, and U.S. imports of legal services from Latin America, the Middle East, and Africa continued to grow in 2009.⁸⁶ These trends also reflect deeper economic ties between the United States and these regions, as U.S. direct investment in Latin America, Africa, and the Middle East grew faster from 2005 to 2009 than investment in Europe, Asia-Pacific, or Canada.⁸⁷

The two countries with the largest increases in their share of U.S. legal services imports are Israel and Brazil.⁸⁸ Expanded exports of legal services from Brazil to the United States coincided with growing U.S. direct investment in Brazil, which rose 27.3 percent in 2009.⁸⁹ Brazil's increased share of U.S. legal services imports partly reflects the joint work of Brazilian and U.S. law firms that advise on investments.⁹⁰ For example, two Brazilian law firms (Pinheiro Neto Advogados and Barbosa Müssnich & Aragão) are

⁸¹ The 10 fastest-growing export markets from 2005 through 2008 include the ones mentioned above, plus Australia, China, Korea, New Zealand, and Singapore. Though U.S. legal services exports to a number of these countries declined or grew more slowly in 2009 than in 2005–08, they account for the majority of the countries whose annual average (U.S. legal services) exports grew fastest from 2005 through 2008. Within the Asia-Pacific, China and Korea took the largest share of U.S. legal export after Japan, at 10.2 percent and 13.6 percent, respectively. Among all countries importing U.S. legal services, China's share increased from 2.1 percent in 2005 to 3.2 percent in 2009 and Korea's from 2.4 percent in 2005 to 4.4 percent in 2009. Within Latin America, Brazil and Mexico are the largest export markets (17.8 and 16.8 percent, respectively). Israel makes up 44.2 percent of the Middle Eastern export market, and South Africa makes up 60 percent of the African market.

⁸² Cattaneo and Walkenhorst, "Legal Services," 2010, 70.

⁸³ Imports from Europe declined by 20.2 percent in 2009 after growing at an annual average rate of 25.7 percent during 2005–08; the share of imports from Europe among total imports fell from 57.5 percent in 2005 to 47.9 percent in 2009.

⁸⁴ Imports from Canada declined 25.4 percent in 2009, following annual average growth of 28.7 percent during 2005–08; the share of imports from Canada among total imports fell from 9.5 percent in 2005 to 7.9 percent in 2009.

⁸⁵ Imports from the Asia-Pacific declined 19.3 percent in 2009 after growing at an annual average rate of 41.1 percent during 2005–08; the share of imports from the Asia-Pacific among total imports increased from 22.9 percent in 2005 to 27.4 percent in 2009.

⁸⁶ Imports from Latin America and the Western Hemisphere increased by 29.9 percent in 2009 following annual average growth of 26.0 percent between 2005–08; the share of imports from Latin America in total imports of U.S. legal services increased from 7.5 percent in 2005 to 10.2 percent in 2009. Imports from the Middle East increased by 46.2 percent in 2009 after growing at an annual average rate of 63.0 percent during 2005–08; the share of imports from the Middle East increased from 1.7 percent in 2005 to 5.6 percent in 2009. Imports from Africa increased 23.1 percent in 2009 following annual average growth of 22.9 percent between 2005 and 2008; the share of imports from Africa increased from 0.8 percent in 2005, to 0.9 percent in 2009.

⁸⁷ USDOC, BEA, *Survey of Current Business*, September 2010, table 14.

⁸⁸ USDOC, BEA, *U.S. International Services*, 2009, table 7.

⁸⁹ USDOC, BEA, *Survey of Current Business*, September 2010, table 14. This number is for investment in all industries.

⁹⁰ Todd, "The Future is Now," October 1, 2010.

working with a U.S. law firm (Cahill Gordon & Reindel) on JP Morgan's \$6 billion Brazilian investment.⁹¹ Similarly, rapidly growing imports from Israel⁹² partly result from Israeli law firms advising U.S. clients on investments and business in Israel. For example, Israeli firm Herzog Fox & Neeman advises large U.S. firms such as Citibank, Hewlett-Packard, Pfizer, and UPS on their Israeli interests.⁹³

Affiliate Transactions

Sales⁹⁴ by foreign affiliates of U.S. law firms (foreign affiliate sales) exceeded purchases from U.S. affiliates of foreign law firms in recent years (figure 7.5). In 2008, foreign affiliate sales increased 8.6 percent to \$3.4 billion. This increase was well below the average annual growth rate of 30.4 percent from 2003 through 2007. In 2008, Europe accounted for 82.5 percent of foreign affiliates sales, led by the United Kingdom (37.4 percent), France (14.3 percent), and Germany (15.4 percent) (figure 7.6).⁹⁵ Japan, with 4.9 percent, ranked as the largest non-European market for foreign affiliate sales.⁹⁶ These shares remained largely unchanged since 2003.

Increasing foreign affiliate sales coincided with growth of direct investment abroad in legal services. Investment abroad by U.S. law firms increased by 28.8 percent in 2009 and rose at an average annual rate of 37.1 percent from 2005 through 2008.⁹⁷ Further, direct investment abroad in legal services increased faster than both total investment in professional services and total investment in all industries, which increased by 3.7 and 9.0 percent, respectively, in 2009, and at annual average rates of 9.3 and 12.8 percent from 2005 through 2008. Although Europe accounts for the greatest share of foreign affiliate sales, U.S. law firms are also establishing offices in non-European foreign markets, such as Latin America and the Middle East.⁹⁸

⁹¹ Cresswell, "JP Morgan Looks to Brazil," October 28, 2010.

⁹² U.S. legal service imports from Israel grew 72.7 percent in 2009 to \$76 million, slightly slower than the average annual growth rate between 2005 and 2008 of 94.3 percent. The share of U.S. legal services imports from Israel increased to 4.5 percent in 2009 compared with 0.7 percent in 2005. U.S. legal service imports from Brazil grew 112.5 percent in 2009 to \$68 million, and grew at an annual average rate of 31.7 percent between 2005 and 2008. The share of U.S. legal services imports from Brazil has increased from 1.6 percent in 2005 to 4.0 percent in 2009.

⁹³ Legal 500 Web site, "Herzog Fox & Newman" (accessed December 20, 2010); Herzog Fox & Neeman Web site, "Practice Areas, Banking and Finance" (accessed December 20, 2010).

⁹⁴ BEA reports "services supplied" by foreign affiliates. In the legal services industry, services supplied correspond to sales. Thus, sales and services supplied are used interchangeably in this section.

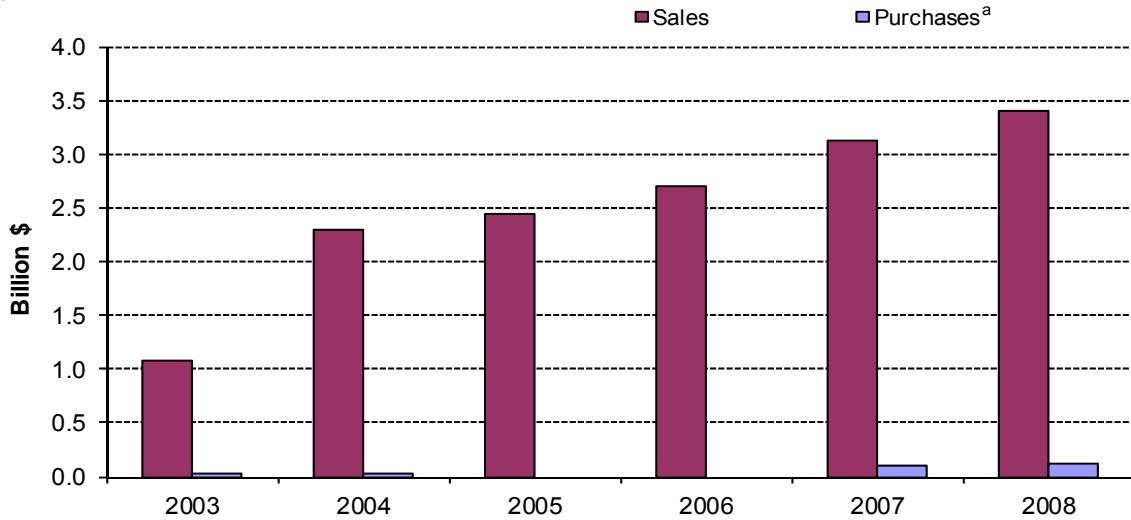
⁹⁵ USDOC, BEA, *U.S. International Services*, 2005–09, table 7.

⁹⁶ *Ibid.*

⁹⁷ USDOC, BEA, *Survey of Current Business*, September 2010, table 15.

⁹⁸ Culbert, "Law Firms in the US," September 2010, 26.

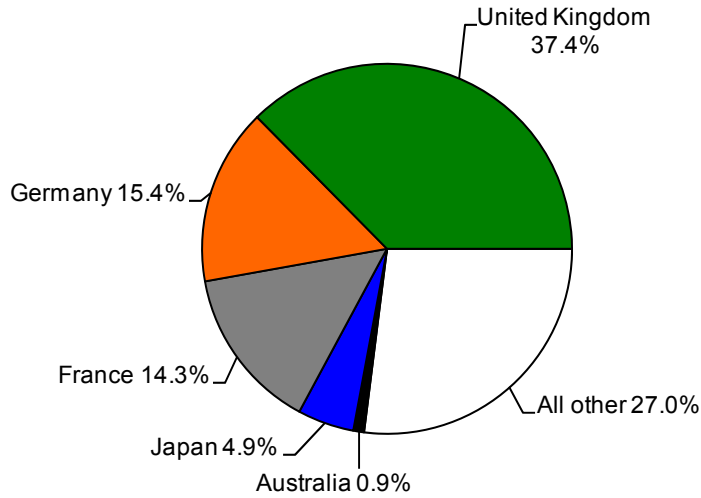
FIGURE 7.5 Legal services: Both sales by foreign affiliates of U.S. law firms and purchases from U.S. affiliates of foreign law firms steadily grew, though sales continued to exceed purchases, 2003–08



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

^aBEA reports “services supplied” by foreign affiliates. In the legal services industry, “services supplied” correspond to “sales”. Data were suppressed in 2005 and 2006 to avoid disclosure of individual company data.

FIGURE 7.6 Legal services: Europe accounted for the majority of foreign affiliate sales^a in 2008



Total = \$3.4 billion

Source: USDOC, BEA, *Survey of Current Business*, October 2010, 58, table 9.2.

^aBEA reports “services supplied” by foreign affiliates. In the legal services industry, “services supplied” correspond to “sales”.

Domestic purchases of legal services from U.S. affiliates of foreign law firms grew faster than foreign affiliate sales in 2003–07, though they started from a smaller base. In 2008, the latest year for which affiliate data are available, purchases from U.S. affiliates grew by 10.4 percent to \$117 million, slower than the average annual increase of 45.0 percent from 2003 through 2007.⁹⁹

Multilateral Negotiations, Liberalization, and Remaining Barriers

U.S. firms face significant restrictions when exporting legal services to emerging markets.¹⁰⁰ For example, foreign lawyers are prohibited from providing legal services or establishing a presence in India.¹⁰¹ To advise on issues related to India, firms like Jones Day of the United States and Allen & Overy of the United Kingdom have entered into alliances with local firms¹⁰² or work on Indian legal issues from nearby branch offices in Hong Kong or Singapore.¹⁰³ In 2009, the Bombay High Court directed the Indian government to clarify what foreign law firms are permitted to do,¹⁰⁴ and in September 2010 the government reaffirmed that India would remain closed to foreign lawyers.¹⁰⁵

Brazilian regulations prohibit foreign firms from practicing local law and require local law firms to be owned and governed by Brazilian lawyers.¹⁰⁶ Consequently, firms like Mayer Brown, a U.S. law firm with an office in São Paulo, limit their practices to advising Brazilian clients on U.S. and British law.¹⁰⁷ Saudi Arabia requires foreign law firms to partner with Saudi law firms in order to establish a local presence.¹⁰⁸ In China, foreign lawyers and law firms face restrictions on the types of law they can practice and their ability to hire lawyers, among other stipulations.¹⁰⁹

However, certain countries have taken steps to liberalize their legal service markets. For example, Korea passed the Foreign Legal Consultant Act in 2009. This act permits lawyers and law firms from countries that have a free trade agreement with Korea to establish offices as foreign legal consultants and, with three years' experience, to provide

⁹⁹ USDOC, BEA, *U.S. International Services*, 2003–08, table 10. Note that data for 2005 and 2006 data were suppressed to avoid disclosing individual firms' data. Hence, country-specific data on purchases from U.S. affiliates of foreign law firms are not available in enough detail to determine which countries account for the greatest shares of such transactions.

¹⁰⁰ For Asian markets, see Sawhney, "Entering the Emerging Markets of Asia."

¹⁰¹ Office of the U.S. Trade Representative (USTR), "India," 2010, 7.

¹⁰² Jones Day Web site, "Offices: New Delhi" (accessed December 29, 2010); Allen & Overy Web site, "People & Offices: India Group" (accessed February 1, 2011).

¹⁰³ Also see Lin, "India," October 1, 2009.

¹⁰⁴ USTR, "India," 2010, 7.

¹⁰⁵ Baxter, "India Again Closes Door on Foreign Firms," September 29, 2010.

¹⁰⁶ American Lawyer, "The Future is Now" (video), October 1, 2010.

¹⁰⁷ Mayer Brown is partnered with a local Brazilian law firm, Tauil & Chequer Advogados. Mayer Brown Web site, "Offices: São Paulo" (accessed December 20, 2010).

¹⁰⁸ USDOC, U.S. Commercial Service, "Doing Business in Saudi Arabia," 2010, 75; Legal 500 Web site, "Saudi Arabia, Legal market overview" (accessed December 20, 2010).

¹⁰⁹ For further restrictions, see USTR, "China," 2010, 24–25.

advice on public international law and the law of the foreign lawyer's jurisdiction.¹¹⁰ Similarly, towards the end of 2008, Singapore granted licenses to six U.S. and British law firms which enabled them to practice Singapore law with some restrictions.¹¹¹ Previously, foreign lawyers were restricted from either practicing Singaporean law or employing lawyers qualified to practice it.

Outlook

Restructuring may be necessary for leading law firms to maintain their competitiveness.¹¹² Law firms may increasingly deliver their services through flexible non-hourly fee arrangements,¹¹³ such as on a fixed-fee basis, which provides more price predictability to both the firm and the client.¹¹⁴ In the United States, it is estimated that only 1 to 2 percent of medium-sized and large firms' business is currently handled on an alternative fee basis, but that rate is projected to rise to 10–15 percent in 10 years.¹¹⁵

Technological advances¹¹⁶ may provide opportunities for smaller firms. Large firms tend to be better equipped to handle complex cases, but technology increasingly allows smaller firms to efficiently gather, review, and process vast amounts of data and documents. Additionally, technological changes will be advantageous for corporate in-house counsel; for example, larger social networks now allow in-house lawyers to find and develop relationships with outside counsel more efficiently.¹¹⁷

Firms will likely continue to expand their presence in growing markets such as Brazil, China, Korea, and India.¹¹⁸ Global capacity will be very important for U.S. firms in the future¹¹⁹ as they seek to establish and operate in fast-growing markets, follow cross-border merger and acquisition activity, and provide services to multinational clients.¹²⁰

¹¹⁰ USTR, "Korea," 2010, 5. Also see Rupp and Kim, "Korean Legal Services Set to Open Up," February 26, 2008; United States-Korea Free Trade Agreement, Annex II: Non-Conforming Measures for Services and Investment, 44–45. The free trade agreement between Korea and the United States, signed in 2007 but not yet ratified, includes liberalizing provisions related to legal services. For example, U.S. law firms are allowed to establish foreign legal consultant offices, and U.S.-licensed attorneys are permitted to provide legal services regarding international law and laws of their home jurisdiction. Other provisions permit foreign legal consultant offices to enter into "cooperative agreements" with Korean law firms and for U.S. law firms to form joint ventures with Korean law firms.

¹¹¹ USTR, "Singapore," 2010, 2; Swift, "Singapore's Swing," August 9, 2010; Lin, "Singapore: Feeling the West's Pain," October 1, 2009.

¹¹² Ribstein, "Death of Big Law," 2010. See *The Legal Intelligencer*, "The New Firm Order," June 22, 2009, for a series of articles examining the effect of the economic recession on the legal industry. Examples include Passarella, "Losing Lockstep," May 18, 2009, and Passarella, "Diamonds Are a Law Firm's Best Friend," May 11, 2009, on associate hiring and compensation models. Culbert, "Law Firms in the US," September 2010, 8–9; Heineman and Lee, "The Time Has Come," October 1, 2009.

¹¹³ Johnson, "Letter from London," September 17, 2010. Also see Passarella, "For Large Firms," May 26, 2009; Passarella and Needles, "After the Last Shoe Drops," June 22, 2009.

¹¹⁴ Heineman and Lee, "The Time Has Come," October 1, 2009.

¹¹⁵ Passarella, "For Large Firms," May 26, 2009.

¹¹⁶ Needles, "For Midsized Firms, Opportunities Abound," June 1, 2009.

¹¹⁷ Burk and McGowan, "Big but Brittle," 2010, 56–57, 63.

¹¹⁸ DiPetro, "Priced to Sell," May 1, 2010. Also see Lloyd, "The 2009 Global 100," October 1, 2009.

¹¹⁹ Marek, "What to Expect in the Decade Ahead," November 9, 2009.

¹²⁰ Culbert, "Law Firms in the US," September 2010, 26.

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CHAPTER 8

Services Roundtable

The Commission hosted its fourth annual services roundtable on December 8, 2010. These roundtables are held to facilitate discussions about important issues affecting services trade. This year's roundtable included participants from government, industry, and academia, representing a range of perspectives. Discussion topics included the effect of globalization on U.S. services jobs and wages, the net welfare effects of establishing services affiliates abroad, and the effects of technological advances on the ways in which services are produced and delivered. Participants highlighted the challenges faced in understanding services trade trends in the absence of comprehensive data, and debated the significance of globalization's impact on employment trends in U.S. services industries. This section summarizes the roundtable discussion and provides a list of participants.

Data

As in past roundtables, a recurring theme in the discussion was the need for more and better services data. It is often more difficult to measure services transactions than goods transactions due to the intangible and non-storable nature of services, so existing data on services tend to include few geographic and industry details compared to data on manufactures. Participants highlighted shortcomings of data both on domestic services activities and on international trade in services, and pointed out that researchers largely have to find ways to supplement official sources in developing data sets on trade in services.

At present, U.S. trade data are collected by multiple government agencies. One participant described the current fragmented system of trade statistics as divided between the Customs Bureau (which collects information on goods imports), the Census Bureau (which covers goods exports), and the Bureau of Economic Analysis (BEA) (which conducts surveys covering goods and services). Within BEA's survey-based data, there is a disparity in the amount of money spent surveying manufacturing firms versus what is spent surveying services firms—one participant estimated the difference to be 10 times more for manufacturing establishments. This disparity in spending is all the more striking given that manufacturing accounts for about one-tenth of U.S. employment, while services account for as much as 80 percent. One participant suggested that the Census Bureau may be better positioned than the BEA to collect survey-based services data, given the agency's access to a more representative sample of services firms and its experience collecting export data.

The underlying challenges of services data include a lack of budget for data collection. One participant noted that statistical budgets are often sacrificed when governments face fiscal constraints, and predicted the U.S. government is unlikely to spend more on services data collection in the near future. To provide historical perspective, a participant pointed out that the U.S. government used to have stronger incentives to collect trade data due to its reliance on goods tariffs as a significant source of income. In the absence of improved government data collection, industry groups may be able to supply more information on services trade, but are constrained by the confidentiality of their internal operations.

Other challenges include differences in services categorization schemes. Opportunities to make direct year-on-year comparisons of services data become limited when categories are adjusted. One participant noted that the services categories used in negotiations over the General Agreement on Trade in Services were different from the categories used in data collection. The consequences of limited services data include increased difficulty in negotiating services agreements. A participant pointed out that developing-country representatives tend to be cautious in negotiating services agreements, in part because they have limited information on the importance of services to their trading sector. Uruguay Round negotiators discussing services commitments were paraphrased as saying, “How can we discuss this? We don’t have the trade data.”

Effects of Globalization on Jobs and Wages

The roundtable discussed the phenomenon of U.S. information technology (IT) firms employing many workers abroad, especially in India. Opinions diverged regarding the effects of globalization on employment in the U.S. IT industry. One participant suggested that the offshoring and outsourcing business model has been fundamentally successful in boosting the net margins of U.S. IT companies, yet has also resulted in firms cutting their workforces in the United States and put downward pressure on the wages of U.S. IT workers. However, another participant pointed out that employment and wage growth have been about the same for both tradable and nontradable services in recent years, so it is difficult to conclude that tradability has measurable economic effects—i.e., that the ability to trade IT services internationally is the driver of employment and wage trends in the IT services sector.¹

The discussion focused on India, the leading source of U.S. imports of computer and data processing services. One participant argued that India’s comparative advantage in IT services is “artificial” and likely will not persist, as India is not an especially skill-abundant place relative to other countries. There are highly skilled Indian workers, but they represent a small share of India’s very large population, and arbitrage opportunities are vanishing (“at this point it’s a wash [in terms of cost] whether you open a call center in Bangalore or Detroit.”). This was affirmed by another participant who pointed out that the current supply of engineers coming from the Indian Institutes of Technology is limited, and that firms seeking to hire such engineers compete with firms like Infosys (an Indian firm). For this reason, Indian engineers now command wages comparable to their U.S. counterparts.

The roundtable discussed the fact that offshoring can be viewed either in terms of employment or in terms of profits. Researchers and policymakers are currently focusing on ways to increase employment, yet companies that invest abroad tend to make offshoring decisions on the basis of profit opportunities. One participant suggested that we need to think more broadly about the costs and benefits of offshoring than the effects on a single firm: for example, U.S. firms have maintained their overall leadership in IT sectors in part through establishing Indian operations. Additionally, importers and exporters generally pay higher wages and are bigger, more productive, and more capital intensive than their non-importing or -exporting counterparts. In considering the broader effects of investment abroad, participants noted that the “headquarters effect” of foreign investment on domestic employment—jobs created at multinational firms’ headquarters as a result of expanding abroad—is hard to identify, and may not be a significant

¹ Tradability refers to whether a good or service can be consumed at a location distant from the site of its production. For more detail on research conducted in this area, see box 2.1 on p. 2-4.

phenomenon. However, the second-order domestic employment gains—jobs created from increased purchases of inputs by multinational companies—may be more significant.

The roundtable concluded with a discussion of challenges facing U.S. services industries going forward. One participant emphasized that there is now global competition for labor at all skill levels, as nontradable sectors are small and diminishing in number (with many activities becoming newly tradable). This elevates the importance of education and the need for the United States to invest in areas where it has comparative advantages. A participant pointed out that one challenge faced by the United States has been the strong incentive for students with mathematics skills to work in the investment banking sector, rather than sectors like computer science or engineering. The roundtable discussed the many export opportunities for U.S. services firms in engineering, architecture, and other sectors in which the United States is highly competitive. However, fewer people understand the opportunities for exporting services like these, compared to goods like aerospace manufactures. Additionally, small U.S. services firms may be more likely to focus on domestic clients due to unfamiliarity with the languages and cultures of potential export markets.

List of external participants at the Commission's services roundtable held on December 8, 2010

<u>Name</u>	<u>Title / Affiliation</u>
Bernie Ascher	Adjunct Professor of Global Business and Public Policy University of Maryland University College
Christine Bliss	Assistant United States Trade Representative for Services and Investment USTR
John Goyer	Vice President, International Trade Negotiations and Investment Coalition of Services Industries
Ron Hira	Associate Professor of Public Policy Rochester Institute of Technology
Geoff Huntington	Executive Vice President of Research Phi Power Communications Inc.
J. Bradford Jensen	Associate Professor of International Business and Economics McDonough School of Business at Georgetown University
David Long	Director of the Office of Services Industries U.S. Department of Commerce
Sherry M. Stephenson	Institutional Relations Organization of American States
Marc S. Tucker	President and CEO National Center on Education and the Economy
J. Robert Vastine	President Coalition of Services Industries