

Recent Trends in U.S. Services Trade

2006 Annual Report

**June 2006
Publication No. 3857**

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



U.S. International Trade Commission

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ABSTRACT

This report covers recent trends in U.S. services trade, U.S. services trade with China, air transportation services, banking and securities services, education services, insurance services, legal services, and nontariff impediments to trade in commercial banking services. *Recent Trends in U.S. Services Trade* provides coverage of services trade undertaken on a cross-border basis as well as sales of services recorded by majority-owned affiliates in U.S. and foreign markets. The report also provides information on the overall competitiveness of the U.S. services sector, and on U.S. firms' competitive position in specific service industries. Chapters 1 and 2 of the report provide coverage of broad themes in services trade regarding the nature and extent of U.S. imports and exports, affiliate sales, and the effect of the services trade and affiliate sales on the U.S. current account. The remaining chapters examine trade in selected service industries, describing how such services are traded, comparing recent trade performance to historical trends, and identifying trends and issues affecting competitive conditions in the industry. In addition to a chapter on U.S. services trade with China, the 2006 report contains industry-specific chapters covering air transportation; banking and securities; education; insurance; and legal services. A special topic chapter estimates tariff rate equivalents for barriers to trade and investment in commercial banking services, looking across 50 developed and developing markets.

PREFACE

This report is the ninth in a series of annual reports on recent trends in U.S. services trade that the U.S. International Trade Commission (“The Commission” or USITC) has published under investigation No. 332-345. The Commission also publishes an annual companion report, under this investigation number, on U.S. merchandise trade, entitled *Shifts in U.S. Merchandise Trade*. These annual reports are the product of an investigation instituted by the Commission in 1993 under section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)).¹ A significant amount of the information contained in this recurring report reflects basic research that is required by staff to maintain a proficient level of trade and industry expertise. The Commission has found such expertise to be essential in its statutory investigations and in apprising its varied customer base of global industry trends, regional developments, and competitiveness issues.

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

¹ On August 27, 1993, on its own motion and pursuant to section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)), the USITC instituted investigation No. 332-345, *Annual Reports on U.S. Trade Shifts in Selected Industries*. On December 20, 1994, the Commission on its own motion expanded the scope of this report to include more detailed coverage of service industries. Under the expanded scope, the Commission publishes two annual reports, *Shifts in U.S. Merchandise Trade* and *Recent Trends in U.S. Services Trade*. Services trade is presented in a separate report in order to provide more comprehensive and timely coverage of the sector’s performance. The current report format was developed by the USITC in response to Congressional interest in establishing a systematic means of examining and reporting on the significance of major trade developments, by product, and with leading U.S. trading partners, in service, agriculture, and manufacturing sectors.

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EXECUTIVE SUMMARY

The United States is the world's largest exporter of services and carries the world's largest services trade surplus. Since 1998, however, the U.S. cross-border services trade surplus has eroded, owing to faster growth in services imports relative to exports, indicating heightened capacity of foreign firms to compete successfully in the U.S. services market.

The value of services transactions by U.S. firms' affiliates abroad and by foreign firms' affiliates in the United States has increasingly exceeded the value of cross-border services trade in recent years. This trend reflects the ongoing liberalization of services trade and investment regimes and the consequent globalization of services firms.

Barriers to services trade, although reduced in many markets in recent years, continue to limit participation across borders and through affiliates in certain service industries and countries. Although the adverse effects of terrorist attacks in 2001 on trade in certain service industries such as insurance services and banking and securities services have subsided, heightened security measures and more rigorous visa requirements have changed trade trends in services such as passenger and freight transportation services and education services.

Overshadowed by a \$161.9-billion merchandise trade deficit with China, U.S. services trade with China netted a \$1.6-billion surplus in 2004. Nevertheless, the services surplus was smaller than in previous years, owing to a surge in U.S. imports from China of freight transport services, port services, and passenger fares. Research conducted for this report indicates that liberalization across Chinese service industries has been uneven, and substantial barriers in China to trade and investment remain. Even so, the continued expansion of China's economy and substantial demand for key infrastructure services, such as telecommunications and banking, and for professional and technical services personnel in China will likely enhance opportunities for U.S. service industries seeking to participate in the Chinese services market.

Because a range of nontariff measures (NTMs) impacts services trade, the U.S. International Trade Commission (the "Commission") has conducted extensive research intended to identify and measure the effects of such NTMs. In chapter 9, Commission staff estimate baseline tariff rate equivalents (TREs) for 50 countries' NTMs on selected commercial banking services, identifying several EU Member States as having the smallest TREs and several Latin American countries as having the largest. The estimation of benchmark TREs will provide a basis for assessing progress made through bilateral and multilateral trade agreements in liberalizing services trade regimes.

CHAPTER 1

Introduction

Scope

The U.S. International Trade Commission (USITC or “Commission”) routinely monitors trade developments in the service, agricultural, and manufacturing sectors. This annual report examines U.S. services trade, both in the aggregate and for selected industries; identifies leading service sectors and important U.S. trading partners; and briefly analyzes global competitive conditions in selected industries.

Data and Organization

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

Chapter 2 of this report examines cross-border services trade during 1995-2004 and affiliate sales during 1994-2003, comparing trade during the most recent year to previous trends.¹ Chapter 2 also describes the nature and extent of cross-border trade and affiliate transactions. Chapters 3 through 7 provide analysis of the following industries: air transport, banking, education, insurance, and legal services. A brief definition of the industry and the activities captured by trade data is followed by an examination of recent trends in cross-border trade and/or affiliate transactions, as appropriate.² Thereafter, the chapters provide an analysis of the global competitive landscape in each industry.

Chapter 8 principally examines aggregate and sectoral cross-border services trade with China, as there is limited data on services trade through Chinese affiliates. In the sectoral examinations, chapter 8 identifies potential opportunities for greater services trade as well as impediments that may limit such opportunities.

Chapter 9 develops tariff rate equivalents (TREs) for barriers to trade and investment in commercial banking services, looking across 50 developed and developing markets. To estimate TREs, ITC staff regressed interest rate spreads on market variables, including a policy variable derived directly from schedules appended to the General Agreement on Trade in Services (GATS), after correcting for the effects of prudential regulations (namely, capital adequacy and liquidity ratios). Staff finds that the GATS policy variables, as well as interest rate volatility and foreign investment levels, are statistically significant determinants of interest rate spreads. Tariff

¹ Data on affiliate transactions trail those on cross-border services trade by one year. Consequently, the analysis of affiliate transactions ends with 2003 data, whereas that of cross-border trade ends with 2004 data.

² Analyses of cross-border trade data compare performance in 2004 to trends during 1999-2003. Similarly, analyses of affiliate sales compare performance in 2003, the most recent year for which affiliate sales data are available, to trends during 1999-2002.

rate equivalents based on these econometric results provide a baseline from which future trade negotiations can be assessed, with TREs falling as trade impeding measures decline.

Services Trade in Context³

Cross-border services trade accounted for 22 percent of total U.S. cross-border trade volume in 2004 (figure 1-1).⁴ U.S. cross-border trade in services generated a \$47.8-billion surplus in 2004, in contrast to a U.S. merchandise trade deficit of \$665.4 billion.⁵ The services sector accounted for 83 percent of U.S. private-sector gross domestic product⁶ and 85 percent of private-sector employment in 2004 (figures 1-2 and 1-3).⁷

According to data reported by the World Trade Organization (WTO), global cross-border exports of services totaled \$2.1 trillion in 2004.⁸ The United States was by far the largest services exporter, accounting for 15.0 percent of such exports worldwide (figure 1-4). Other significant services exporters included the United Kingdom (8 percent), Germany (6 percent), and France (5 percent).⁹ Among those countries for which 2004 trade data were reported by the WTO, the United States posted the largest services trade surplus (\$58 billion) whereas Germany posted the largest services trade deficit (\$59 billion) (figure 1-5).¹⁰ Three-quarters of Germany's services trade deficit is due to the \$44-billion deficit it runs in travel services.

³ The main sources for this section are the BEA's *Survey of Current Business* and World Trade Organization (WTO), *International Trade Statistics 2005*. See bibliography for full citations.

⁴ Total trade volume is the sum of the value of imports and exports.

⁵ For purposes of comparison with the merchandise trade deficit, the figure cited for the services trade surplus reflects public-sector as well as private-sector transactions. Elsewhere in this report, services trade data reflects private-sector transactions only. USDOC, BEA, *Survey of Current Business* 85, no. 10:78.

⁶ USDOC, BEA, *Survey of Current Business* 85, no. 5:13.

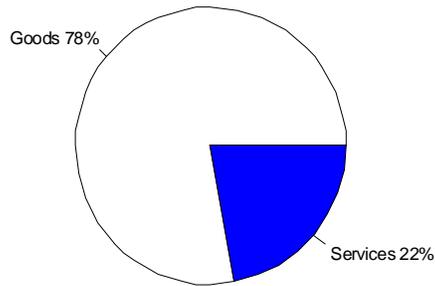
⁷ USDOC, BEA, *Survey of Current Business* 84, no. 2, "Full-Time Equivalent Employees by Industry," Table 6.5D.

⁸ WTO, "World Exports of Commercial Services by Selected Region and Economy, 2004," Table A8.

⁹ *Ibid.*

¹⁰ These figures reflect private-sector transactions only. Further, WTO figures treat trade in insurance services differently than the BEA, accounting for the difference between the surplus reported by BEA and that reported above.

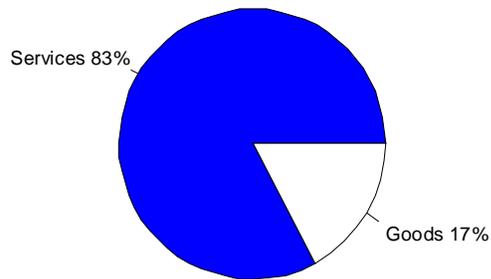
Figure 1-1
U.S. cross-border trade volume, by sector, 2004



Total trade volume = \$2.9 trillion

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 78.

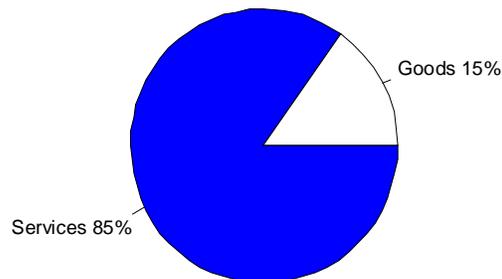
Figure 1-2
U.S. private-sector gross domestic product, by sector, 2004



Total private-sector GDP = \$10.3 trillion

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 13.

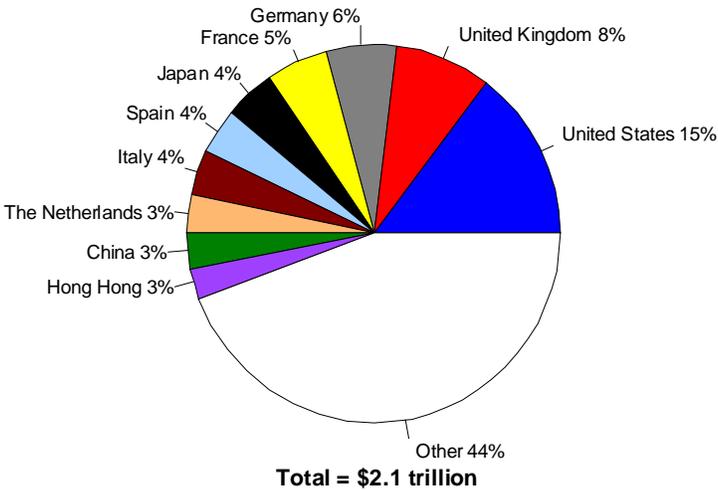
Figure 1-3
U.S. private-sector employment, by sector, 2004



Total full-time equivalent employees = 104.5 million workers

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Online database, "Full-Time Equivalent Employees by Industry," October 2005.

Figure 1-4
Global cross-border exports of services, by exporting country, 2004¹

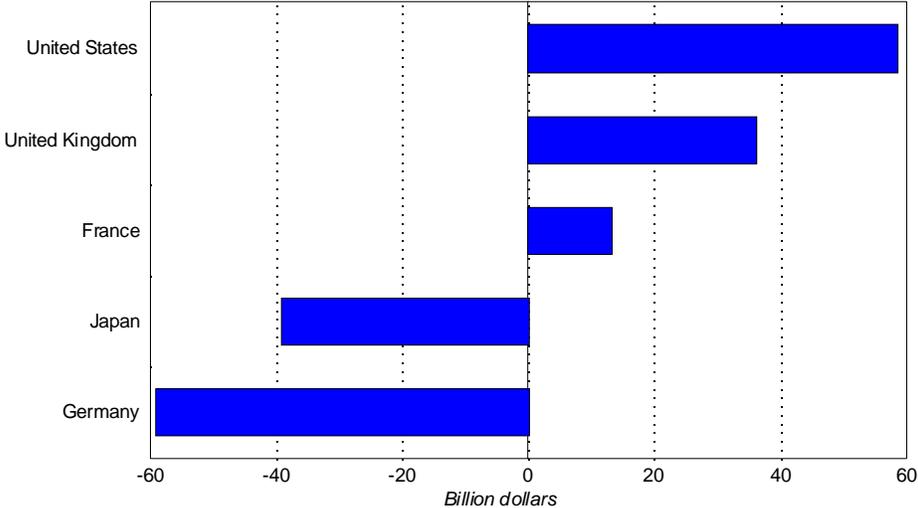


¹ Total may not equal 100 percent due to rounding.

Note.--Excludes public-sector transactions.

Source: World Trade Organization, *International Trade Statistics, 2005*, "World Exports of Commercial Services," (2005).

Figure 1-5
Services trade balances of leading exporting countries, 2004



Source: World Trade Organization, *International Trade Statistics, 2005*, "World Exports of Commercial Services," (2005).

CHAPTER 2

U.S. Trade in Services

Introduction

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

Since 1986, when the U.S. Department of Commerce (USDOC) began collecting statistics on U.S. services trade, the relative importance of cross-border trade and affiliate transactions has shifted significantly. For example, during the 10-year period between 1986-1995, U.S. cross-border exports of services consistently exceeded sales by majority-owned foreign affiliates of U.S. firms by average annual margins of approximately 18 percent. Since 1996, however, sales by U.S. firms’ affiliates abroad have exceeded cross-border services exports by ever-widening margins (figure 2-1). By 2003, sales by U.S. firms’ affiliates abroad (\$477 billion) exceeded receipts for cross-border services (\$292 billion) by approximately 63 percent. Similarly, U.S. purchases of services from foreign-owned affiliates have exceeded cross-border services imports by growing margins since 1989. By 2003, sales to U.S. citizens by the U.S. affiliates of foreign companies (\$381 billion) exceeded services imports (\$225 billion) by \$156 billion.¹ The growing predominance of affiliate transactions largely reflects the global spread of service firms, facilitated by the liberalization of investment and services trade regimes, which first occurred in developed countries and more recently in a growing number of developing countries and countries in transition. The liberalization of services trade regimes, in turn, is largely rooted in the growing recognition that efficient infrastructure industries--telecommunications, finance, energy, and transportation--improve economic performance throughout host economies. Consequently, many countries have removed or reduced impediments to trade and investment, especially in telecommunication services and financial services.

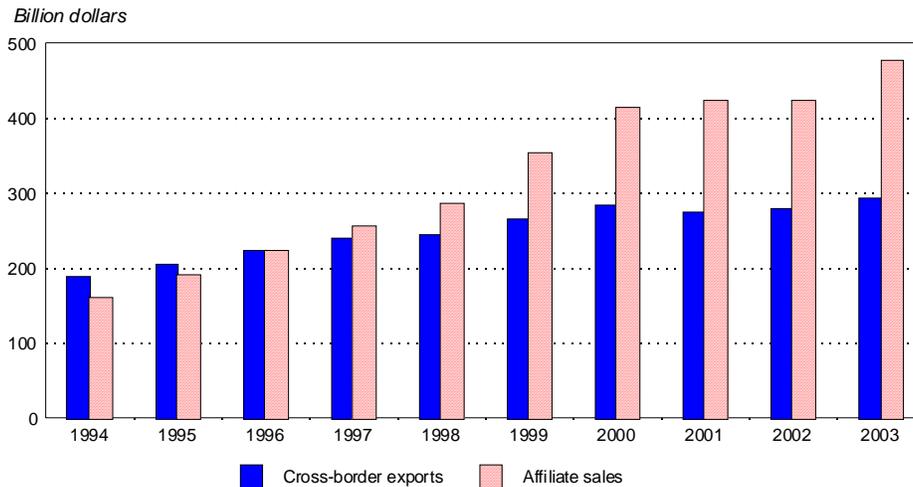
Cross-Border Trade²

In 2004, U.S. services exports and imports experienced exceptionally rapid growth, due in large part to the recovery of travel-related services following the September 11, 2001 terrorist attacks.

¹ USDOC, BEA, *Survey of Current Business* 85, no. 10:26.

² The main source for this section is the BEA’s *Survey of Current Business*. See bibliography for full citations.

Figure 2-1
U.S. cross-border exports¹ of services and U.S.-owned foreign affiliate sales
of services, 1994-2003²



¹ Trade data exclude public-sector trade.

² Affiliate sales data for 1999-2003 were reported under a new industry classification system.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 26.

U.S. exports of private services³ totaled \$323 billion, while U.S. imports totaled \$258 billion, resulting in a trade surplus of approximately \$65 billion (figure 2-2).⁴ This surplus, which was 2 percent smaller than the \$67-billion surplus in 2003, continues a decline that began in 1998 when import growth began to increase consistently faster than export growth. Exports increased by 11 percent during 2004, markedly up from the 2-percent average annual growth rate recorded during 1999-2003. The bulk of export growth in 2004 was largely attributable to growth in five distinct categories: *passenger fares* (20 percent), *other transportation* (18 percent), *travel* (16 percent), *financial services* (10 percent), and *royalties and license fees* (9 percent). Similarly, U.S. imports of services grew by 15 percent in 2004, significantly faster than the 5-percent average annual growth rate experienced during 1999-2003. Similarly, the bulk of import growth in 2004 was accounted for by growth in *other transportation* (28 percent), *travel* (25 percent), *royalties and license fees* (14 percent), and *passenger fares* (8 percent) categories.⁵

*Travel services*⁶ were the leading U.S. services export, accounting for 23 percent of such exports in 2004 (figure 2-3). Other industries accounting for large shares of total U.S. services exports in 2004 were *business, professional, and technical services* (22 percent); *royalties and license*

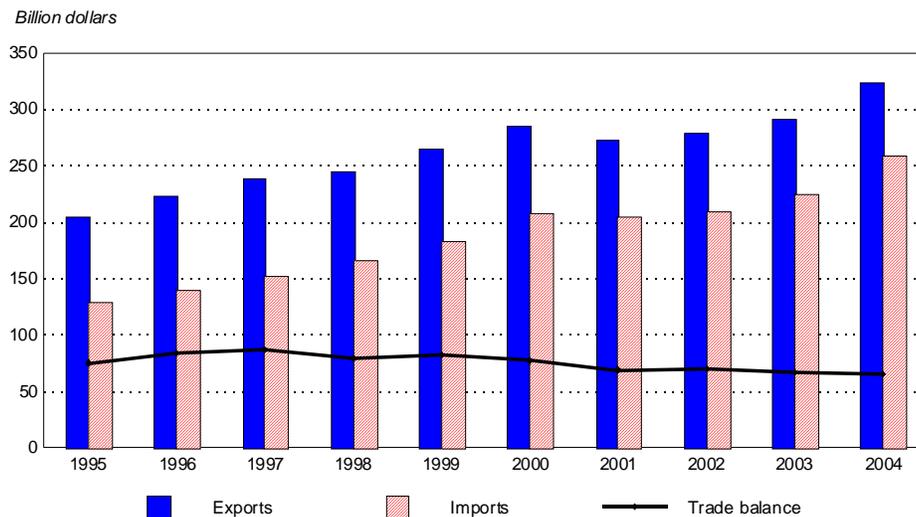
³ Cross-border services trade, as reported in the current account, includes both private- and public-sector transactions. The latter principally reflect operations of the U.S. military and embassies abroad. However, because public-sector transactions are not considered to reflect U.S. service industries' competitiveness and may introduce anomalies resulting from events such as international peace-keeping missions, this report will focus solely on private-sector transactions, except where noted.

⁴ Values are reported before deductions for expenses and taxes, as gross values are most directly comparable across countries, industries, and firms. USDOC, BEA, *Survey of Current Business* 72, no. 6:68-70.

⁵ USDOC, BEA, *Survey of Current Business* 85, no. 10:26.

⁶ The *Travel* category consists of expenditures by individuals who travel to foreign countries.

Figure 2-2
U.S. cross-border trade in private services: Exports, imports, and trade balance, 1995-2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

fees (16 percent);⁷ *financial services* (8 percent); and *passenger fares*⁸ (6 percent).⁹ Intrafirm exports,¹⁰ which largely reflect transactions between U.S. parent firms and their foreign affiliates, accounted for 26 percent of total services exports in 2004.¹¹ The largest component, *royalties and license fees*, accounted for approximately 46 percent of such trade.¹²

Travel services also accounted for the largest share of U.S. services imports, representing 25 percent of the total in 2004 (figure 2-3). As with exports, sectors accounting for large shares of total services imports include *business, professional, and technical services* (16 percent); *royalties and license fees* (9 percent); and *passenger fares* (9 percent).¹³ In 2004, intrafirm imports accounted for approximately 21 percent of total cross-border services imports.¹⁴ *Royalties and license fees* were also the largest component of intrafirm imports, accounting for 34 percent of such trade.¹⁵

As in most years, the majority of U.S. service industries registered cross-border trade surpluses in 2004. Markets with notable deficits include *insurance services* (\$24 billion), *other transportation, i.e., freight transport and port services* (\$17 billion), and *passenger fares* (\$5

⁷ These services principally include management services and sales of rights to industrial processes; broadcasts and recordings of live events; books, records, and tapes; business format franchises; trademarks; and distribution, use, and reproduction of computer software.

⁸ Passenger fares consist of fares paid by residents of one country to airline and vessel operators (carriers) that reside in another country.

⁹ USDOC, BEA, *Survey of Current Business* 85, no. 10:45-46

¹⁰ Intrafirm exports represent U.S. parents' receipts from foreign affiliates and U.S. affiliates' receipts from a foreign parent. Intrafirm imports represent U.S. parents' payments to foreign affiliates and U.S. affiliates' payments to foreign parents. Ibid., 33.

¹¹ Ibid., 31.

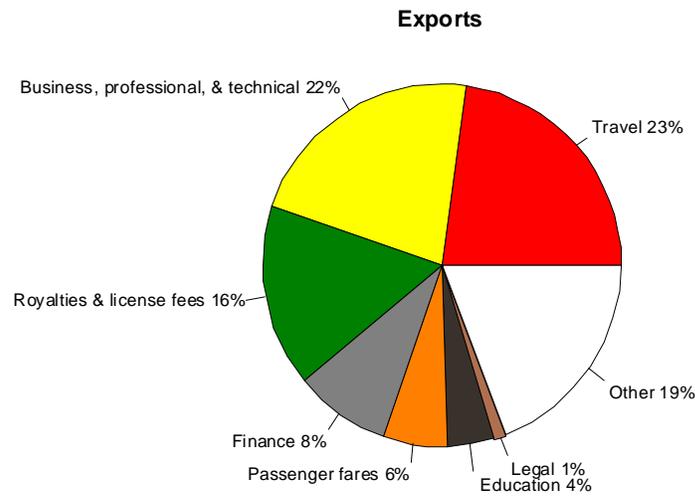
¹² Ibid., 33.

¹³ Ibid., 46.

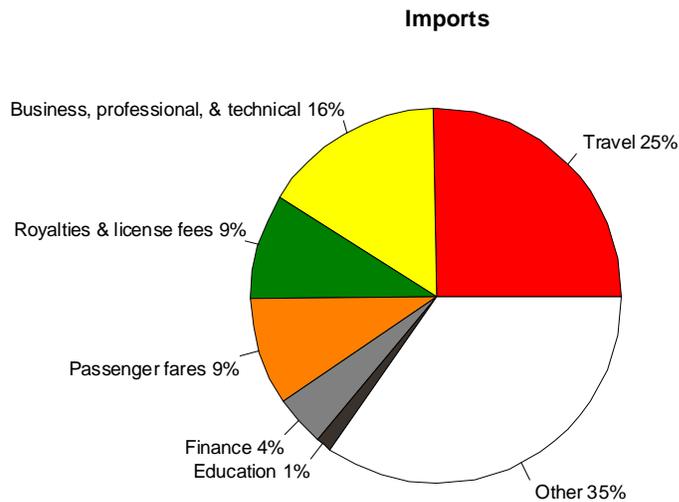
¹⁴ Ibid., 31.

¹⁵ Ibid., 33.

Figure 2-3
U.S. cross-border services exports and imports,¹ by industry, 2004²



Total = \$323.4 billion



Total = \$258.1 billion

¹ See appendix A for a description of service industries.

² Totals may not equal 100 percent due to rounding.

Note.--Trade data exclude public-sector transactions.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

billion). The deficit in *insurance services* is structural, as most international trade in such services comprises reinsurance transactions, a market that is dominated by European firms. By contrast, the deficit related to *other transportation services*, which largely reflects the shipment of manufactured goods by sea and air, results primarily from the asymmetrical nature of trade in manufactured goods between the United States and its trading partners. For example, Chinese shipments of manufactured goods to the United States vastly exceed U.S. shipments of goods to China. Certain segments of the professional services category, including *advertising; accounting, auditing and bookkeeping services; and management and consulting services*, also experienced small trade deficits in 2004. Overall, however, the professional services subsector recorded

a surplus of \$30 billion in 2004, with *operational leasing; installation, maintenance, and repair services; and architectural, engineering, and other technical services* posting the largest sectoral surpluses.¹⁶

The United Kingdom, Japan, and Canada were the largest single-country U.S. export markets in 2004, accounting for 12 percent, 11 percent, and 9 percent of total U.S. services exports, respectively (figure 2-4). The United Kingdom (13 percent), Canada (8 percent), and Japan (8 percent) were also the largest single-country suppliers of U.S. services imports. In regional terms, the European Union (EU) was the largest market for U.S. services exports, accounting for 36 percent of the total in 2004. At 37 percent, the EU was also the largest supplier of U.S. services imports. Since 2000, the United States has signed more than five bilateral free trade agreements (FTAs). As a result, the United States may experience growing services trade volumes with its FTA partners (table 2-1).

In 2004, the United States maintained large bilateral services surpluses with Japan (\$16 billion), Canada (\$10 billion), the United Kingdom (\$7 billion), Mexico (\$5 billion), and Korea (\$4 billion). The United States also maintained a large bilateral surplus with the EU (\$19 billion). In marked contrast to goods trade, the United States recorded a services trade surplus of approximately \$2 billion with China during 2004.

The largest U.S. bilateral deficits were registered with Bermuda (\$12 billion) and Hong Kong (\$1 billion). The deficit with Bermuda largely reflects payments for insurance and reinsurance services from U.S. and foreign firms that have set up operations there, chiefly for preferential tax treatment. The services deficit with Hong Kong is more broadly-based. The United States also maintained deficits of less than \$300 million with Norway, Taiwan, New Zealand, Switzerland, and the Philippines.¹⁷

Affiliate Transactions¹⁸

In 2003, sales by the foreign-based affiliates of U.S. companies increased by 13 percent to approximately \$477 billion. U.S.-owned affiliates in the insurance industry accounted for approximately 17 percent of total affiliate sales, the largest single-industry share (figure 2-5). Other industries that accounted for relatively large shares of affiliate sales included the *finance* (9 percent), *broadcasting and telecommunications* (7 percent), *wholesale trade* (6 percent), *transportation and warehousing* (6 percent), and *publishing* (4 percent) industries. The largest host-country markets for U.S.-firms' foreign affiliates included the United Kingdom (24 percent), Japan (9 percent), Canada (9 percent), Germany (6 percent), and France (6 percent). Overall, European countries accounted for approximately 56 percent of U.S. firms' affiliate sales in 2003 (figure 2-6).¹⁹

In 2003, purchases from majority-owned, U.S.-based affiliates of foreign firms totaled approximately \$381 billion, an increase of 4 percent over 2002. Services purchased from U.S.-based insurance affiliates accounted for 22 percent of such purchases, the largest single-industry share. Other relatively important industry purchasers included firms in the *transportation and warehousing* (8 percent), *utilities* (7 percent), and *finance* (6 percent) sectors. In 2003, U.S.-

¹⁶ Ibid., 45-46.

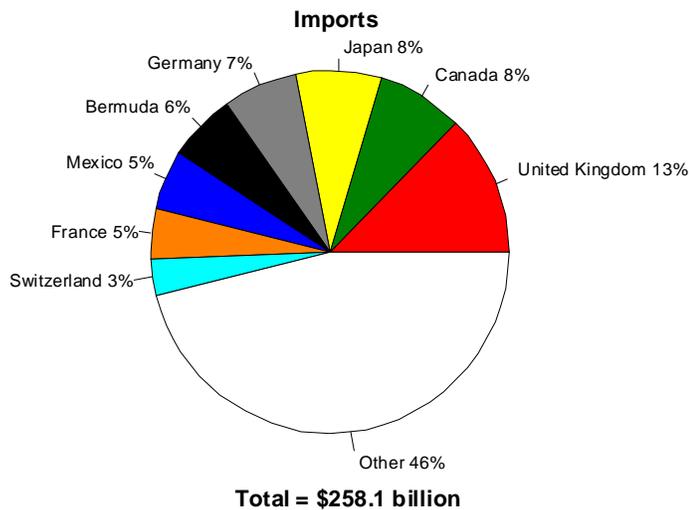
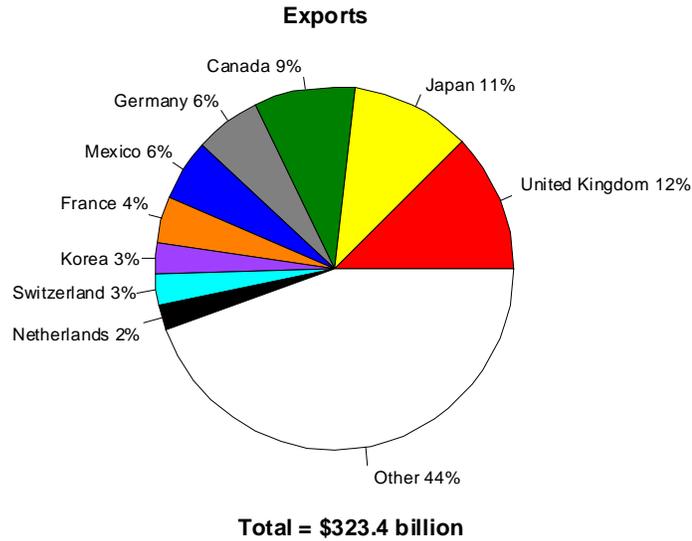
¹⁷ Ibid., 47-48.

¹⁸ The main source for this section is the BEA's *Survey of Current Business*. See bibliography for full citations.

¹⁹ Ibid., 74-75.

based affiliates with parents based in the United Kingdom accounted for 20 percent of total U.S. services purchases from foreign-owned affiliates, while purchases from French-owned affiliates represented approximately 13 percent of such purchases. Similarly, affiliates of German and Canadian parent firms both accounted for approximately 11 percent of such purchases in 2003.²⁰

Figure 2-4
U.S. cross-border services exports and imports,¹ by country, 2004



¹ Totals may not equal 100 percent due to rounding.

Note.--Trade data exclude public-sector transactions.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 47-48.

²⁰ Ibid., 76-77.

Table 2-1
U.S. bilateral agreements

Free Trade Agreement	Signed	Entered into force
Australia	May 2004	January 2005
Bahrain	September 2004	January 2006
Central America-Dominican Republic (CAFTA-DR)	August 2004	(¹)
Chile	June 2003	January 2004
Colombia ²	(³)	
Israel	April 1985	September 1985
Jordan	October 2000	December 2001
Morocco	June 2004	January 2006
Oman	January 2006	(⁴)
Peru ²	April 2006	(⁴)
Singapore	May 2003	January 2004

¹ Ratified by the United States, the Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua. Pending ratification by Costa Rica.

² Trade Promotion Agreement (TPA).

³ Negotiations were concluded February 2006.

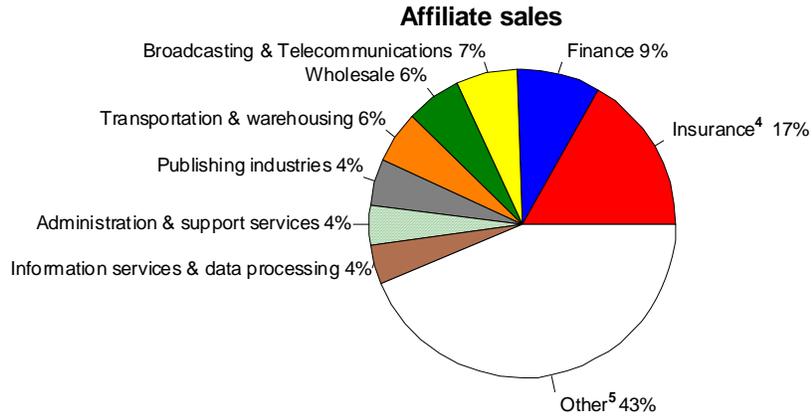
⁴ Pending ratification by parties.

Note: Negotiations are planned or pending with Korea, Malaysia, Panama, the Southern African Customs Union (SACU), Thailand, and the United Arab Emirates.

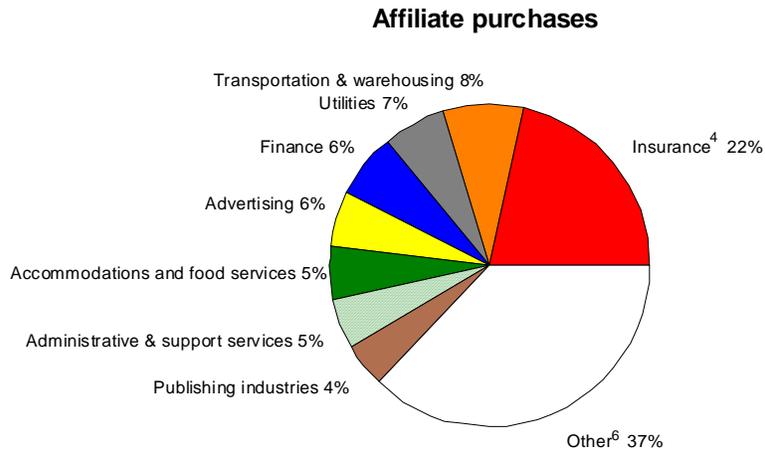
Source: Office of the United States Trade Representative.

http://www.ustr.gov/Trade_Agreements/Bilateral/Section_Index.html (accessed May 22, 2006).

Figure 2-5
Affiliate services transactions: U.S. sales¹ and purchases,² by industry, 2003³



Total = \$477.5 billion

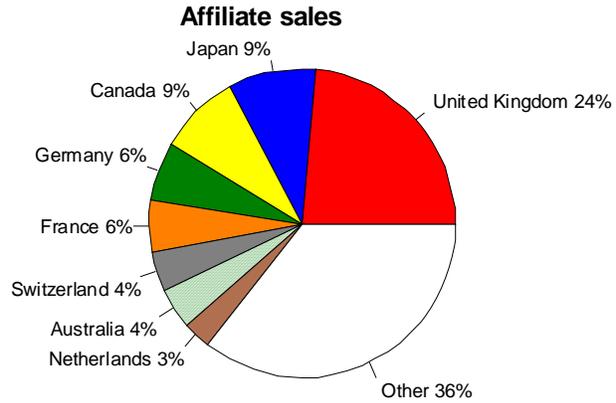


Total = \$381.4 billion

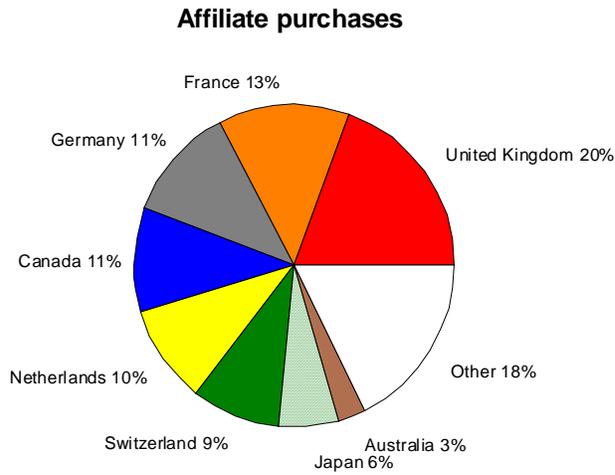
¹ Sales of services by majority-owned foreign affiliates of U.S. parent firms.
² Purchases of services from majority-owned U.S. affiliates of foreign parent firms.
³ Totals may not equal 100 percent due to rounding.
⁴ Includes insurance carriers, agencies, brokerages, and other insurance related activities.
⁵ Reflects sales of services by manufacturers, retailers, real estate firms, and all other services firms.
⁶ Reflects purchases of services from manufacturers, wholesale, retailers, real estate firms, and many other services firms.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 76, 77.

Figure 2-6
Affiliate services transactions: U.S. sales and purchases,² by country, 2003³



Total = \$477.5 billion



Total = \$381.4 billion

¹ Sales of services by majority-owned foreign affiliates of U.S. parent firms.

² Purchases of services from majority-owned U.S. affiliates of foreign parent firms.

³ Totals may not equal 100 percent due to rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis *Survey of Current Business* 85, no. 10 (October 2005): 75, 77.

CHAPTER 3

Air Transportation Services

Introduction

Trade in air transportation services includes transportation services for passengers, freight transportation for merchandise, and airport services. Exports of air transportation services occur when U.S. carriers collect fares to transport foreign residents to and from the United States, when foreign citizens pay U.S. carriers to transport merchandise between two airports,¹ or when foreign carriers purchase goods and services at U.S. airports. Similarly, imports of air transportation services occur when foreign carriers collect fares to transport U.S. residents to and from the United States,² when U.S. citizens pay foreign carriers to transport merchandise between two airports, or when U.S. carriers purchase goods and services in foreign airports.³ Due to commonplace prohibitions on cabotage⁴ in nearly all countries, most trade in airline transportation services occurs via cross-border transactions.

Cross-Border Trade⁵

During 1999-2004, U.S. exports of air transportation services grew at a compound annual growth rate of approximately 3 percent (figure 3-1), while imports of such services grew by 4 percent. The trade deficit during this period reflects the greater number of U.S. citizens that travel on foreign airlines, relative to foreign citizens that travel on U.S. airlines. In contrast to the 1999-2004 trend, exports and imports grew by 21 percent and 16 percent, respectively, during 2004.⁶ Such double-digit increases reflect not only the continuing recovery of passenger volumes

¹ According to balance-of-payments accounting convention, the importer is said to assume ownership of the goods when they cross the border of the exporting country and, as a consequence, bears all subsequent transportation costs. Therefore, receipts of U.S. carriers for the transport of U.S. imports are excluded from U.S. transportation exports because, by this convention, they represent transactions between U.S. parties. Similarly, payments to foreign carriers for transporting U.S. exports are not included in U.S. transportation imports because they represent transactions between foreign residents and foreign providers of transportation services. USDOC, BEA, *Survey of Current Business* 85, no. 10:78.

² Payments by U.S. residents to foreign carriers for travel between two foreign points are not incorporated in passenger fare data. Instead, such payments are recorded in the travel and tourism data prepared by the BEA. Transactions involving a U.S. resident contracting with a foreign carrier to transport goods between two foreign points are not included in calculations of U.S. payments for freight imports. BEA official, telephone interview by USITC staff, November 16, 1998.

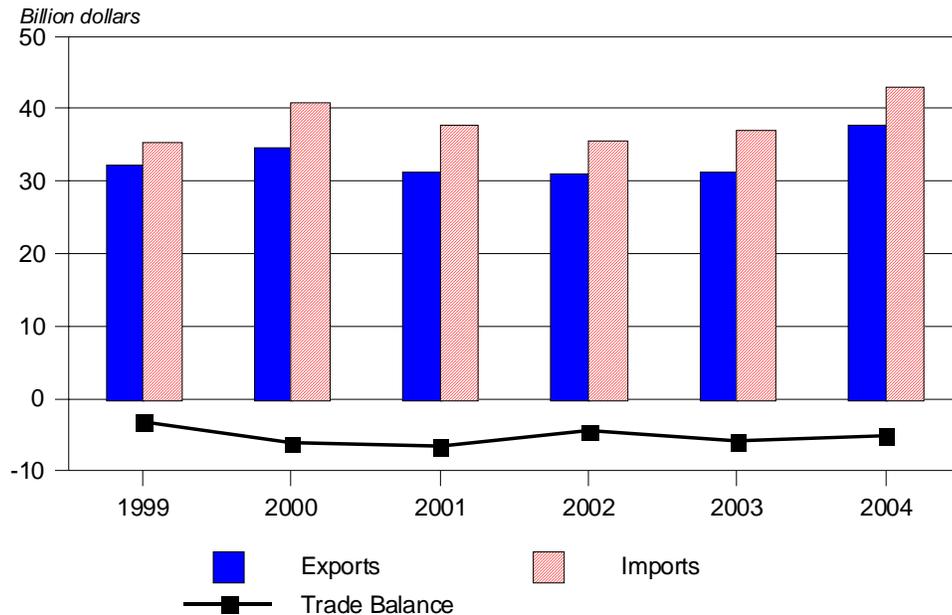
³ BEA distributes quarterly surveys to foreign airlines to collect data on their operations in the United States, and to U.S. airlines to collect data on their operations in foreign countries. With respect to airport services, foreign airlines are requested to provide information on expenses incurred in the United States related to the purchase of fuel and oil, and aircraft handling and terminal services. Likewise, U.S. airlines are requested to report fuel expenses in foreign countries, and expenses related to "station and maintenance bases." USDOC, BEA, "International Services Surveys," January 2006.

⁴ Cabotage refers to the transport of passengers or cargo by a foreign carrier between two cities within the same country.

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

⁶ USDOC, BEA, *Survey of Current Business* 85, no. 10:45.

Figure 3-1
Air transport services: Cross-border trade, 1999-2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 49-51; 84, no.10 (October 2004): 48; and 83, no. 10 (October 2003): 82-83.

following the September 11, 2001 terrorist attacks but also a 28-percent rise in fuel costs.⁷ In 2004, the top-five export markets for U.S. air transportation services were the United Kingdom (15 percent); Japan (14 percent); Canada (8 percent); Germany (7 percent); and Mexico (6 percent) (figure 3-2).⁸

Competitive Conditions in the Global Air Transportation Market⁹

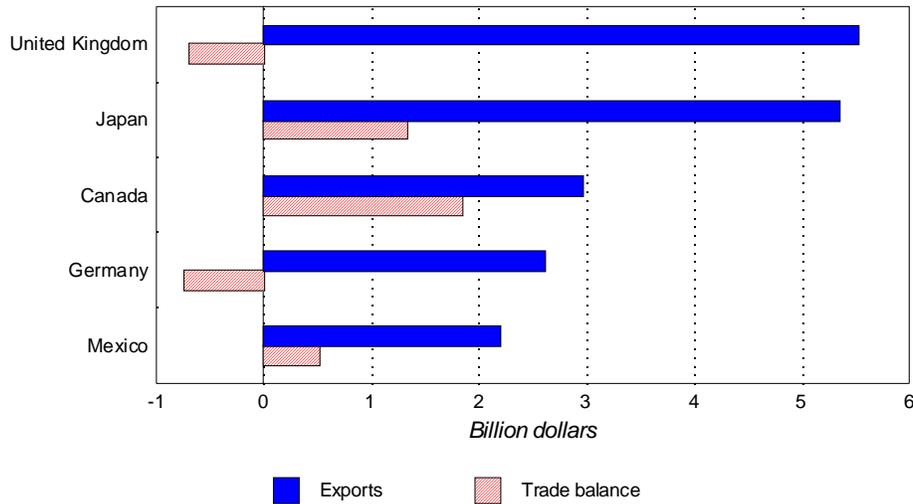
The global airline industry grew by approximately 2 percent in 2004 to \$217.9 billion. During 2000-2004, the global market contracted at a compound annual rate of change of approximately 2 percent. In dollar terms, the U.S. market accounts for approximately 40 percent of the global airline industry. By contrast, Europe and the Asia-Pacific region account for 28 percent and 24 percent, respectively. In terms of passenger traffic, the global industry grew by 2 percent in 2004, to reach a total of approximately 2.2 billion passengers. During 2000-2004, passenger

⁷ Higher fuel costs led to higher imports via two mechanisms: 1) some U.S. airlines passed fuel costs on to customers via higher fares and/or fuel surcharges, and 2) higher fuel costs increased the fuel expenses of airlines in foreign airports.

⁸ *Ibid.*, 51.

⁹ The main sources for this section include Standard & Poor's *Industry Reports*, Oxford Analytica, DataMonitor, *The Economist*, IBA NewsWatch, *Airline Business*, *Aviation Week*, and the websites of the major global airlines as well as the three international airline alliances. See bibliography for full citations.

Figure 3-2
Air transport services: U.S. cross-border exports and trade balance, by major trading partners, 2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 51.

numbers grew at a compound annual growth rate of 1 percent.¹⁰ Within the global airline industry, there are regions of maturity (North America), late-stage growth (Transatlantic and Western Europe), and development (Asia, Africa, and Latin America).¹¹ The largest global airlines, all of which provide extensive domestic and international services, include Air France-KLM; Deutsche Lufthansa (Germany); Japan Airlines, AMR (the parent of American Airlines); and United Airlines (table 3-1).¹²

Airlines around the world have faced a difficult operating environment over the past few years. For example, the global airline industry lost \$18 billion in 2001, \$13 billion in 2002, \$6.6 billion in 2003, and \$4.8 billion in 2004. Such large-scale losses have particularly affected the U.S. air transportation market, where five of the largest carriers declared bankruptcy in 2005.¹³ Factors

¹⁰ Datamonitor, "Global Airlines," 9-12. Datamonitor data includes only revenues derived from passenger air transportation. Volumes are measured in terms of the number of passengers; flights sold on the same ticket are counted once. As such, each return journey (including open-jaw flights and multistop flights) are counted once. Where no return journey is booked, the single journey is counted once.

¹¹ Oxford Analytica, "Dire Outlook for Airlines," March 12, 2003.

¹² Measured by share of the global market, AMR accounts for 8 percent; UAL, 8 percent; AirFrance/KLM, 7 percent; British Airways, 6 percent; Delta Airlines, 6 percent; and Northwest Airlines, 5 percent. Datamonitor, "Global Airlines," 13.

¹³ In 2005, ATA Airlines, Delta Air Lines, Northwest Airlines, United Airlines, and U.S. Airways filed for bankruptcy. Overall, U.S. airlines have attempted to restructure their operations in an effort to emerge from (or avert) bankruptcy; common restructuring practices include capacity reduction, debt restructuring, elimination of defined benefit pension plans, employee layoffs, and salary cuts.

Table 3-1
Leading global airlines, 2004

Airline	Country	Revenue
		<i>Billion dollars</i>
Air France	France	23.7
Deutsche Lufthansa A.G.	Germany	21.1
Japan Airlines System, Corp.	Japan	19.9
AMR Corp. (American Airlines)	United States	18.6
UAL Corp. (United Airlines)	United States	16.4
Delta Air Lines, Inc.	United States	15.0
All Nippon Airways Co., Ltd.	Japan	11.8
Cathay Pacific Airways, Ltd.	Hong Kong	11.8
Continental Airlines, Inc.	United States	9.7
British Airways plc.	United Kingdom	9.6

Source: Datamonitor, "Global Airlines," Oct. 2005, Datamonitor, "Airlines in Asia-Pacific," Oct. 2005, Datamonitor, "Airlines in the United States," Oct. 2005.

contributing to the industry's difficult financial environment include high oil prices,¹⁴ persistent overcapacity, weak global macroeconomic conditions,¹⁵ and a steep decline in passenger traffic in many markets following September 11, 2001.¹⁶

Airlines operating in international markets are subject to regulatory oversight by individual foreign governments, as well as economic and political entities like the Asia Pacific Economic Cooperation and the European Union. Bilateral air transport agreements attempt to remove regulatory barriers by allowing airlines of signatory countries to serve each other's markets. Such agreements detail not only reciprocal landing rights but also regulate the number of carriers and the type of aircraft that can operate in any particular country, as well as fare levels and flight frequency. The United States has negotiated "Open Skies" agreements with more than 70 countries worldwide. In general, such agreements provide for reduced regulation, unrestricted code sharing between international carriers, the formation of alliances, and partial improvements in foreign ownership requirements.¹⁷

¹⁴ On average, jet fuel prices increased by approximately 44 percent, from \$50 per barrel in 2004 to \$72 dollars per barrel in 2005.

¹⁵ Air traffic is heavily influenced by economic activity. On average, passenger traffic grows at twice the rate of economic activity. Oxford Analytica, "Dire Outlook for Airlines," March 12, 2003.

¹⁶ Passenger traffic did not decline in all global markets. For example, in 2002, passenger traffic on Cathay Pacific (Hong Kong, China) and Singapore Airlines was 4 percent and 5 percent higher, respectively, than in 2000. By contrast, passenger traffic in the United States decreased by 9 percent, relative to 2000. Similarly, Japan Airlines traffic declined by 8 percent, reflecting its exposure to the transpacific market. *Ibid.*

¹⁷ Ownership issues have stalled the much-anticipated "Open Skies" agreement between the European Union and the United States. On both sides, various constituencies and political bodies are reluctant to cede control of national airlines to foreign investors. Oxford Analytica, "EU/United States: Skies Not Yet Open For Aviation," Dec. 5, 2005.

Overall, the global air transportation services market is characterized by a high degree of competition. In addition to competing with other modes of transportation (i.e., trains, buses, and automobiles), many established airlines compete not only with each other, but also with “low-cost carriers.” As their name implies, low-cost carriers generally maintain lower average costs—both fixed and variable—than established carriers. This, in turn, enables them to offer reduced fares. In most cases, low-cost airlines minimize costs by maintaining high utilization rates; offering few in-flight amenities; paying lower wages; focusing on profitable point-to-point routes; and deploying a narrower range of aircraft. Many low-cost carriers also reduce costs by flying into secondary airports.¹⁸

The low-cost airline concept started in the United States with the emergence of Southwest Airlines in 1971. The main low-cost carriers in the U.S. market, which accounted for 24 percent of U.S. revenues in 2004,¹⁹ include AirTran, America West, ATA, Frontier, JetBlue, Southwest, and Spirit Airlines.²⁰ Overall, the share of passenger revenues held by low-cost airlines in the United States has doubled over the past decade, whereas that of established airlines has fallen by nearly 20 percent.²¹ In Europe, the low-cost industry started in the mid-1980s in the United Kingdom and Ireland, the two countries where the industry is currently best established. The largest and best known of such airlines are Ryanair, which flies to more than 70 European destinations, and easyJet, which offers service to 25 European cities. In Germany, more than 12 low-cost carriers compete with the national incumbent, Lufthansa Airlines, on domestic routes. In Central and Eastern Europe, WizzAir, which is based in Hungary and Poland, flies to more than 17 European countries. Similarly, SkyEurope flies to more than 20 European countries from bases in Hungary, Poland, and Slovakia. In Asia, Kingfisher and Spice Jet recently launched domestic operations in India,²² while AirAsia, a joint venture between firms based in Malaysia and Thailand, offers service between Bangkok, Thailand and cities in China.²³

Low-cost carriers are also beginning to emerge on long-haul international routes. The most notable example is Emirates Airlines, which offers flights between Dubai (United Arab Emirates), and several destinations in Europe, Asia, and the Americas.²⁴ Similarly, two new start-ups, Eos and MaxJet, have emerged on the New York-London route. Although both airlines utilize low-cost strategies, e.g., focusing on profitable, point-to-point routes (thereby avoiding expensive hub connections), their target is the more profitable corporate niche. Eos, for example, offers a luxury business-class service, whereas MaxJet offers a full business-class service for under \$2,000,²⁵ less than half of what most carriers charge for business-class service on the transatlantic route.

¹⁸ In Europe, the pioneers of the low-cost carrier industry traditionally adopted one of two main models. Ryanair, for example, focused on offering a limited number of flights to a large number of destinations, typically targeting small, low-cost airports. By contrast, easyJet offered frequent flights on fewer routes. In recent years, the two models have converged. Oxford Analytica, “Expanding Low-Cost Airlines Pose Bigger Threat,” February 9, 2006.

¹⁹ In 2004, major network carriers accounted for 68 percent of U.S. passenger revenues, while regional airlines accounted for 8 percent of such revenues. Japan International Transport Institute, *The Current State of the U.S. Aviation Industry*, 5.

²⁰ Delta Airlines and United Airlines have also developed low-cost subsidiaries.

²¹ Ibid.

²² *Economist*, “Lining Up for Profits,” May 10, 2005.

²³ *Chinanews*, “Low-Cost Airlines to Take Off in China,” March 9, 2005; and *ChinaBiz*, “Low-Cost Airlines Expansion Not Easy,” May 15, 2004.

²⁴ Despite fares and amenities similar to those of traditional international carriers, Emirates Airlines maintains per-seat cost and profit numbers that closely resembles that of low-cost carrier Ryanair. *The Economist*, “Easy Oz,” May 10, 2005.

²⁵ *Economist*, “Battle of the Atlantic,” October 13, 2005.

In response to rising fuel and labor costs²⁶ and competition from low-cost carriers, many established carriers in developed countries have adopted a variety of strategies to reduce average costs. The main focus of such strategies is the reduction of labor costs, particularly through employee lay-offs, contract renegotiations, and salary cuts. Many airlines—both traditional and low-cost carriers—also have attempted to reduce labor costs by developing proprietary websites through which customers can purchase tickets,²⁷ and by installing automated check-in kiosks. Such practices improve efficiency and reduce the number of required ticketing agents and airport check-in staff. Increasingly, many airlines also are outsourcing maintenance, repair, and cabin service functions in an effort to reduce labor costs. In 2004, over one-half of U.S. airlines' aircraft maintenance and repair operations, tasks historically performed in-house by high-wage, unionized workers, were outsourced to domestic third-party firms.²⁸ In some cases, U.S. airlines have contracted with offshore companies to perform a portion of their aircraft repairs. For example, United Airlines recently concluded an agreement with China-based Ameco for maintenance services on its Boeing 777 fleet.²⁹ Airlines are also beginning to outsource in-flight catering and ground-handling services.³⁰

The commodity-like nature of a passenger seat, and persistent overcapacity on many domestic and international routes, have forced airlines to compete for customers mainly on the basis of price. Although airline pricing is highly seasonal, steeply discounted pricing (and occasional price wars) is a common occurrence, particularly for economy seats on many routes within North America and Europe, and in the transatlantic market. Nonetheless, some airlines are attempting to increase revenues by charging higher business-class fares in exchange for value-added services and amenities. For example, many airlines are redesigning business-class cabins to improve comfort and privacy. Similarly, airlines are beginning to add services like Internet access and teleconferencing facilities to business-class cabins. On many domestic and international routes, however, competition from low-cost carriers discourages fare increases on economy-class tickets.

In an effort to both reduce costs and increase passenger traffic, U.S. and foreign airlines developed strategic alliances. The main alliances world-wide include OneWorld,³¹ Skyteam,³² and the Star Alliance.³³ In general, such alliances enable participants to increase flight frequency, reduce costs, and lower fares with minimal capital investment in aircraft and airport facilities. Such alliances comprise both large airlines with regional hubs (like American Airlines and British Airways), as well as smaller carriers that do not have extensive networks. Small carriers typically add value by feeding passenger traffic into the hubs of larger alliance members.³⁴

²⁶ For the financial year ending in August 2004, airline fuel and lubricant costs increased by 10 percent, while aircraft maintenance and repair services increased by 7 percent. Datamonitor, "Global Airlines," 14.

²⁷ Some observers assert that the Internet has heightened already competitive pricing conditions by allowing customers to more easily access and compare airline fares.

²⁸ *Outsourcing Times*, "Airlines Increasingly Outsource Maintenance Work," May 9, 2005.

²⁹ International trade in repair and maintenance services are covered in the BEA category entitled *Installation, maintenance, and repair of equipment*. Todd, "Soaring Costs Send Airlines Abroad for Maintenance," October 23, 2005.

³⁰ Conway, "Revolution Delayed," 46.

³¹ Members of the Oneworld alliance include Aer Lingus (Ireland), American Airlines (United States), British Airways (United Kingdom), Cathay Pacific (Hong Kong), Finnair (Finland), Iberia (Portugal), LanChile (Chile), and Qantas (Australia).

³² Members of the Skyteam alliance include Aeromexico (Mexico), Air France (France), Alitalia (Italy), CSA Czech Airlines (Czech Republic), Delta Airlines (United States), and Korean Air (Korea).

³³ Members of the Star Alliance include Air Canada (Canada), Air New Zealand (New Zealand), ANA (Japan), Asiana Airlines (Korea), Austrian Airlines (Austria), bmi (United Kingdom), LOT Polish Airlines (Poland), Lufthansa (Germany), SAS (Sweden), Singapore Airlines (Singapore), Spanair (Spain), Thai Airways (Thailand), United Airlines (United States), US Airways (United States), and Varig (Brazil).

³⁴ Hubbard, "The Growing Impact of Airline Alliances," 28-29.

Alliances allow both large and small members to reduce variable, flight-related costs through the joint utilization of aircraft. Alliance members also reduce costs by merging relevant sales, maintenance, and administrative functions; combining computer systems; and integrating frequent-flyer programs. In some cases, alliance partners also have achieved cost savings by jointly procuring advertising, insurance, and aircraft maintenance/repair services, and by sharing cargo and passenger facilities at airports.³⁵ Similarly, alliance members often jointly procure goods such as aircraft parts or fuel, using volume purchasing methods to obtain price discounts. Airline partners also have made joint capital investments, particularly for new information technology systems.³⁶

In an effort to increase revenue, many large airlines are shifting capacity from highly competitive national markets to more profitable international routes. For example, United Airlines recently signed an agreement with Swiss International Airlines that includes code-sharing³⁷ arrangements, joint marketing efforts, and merged frequent flyer programs. Similarly, Delta Airlines recently announced plans to increase the number of international seats by 25 percent. Overall, between January 2002 and August 2005, U.S. airlines' domestic capacity declined by 4 percent, whereas the capacity deployed by U.S. airlines in international markets increased by 4 percent.³⁸

Despite increasing pricing pressures, transcontinental routes continue to be profitable, particularly in the business segment. In the near term, most U.S. airlines likely will focus their international expansion activities on popular European routes. However, many U.S. airlines are also adding other international routes. Recently, for example, American, Continental, and United Airlines each added new flights between U.S. and Chinese cities, while Delta increased the frequency of its flights between the United States and Brazil. According to industry sources, consumer demand for air travel is expected to grow rapidly in Asia, Latin America, and the Middle East as these economies continue to grow, while the demand for air travel in the relatively mature markets of Europe and North America is expected to decline.³⁹

Worldwide, passenger airlines represent eight of the 10 largest freight carriers.⁴⁰ Nonetheless, the cargo operations of most passenger airlines typically account for a relatively small share of overall revenues. For example, the cargo division of British Airways accounted for 6 percent of revenues during the latest financial year. Similarly, Northwest Airlines' cargo division accounted for roughly 7 percent of total revenues in 2004. Overall, cargo accounted for only 4 percent of total revenues at the 12 largest U.S. airlines. Passenger airlines, which generally accept freight from a few select forwarders, typically attract business by offering price discounts relative to the rates of cargo-only carriers.⁴¹ Over the past 20 years, growth in freight services has resulted from the globalization of supply chains, which necessitates the shipping of both intermediate goods and finished products around the world. Shifting consumer tastes have also played a role, as perishable items such as out-of-season vegetables, exotic fish, and fresh flowers are increasingly

³⁵ *Airline Business*, "Airline Alliance Survey 2005," 49.

³⁶ Field, "Collective Gains," 44-45.

³⁷ Code-sharing agreements permit airlines to list flights under another airline's code in a computer reservation system.

³⁸ Bond, "Stymied by Domestic Fares, U.S. Carriers Think International," October 9, 2005.

³⁹ Boeing, *Current Market Outlook 2005*.

⁴⁰ The largest cargo/freight carriers, measured in descending order by freight-metric tonne kilometers flown, are Federal Express (United States), Korean Air, Lufthansa (Germany), United Parcel Service (United States), Singapore Airlines, Cathay Pacific (Hong Kong), China Airlines, Eva Airlines (Taiwan), Air France, and Japan Airlines. *Economist*, "Inspecting the Cargo," February 15, 2005.

⁴¹ The air freight industry comprises a mix of large, cargo-only carriers (e.g. Federal Express); smaller, specialized operators; and passenger airlines. In 2004, the air freight industry was valued at \$50 billion worldwide. *Ibid.*; and Standard & Poor's, "Airlines," 20-21.

being flown between countries. In the future, passenger airlines are expected to increase their freight/cargo operations due to the high relative profit margins associated with such services.

CHAPTER 4

Banking and Securities Services

Introduction

For the purposes of this discussion, banking and securities services comprise both fee-based commercial banking services and securities-related services. Fee-based commercial banking services include financial management and transaction services; advisory services; custody services;¹ credit card services; and other credit-related services, such as the provision of standby letters of credit for trade financing.² Securities-related services include brokerage services; securities lending services;³ securities clearance and settlement services; securities trading services; private placements;⁴ and securities underwriting services. Deposit-taking and lending services are excluded from the trade discussion, but are included in the industry analysis section of this chapter.⁵ Both fee-based commercial banking services and securities-related services can be traded across borders or sold through affiliates.

Cross-Border Trade and Affiliate Transactions⁶

U.S. cross-border exports of financial services increased by 13 percent to \$27.4 billion in 2004, following a compound annual growth rate of 9 percent during 1999-2003 (figure 4-1). U.S. imports of financial services increased by 14 percent in 2004, reaching \$11.2 billion, compared to a compound annual growth rate of 1 percent during 1999-2003. Despite the slightly higher rate of import growth in 2004, the U.S. trade surplus in financial services increased by 16 percent to \$16.2 billion. The rise in exports was largely attributable to an increase in foreign purchases of U.S. bonds,⁷ financial management services, and credit card services.⁸ The rise in imports of the subject services is due in part to increased trading in foreign markets by U.S. investors, likely a response to the lack of significant growth in U.S. equity markets in 2004.⁹

¹ A custodian holds securities for a client under a written agreement and buys and sells when instructed. Custody services include securities safekeeping as well as collection of dividends and interest. Fitch, *Dictionary of Banking Terms*, 172.

² A standby letter of credit represents an obligation by the issuing bank to a designated third party (the beneficiary) that is contingent on the failure of the bank's customer to perform under the terms of the contract with the beneficiary. A standby letter of credit is most often used as a credit enhancement, with the understanding that, in most cases, it will never be drawn against or funded. *Ibid.*, 591.

³ A securities loan is offered by broker-dealers, banks, or other organizations for the purchase of securities. *Ibid.*, 552.

⁴ A private placement is the sale of an entire issue of securities to a small group of investors. *Ibid.*, 481-82.

⁵ BEA does not report data on trade in deposit-taking and lending services provided by commercial banks.

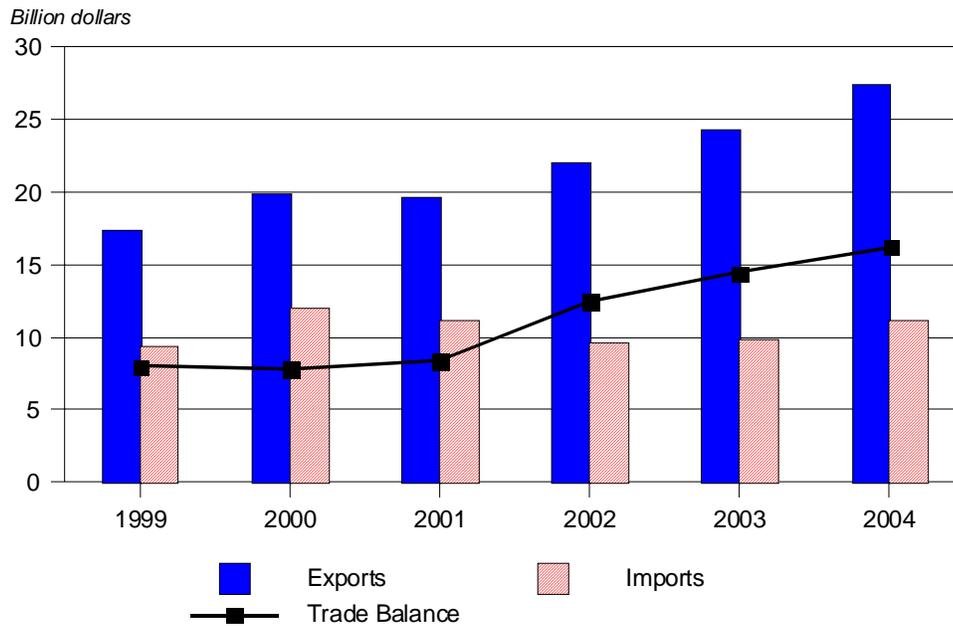
⁶ The main sources for this section include the Securities Industry Association's *Securities Industry Factbook 2005*, and the BEA's *Survey of Current Business*.

⁷ Foreign net purchases of U.S. bonds (corporate, Treasury, and agency) increased 26 percent to \$890 billion in 2004, while foreign net purchases of U.S. stocks decreased 32 percent to \$26 billion. Securities Industry Association, *Securities Industry Factbook 2005*, 77.

⁸ USDOC, BEA, *Survey of Current Business* 85, no. 10:36.

⁹ *Ibid.*, 37. U.S. net purchases of foreign securities increased 51 percent to \$94 billion in 2004. Securities Industry Association, *Securities Industry Factbook 2005*, 79.

Figure 4-1
Financial services: Cross-border trade, 1999-2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

The United Kingdom, Bermuda, Canada, France, and Japan were the largest markets for U.S. exports of financial services in 2004, purchasing \$4.2 billion, \$1.3 billion, \$1.2 billion, \$897 million, and \$875 million, respectively (figure 4-2). These figures represent year-on-year increases for all countries except Bermuda, with exports to the United Kingdom increasing by 27 percent over 2003 levels. Such increases are likely due to improving economic conditions in these countries and, in some cases, rising stock markets. The depreciation of the U.S. dollar vis-a-vis these countries' currencies during 2004 was also likely a contributing factor.¹⁰

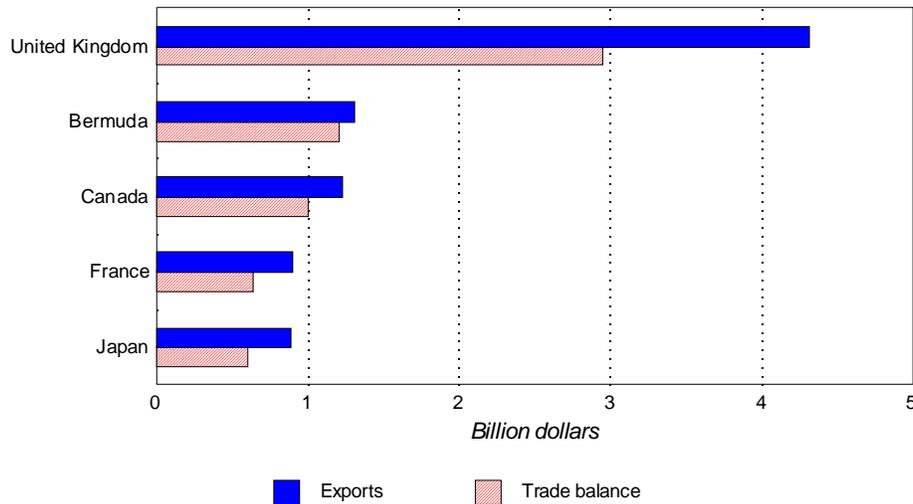
In 2004, the largest suppliers of financial services imports to the United States were the United Kingdom (\$1.4 billion), Japan (\$284 million), France (\$264 million), Hong Kong (\$227 million), and Canada (\$226 million).¹¹ These figures represent substantial increases over 2003 levels for each country, with imports from Hong Kong rising 285 percent, likely reflecting the country's role as a major financial center for business dealings in China.

In 2003, data on total sales of security and commodity brokerage services by majority-owned foreign affiliates of U.S. multinational companies were suppressed to avoid disclosing the confidential data of individual companies. However, sales by affiliates in the United Kingdom, which traditionally accounts for the largest share, totaled \$15.8 billion in 2003, a 7-percent increase over the previous year. Other important markets for U.S. affiliates include Japan (\$5.5 billion), Australia (\$1.2 billion), and Canada (\$914 million).

¹⁰ USDOC, BEA, *Survey of Current Business* 85, no. 10:26.

¹¹ *Ibid.*, 59-60.

Figure 4-2
Financial services: U.S. cross-border exports and trade balance, by major trading partners, 2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 60.

Purchases of security and commodity brokerage services from majority-owned foreign affiliates in the United States totaled \$21.4 billion in 2003, a 10-percent increase over 2002 levels. In 2003, data on U.S. purchases from foreign affiliates by country were suppressed for the major trading partners. However, sales of all non-depository, non-insurance financial services by majority-owned foreign affiliates were dominated by the United Kingdom (\$4.5 billion), France (\$2.7 billion), Japan (\$2.6 billion), and Canada (\$1.4 billion).

Competitive Conditions in the Global Banking Market¹²

The global banking industry—including commercial, retail, and mortgage banks—was valued at a record \$61.6 trillion in 2004, representing a 6-percent increase over the previous year. This followed a compound annual growth rate during the 2000-2004 period of approximately 5 percent. Europe accounted for the largest share of the global banking market with 61 percent in 2004, followed by the Asia-Pacific region and North America with 20 percent and 18 percent, respectively. Although the commercial banking sector is dominated by a few firms worldwide, the retail and mortgage sectors tend to have a more even distribution of market share, as local and regional banks are often able to compete with larger firms. In 2004, Citigroup maintained the largest share of the global banking market, at 2 percent, followed by UBS (Switzerland), HSBC (United Kingdom), Mizuho Financial Group (Japan), Bank of America (United States), and Deutsche Bank (Germany). Collectively, these six banks account for approximately 12 percent of the global banking market.

Although the U.S. banking industry is generally considered to be highly fragmented, it has become less so in the past decade, particularly among large money center banks. In 2005, the ten-largest

¹² The main sources for this section include Datamonitor, Mergent, Standard & Poor's, *The Economist*, the U.S. Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC). See bibliography for full citations.

commercial banks (table 4-1)¹³ held 41 percent of industry assets in the U.S. market, up from 33 percent in 2001.¹⁴ Mergers and acquisitions (M&A) in the U.S. banking industry rapidly increased in the mid-1990s following the passage of legislation that standardized interstate banking and branching,¹⁵ and continued during the 1999-2004 period, albeit at a slower rate. In part a reflection of M&A activity, the total number of commercial banks insured by the FDIC decreased by 11 percent to 7,630 during 1999-2004.¹⁶ Further, the number of relatively large banks with assets between \$100 million and \$1 billion rose by 16 percent to 3,530 during the period, and those with assets exceeding \$1 billion increased by 13 percent to 445. During the 1999-2004 period, foreign banks' assets in the U.S. market rose 31 percent to \$1.1 trillion, although the number of U.S. branches of foreign banks decreased by 24 percent during the same period.¹⁷ Of the fifteen top banks operating in the United States in 2005, three were foreign owned and, in two cases, demonstrated substantial growth in that year. The Royal Bank of Scotland and HSBC realized 20 and 25 percent gains in U.S. assets, respectively, over 2004 levels, while ABN Amro experienced a more modest gain of 2 percent.¹⁸ Although their U.S. counterparts also experienced gains, it is clear that foreign financial firms are succeeding in the increasingly competitive U.S. market.

The global banking sector is in varying stages of development. The North American, European and Japanese markets, for example, are largely mature, with strong competition pressuring banks to increase growth through M&A activities. Much of the Asia-Pacific market, however, is still developing. Strong economic growth and structural reform in those markets in the past few years has escalated the demand for bank products and services. The developing Latin American market is also growing, as certain countries adopt measures to stabilize their financial sectors.¹⁹ Nonetheless, the Latin American region comprises just a fraction of the total global banking industry.

¹³ The five largest bank holding companies in the United States include Citigroup, Inc., JPMorgan Chase & Co., Bank of America Corp., Wachovia Corp., and Wells Fargo & Co. Standard & Poor's, "Banking," 7.

¹⁴ Data are as of September 30, 2001, and September 30, 2005, which are the most recent figures available. U.S. Federal Reserve, "Large Commercial Banks;" and FDIC, "Statistics on Depository Institutions."

¹⁵ The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 provided a national standard for interstate banking, allowed bank holding companies to acquire banks in any state, and allowed mergers between banks across state lines. American Bankers Association, *Banking Today*, 99. One of the key factors contributing to increased consolidation and competition in the banking industry during the last decade is an overhaul of banking legislation. For much of the 20th Century, U.S. banks operated under regulations that restricted banks from operating in multiple states, and, in the case of the Glass-Steagall Act of 1933, prohibited them from dealing in securities markets. In 1994, however, Congress enacted the Riegle-Neal Interstate Banking and Branching Efficiency Act which allowed bank holding companies to purchase banks in multiple states, and to merge banks across state lines. Five years later, the Gramm-Leach-Bliley Act of 1999 allowed banks to undertake securities and insurance activities, previously prohibited under the Glass-Steagall Act and the Bank Holding Company Act, respectively. As a result, bank holding companies rapidly expanded operations into multiple states and market segments, contributing to the growth of high-asset banks. American Bankers Association, *Banking Today*, 2002.

¹⁶ FDIC, "Statistics on Depository Institutions," accessed November 2, 2005.

¹⁷ U.S. Federal Reserve, "Structure and Share Data for U.S. Offices of Foreign Banks," accessed November 1, 2005.

¹⁸ *American Banker*, "Bank and Thrift Holding Companies with Most Assets," November 3, 2005.

¹⁹ Brazil and Argentina, in particular, continue to implement International Monetary Fund recommendations. Datamonitor, "Global Banks," May 2005.

Table 4-1
Leading global banks, 2005

Company	Country	Assets ¹
		<i>Billion dollars</i>
Mitsubishi UFJ Financial Group, Inc.	Japan	1,700
UBS AG	Switzerland	1,700
Barclays PLC	United Kingdom	1,500
Citigroup, Inc.	United States	1,500
BNP Paribas SA	France	1,500
HSBC Holding PLC	United Kingdom	1,500
ING Groep NV	Netherlands	1,400
Royal Bank of Scotland Group PLC	United Kingdom	1,400
Credit Agricole SA	France	1,300
Bank of America Corp.	United States	1,300

¹ Latest fiscal year.

Source: Standard & Poor's, "Banking: Europe" (April 2006): 8

The preponderance of sectoral trade likely takes place in commercial banking, though official government figures are not collected on deposit-taking institutions. However, multinational firms that often rely on global banks for commercial financing, reportedly use local banks for many retail banking services. Because such firms, particularly in developing countries, typically offer higher levels of local market expertise, including knowledge of local business practices.²⁰

Global economic conditions have been favorable to banks in recent years. In 2004, the global economy grew by 5.1 percent while inflation remained low in most countries.²¹ Interest rates, though rising, also remained relatively low in many markets. As a result, the demand for loans continued to grow, particularly for real estate-backed loans and commercial loans to small- and medium-sized enterprises. In 2006 and beyond, however, rising interest rates, as well as cooling housing markets in many countries, could curtail loan demand.²²

During 2001-2004, historically low interest rates generated sustained growth in the U.S. banking sector, particularly in the core loan market. In 2004, for example, loans and leases increased 13 percent to \$6.1 trillion.²³ Much of this activity was driven by strong growth in real estate lending, particularly home equity loans and mortgage refinancing loans. Overall, the number of real estate-

²⁰ Global banks reportedly have limited reach in many countries as their offices tend to be located only in major cities. Myers, "How Global is Your Bank?" October 15, 2005.

²¹ Economist Intelligence Unit, "World Financial Services Outlook," August 24, 2005.

²² Datamonitor, "Global Banks," May 2005.

²³ The data contained in this paragraph were derived from Standard & Poor's, "Banking," 2.

backed loans grew by 17 percent in 2004, followed by loans to individuals (10 percent), commercial and industrial loans (5 percent), and farm loans (4 percent).

Overall, growth in the European banking market was more subdued in 2004, due in large part to high levels of competition and slow economic growth in many countries. Select countries, namely the United Kingdom and Spain, however, experienced banking sector growth, largely due to cost-cutting initiatives and growing demand for financial products. UK-based HSBC, for example, reported a 36-percent rise in operating income during the first half of 2004, compared to the same period in 2003.²⁴ Denmark, Finland, Norway, and Sweden also reportedly registered strong growth in 2004.

As noted, the Asia-Pacific region has become particularly attractive to many global banks. Indeed, strong economic growth and trade liberalization in many Asian countries have created opportunities for global banks, as well as local and regional banks, to provide loans and other financial services to firms in a broad array of industries. According to the Asian Development Bank, economic growth in the region totaled 6.3 percent in 2003, outpacing the global rate. Both deposit and lending rates are rising in most Asia-Pacific countries. For example, in China, bank lending increased by 21 percent in 2003,²⁵ while total deposits by commercial banks in India rose 17 percent in 2004. Some of the countries hampered by nonperforming loans, in particular China and Japan, have taken initial steps to deal with nonperforming loans in recent years, thereby increasing domestic banks' competitiveness, and increasing their ability to attract foreign investors. The latter is particularly important in markets such as China, where liberalization initiatives have allowed foreign banks to purchase partial ownership shares in domestic banks (see chapter 8).

In the increasingly competitive global banking environment, firms are continually taking steps to increase their competitive position. Common activities include focusing on expanding into high-growth markets, cutting costs and increasing efficiency, and introducing new products. Since many global banks have long-established operations in the mature developed-country markets, many are now looking to expand into developing countries, particularly those in Asia. Although global banks may have an advantage over local banks due to the depth and breadth of their experience, restrictive regulatory regimes in many developing countries present an obstacle to market entry. In many such countries, for example, foreign banks face ownership restrictions in local banking establishments. In China, for example, government regulations limit foreign equity ownership in domestic banks to 25 percent. As a result, many banks enter such emerging markets via joint ventures with domestic firms. Nonetheless, many global banks are undeterred by the risks of operating in more restrictive and potentially volatile markets, particularly if it means attaining first mover advantage. For example, Citigroup, which is widely recognized for its global reach, registered a 14-percent increase in international revenues in the last quarter of 2004.

In addition to organic growth in international markets, global banks are also increasing M&A activity. European banks continue to expand into the U.S. market—Royal Bank of Scotland acquired 26 American banks during the 1988-2004 period²⁶—and inside Europe as well. HSBC recently made acquisitions in Bermuda, Mexico, and Brazil, while Citigroup moved into the Korean, Mexican, and Australian markets through M&A activity.

As many of the large banks expand their presence through either M&A activities or branch expansions, a growing variety of banks and banking services are becoming available to customers

²⁴ Mergent, "The Global Banking Industry," May 2005.

²⁵ For the fiscal year ending in March 2004. Mergent, "The Global Banking Industry," May 2005.

²⁶ Ibid.

who face few switching costs for many banking services. As a result, banks are constantly attempting to differentiate themselves, in both domestic and international markets, via new product offerings and/or service enhancements. Internet banking, for example, has grown exponentially in recent years, affording customers greater convenience. In many cases, banks are waiving transaction fees in an effort to lure new customers and retain existing ones. Further, many bank branches are offering personalized services, extended hours, and more branch locations.²⁷ Moreover, as larger banks have penetrated local markets, smaller community banks are increasingly pressured to match such enhanced products and services in order to maintain their competitiveness.

The global banking industry also faces increasing competition from non-traditional financial entities and products. Nonbank firms such as mortgage brokers and credit card companies, for example, have been successful in capturing market share in their respective segments. In recent years, too, the growing number of consumer-oriented investment options have also presented a challenge to banks. Indeed, banks' traditional savings, checking, and money market accounts now compete head-to-head with myriad products and services offered by mutual funds, brokerage firms, and other financial intermediaries.

²⁷ Standard & Poor's, "Banking," 3.

CHAPTER 5

Education Services

Introduction

Education services include formal academic instruction in primary, secondary, and higher education institutions, as well as instructional services offered by libraries and vocational, correspondence, language, and special education schools. Cross-border trade predominates in this service industry. U.S. cross-border exports reflect the estimated tuition and living expenses of foreign residents¹ enrolled in U.S. colleges and universities, while U.S. cross-border imports of education services represent the same expenses for U.S. residents studying abroad.² Affiliate transactions in education services occur when educational institutions establish a physical presence in a foreign market for the purpose of offering for-credit courses. Data on affiliate transactions are limited, especially those concerning sales by U.S.-based affiliates of foreign-parent firms. As a result, the trade discussion in this chapter focuses primarily on cross-border trade.

Cross-Border Trade and Affiliate Transactions

In 2004, U.S. exports of education services totaled \$13.5 billion, while imports amounted to \$3.5 billion, resulting in a \$10-billion trade surplus (figure 5-1). Exports increased by 2 percent in 2004, slower than the 8-percent average annual growth rate recorded during 1999-2003.³ In 2004, the principal U.S. export markets for education services were India (12 percent of all exports), China (9 percent), Korea (8 percent), Japan (7 percent), and Canada (5 percent) (figure 5-2). Exports to India grew by 13 percent, the fastest growth rate in 2004;⁴ such high growth is attributed to a 7 percent growth rate in the number of Indian students enrolled in U.S. universities as well as a 6-percent increase in per-student expenditures.⁵ Exports to China

¹ Foreign residents do not include U.S. citizens, immigrants, or refugees.

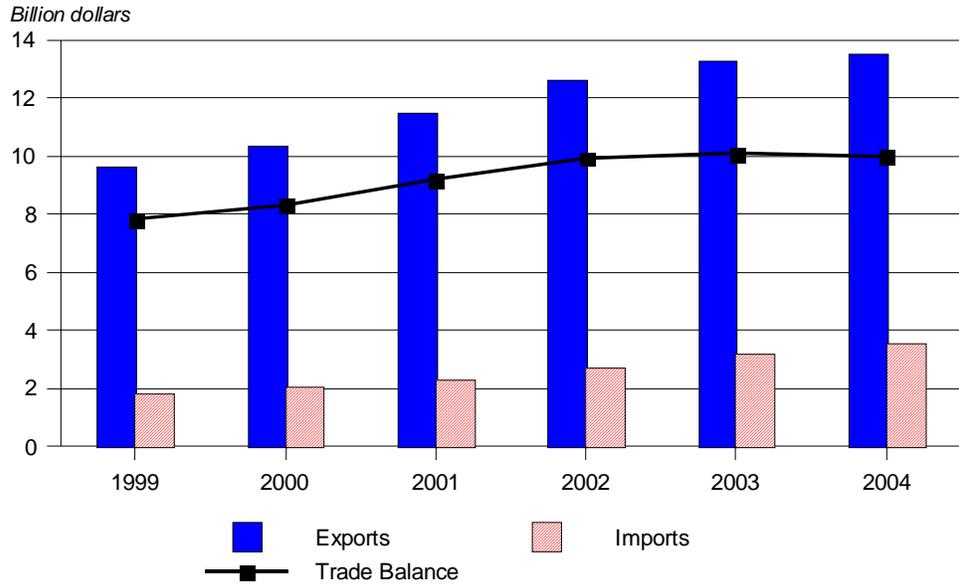
² Data on U.S. imports of education services are estimated by the U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA), based on two pathways in which U.S. permanent residents study in a foreign country. In the first, U.S. residents must receive academic credit for study abroad from accredited U.S. colleges and universities whether or not the U.S. residents also receive academic credit from the foreign institution. The 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, are not included. 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 comprise U.S. imports of education services, the full extent of study abroad by U.S. students is understated in the trade data and, accordingly, the U.S. trade surplus in education services is overstated. USDOC, BEA, *Survey of Current Business* 85, no.10:67; and Chin, ed., *Open Doors 2004*, 92.

³ USDOC, BEA, *Survey of Current Business* 85, no. 10:45-46.

⁴ *Ibid.*, 60.

⁵ Calculated for India and other leading U.S. export markets by USITC staff from official U.S. trade data published by the BEA and from foreign student enrollment data compiled by the Institute for International Education.

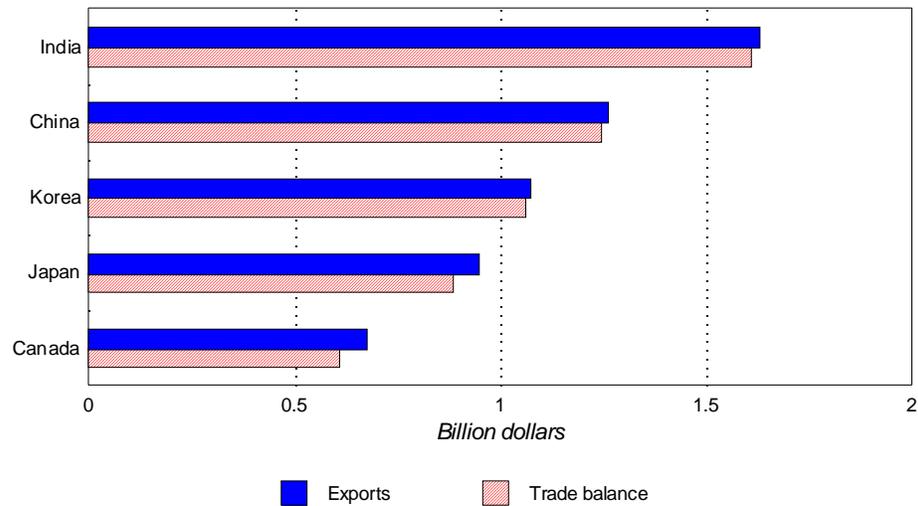
Figure 5-1
Education¹ services: Cross-border trade, 1999-2004



¹ Starting with data for 2002 onward, the Bureau of Economic Analysis modified the method of estimating U.S. imports of education services. As a result, estimated imports in 2002-04 are slightly higher and trade surpluses are slightly lower than they would have been under the previous methodological approach. For details, see footnote 2 in this chapter of the report.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

Figure 5-2
Education services: U.S. cross-border exports and trade balance, by major trading partners, 2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 60.

increased by 1 percent in 2004,⁶ as a 6-percent increase in per-student expenditures offset a 5-percent decrease in Chinese student enrollment. Declining Chinese enrollments are likely attributable to several factors, including changes in U.S. visa regulations and lengthy periods to obtain student visas;⁷ increasing competition for Chinese students from non-U.S. universities,⁸ and Chinese Government-sponsored financial assistance for Chinese graduate students performing research, in China, in science and technology fields. Exports of educational services to Japan decreased by 5 percent in 2004,⁹ largely due to an 11-percent decrease in the number of Japanese students enrolled in U.S. universities. The falloff in Japanese student enrollment is, in part, attributable to an expansion of university-level distance learning programs, including those by U.S. universities. Such programs offer an alternative to studying abroad.¹⁰

U.S. imports of education services increased by 11 percent in 2004.¹¹ Trends during 1999-2003 cannot be precisely determined due to changes in data collection methods.¹² However, statistics on U.S. students studying abroad provide some insight into U.S. import trends. In 2004, approximately 191,300 U.S. students studied abroad,¹³ a 10-percent increase over 2003 and slightly faster than the 8-percent average annual growth rate during 1999-2003.¹⁴ In addition, in 2004, at least 20,000 U.S. students established temporary residency in Australia, Canada, and the United Kingdom for the purpose of enrolling in full-time, degree-granting (or other award) programs.¹⁵ Leading country sources of U.S. import suppliers in 2004 were the United Kingdom (24 percent), Spain (10 percent), Italy (9 percent), Mexico (7 percent), and Australia (6 percent).¹⁶ The United States maintains education services trade surpluses with most countries due to the larger number of foreign students enrolled in U.S. institutions relative to U.S. students

⁶ USDOC, BEA, *Survey of Current Business* 85, no. 10 (October 2005): 59-60.

⁷ *Chronicle of Higher Education*, "Chinese Students to Get One-Year Visas," A32.

⁸ For example, Australia, Japan, and the United Kingdom are among the leading countries in enrolling Chinese students. Chinese student enrollment in Australian universities increased by 33 percent, to about 30,000, in 2004, while enrollment of such students in British universities in 2003 was up 36 percent, to about 48,000. In 2004, approximately 78,000 students from China enrolled in Japanese universities, accounting for more than 65 percent of non-Japanese students in Japan, compared to about 62,000 from China who studied in the United States. *Chronicle of Higher Education*, "In a Recruitment Bid, Japanese Universities Open Offices in China," A37-38, A44; and Chin, ed., *Open Doors 2004*, 8.

⁹ USDOC, BEA, *Survey of Current Business* 85, no. 10:59-60.

¹⁰ *Chronicle of Higher Education*, "Study Ranks Top Foreign Markets for Distance Learning," A44. BEA staff notes that distance learning over the Internet or through correspondence courses is not included in the U.S. balance of payments accounts under educational services but is included elsewhere in the balance of payments accounts. BEA representative, e-mail message to USITC staff, received January 26, 2006.

¹¹ USDOC, BEA, *Survey of Current Business* 85, no. 10:59-60.

¹² See footnote 2.

¹³ To be counted, U.S. students must be 1) enrolled in at least one credit-granting course abroad, and 2) matriculated in a U.S. degree-granting program. *Chronicle of Higher Education*, "Enrollment of Foreign Students Falls for a Second Year," A1.

¹⁴ Chin, ed., *Open Doors 2004*, 58.

¹⁵ As previously noted, starting in 2002 the BEA has included estimates of additional U.S. imports of education services based on information supplied by the Australian Government's immigration agency, education associations in the United Kingdom, and various universities in Canada, which reported statistics on students from the United States who enrolled as temporary residents directly in degree programs of universities in those three countries. In 2004, such students totaled approximately 13,400 in the United Kingdom, 3,700 in Australia, and 3,000 in Canada. The addition of these students increased the total number of U.S. students enrolled in degree programs either from their home institution or their host university in the United Kingdom by 42 percent, Australia by 32 percent, and Canada by 284 percent. These three native English-speaking countries account for most U.S. residents who enroll in a foreign university's degree program. Council for International Education (United Kingdom), "Higher Education Statistics," online tables, accessed January 19, 2006; Commonwealth of Australia, Department of Immigration, Multicultural and Indigenous Affairs statistics tables, accessed January 19, 2006; Canadian university web sites; telephone interviews and e-mail correspondence with Canadian university officials; and telephone interviews with BEA staff.

¹⁶ USDOC, BEA, *Survey of Current Business* 85, no. 10:60.

who study abroad, and also to the tendency of U.S. students to study abroad for shorter periods of time, typically less than one semester, than do their foreign student counterparts.

Of the foreign students studying abroad in 2003, one-quarter chose to study at colleges and universities in the United States, the largest overall market worldwide.¹⁷ In 2004, the number of foreign students enrolled in U.S. universities fell by 2 percent to approximately 572,500. By contrast, foreign student enrollments at U.S. universities grew at an average annual rate of 5 percent during 1999-2003.¹⁸ Although 2005 trade data for education services are not yet available, industry sources report that foreign student enrollment in U.S. colleges and universities decreased by 1 percent during the 2004-05 academic year, the second consecutive year of falling foreign student enrollments.¹⁹ In 2005, the decline in foreign student enrollments was most pronounced at the graduate school level, which fell, for the first time in nearly a decade, by 4 percent. Such enrollment declines were spread across a broad spectrum of both developed and developing countries. However, foreign student enrollments from the top five source countries actually increased 1 to 4 percent, per country, in 2005. Foreign student applications to U.S. graduate schools, a leading indicator of foreign student enrollments, fell by 28 percent in 2004 and by 5 percent in 2005. Based upon these figures, U.S. colleges and universities predict that, going forward, foreign student enrollment in U.S. graduate schools is likely to remain flat, or even fall.²⁰ Such statistics reportedly led 40 percent of U.S. graduate schools to establish programs and/or campuses abroad.²¹

Available data on affiliate operations in education services are limited, largely because inbound and outbound direct investment in such services is relatively small. In 2003, foreign-based education services affiliates of U.S. parent firms, for example Laureate Education Inc. (formerly Sylvan Learning Systems, Inc.), Career Education Corp., Kaplan Inc., and DeVry Inc.,²² generated sales amounting to \$1.3 billion, up 26 percent from the previous year (figure 5-3).²³ Sales by U.S.-based affiliates of foreign firms in 2003 declined by 9 percent, to approximately \$212 million, slightly slower than the average annual decline of 13 percent during 1999-2002.²⁴

¹⁷ UNESCO, Institute for Statistics, "Tertiary Students Abroad: Learning Without Borders," fact sheet UIS/FS/05/02.

¹⁸ Chin, ed., *Open Doors 2004*, 3.

¹⁹ *Chronicle of Higher Education*, "Enrollment of Foreign Students Falls for a Second Year," A1; and Chin, ed., *Open Doors 2004*, 3.

²⁰ Council of Graduate Schools, press release, March 9, 2005; and "Findings from the 2005 CGS International Graduate Student Admissions Survey II," accessed January 11, 2006.

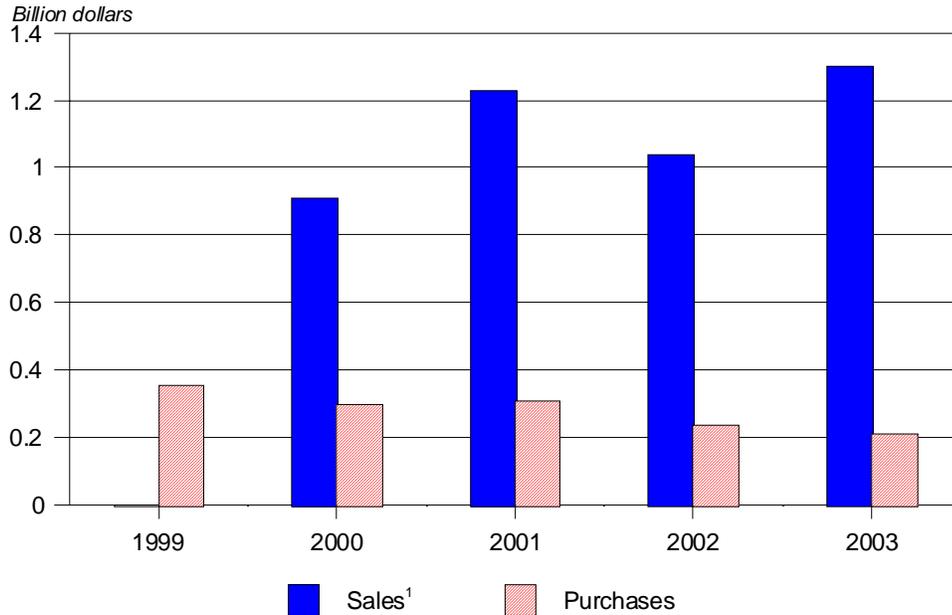
²¹ Council of Graduate Schools, press release, October 31, 2005.

²² Corporate news releases and corporate financial reports, various years.

²³ For years prior to 2000, data on sales of foreign-based education services affiliates of U.S. firms were unavailable or were suppressed to avoid disclosure of the operations of individual firms. USDOC, BEA, *Survey of Current Business* 85, no. 10:74-75.

²⁴ *Ibid.*, 77.

Figure 5-3
Education services: Sales by U.S. majority-owned affiliates, and purchases from foreign majority-owned affiliates, 1999-2003



¹ Sales data for 1999 were suppressed to avoid disclosure of individual company data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 82, no. 10 (October 2002): 121-123; 83, no. 10 (October 2003): 115-117; 84, no. 10 (October 2004): 73-76; and 85, no. 10 (October 2005): 74-77.

Competitive Conditions in the Global Education Services Market

The United States is widely recognized as having the most extensive and preeminent system of higher education in the world. For example, rankings²⁵ developed by the Institute for International Education at Jiao Tong University (China) place U.S. universities in 17 of the top 20 spots²⁶ and 35 of the top 50. The position of U.S. universities, relative to universities in many foreign countries, is rooted in several interrelated factors, including, *inter alia*, highly qualified professors; world-class academic facilities; cutting-edge research in a wide variety of fields; and decades of substantial funding from both public and private sources. Some observers suggest that U.S. universities' academic freedom relative to that of universities in many other countries is a leading factor in their overall success.

²⁵ Such rankings are developed from indicators of the institution's academic and research performance, including the Nobel Prize and other awards conferred on faculty and the quantity and perceived caliber of the faculty's published works.

²⁶ According to Jiao Tong University, the top 20 universities in the world, listed in descending order, include: Harvard University, Stanford University, University of Cambridge (United Kingdom), University of California-Berkeley, Massachusetts Institute of Technology, California Institute of Technology, Princeton University, University of Oxford (United Kingdom), Columbia University, University of Chicago, Yale University, Cornell University, University of California-San Diego, Tokyo University (Japan), University of Pennsylvania, University of California-Los Angeles, University of California-San Francisco, University of Wisconsin, University of Michigan, and University of Washington.

In 2003, the United States was the largest destination for foreign students, hosting approximately 25 percent of all students studying abroad. Other important host countries included the United Kingdom (11 percent), Germany (10 percent), France (9 percent), and Australia (8 percent).²⁷ U.S. universities' share of all foreign students studying abroad, however, has been shrinking for decades, decreasing from 37 percent in 1970 to 25 percent in 2003.²⁸ Moreover, in 2003, the United States ranked in the lower half of Organization for Economic Cooperation and Development (OECD) countries with regard to the share of total enrollment accounted for by foreign students (4 percent), far below that of, for example, Australia and Switzerland (18 percent), the United Kingdom (11 percent), Germany (10 percent), and Canada (7 percent).²⁹ In addition, of the top 20 universities ranked by foreign student enrollments in English-speaking countries, only 4 are U.S. universities (table 5-1).

Globally, competition for highly qualified college students is intense. As a result, colleges and universities strive to differentiate themselves from peer institutions. One of the most important distinguishing factors is a university's reputation, which is often based on a highly subjective assessment of factors such as name recognition, perceptions of academic quality and post graduation employment prospects, and even a school's history and heritage. In recent years, competitive pressures for highly qualified students, particularly in the United States, have also led colleges to redesign curriculum, upgrade facilities, install state-of-the-art communications and Internet capacity, and enhance campus amenities. Universities and colleges also seek to attract top students by providing financial aid, including low-interest loans, tuition grants, scholarships, and on-campus employment.

Many universities, both in the United States and abroad, are actively attempting to increase their foreign student enrollments. For example, the world's top-tier universities are increasingly competing amongst themselves for the world's best students. At all levels, universities in many countries desire to attract foreign students as a way to increase the diversity of their student bodies, with some universities even emphasizing their share of international students in recruiting efforts. Additionally, universities in many countries reportedly seek to attract foreign students, in part, for financial reasons—foreign students often pay full room, board, and tuition.³⁰ For example, the University of Oxford (United Kingdom), which currently runs an annual operating deficit, is increasing the non-European Union (EU) students' share of total enrollment as a means to augment university revenues.³¹

Leading global institutions of higher education recruit foreign students for their degrees and programs directly, and through collaborative efforts with peer institutions, both domestically and abroad. Directly, universities' recruitment efforts include Internet-based virtual campus tours; informational materials delivered in print, DVD, and web-based formats; direct participation in recruiting events abroad; and the engagement of foreign student recruiters abroad.³² Collaborative efforts typically involve the mobility of programs between universities.³³ Program mobility traditionally involves the transfer of proprietary curricula to partner institutions, who provide instructors. Often, the agreement between institutions takes the form of a franchise, one

²⁷ UNESCO, "Tertiary Students Abroad: Learning W"

²⁸ Anderson, "International Students and U.S. Policy Choices," 26; and UNESCO, Institute for Statistics, "Tertiary Students Abroad: Learning Without Borders," fact sheet UIS/FS/05/02.

²⁹ OECD, *Education at a Glance*, 2005, 44.

³⁰ *Economist*, "Wandering Scholars," September 8, 2005.

³¹ *Economist*, "Head in the Clouds," September 8, 2005.

³² Hobsons, *The Hobsons U.S. Education Guide 2006, Worldwide Edition*.

³³ Vincent-Lancrin, "Building Capacity through Cross-border Tertiary Education," 20.

Table 5-1
Top 20 universities in English-speaking countries, by number of foreign students enrolled in 2004

Number of foreign students	University
10,000+	Monash University (Australia)
8,000-9,999	University of New South Wales (Australia) University of Melbourne (Australia)
6,000-7,999	University of Southern California (United States) University of Warwick (United Kingdom) London Metropolitan University (United Kingdom)
5,000-5,999	University of Nottingham (United Kingdom) University of Birmingham (United Kingdom) Macquarie University (Australia) University College London (United Kingdom) University of Leeds (United Kingdom) Massey University (New Zealand) Columbia University (United States) University of Cambridge (United Kingdom) Middlesex University (United Kingdom) London School of Economics and Political Science (United Kingdom) University of Westminster (United Kingdom) University of Toronto (Canada) Purdue University - Main Campus (United States) New York University (United States)

Source: *Open Doors 2004*: 12 (for foreign students at U.S. universities), and published data on foreign student enrollment at non-U.S. universities were provided to respective foreign government agencies by foreign universities, accessed from Australian, Canadian, New Zealand, and U.K. government agency or university websites, (April 5, 2006).

form of which involves a student studying in both countries during the program. These collaborations are growing rapidly, particularly in Asia. The language of instruction is typically the student's native language, although such programs are increasingly taught in English.³⁴

In recent years, foreign universities have competed successfully with U.S. institutions in recruiting students from abroad. Substantial funding from foreign governments or private sources abroad has enhanced student advising and recruitment; facilitated student-visa processing; enabled better coordination between government immigration and education officials; and financed the development of student information sources.³⁵ Universities in some foreign countries also compete by charging lower admissions fees, requiring fewer admission tests, maintaining lower tuition rates, and designing shorter degree programs. Some universities even emphasize lower in-country cost-of-living statistics. In an effort to facilitate university recruitment efforts, some countries also maintain fewer restrictions on work visas for full-time students and recent graduates.

³⁴ Foreign student advisory information and study-abroad information for U.S. students have been provided to USITC staff by various U.S. and foreign universities and other education services organizations.

³⁵ Khandavilli, "Fall in Indian Student Applications," 2.

Certain countries actively recruit larger numbers of graduates in professional or technical fields of study, compared to the United States. Others have substantially increased government funding to upgrade graduate degree programs and research universities in their countries, which have considerably expanded options available to foreign students in a segment of higher education historically dominated by U.S. institutions. In the aftermath of the terrorist attacks on September 11, 2001, and the difficulties encountered in the early administration of U.S. Government-mandated computerized tracking of the status of foreign students enrolled in U.S. colleges and universities, the U.S. higher education industry expressed concern over perceptions abroad that the United States was less accessible and welcoming to foreign students. Steps implemented by the U.S. Government and the education industry to counter such perceptions have demonstrated progress but will likely change foreign students' attitudes only gradually.³⁶

Many national governments, particularly in the developing world, are establishing policies and designating resources designed to encourage universities in other countries to establish campuses or programs across borders. Several years ago, for example, Singapore invited leading foreign universities to establish branch campuses in Singapore and/or enter into partnerships with Singaporean universities, with the aim of creating a science and technology center in Asia. Largely in response to this invitation, the University of New South Wales (Australia) plans to open the first wholly foreign-owned private university in Singapore by the end of 2007.³⁷ Similarly, China has developed policies to encourage foreign universities to establish joint ventures with Chinese educational institutions and/or develop complementary degree programs.

Universities in several countries are also developing "distance learning" programs, which typically offer individual courses and/or degree programs to off-site students. Many such programs are delivered entirely over the Internet, while others divide instruction between Internet delivery and required periods of on-campus residency.³⁸ A small number of U.S. colleges and universities are delivering on-line courses, including private universities such as Harvard University and public universities such as the University of Maryland and Pennsylvania State University.³⁹ Some industry observers believe that, over the longer term, distance learning will facilitate the growth of global education by providing educational opportunities to students around the world, including the underserved markets in many developing countries.

Universities seeking to establish a brick-and-mortar campus abroad face barriers in certain countries. For example, foreign universities are not allowed to establish branch campuses in India⁴⁰ and in certain countries of the former Soviet Union.⁴¹ National regulations related to the official acceptance of university degrees can also act as a barrier to entry. In Japan, for example, the branch campuses of U.S. universities currently face difficulties obtaining official recognition

³⁶ U.S. Government and education industry representatives, conference presentations and interviews with education industry representatives, NAFSA: Association of International Educators Bi-Regional Conference, Atlantic City, NJ, November 8-10, 2005.

³⁷ Singapore Economic Development Board, news release, April 27, 2004.

³⁸ Revenues from on-line education services, however, are included elsewhere in a country's balance of payments accounts and not reported as exports or imports of education services. USDOC, BEA, *Survey of Current Business* 85 no. 10:39.

³⁹ Private, for-profit firms that own and operate colleges/universities, for example Apollo Group, Kaplan, and Laureate, have substantially increased their distance learning capacity.

⁴⁰ "Education in India: Past, Present, and the Future" weblog, "CNR Rao Submits its Report," September 26, 2005.

⁴¹ Education industry and U.S. Government representatives, interviews by USITC staff, Atlantic City, NJ, November 9, 2005.

for both credit hours and conferred degrees.⁴² Indeed, as of the end of 2005, only one U.S. university was able to obtain official recognition for credit hours/degrees conferred by its branch campus in Japan.

⁴² U.S.-Japan Economic Partnership for Growth, “United States-Japan Investment Initiative 2005 Report,” July 7, 2005.

CHAPTER 6

Insurance¹

Introduction

The insurance industry underwrites financial risk for life and nonlife (property/casualty) products, and provides many specialty products. The latter includes reinsurance (the transferring of risk between insurance companies), marine and transportation insurance (for goods in transit, hulls, aviation, and off-shore oil rigs), and brokerage services (the packaging of policies from several underwriters to cover a given risk). In addition to risk transfer, insurance is also an important individual savings device in most countries.² Worldwide, the business of insurance is increasingly being combined with other financial services such as banking, securities, mutual funds, and annuities, most commonly in the distribution of financial products, but also as an integrated method of managing savings, investment, and risk. Insurance firms have been active participants in the recent introduction of mandatory private pension systems in a number of countries.

International trade in insurance takes place on both a cross-border and an affiliate basis. Sales of reinsurance account for the majority of cross-border trade.³ Cross-border trade figures for insurance services are presented on a net basis; i.e., imports largely comprise premiums paid to foreign insurers minus claims received, and exports largely comprise premiums received from foreign policyholders minus claims paid.⁴ Insurance sales, particularly at the retail level, often require knowledge of, and proximity to, insurance consumers, so affiliate transactions generate the greatest share of international insurance sales. Affiliate transactions data reflect payment of premiums only, so the two data sets are not directly comparable.⁵

¹ This discussion reflects life and non-life insurance carriers for both direct insurance and reinsurance. The discussion excludes insurance brokers and agents.

² Consumers in many countries are increasingly using private life insurance products such as annuities and other pension products to supplement government-sponsored social assistance programs. See *Insurance Pocket Book 2003*, 228-255; and American Council of Life Insurance (ACLI), *Life Insurance Fact Book 1999*, 155.

³ The reinsurance segment accounted for 70 percent of all cross-border exports of insurance services, and 88 percent of imports.

⁴ Beginning with 2002 data, the U.S. Department of Commerce (USDOC), Bureau of Economic Analysis (BEA) revised its method of calculating and presenting cross-border insurance data, incorporating two major changes. Previously, the data reflected estimates of premiums earned minus claims paid or recovered in a given year. Under the new system, BEA's estimates of premiums include a "premium supplement" reflecting the expected investment income earned by insurers on their financial reserves (premium payments that have not yet been used to pay claims). The measurement of claims has also undergone an important change. Instead of using the actual claims payments in a given year, the claims figure is now an estimate of "normal" losses, a measure of the year's expected claims payments. The estimate is based on an average of actual claims paid over the previous six years. The new system better reflects the economic assumptions under which insurance carriers set premium prices, and eliminates the large swings in insurance data caused by catastrophes such as Hurricane Andrew in 1992 or the September 11, 2001 terrorist attacks. For further information on the new insurance data system, see Chen and Fixler, "Measuring the Services of Property-Casualty Insurance," October 2003.

⁵ However, within the next couple of years, BEA expects to begin presenting net data for affiliate transactions. See USDOC, BEA, *Survey of Current Business* 85, no. 10:29.

Cross-Border Trade and Affiliate Transactions⁶

During 1999-2004, U.S. cross-border exports of insurance services grew at a compound annual growth rate of 15 percent (figure 6-1), to \$6.1 billion, while imports of such services grew by 26 percent, to \$29.9 billion.⁷ As discussed in the introduction, the majority of cross-border trade in insurance services reflects reinsurance transactions, with the trade deficit during the period reflecting the dominance of non-U.S. companies in the reinsurance segment.⁸ The overall growth rate of both imports and exports during 1999-2004 was biased upward due to high growth rates in 2002 and 2003, which largely resulted from high premiums in those years; premiums in many market segments increased following the terrorist attacks of September 11, 2001.⁹ In 2004, the largest U.S. export markets for insurance services were the United Kingdom, which accounted for \$1.3 billion (22 percent); Germany, with \$809 million (13 percent); Canada, with \$715 million (12 percent); Bermuda, with \$466 million (8 percent); and Japan, with \$401 million (7 percent) (figure 6-2). In 2004, the largest source of U.S. imports of insurance services was Bermuda, which accounted for \$12.4 billion, or 41 percent of total U.S. insurance imports. Bermuda is a major reinsurance center, whose influence in the insurance industry has increased in recent years, helping to maintain the growth of U.S. cross-border imports. Other leading sources of U.S. insurance imports include the United Kingdom, with \$3.5 billion (12 percent); Switzerland, with \$3.1 billion (10 percent); and Germany, with \$2.9 billion (10 percent).¹⁰

Sales of services by U.S.-owned affiliates of insurance carriers in foreign markets totaled \$80.4 billion in 2003 (figure 6-3). Nonlife insurance again accounted for the majority of sales, 55 percent (\$43.8 billion), with life insurance accounting for \$31.2 billion and agencies, brokerages, and other services auxiliary to insurance accounting for \$5.4 billion. Sales by U.S.-owned affiliates were largest in Japan, which accounted for \$18.0 billion, or 22 percent of all foreign sales by U.S.-owned affiliates. The United Kingdom followed, with sales by insurance carriers totaling \$14.8 billion (18 percent). In addition, the combined markets of Latin America and other Western hemisphere countries accounted for sales of \$12.6 billion (16 percent).¹¹

In 2003, U.S. purchases from U.S.-based insurance affiliates of foreign companies totaled \$83.3 billion. Non-life insurance accounted for 67 percent of the total, with life insurance accounting for 32 percent and services auxiliary to insurance accounting for 2 percent. Foreign firms are particularly competitive vis-a-vis U.S.-based firms in the commercial lines market, but have also made inroads into the U.S. market for personal lines in recent years. Overall, affiliates owned by parent firms based in the Netherlands accounted for the largest share of foreign affiliate insurance sales in the U.S. market (\$20.3 billion, or 24 percent of the total), followed by Canadian- and German-owned affiliates, representing 17 percent and 12 percent, respectively.¹²

⁶ The main sources for the cross-border trade section are the BEA's *Survey of Current Business*; Standard & Poor's *Global Reinsurance Highlights 2004*; and Standard & Poor's *Industry Surveys*. See bibliography for full citations.

⁷ USDOC, BEA, *Survey of Current Business* 85, no. 10:63.

⁸ In 2004, only two of the top-10 and six of the top-40 reinsurance companies were based in the United States. Standard & Poor's, *Global Reinsurance Highlights 2004*, 14.

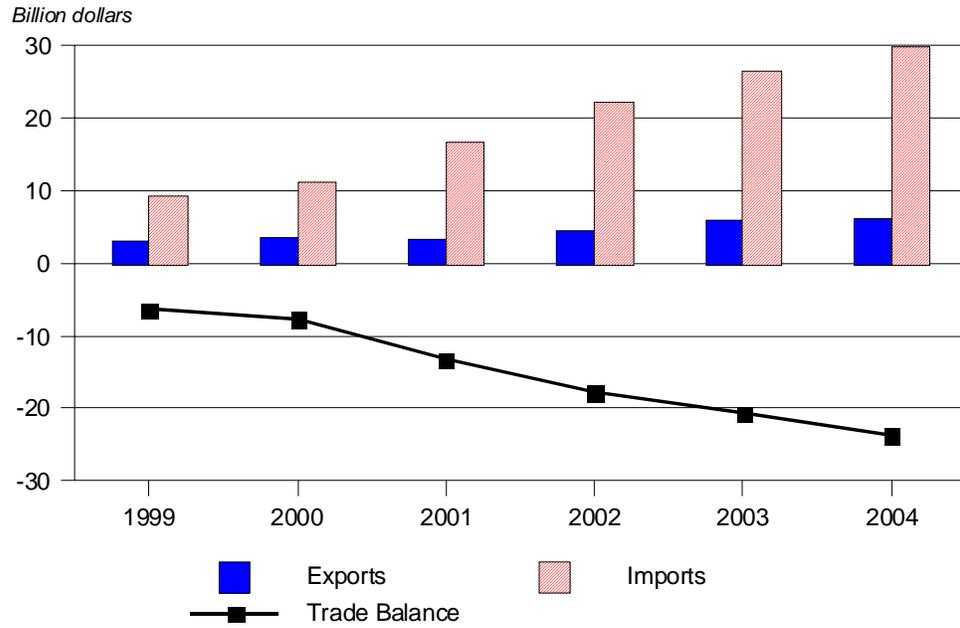
⁹ The terrorist attacks resulted in insured losses of approximately \$20 billion. Premium rates rose the following year in response to these losses. Standard & Poor's, "Insurance: Property-Casualty," 1.

¹⁰ USDOC, BEA, *Survey of Current Business* 85, no. 10:60.

¹¹ *Ibid.*, 75.

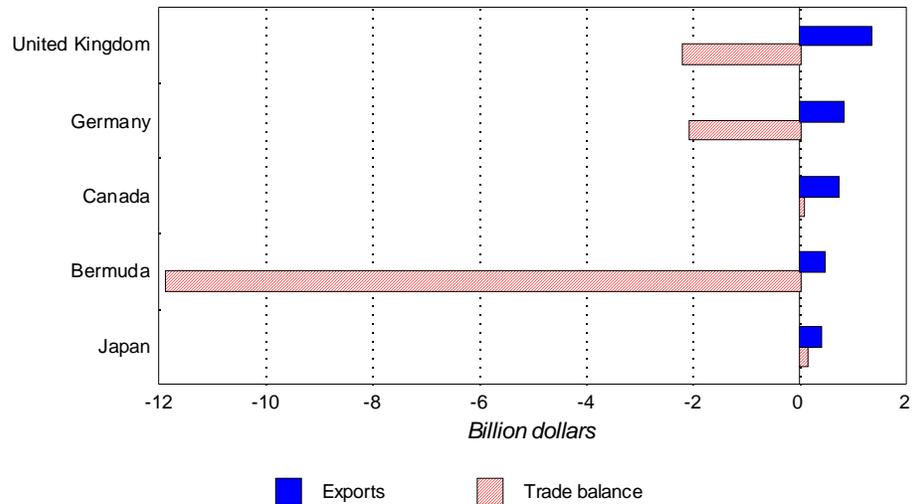
¹² Swiss-owned affiliates are also significant suppliers of insurance services to the United States market, but data for Switzerland were suppressed by BEA to avoid the disclosure of data from individual companies. USDOC, BEA, *Survey of Current Business* 85, no. 10:77.

Figure 6-1
Insurance services: Cross-border trade, 1999-2004



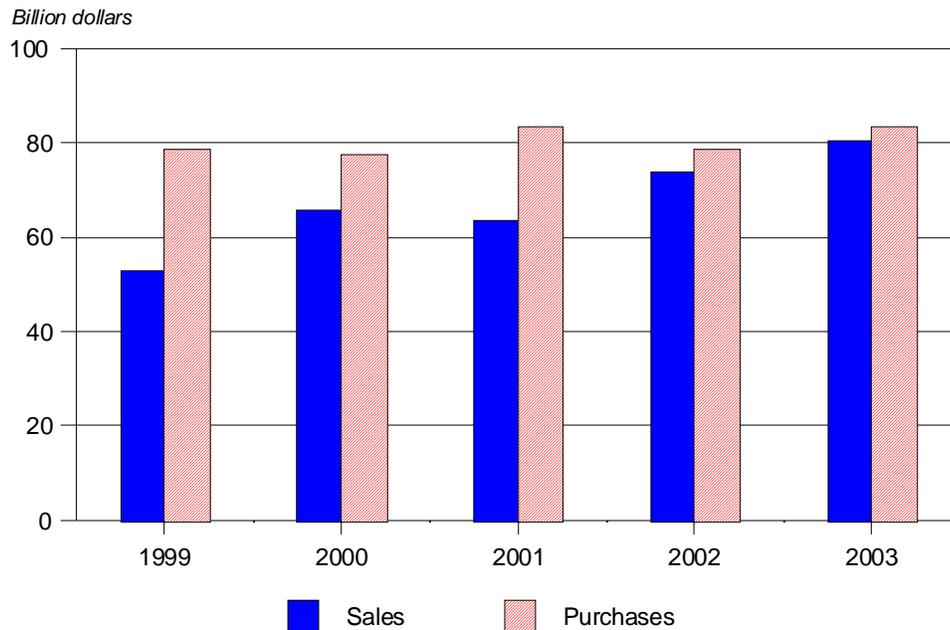
Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

Figure 6-2
Insurance services: U.S. cross-border exports and trade balance, by major trading partners, 2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 63.

Figure 6-3
Insurance services: Sales by U.S. majority-owned affiliates, and purchases from foreign majority-owned affiliates, 1999-2003



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 82, no. 10 (October 2002): 121-123; 83, no. 10 (October 2003):115-117; 84, no. 10 (October 2004): 73-76; and 85, no.10 (October 2005): 74-77.

Netherlands-based AEGON NV and ING Groep, both integrated financial services firms offering banking and asset management as well as investment services, are ranked fifth and seventh in terms of assets, respectively, among U.S. life insurance firms.¹³ The largest Canadian supplier of insurance services is Manulife. The Manulife purchase of John Hancock Financial Services, Inc. in 2004 will likely result in increased U.S. sales by Canadian-owned insurance affiliates in future years. Munich Re, the world's largest reinsurance company, and Allianz AG are the leading German firms in terms of sales by U.S. affiliates.

Competitive Conditions in the Global Insurance Services Market¹⁴

The global insurance industry grew by approximately 4 percent in 2004 to \$3 trillion. This matched the compound annual growth rate recorded during 2000-2003.¹⁵ The main market segments in the global insurance industry include property and casualty insurance (32 percent),

¹³ Standard and Poor's, "Life & Health," 6.

¹⁴ The primary sources for this section include Mergent, "The Global Insurance Industry;" Datamonitor, "Global Insurance," "Insurance in Asia-Pacific," "Global Life and Pensions," and "Global Non-Life;" the Vietnam Ministry of Finance; *The Economist*; and press releases from AIG and New York Life. See bibliography for full citations.

¹⁵ Datamonitor defines the global insurance markets as including life insurance and pensions, which includes life insurance and retirement saving products, and non-life insurance, which comprises property and casualty insurance as well as accident and health insurance. The value of the global insurance industry is derived from gross premium incomes, converted to U.S. dollars at the 2004 average annual exchange rate. Datamonitor, "Global Insurance Industry Profile," 8.

life insurance (32 percent), pensions (26 percent), and accident and health insurance (10 percent). The United States, which represented 38 percent of the global market, is the largest single-country market for insurance services. Europe and the Asia-Pacific region accounted for 34 percent and 24 percent, respectively. The largest global insurance companies include Allianz (Germany), AXA Group (France), American International Group (AIG; United States), Assicurazioni Generali (Italy), Aviva (United Kingdom), and ING Groep (Netherlands) (table 6-1).

Companies operating in the global insurance market have faced a difficult operating environment over the past few years. In the property and casualty segment, for example, a large number of natural disasters and terrorist attacks have resulted in large-scale claims. This, in turn, has yielded fluctuating premiums and growth rates. By contrast, companies in the life insurance and pensions segment faced market maturity in their core markets in Europe and North America. Firms in the global insurance industry faced rising cost pressures, weakening pricing power, and lower investment returns/interest rates.¹⁶ In response, the large global firms are shifting their focus to core operations and pursuing new opportunities in foreign markets.

Efforts to reduce rising legal, operational, and information and technology costs, particularly in Europe, have resulted in large-scale industry consolidation. Over the past five years, the number of insurance companies in Europe has decreased by approximately 70 percent.¹⁷ More recently, the desire to focus on core operations has driven many firms to spin off non-core assets. In 2005, the ING Groep sold its property and casualty business in Chile to the Liberty Mutual Group, citing the need to focus on core operations. In 2005, a desire to focus on core operations also motivated Switzerland's Zurich Financial Service (ZFS) to sell 94 percent of its holdings in ZC Sterling Corp. to Trident III, L.P. Similarly, in 2005, Italy's Assicurazioni Generali agreed to sell its subsidiary, Uni One Assicurazioni Spa, to Società Cattolica di Assicurazioni Soc Coop for \$126 million. Overall, the maturation of the U.S. market has caused some European insurers to begin shifting operations back to home-country markets.¹⁸

Maturing markets in many Organization for Economic Cooperation and Development (OECD) countries have also led many large insurance firms in the United States and Europe to look abroad. Low insurance penetration rates and rising economic growth and income have increased the financial attractiveness of many developing country markets.¹⁹ At the same time, the liberalization of restrictions on foreign participation in many emerging markets has opened up new opportunities for global insurance conglomerates. As a result, many of the global insurance firms are increasing their exposure to developing country markets, particularly China and parts of Southeast Asia, via joint ventures and acquisition activities.

Due to its large size, growing wealth, and low levels of insurance penetration, China is viewed by many insurance companies as an important market. AIG was among the first foreign firms to enter the Chinese market and, as a result, accounts for nearly 70 percent of the insurance market controlled by foreign firms. Since 2001, however, the number of foreign insurers in China has increased dramatically. By the end of 2004, for example, China hosted 39 foreign

¹⁶ Mergent, "The Global Insurance Industry," 4 and 17; and Datamonitor, "Global Insurance," 11, "Global Life and Pensions," 12, and "Global Non-Life Insurance," 12.

¹⁷ Mergent, "Global Insurance Industry," 27.

¹⁸ *Ibid.*, 7-8 and 22.

¹⁹ Datamonitor, "Insurance in Asia-Pacific," 11; and *Economist*, "Try Anything Once," 2 of 2.

Table 6-1
Leading global insurance companies, 2004

Company	Country	Revenue
		<i>Billion dollars</i>
Allianz AG	Germany	129.5
ING Groep N.V.	Netherlands	105.8
American International Group, Inc.	United States	98.6
AXA	France	90.2
Assicurazioni Generali S.p.A	Italy	82.7
Aviva Plc	United Kingdom	57.9

Source: Datamonitor, "Global Insurance," May 2005: 18-19.

insurers operating through approximately 70 branches and joint ventures. Furthermore, in 2005, the Chinese insurance market witnessed additional acquisition and joint-venture activities by a number of large, multinational insurance companies. For example, in December 2005, Prudential Insurance and the Carlyle Group bought 25 percent of China Pacific Life Insurance, the third-largest Chinese insurer. Insurance Australia Group also announced plans to purchase 25 percent of China Pacific Life's property segment. HSBC Insurance Holdings increased its holdings of the second-largest Chinese insurer, Ping An Insurance, to 20 percent. Regarding joint-venture activities, Mitsui Sumitomo Insurance (MSI) entered into an alliance with China Pacific Insurance in October 2005. Although MSI already maintains a branch office in Shanghai, and nine representative offices through the country, it reportedly intends to pursue further alliances and joint ventures in an attempt to increase its presence and brand-name recognition.²⁰

Insurance multinationals are also keenly interested in India, Korea, Malaysia, Singapore, and Thailand. In these markets, U.S. firms are making inroads vis-a-vis local firms, particularly in the life and pension segments, due to high brand-name recognition.²¹ Vietnam is also increasingly open to foreign investors. In 2000, for example, AIG received a license from the Vietnamese government to sell life insurance. Further, in 2005, AIG received a license to establish a wholly-owned general insurance company, AIG General Insurance (Vietnam) Co. Ltd. The license allows AIG to sell property and casualty insurance to both consumers and businesses throughout Vietnam.²²

²⁰ Mergent, "Global Insurance," 8-9, 28, and 35.

²¹ *Ibid.*, 9.

²² New York Life also received a life insurance license in 2005. Vietnam Ministry of Finance; "NY Life Insurance Swings Back," June 5, 2005; "New York Life Received License," press release, June 21, 2005; and "AIG General Insurance License in Vietnam," press release, June 24, 2005.

CHAPTER 7

Legal Services

Introduction

Legal services include legal advisory and representation services in various fields of law, advisory, and representation services in statutory procedures of quasi-judicial bodies, and legal documentation and certification services. International trade in legal services occurs through both cross-border trade and affiliate transactions. Cross-border trade occurs 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, facsimile transmissions, the Internet, or other means. Affiliate trade occurs when a law firm in one country establishes an office in another country (the host country) for the purpose of providing services in that market.

Under certain circumstances, legal services providers may become members of foreign bars, allowing them to appear in foreign courts and provide advice on foreign law. However, most lawyers practicing outside their home jurisdiction are not locally accredited and, therefore, serve in the limited capacity of foreign legal consultants.¹ For example, when operating in foreign countries, U.S.-based foreign legal consultants are generally allowed to provide advice regarding U.S. law, international law, and third-country law, but are precluded from appearing in host country courts or giving advice on host country law. Internationally, this arrangement is fairly common and is not widely regarded as a significant barrier to trade by legal service providers.²

Cross-Border Trade and Affiliate Transactions

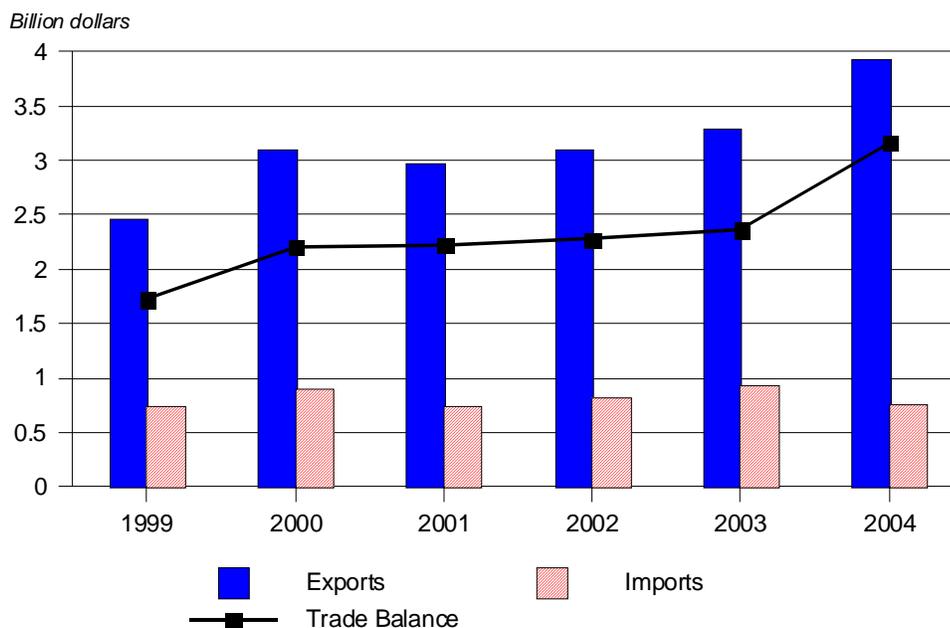
U.S. cross-border exports of legal services rose to \$3.9 billion in 2004, while imports declined to \$754 million, resulting in a trade surplus of \$3.2 billion (figure 7-1). Export growth has trended upward since 2001, reflecting increasing demand for U.S. legal services. U.S. exports increased by 19 percent in 2004, which was significantly higher than the compound annual growth rate of 8 percent attained during 1999-2003. During the same period, U.S. imports grew at a compound annual growth rate of 6 percent. U.S. purchases of foreign legal services were uneven during the 1999-2004 period, and reflected a worldwide drop in demand in 2001.³ In

¹ The American Bar Association's *Model Foreign Legal Consultant Rule* proposes that foreign lawyers be allowed to establish offices in the United States without taking a U.S. bar exam. Under this proposal, foreign lawyers would be registered by the local bar, and would be able to hire, be hired by, or become a partner with a local law firm. They would also be allowed to advise on most matters, other than the local law of the admitting jurisdiction. Although the ABA has urged all U.S. States to adopt this proposal, less than one-half actually have. U.S. House of Representatives, Committee on Small Business, "Impact of Financial and Professional Service Exports on Small Business," October 2001.

² Some industry observers believe that the foreign legal consultant (FLC) situation in the United States may indirectly create trade barriers for the U.S. legal services industry. In the United States, for example, entry requirements for FLCs differ from state to state, while some states do not allow FLCs to practice law. As a result, some industry observers believe that the United States' lack of universal access for FLCs may adversely affect U.S. efforts to negotiate for the liberalization of legal services in foreign markets, as terms are often based on reciprocity. Melnitzer, "U.S. Pushes for Open Legal Markets at GATS Talks," April 2005.

³ USDOC, BEA, *Survey of Current Business* 85, no. 10:45-46.

Figure 7-1
Legal services: Cross-border trade, 1999-2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-46.

2004, the largest U.S. export markets for legal services were the United Kingdom (\$711 million), Japan (\$658 million), Canada (\$340 million), Germany (\$312 million), and France (\$287 million) (figure 7-2).⁴

In 2003, sales of legal services by U.S.-owned affiliates in foreign markets totaled \$1.1 billion, 13 percent above 2002 sales (figure 7-3).⁵ U.S. purchases from U.S.-based legal affiliates of foreign companies totaled \$24 million, 4 percent above 2002 purchases.⁶ During 1999-2002, the compound annual growth rate was moderate for both affiliate sales (6 percent) and purchases (3 percent). Europe is the largest regional market for affiliate sales of legal services, accounting for 77 percent of total sales by U.S. firms in 2003. Affiliate sales in the United Kingdom (\$400 million), France (\$235 million), and Germany (\$87 million) accounted for the majority of such sales. Overall, U.S. affiliate sales to Europe increased 15 percent in 2003, while sales to the United Kingdom, France, and Germany increased by 14 percent, 18 percent, and 16 percent, respectively.⁷

Competitive Conditions in the Global Legal Services Market

The largest global law firms are based in the United States and the United Kingdom. In 2002, for example, the 20 largest law firms included twelve based in the United States, seven based in the United Kingdom, and one based in Australia. During fiscal year 2005, the ten largest

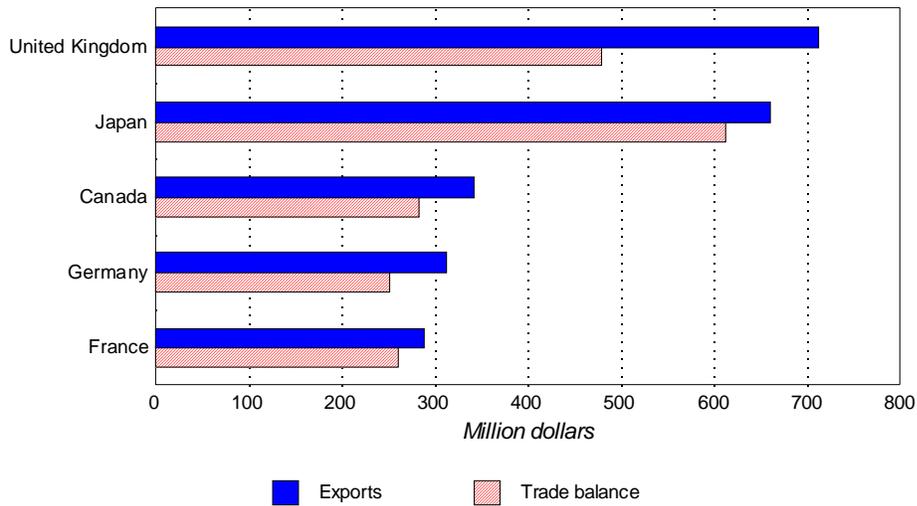
⁴ Ibid., 68-69.

⁵ Ibid., 74-75.

⁶ Ibid., 76-77.

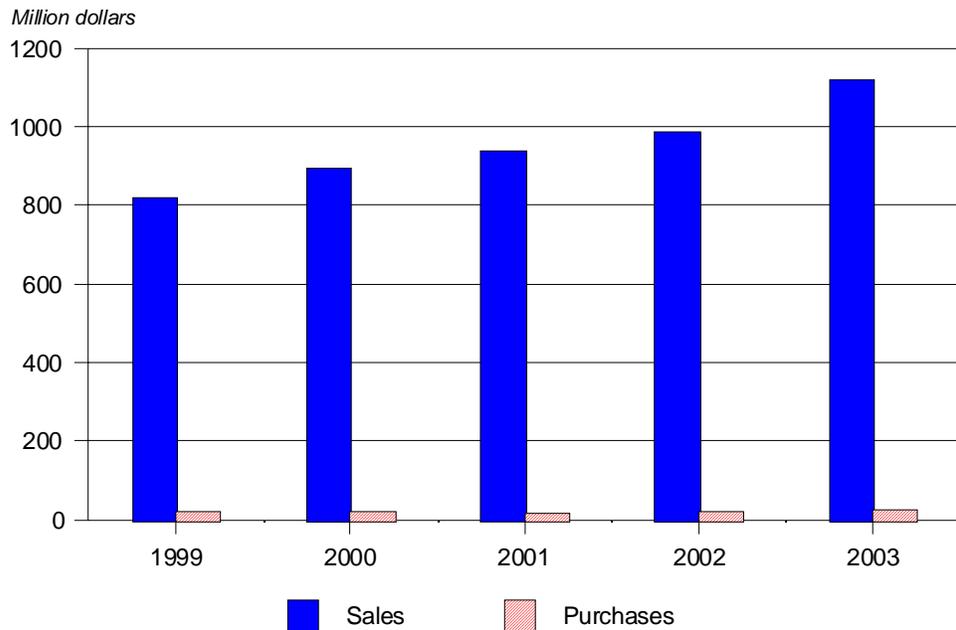
⁷ Ibid., 74-75.

Figure 7-2
Legal services: U.S. cross-border exports and trade balance, by major trading partners, 2004



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, 85, no. 10 (October 2005): 68-69.

Figure 7-3
Legal services: Sales by U.S. majority-owned affiliates, and purchases from foreign majority-owned affiliates, 1999-2003



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 82, no. 10 (October 2002): 121-123; 83, no. 10 (October 2003):115-117; 84, no. 10 (October 2004): 73-76; and 85, no.10 (October 2005): 74-77.

global law firms, ranked by revenue, included Clifford Chance (United Kingdom), Linklaters (United Kingdom), Skadden, Arps, Slate, Meagher & Flom (United States), Freshfields Bruckhaus Deringer (United Kingdom), Baker & McKenzie (United States), Allen & Overy (United Kingdom), Latham & Watkins (United States), Jones Day (United States), Sidley Austin Brown & Wood (United States), and White & Case (United States) (table 7-1).⁸ Overall, the top 10 firms operate and provide legal services in an average of 20 countries. Worldwide, strong demand for U.S. and British legal services is due, in large part, to the industry's high level of experience with financial markets and expertise in securities law, two of the highest volume practice areas in international business. Moreover, firms in the United States and the United Kingdom benefit from the widespread use of the English language, and widespread adoption of both New York State law and English law in international business transactions.⁹

In major international business centers, the large, global law firms often try to differentiate themselves by specializing in a unique practice area (e.g., tax law), or by focusing on a specific geographic region (e.g., China) or category of client (e.g., the airline industry). Strategies to gain market share also include introducing aggressive marketing techniques, adjusting fees, and diversifying into new products and services, often in response to a client's unique needs.¹⁰ Competitive strategies also include recruiting top legal talent from competitors, a tactic which enables law firms to attract top-tier clients. Firms may also form partnerships with firms in foreign markets, or with firms having complementary skills in order to reach new markets. Moreover, a growing number of larger firms are establishing specialized niche practice areas that were once predominantly the domain of smaller firms.

The leading international law firms, many of which have followed corporate clients abroad, have expanded their global presence in recent years. Outside the United States and the United Kingdom, demand for U.S. legal services is particularly strong in Europe and Asia, and is increasing in Central and Eastern Europe. Many U.S. firms, for example, have established substantial European practices, and have continued to expand.¹¹ Many of the leading global firms are also attempting to expand into China, which is considered to be a potentially lucrative market for legal services (see chapter 3).¹² The globalization of business and the movement of large multinational corporations into new markets have also spurred the growth of cross-border investment by law firms.¹³ In recent years, such investment has occurred primarily between Europe and North America, with a lesser amount flowing from the Organization for Economic Cooperation and Development (OECD) countries to emerging markets such as Poland and Thailand.

⁸ *American Lawyer*, "The Global 100," November 2003.

⁹ UNCTAD, *World Investment Report 2004*, 2004.

¹⁰ In recent years, Internet applications have gained popularity with legal services providers, enabling firms of all sizes to access new markets, both locally and internationally. However, early expectations that the Internet would substitute for in-person service on a widespread basis have not yet materialized. Some instances of substitution do exist, but generally, the Internet has been the most useful as a marketing tool that introduces potential clients to the services offered by law firms and legal practitioners.

¹¹ Industry representative, telephone interview by USITC staff, November 2005.

¹² Industry representative, telephone interview by USITC staff, November 2005.

¹³ Firms based in different countries have traditionally structured their cooperative activities in the form of non-equity relationships. Consequently, while the U.S. outward FDI stock in legal services has grown rapidly in recent years, such measures may not represent the full extent of the industry's cross-border investment activity. UNCTAD, *World Investment Report 2004*, 104.

Table 7-1
Leading global legal services firms, by revenue and size, 2005

Firm	Country	Revenue	Number of lawyers
		<i>Million dollars</i>	
Clifford Chance LLP	United Kingdom	1,577	2,480
Linklaters	United Kingdom	1,388	2,013
Skadden Arps Slate Meagher & Flom	United States	1,355	1,554
Freshfields Bruckhaus Deringer	United Kingdom	1,345	2,115
Baker & McKenzie	United States	1,156	2,992
Allen & Overy	United Kingdom	1,149	2,263
Latham & Watkins	United States	1,135	1,502
Jones Day	United States	1,120	2,076
Sidley Austin Brown and Wood	United States	969	1,405
White & Case	United States	897	1,685

Source: *The American Lawyer*, "Global 100: The worlds Largest Law Firms" (April 2006).

Following a period of stagnant growth, the global legal services industry has become increasingly profitable in recent years.¹⁴ Overall, such profitability stems from not only the upswing in international corporate and financial business, but also concerted efforts by many law firms to reduce expenses. Further, the growth in equity investment in many business centers throughout the world has spurred law firms to return to more robust international expansion strategies. Indeed, international growth has often been more robust than domestic growth in many regions and practice areas. Even so, competition among legal services providers has increased in many global markets, spurring some law firms to minimize costs, the most prominent of which are payroll and real estate expenses, and to maximize operating efficiencies.

In recent years, the clients of the global international law firms have become increasingly price sensitive. For example, an increasing awareness of the standard fees charged by large international law firms has enabled corporate clients to negotiate lower fees. Specialized practice areas, however, remain largely able to command premium fees.¹⁵ Clients are also increasingly demanding that legal services be provided as part of a comprehensive package of services. For example, multinational clients are increasingly asking law firms to form consortia that cover all aspects of a given project, which may include legal services, financial consulting, and technical or engineering expertise.

Outsourcing, a relatively new phenomenon within the legal services industry, has quickly gained acceptance by law firms as a way to reduce costs and improve productivity. Basic, standardized tasks such as document editing and proofreading were initially outsourced, both locally and internationally, to nonlawyers. More recently, however, outsourcing firms are also providing

¹⁴ Official data on profits for 2003 and 2004 are not available. However, law firms report that profit growth accelerated during these two years. Industry representatives, telephone interviews by USITC staff, Oct. 2005.

¹⁵ Fischer, "The Business of Law," March 4, 2005.

more skill-intensive work, such as litigation research and intellectual property work involving patent research, analysis, and drafting of patent applications.¹⁶ The practice of outsourcing legal services is becoming particularly popular with small- and medium-sized firms with limited resources, as it allows them to compete with larger or more specialized law firms.¹⁷

Internationally, legal services providers seeking access to foreign markets may face barriers such as restrictions or prohibitions on the establishment of foreign law firms; restrictions on employing local lawyers; restrictions on profit sharing by local and foreign law firms; numerical ceilings on foreign lawyers; and a lack of transparency in regulatory processes. Regulatory barriers that may limit market access include nationality requirements, restrictions on movement of professional personnel as part of a country's immigration policy, and prohibitions on incorporation. Relevant national treatment issues include restrictions or limitations on partnerships or joint ventures with local professionals, rules on the use of international and foreign firm names, and residency requirements.¹⁸ However, even in the most restrictive markets, foreign lawyers are usually able to provide services to multinational corporations operating in the country, as well as services involving international law. For example, under India's Advocates Act (1961), foreign law firms are currently barred from opening law offices in the country, even if they are staffed entirely with Indian lawyers. Even so, U.S. and British law firms have long represented foreign companies investing in India, as well as Indian companies conducting business in both domestic and foreign markets. Such representation is permissible, as long as the lawyers are located outside India.¹⁹

¹⁶ Bellman and Koppel, *The Wall Street Journal*, B1.

¹⁷ O'Shea, "Caseload Grows for Advocates in Absentia," 3.

¹⁸ WTO, Council For Trade In Services, "Legal Services: Background Note," July 6, 1998.

¹⁹ Koppel, "Doing Business in India is not for the Faint of Heart," September 28, 2005

CHAPTER 8

U.S. Services Trade with China

Summary of Findings

Overall, growth in services trade between the United States and China is largely driven by bilateral merchandise trade. Many of the services traded by the two countries involve intermediary functions that facilitate product, payment, and information flows between producers and consumers. The largest amount of cross-border trade occurred in the categories of *freight transport* and *port services*, which together accounted for approximately 25 percent of U.S. services exports to China, and 54 percent of such imports in 2004. As part of its 2001 accession agreement to the World Trade Organization (WTO), China agreed to open selected services sectors to foreign trade and investment, notably important infrastructure sectors like air transport, banking, education, and insurance services. Some U.S. industry representatives, however, consider China's implementation of these commitments to be uneven. Examples of reported barriers to trade and investment include high capitalization requirements to establish businesses, burdensome licensing and operating requirements, and ambiguous regulations and procedures (appendix C).¹

Introduction

Given China's growing importance as a U.S. trade partner, particularly in the area of manufactured goods, this chapter examines the often overlooked area of services trade between the United States and China. In 2004, the United States recorded a \$1.6-billion services surplus with China,² a sharp contrast to the \$161.9-billion bilateral merchandise trade deficit.³ Overall, China is the eighth-largest market for U.S. services, accounting for approximately \$7.2 billion (2 percent) of total U.S. services exports in 2004.⁴ Moreover, recent data suggest there is potential for significantly expanded two-way services trade. As evidenced in China's gross domestic product (GDP) revision in December 2005,⁵ approximately \$265 billion, or 93 percent of the 17-percent overall upward adjustment in GDP, was attributed to the services sector.⁶ China now estimates that the services sector accounts for 41 percent of its GDP, a proportion comparable to that of Japan, Korea, and Taiwan when they were at a similar stage of economic development, but below the 60 to 75 percent that is common in developed countries.⁷

¹ Schaffer, "Huge Unrealized Opportunities Remain in China's Services Sector," May 2005.

² USDOC, BEA, *Survey of Current Business* 85, no. 10:47-48.

³ U.S. Census Bureau, "Trade With China: 2004," 2004.

⁴ In 2004, the top-seven markets for U.S. services exports include the United Kingdom (\$40.1 billion; 12 percent), Japan (\$35.2 billion; 11 percent), Canada (\$29.7 billion; 9 percent), Germany (\$18.9 billion; 6 percent), Mexico (\$18 billion; 6 percent), France (\$12.8 billion; 4 percent), and Korea (\$9.1 billion; 3 percent). USDOC, BEA, *Survey of Current Business* 85, no. 10:47.

⁵ Due to previous statistical under-reporting, primarily in the services sector, China's National Bureau of Statistics revised the official 2004 GDP on December 20, 2005.

⁶ *The Economist*, "China: Are you being served?" January 12, 2006.

⁷ *Ibid.*

Overall, the United States has consistently posted trade surpluses in *education* and *financial services*, due in large part to rising income levels and improved living standards in China. Further, as China has expanded its merchandise exports, demand for *wholesale trade* and *transport services* has risen as well. The rate of future growth in U.S. services trade with China will depend, in large part, on continued macroeconomic expansion and market liberalization in China.

Cross-Border Trade and Affiliate Transactions⁸

In 2004, U.S. services exports to China totaled approximately \$7.2 billion (figure 8-1), while imports totaled \$5.6 billion, yielding a trade surplus of approximately \$1.6 billion.⁹ The U.S. services trade surplus with China grew at a compound annual growth rate of approximately 2 percent during 2000-2003, but decreased by nearly 22 percent in 2004, due in large part to surging services imports. Cross-border imports grew by 43 percent in 2004, while exports grew by 20 percent. By contrast, during 2000-2003, U.S. services exports to China grew at a compound annual growth rate of 4 percent, while imports grew by 5 percent.¹⁰

The principal factor behind the decrease in the U.S.-China services surplus in 2004 was a 38-percent increase in *freight transport* services imports from China.¹¹ Overall, the large and growing nature of U.S. imports of such services reflects large and growing levels of U.S. merchandise imports from China. Further, the decline in the U.S.-China bilateral surplus in 2004 can also be attributed to a 65-percent increase in imports of tourism services, the second-largest component of U.S. imports from China.¹² The resurgence of tourism imports suggests that travelers' concerns stemming from the September 11, 2001 terrorist attacks, the start of the war in Iraq, and severe acute respiratory syndrome (SARS) receded by the latter half of 2003.¹³ Other industries accounting for large shares of U.S. services imports from China in 2004 include *port services* (9 percent) and *passenger fares* (6 percent) (table 8-1).¹⁴

In 2004, *port services* accounted for approximately 18 percent of U.S. services exports to China, the largest share of total services exports accounted for by a single industry (table 8-2). Other industries accounting for large shares of U.S. services exports were *education services* (17 percent); cross-border payments of *royalties and license fees* (13 percent); and *tourism services* (12 percent).¹⁵

In 2004, as in previous years, the majority of U.S. service industries registered cross-border trade surpluses with China. As noted, prominent exceptions included *freight transport*, *tourism*, and *passenger fares*. Overall, the United States' cross-border trade surplus in knowledge-driven, professional services is likely due to the relative shortage of technical and managerial expertise in the Chinese economy, as well as uneven liberalization efforts in the domestic Chinese services sector.¹⁶ By contrast, the large U.S.-China bilateral trade deficit in *freight transport* services

⁸ The main source for this section is the BEA's *Survey of Current Business*.

⁹ USDOC, BEA, *Survey of Current Business* 85, no. 10:47-48.

¹⁰ *Ibid.*, 45-69.

¹¹ In 2004, freight transport services accounted for the largest share of total U.S. services imports from China.

¹² U.S. exports of tourism services also grew by 30 percent in 2004. *Ibid.*, 45-69.

¹³ *Ibid.*, 31.

¹⁴ *Ibid.*, 45-69.

¹⁵ *Ibid.*, 45-69.

¹⁶ Schaffer, "Huge Unrealized Opportunities Remain in China's Services Sector," May 2005.

Table 8-1
China: U.S. cross-border services imports, 2000-04
(Million dollars)

Service	2000	2001	2002	2003	2004
Education	15	11	17	16	18
Financial services	4	5	6	14	20
Freight transport	1,228	1,512	1,850	1,813	2,508
Insurance ¹	0	1	2	1	0
Passenger fares	151	181	292	161	353
Port services	297	376	406	410	522
Professional services:					
Advertising	5	4	8	9	18
Computer	5	5	2	5	6
Construction-related services	1	2	1	2	7
Database	4	3	3	1	1
Equipment-related services	9	7	34	14	19
Industrial engineering	6	(²)	2	5	2
Legal services	13	11	17	21	16
Management/consulting/public relations	3	2	4	6	8
Research and development	25	9	5	7	17
Other professional services	40	(³)	68	62	60
Royalties and license fees	13	11	20	36	15
Telecommunications	94	62	49	45	54
Tourism	1,169	1,226	1,124	994	1,637
Other ⁴	175	177	210	318	334
Total ⁵	3,257	3,643	4,120	3,940	5,615

¹ Insurance imports are the difference between premiums paid to foreign insurers and claims received by U.S. policy-holders. Imports are entered as credit on the balance of payments when claims received by U.S. policyholders exceed premiums paid to foreign insurers.

² Less than \$500,000.

³ Data have been suppressed to avoid disclosure of individual company operations.

⁴ Includes intra-corporate transactions; i.e., U.S. parent firms' receipts from foreign-based affiliates, and U.S.-based affiliates' receipts from foreign parent firms. Also includes expenditures of foreign governments and international organizations in the United States, and expenditures of foreign residents employed temporarily in the United States.

⁵ Due to rounding and suppression of individual company data, figures may not add to totals shown.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 83, no. 10 (October 2003): 78-109; 84, no.10 (October 2004): 44-64; and 85, no. 10 (October 2005): 45-69.

Table 8-2
China: U.S. cross-border services exports, 2000-04
(Million dollars)

Service	2000	2001	2002	2003	2004
Education	907	1,066	1,165	1,248	1,260
Financial services	114	107	152	194	165
Freight transport	262	343	416	441	472
Insurance ¹	7	14	34	16	23
Passenger fares	304	314	227	168	221
Port services	713	919	1,021	923	1,332
Professional:					
Advertising	2	2	3	6	6
Computer	13	17	17	12	33
Construction-related services	334	158	98	186	328
Database	15	16	23	25	15
Industrial engineering	(²)				
Equipment-related services	138	167	174	157	199
Legal services	35	38	44	36	60
Management/consulting/public relations	9	13	12	10	53
Research and development	10	12	14	14	14
Other professional services	(²)				
Royalties and license fees	501	581	758	842	928
Telecommunications	92	102	68	78	90
Tourism	1,120	1,012	958	690	894
Other ³	(²)	(²)	(²)	493	637
Total ⁴	5,199	5,636	6,048	6,010	7,239

¹ Insurance exports are defined as difference between premiums received from foreign policy-holders and claims collected by foreign policy-holders.

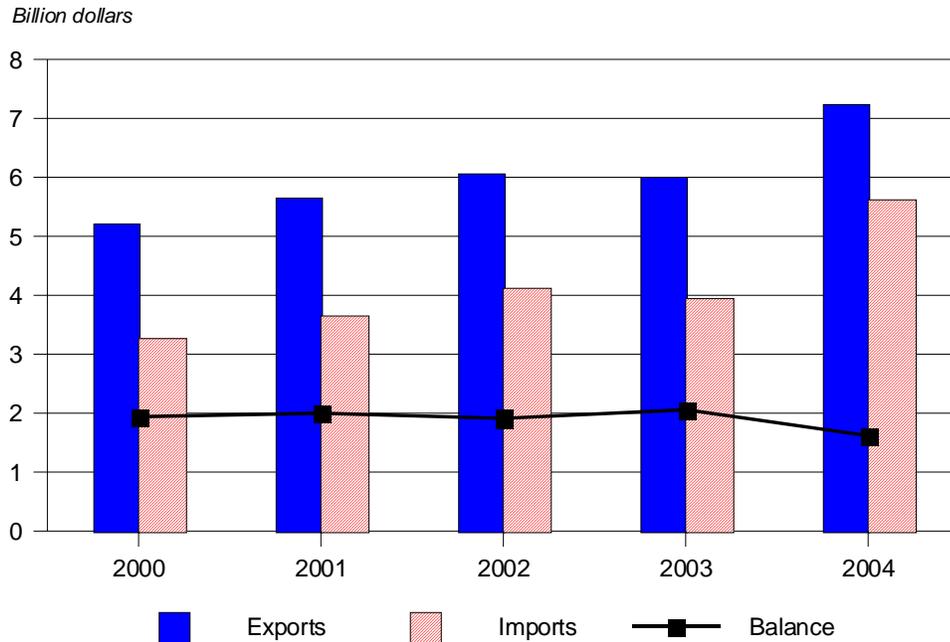
² Data have been suppressed to avoid disclosure of individual company operations.

³ Includes intra-corporate transactions; i.e., U.S. parent firms' receipts from foreign-based affiliates, and U.S.-based affiliates' receipts from foreign parent firms. Also includes expenditures of foreign governments and international organizations in the United States, and expenditures of foreign residents employed temporarily in the United States.

⁴ Due to rounding and suppression of individual company data, figures may not add to totals shown.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 83, no. 10 (October 2003): 78-109; 84, no. 10 (October 2004): 44-64; and 85, no. 10 (October 2005): 45-69 .

Figure 8-1
U.S. cross-border trade in private services with China, 2000-04



Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 85, no. 10 (October 2005): 45-69.

results from large and growing U.S. imports of such services which, in turn, likely reflect the United States' large-scale imports of manufactured goods from China.

In 2003, the sale of services in China by the affiliates of U.S. companies increased by 10 percent, to \$3.8 billion.¹⁷ Based on aggregate sales data, sales by U.S.-owned *wholesale trading* companies accounted for the largest share of receipts. U.S. purchases from majority-owned affiliates of Chinese firms totaled \$321 million in 2002,¹⁸ up 118 percent over the previous year.¹⁹ Activity within the *wholesale trade* industry also accounts for the majority of U.S. purchases, again illustrating the predominance of merchandise trade driven services.

Industry Analyses²⁰

*Air Transport Services*²¹

In 2004, U.S. exports of air transportation services to China totaled \$1.1 billion, whereas U.S. imports totaled \$1.3 billion.²² U.S. exports of air freight and airport services comprised 80 percent of U.S. exports of air transportation services to China in 2004. Similarly, U.S. imports

¹⁷ USDOC, BEA, *Survey of Current Business* 85, no. 10:73.

¹⁸ Total for 2003 was suppressed to avoid disclosure of data of individual companies.

¹⁹ *Ibid.*, 73.

²⁰ The industry-specific service sectors covered in this chapter correspond to the industry-specific chapters found earlier in the report.

²¹ The main sources for this section include the BEA's *Survey of Current Business*, Rolls Royce Civil Aerospace, *Air Transport World*, *Transport Canada*, *Access News*, *Taipei Times*, *China Daily*, and *People's Daily Online*. See bibliography for full citations.

²² U.S. exports and imports of air transportation services include data pertaining to trade in air passenger services (\$221 billion), air freight services (\$276 billion), and airport services (\$601 billion).

of air freight and airport services accounted for 73 percent of U.S. imports of air transportation services from China during 2004.²³ These high trade volumes reflect growing merchandise trade between the United States and China. Overall, China's air transport market, including passenger and freight services, is expected to increase by approximately 9 percent per year over the next 20 years. Such growth is predicated on the continued expansion of China's economy and ongoing progress toward the liberalization of China's air transport market.²⁴

Rising demand for air travel in China has encouraged the Chinese government to open the country's air transport market to increased domestic and foreign competition. China's air services market has historically been dominated by government-owned airlines, the largest of which are Air China, China Airlines, China Eastern, and China Southern.²⁵ However, in March 2005, China's first privately owned airline began offering service between Beijing and major cities in southern China.²⁶ The Chinese government also approved two additional airlines to begin domestic air transport service in 2005.²⁷ Separately, China has signed new bilateral air transport agreements permitting foreign airlines to fly to and from China with fewer restrictions. For example, in 2004, the United States and China signed a bilateral agreement allowing U.S. carriers to increase the frequency with which they offer service to China, and enabling them to establish hubs at Chinese airports. Under the 2004 agreement, five U.S. passenger airlines and three U.S. cargo airlines are permitted to fly between the United States and China.²⁸ China is currently engaged in bilateral aviation discussions with other countries such as Canada and Spain, and has plans to negotiate an open skies agreement with the European Union.²⁹

Banking Services

The Chinese banking market is highly consolidated, largely under state control, and currently offers limited opportunities for foreign firms.³⁰ The four-largest state-owned commercial banks are the Agricultural Bank of China, Bank of China, China Construction Bank, and the Industrial and Commerce Bank of China. Together, these banks accounted for 71 percent of China's commercial bank assets in 2004, and 50 percent of the financial system's total assets,³¹ although these shares are reportedly declining as reforms allow smaller banks to grow. For several years, the sector has been plagued by non-performing loans, which reportedly stood at \$205 billion, or 13 percent of total banking assets, at year-end 2004;³² government-directed loans to loss-making state enterprises; alleged corruption; and antiquated practices that have impaired banks' ability to keep pace with China's rapidly growing economy.³³ The Chinese government has recently implemented certain measures in an effort to address these issues, such as creating the Chinese Banking Regulatory Commission as a governing body for financial institutions; allowing banks to transfer non-performing loans to separate, state-owned companies; and

²³ *Ibid.*, 51.

²⁴ Rolls Royce, "The Outlook 2005," 2005.

²⁵ *Air Transport World*, "World Airline Financial Results 2004," 35.

²⁶ Thomas, "Will China Go Low-Cost?" 38.

²⁷ *Taipei Times*, "First Private Airlines in China to Launch Services This Year," January 24, 2005.

²⁸ *Access News*, "U.S., China Sign Agreement to Increase Commercial Flights," July, 25, 2004.

²⁹ An open skies agreement is the most liberalized form of a bilateral air services agreement, and permits the airlines of signatory countries to fly to and from each other's markets without restrictions on the number of flights operated or the cities that are served. *Transport Canada*, "Canada and the People's Republic of China Conclude New Bilateral Air Agreement," Apr. 19, 2005; *People's Daily Online*, "China, Spain Sign Bilateral Aviation MOU," May 28, 2005; and Desheng, "China, EU Ready to Explore 'Open Skies'," July 1, 2005.

³⁰ The main sources for this section include the Organization for Economic Cooperation and Development (OECD), *The McKinsey Quarterly*, *The Economist*, and the Chung-Hua Institution for Economic Research. See bibliography for full citations.

³¹ OECD, *OECD Economic Surveys: China*, 139.

³² Bekier, Huang, and Wilson, "How to Fix China's Banking System," 2005.

³³ *Ibid.*

encouraging gradually more foreign investment in the banking market with the aim of introducing new business practices to the Chinese banking system.³⁴

Although foreign banks have enjoyed incrementally greater access to the Chinese market since the country became a member of the WTO, China's commitments call for the bulk of liberalization to occur by year-end 2006. At that time, foreign banks will be allowed full access to the Chinese market, freedom to conduct retail business in local currency, and freedom from geographic and customer-type restrictions.³⁵ Bank of America has recently purchased a 9-percent stake in the China Construction Bank, HSBC has paid \$1.7 billion for a 20-percent share of the Bank of Communications, and several other such deals have occurred, or are pending.³⁶ At present, Chinese banks have foreign equity limitations of 25 percent, although industry observers speculate that the Chinese Government will raise the limit by the end of 2006. Industry sources indicate that foreign banks are increasingly eager to enter the Chinese market and view the potential gains as outweighing the risks.³⁷ Full liberalization of the Chinese banking sector will likely result in a sharp increase in FDI and cross-border trade in that market.

Education Services

China's approximately 1,300 higher-education institutions enrolled 20 million students,³⁸ the largest total of any country, in 2004.³⁹ Higher education in China is undergoing vast transformation and expansion due to the country's rapid economic growth and increased government-authorized enrollment as the college-age portion of the Chinese population grows. Moreover, the Chinese government has established policies and budgets to provide more extensive primary education throughout China, while also seeking to ensure that large universities under its control attain world-class status in science and technology, as called for in national planning documents.⁴⁰ Since 1990, the Chinese government has transferred more than 200 colleges and universities to provincial and local governments, reducing the government's responsibility to less than 10 percent of colleges and universities in China. In turn, provincial and local authorities have permitted most Chinese universities to exercise a greater degree of administrative and fiscal autonomy, including expanded authority to enter into exchange agreements with foreign universities. Other changes have included privatization; cooperative ventures between Chinese and foreign universities, to enhance Chinese educational institutions' expertise and program quality; the promotion of Chinese language studies outside of China; and the retention of Chinese students, especially at the postgraduate level in science and technology fields.⁴¹ Since China first allowed private educational institutions in 1992, about 100 such entities have been established. Overall, enrollment in private universities and colleges is growing faster than enrollment in state-operated institutions.⁴²

³⁴ Ibid.

³⁵ Chen and Shih, *Banking and Insurance in the New China*, 2004.

³⁶ *Economist*, "A Great Big Banking Gamble," October 27, 2005.

³⁷ Ibid.

³⁸ The main sources for this section include the *Chronicle of Higher Education*, *International Educator*, *The Economist*, the OECD, and China's Ministry of Education. See bibliography for full citations.

³⁹ *Chronicle of Higher Education*, January 7, 2005, A46.

⁴⁰ Rubin, "Beyond the Great Wall," 26.

⁴¹ *The Economist*, "A World of Opportunity," Sept. 8, 2005 and education industry representatives, interviews by USITC staff, Atlantic City, NJ, November 8-10, 2005.

⁴² OECD, *OECD Review of Financing and Quality Assurance Reforms*, 13.

Foreign higher-education institutions intending to establish a presence in China to teach Chinese students in a government-authorized institution, and in an accredited program of study, must do so in partnership with a Chinese higher-education institution.⁴³ Chinese educational institutions are permitted to partner with many foreign entities, other than for-profit partnerships and religious institutions, organizations, or religious workers providing religious education or conducting religious activities.⁴⁴ Moreover, only authorized Chinese institutions may provide “special education services,” such as military, police, and political education services. Overall, Chinese citizens must constitute a majority of the governing body of cooperative educational institutions in China, and the president of the institution must be a resident Chinese citizen. Basic instruction must be in Chinese.

*Insurance Services*⁴⁵

Premium value in China totaled \$52.2 billion in 2004, up by 11 percent over the 2003 level, making China one of the fastest growing markets in the world. A number of factors contribute to the rapid growth in insurance sales: increasing levels of disposable income; increased automobile ownership; growing insurance purchases by foreign investors operating in China; new insurance products offered by foreign insurers; and a distribution system that is expanding beyond traditional agent networks to include commercial insurance brokers and banks.⁴⁶ Nonetheless, China’s insurance density remains low, ranking 72nd globally in 2004 in terms of insurance premiums per capita.⁴⁷ This low level, however, suggests significant potential for growth, as the Chinese market continues to develop and modernize. One source estimates that by 2008, the Chinese insurance market will be the fourth-largest in the world, exceeding those of both France and Germany.⁴⁸

Foreign firms across the globe are actively increasing their presence in China. Most recently, U.S.-based investment firm The Carlyle Group, in partnership with U.S.-based Prudential Financial, agreed to purchase 25 percent of China Pacific Life Insurance Co. for an estimated \$410 million. China Pacific Life Insurance, which is a subsidiary of China Pacific Insurance Group, holds a 10-percent share of the Chinese life insurance market and a 12-percent share of the non-life market.⁴⁹ HSBC Holdings Plc has announced plans to spend slightly more than \$1 billion for a 20-percent share of Ping An Insurance Co.⁵⁰ In the life segment, China Life Insurance and Ping An Insurance together accounted for 70 percent of premiums in 2004.⁵¹ To respond to foreign competition, Chinese insurance companies are raising capital to modernize their operations, either through joint venture agreements or by listing on local and foreign stock exchanges. In 2003, for example, two Chinese firms, China Life and the Peoples Insurance Company of China, the first Chinese insurance companies to be listed on stock exchanges

⁴³ People’s Republic of China, “Regulations of the People’s Republic of China on Chinese-Foreign Cooperation in Running Schools,” 2006.

⁴⁴ *Ibid.*

⁴⁵ The main sources for this section include *Emphasis*, *The McKinsey Quarterly*, Swiss Re, HSBC, *Reuters*, and *Shanghai Daily.com*. See bibliography for full citations.

⁴⁶ *Emphasis*, “China’s Insurance Market – The Giant Awakens,” 2-5.

⁴⁷ Swiss Re, *Sigma* no. 2 (2005): 39.

⁴⁸ *McKinsey Quarterly*, “Selling Life Insurance to China,” 2004, and *Reuters*, “Carlyle, Prudential Win China Insurance Nod,” September 7, 2005.

⁴⁹ The deal was approved by China Pacific shareholders in October 2005, with completion expected by year-end 2006. According to press reports, Carlyle Group and Prudential Financial plan to increase their holdings in China Pacific Insurance to 49 percent, pending Chinese government approval. *Shanghai Daily.com*, “China Pacific to Sell Subsidiary Stake,” October 26, 2005.

⁵⁰ HSBC originally acquired 10 percent of Ping An Insurance in 2002. The HSBC Group, “About HSBC,” accessed October 12, 2005 and *Reuters*, “Carlyle, Prudential Win China Insurance Nod,” September 7, 2005.

⁵¹ *Reuters*, “AIG Aims to Maintain Sole-Ownership Model in China,” October 7, 2005.

outside of China, raised \$3.5 billion and \$797 million on the New York and Hong Kong stock exchanges, respectively. Other Chinese insurers are reportedly investigating the possibility of listing options outside of China.⁵²

Legal Services⁵³

Foreign legal firms have been active in China for many years, usually acting in a limited capacity and advising only on external issues or on international legal matters. As China's trade with the United States and other countries has increased, demand for legal services, which are an integral component of merchandise trade and international finance, has also increased, spurring China to improve foreign access to its legal services market. For example, in 2003, China opened several sectors of domestic law to foreign participation, and also allowed several foreign law firms to operate in more than one city. Even so, foreign legal providers still consider access to China's legal industry to be limited due to restrictions such as geographical and numerical restraints on law firms. Industry representatives also have expressed concern about the economic needs test applied to foreign legal providers, which has the potential to negate China's WTO commitments to liberalize legal services.⁵⁴ In 2007, geographical and quantitative restrictions on legal services are scheduled to be lifted, although foreign firms will still be limited to legal work related to their home country.⁵⁵

Privatization, market liberalization, and substantial foreign direct investment throughout the Chinese economy have created substantial opportunities for foreign law firms, which expect more such business to follow. Since 1997, China has privatized its telecommunications, airline, insurance, energy, and mining industries, usually with involvement by foreign law firms. China's large state banks are also expected to generate substantial legal work in areas such as securities offerings, joint venture formation, regulatory compliance, and overseas expansion.⁵⁶

Since 2003, several U.S. law firms opened new offices in China, whereas others expanded. Overall, thirty-nine of the 250 largest U.S. law firms reported having offices in China, with some having offices in multiple Chinese cities. The largest U.S. firms in China include Baker & McKenzie, Jones Day, and Sidley Austin. However, a few U.S. firms, such as Cravath, Swaine & Moore, have exited the market, in part due to intense competition.⁵⁷ British law firms also have a significant presence in China. Firms with the largest offices include Clifford Chance, Linklaters, Freshfields, Herbert Smith, and Allen & Overy.⁵⁸ Although the Chinese market continued to appeal to foreign law firms in 2005, growth was slow principally due to a shortage

⁵² Swiss Re, *Sigma* no. 5 (2004): 23.

⁵³ The main sources for this section include the American Chamber of Commerce in Shanghai, the Asian Studies Association of Australia, *The American Lawyer*, *National Law Journal*, and *Legal Times*. See bibliography for full citations.

⁵⁴ A recently introduced "economic needs" requirement grants wide discretion to government agencies in determining whether an actual need exists for the establishment and development of a foreign legal services firm in China. Such a test appears to contradict the General Agreement on Trade in Services (GATS), which prohibits economic needs tests by WTO members that make specific market-access commitments. American Chamber of Commerce in Shanghai, "Legal Services," March 7, 2006.

⁵⁵ Guo, *China and the World Trade Organisation*, March 2005.

⁵⁶ Goldhaber, "Banking on China," November 1, 2005.

⁵⁷ As a number of new law firms compete to enter the Chinese market, some are undercutting each other with fees far below their normal market value. Schwartz, "D.C. Firms View China With Caution," February 7, 2006.

⁵⁸ Goldhaber, "Here Comes China," November 1, 2005.

of attorneys who are qualified and authorized to practice in China.⁵⁹ Indeed, most firms with established practices in China added just a few attorneys to their locations in Beijing, Hong Kong, Shanghai, and elsewhere.⁶⁰

⁵⁹ Authorization for law firms includes official licensing by the Chinese Ministry of Justice.

⁶⁰ Jones, "Healthy Growth Seen in Firms' Foreign Offices," November 14, 2005.

CHAPTER 9

The Measurement of Nontariff Impediments to Trade in Commercial Banking Services

Trade negotiations increasingly focus on the removal of nontariff measures (NTMs), which restrict the cross-border flow of goods, services, and investment capital. This is true, in particular, of negotiations that address impediments to trade in services.¹ However, it is often difficult for trade policymakers to perceive the benefits of agreements that remove NTMs. In recognition of this, the Commission is developing methodologies to quantify NTMs in goods and services and assess their economic impact. The first step in this assessment is the development of baseline tariff rate equivalents (TREs) for existing NTMs. TREs express the percentage increase in a product's or service's price due to trade restrictions. The second step is to develop TREs that capture the removal of NTMs achieved in ongoing or future trade negotiations. Comparison of these TREs would yield a clearer impression of the benefits of NTM reduction.

The General Agreement on Trade in Services (GATS), one of the major achievements of the Uruguay Round, largely bound existing service NTMs in place, which provides a point from which baseline TREs can be estimated. Ongoing service negotiations in the Doha Development Agenda (DDA) seek to remove current NTMs, in large part by binding liberalization efforts implemented after the conclusion of the Uruguay Round. Comparison of the Uruguay Round and DDA tariff rate equivalents, the subject of forthcoming work by the Commission, should inform the trade dialogue.

The Commission's recent work on NTMs has focused on commercial banking services. The baseline, or Uruguay Round, commercial banking TREs estimated by the Commission appear in table 9-1. The TREs are estimated in three econometric specifications using firm-level financial data, market variables, and a policy variable. The trade policy variable is formulated on the basis of Uruguay Round GATS commitments. For the purpose of this analysis, the service provided is financial intermediation, and the price of this service is measured by individual banks' net interest margins, or the difference between deposit and lending rates.²

Table 9-1 indicates that several countries of the European Union (EU)--namely, Germany, Luxembourg, the Netherlands, and the United Kingdom--have the smallest estimated TREs.

¹ Service sector NTMs usually result from government regulation. Such regulation may be intended to promote health and safety or protect infrastructure services (*e.g.*, financial, telecommunication, energy, and transport services) critical to the country's economic efficiency and growth. Others may be designed to protect favored industries from competition.

² Considering the net interest margin (NIM) as the price of intermediation services, it is reasonable to consider the percent increase in NIMs due to restrictive trade policies as the tariff rate equivalent. Nonetheless, it is recognized that the term "tariff rate equivalent" is not used here in the strictly conventional sense, as our TRE captures impediments internal to a country (such as impediments to establishment), rather than impediments at the border.

Table 9-1
Tariff rate equivalents of bound NTMs on commercial banking

Country	Specification 1	Specification 3	Country	Specification 1	Specification 3
Australia	12.2	9.9	Kuwait	48.6	38.3
Austria	8.6	7.0	Latvia	10.4	8.4
Bahrain	34.6	27.5	Luxembourg . . .	6.8	5.5
Bolivia	43.8	34.6	Malaysia	23.9	19.2
Brazil	41.4	32.8	Mauritius	17.9	14.5
Canada	12.2	9.9	Mexico	58.7	45.9
Chile	69.6	54.0	Netherlands . . .	6.8	5.5
Colombia	16.0	12.9	New Zealand . . .	32.4	25.8
Costa Rica	46.2	36.4	Norway	12.2	9.9
Czech Republic	19.9	16.0	Pakistan	57.4	45.0
Denmark	8.6	7.0	Peru	58.7	45.9
Ecuador	14.1	11.4	Philippines	16.0	12.9
Egypt	41.4	32.8	Portugal	12.2	9.9
El Salvador	64.0	49.9	Slovakia	21.9	17.6
Estonia	11.3	9.2	Slovenia	16.0	12.9
Finland	17.9	14.5	South Africa . . .	56.1	44.0
Germany	6.8	5.5	Spain	8.6	7.0
Greece	10.4	8.4	Sweden	10.4	8.4
Hungary	12.2	9.9	Switzerland	17.9	14.5
Iceland	14.1	11.4	Thailand	23.9	19.2
India	45.0	35.5	Turkey	8.6	7.0
Indonesia	16.0	12.9	United Kingdom	6.8	5.5
Italy	16.0	12.9	United States . .	14.1	11.4
Japan	26.0	20.8	Uruguay	36.8	29.2
Korea	43.8	34.6	Venezuela	43.8	34.6

Source: Estimated by the U.S. International Trade Commission.

These countries apply neither market access nor national treatment restrictions on cross-border supply (GATS mode 1) and consumption abroad (mode 2). In addition, they schedule full market access commitments for commercial presence (mode 3) and relatively liberal bindings on the presence of business persons (mode 4). An EU-wide measure accords more preferable regulatory treatment to subsidiaries established by third-country (*i.e.*, non-EU) companies than to branches or agencies of the same. In other words, the European Union places a moderate restriction on national treatment of third-country companies (commercial presence).³

By contrast, several developing countries tend to have high estimated TREs. Chile, for instance, scheduled no commitments on deposit-taking and lending services, and consequently recorded the highest TRE. Mexico, Peru, and Pakistan scheduled marginally more open commitments, though restrictions on cross-border trade were left unbound.

In the text that follows, we briefly discuss the 1997 outcome of the World Trade Organization's financial services negotiations; outline the econometric method used in this chapter to generate

³ The United States has a slightly higher estimated TRE than certain European countries due to restrictions on commercial presence (mode 3).

TREs; and describe our data set and policy variable. Appendix C provides a condensed literature review and detailed econometric results.

Background

In December 1997, the World Trade Organization (WTO) concluded the Financial Services Agreement (FSA), extending trade disciplines found in the GATS to banking, securities, and insurance markets. The agreement entered into force in March 1999, when signatories annexed binding financial service commitments to the Fifth Protocol to the GATS. The FSA was a milestone in that, eventually, over 100 WTO members accorded some degree of market access and national treatment to foreign financial service providers, broadly on a Most-Favored Nation (MFN) basis.

The FSA discouraged the creation of new trade barriers, yielded greater regulatory transparency, and set the stage for progressively greater market openness. However, the FSA did not open markets in large part, but rather bound in place the status quo. Consequently, many trade impediments remain in both developed and developing countries. TREs developed in this chapter measure impediments remaining after completion of the FSA.

Binding to current levels of openness is the principal goal of ongoing services negotiations. Thus, TREs calculated on the basis of DDA commitments could reflect a new, more liberal status quo. Many governments have unilaterally opened markets since 1999 in order to promote the greater stability and efficiency of financial systems, exerting a powerful economy-wide influence on investment and growth. Beneficiaries of such liberalization include not only foreign financial service firms, but also domestic residents through lower lending rates, higher deposit rates, and a larger capital pool.⁴

Method⁵

Following previous literature, this research estimates TREs using a two-stage econometric method.⁶ In the first stage, we use firm-level data to regress net interest margins on net non-interest operating expenses, capital adequacy ratios, liquidity ratios, and country dummy variables. This yields a “pure” interest spread, or the difference between bank lending and deposit rates, that is corrected for the effects of prudential regulation and differences in cost structure. In the second stage, we regress the pure spread on country level variables--namely, market and policy variables--to estimate the effect of trade restrictions on the pure spread.

Net non-interest operating expenses reflect differences in banks’ cost structures and efficiency. Increases in non-interest operating expenses drive up net interest margins. The capital adequacy and liquidity ratios are prudential measures, intended to ensure the stability and integrity of the banking system. Capital adequacy ratios ensure that banks remain solvent in the event of loan

⁴ Dobson, “Further Financial Services Liberalization in the Doha Round?” 2-3.

⁵ The main sources for this section include Saunders and Schumacher, “The Determinants of Bank Interest Rate Margins;” Barth, Caprio, and Levine, *The Regulation and Supervision of Banks Around the World*; and McGuire and Schuele, “Restrictiveness of International Trade in Banking Services.” See bibliography for full citations.

⁶ The two-stage method is recommended in a paper authored by Moulton, who demonstrates that a single stage estimation, merging firm-specific and aggregate economy variables, can introduce a downward bias in standard errors. This bias could produce spurious findings of statistical significance in the regressors. Brent R. Moulton, “An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables,” 334.

failure, and curb excessive risk taking by forcing banks to place more of their own capital, rather than depositors' capital, at risk. Liquidity ratios ensure that banks can meet demand for loans and withdrawals. Increases in either ratio could increase net interest margins, as banks must compensate for holding cash and reserves in low- or non-interest bearing accounts with central banks or other monetary authorities.⁷

The FSA explicitly recognizes the right of all countries to apply prudential measures as they deem appropriate, although it is recognized that such measures may impede trade. Prudential measures tend to be similar across countries as most are based on the Core Principles for Effective Banking Supervision of the Basel Committee on Banking Supervision. For instance, 60 percent of the 107 countries polled by the World Bank in 1999 maintained a minimum capital adequacy ratio of 8 percent, the guideline approved by the Basel Committee.⁸ These principles are endorsed by both the International Monetary Fund (IMF) and the World Bank, but they are purely voluntary.⁹

Pure spreads for each country are the sum of the constant and the coefficients for country dummy variables generated in the first stage regression.¹⁰ They reflect the effect of market variables and non-prudential trade restrictions, such as limitations on market entry, modes of delivery, and breadth of service offerings. In the second stage, we regress pure spreads on market structure, interest rate volatility, trade policy, and foreign ownership shares. Market structure is measured by the share of deposits held by the five largest banks in each market. Interest rate volatility is the variance of quarterly money market interest rates during 1996-1998. Foreign participation is the share of domestic bank assets held by foreign banks in 1999. Trade policies are identified in GATS financial services schedules, although it is recognized that such schedules may include commitments that are more (or less) restrictive than policies currently in place.¹¹

Data and Policy Variable¹²

We collected firm-level information on 3,264 commercial banks in 50 countries. This information comes from BankScope, which gathers data from banks' balance sheets, income statements, and audited annual reports. Market information for the second stage regression comes from various sources. We used market share and foreign ownership data found on the World Bank website, in a bank regulation database of questionnaire responses provided by 71 countries. Most of the responses pertain to 1999.¹³ We calculated interest rate volatility on the basis of rates published in the IMF's *International Financial Statistics*. In most cases, interest rate volatility reflects quarterly variations in money market interest rates, but where such data were

⁷ Of 71 respondents to a World Bank questionnaire, 41 countries stated that liquidity reserves (or reserves deposited at the central bank) earned no interest. Barth, et. al., *Regulation and Supervision of Banks*, Appendix 1.

⁸ *Ibid.*, 10-11.

⁹ McGuire and Schuele, "Restrictiveness of International Trade in Banking Services," 202.

¹⁰ There are 49 country dummy variables. Luxembourg is the excluded base country, and its pure spread is simply the constant from the first stage regression. For all other countries, the pure spread is the sum of the coefficient of its dummy variable and the constant from the first stage regression.

¹¹ In particular, it remains unclear whether a trade impediment exists where no commitment has been made. Unbound limitations are identified by the absence of an entry for the sector of interest (deposit-taking or lending in this instance) or by the word "unbound." No information on regulatory policy, whether liberal or not, is provided in the schedules. This is of course a limitation of this approach.

¹² The main sources for this section include Barth, et. al., *The Regulation and Supervision of Banks Around the World*; Brown and Feinberg, "The Measurement and Effects of Barriers to Trade in Basic Telecommunication Services," OECD, Working Party of the Trade Committee, "Assessing Barriers to Trade in Services: Revised," and Kalirajan, et. al. "The Price Impact of Restrictions on Banking Services."

¹³ Barth, et. al., *Regulation and Supervision of Banks Around the World*.

not available we used discount rates and Treasury bill rates. We developed the trade policy variable, GATSPOLICY, from the GATS Schedules of Specific Commitments.¹⁴

GATSPOLICY reflects a scoring of market access and national treatment commitments, which take on values from 0 to 1.¹⁵ We scored market access and national treatment commitments by the degree to which they promote or impede trade, as suggested in an OECD document published in 2001.¹⁶ Foreign firms can supply banking services via one or more modes: cross-border supply, consumption abroad, commercial presence, and presence of natural persons. For each of these four modes of supply, the OECD document usefully separates the types of NTMs commonly found in schedules into three categories: those having little or no restrictive effect, accorded a score of 0.25; restrictive effect, accorded a score of 0.50; and prohibitive or highly restrictive effect, accorded a score of 0.75. We extend this scoring system by according unbound entries (indicating that trade limitations are unlimited) a score of 1.00, and full commitments (indicating the absence of limitations) a score of 0.00.¹⁷ We assign scores to market access and national treatment commitments on bank deposit-taking and bank lending services for each of the four modes of supply, resulting in 16 scores ranging from 0 to 1, which we sum to develop GATSPOLICY. Lending and deposit taking continue to constitute banks' primary line of business, though fee-generating services such as financial management and transactions services, credit card services, and the provision of standby letters of credit are growing as a share of total business.¹⁸

Stage 1 Results

The first stage regression finds that prudential capital and liquidity ratios, as well as net non-interest operating expenses, are significant determinants of net interest margins. All variables are statistically significant and positive.¹⁹ Net non-interest operating expenses exert the largest influence on net interest margins. The estimated coefficient suggests that each 1-percent increase in net non-interest operating expenses would increase net interest margins by 0.32 percent, holding other variables constant (table D-1). One percent increases in the capital and liquidity ratios would increase net interest margins by 0.25 percent and 0.06 percent, respectively. The

¹⁴ This methodology was used in an earlier study, Brown and Feinberg, "Measurement and Effects of Barriers to Trade in Basic Telecommunication Services," 2004.

¹⁵ In the literature, a multiplicity of NTM scoring methods and NTM information sources are used. In this paper, we use the OECD paper referenced above because its method is agreed by 30 the countries of that organization. Further, we use only the GATS as our source of information, despite its information gaps, in part because there are scheduling guidelines, and therefore rough comparability of NTM information across countries, and in part because the Commission is routinely requested to analyze trade agreements for their content and potential economic effect, and the GATS is such an agreement.

¹⁶ OECD, "Assessing Barriers to Trade in Services: Revised," 2001.

¹⁷ The absence of a commitment does not necessarily indicate the presence of a nontariff barrier, but the absence does reduce the legal certainty and transparency ideally provided by schedules, and permits the implementation of higher barriers without penalty.

¹⁸ Kalirajan, et. al., "Price Impact of Restrictions on Banking Services," 221.

¹⁹ These econometric results are corrected for heteroskedasticity, as detected by the White test. T-scores have been calculated with heteroskedastic - corrected standard errors.

adjusted R-squared value indicates that the stage 1 regression explains 71 percent of variation in the net interest margin. Estimated pure spreads range from 1.59 percent in Luxembourg to 3.26 in Venezuela.

Stage 2 Results

This research considers three different specifications of the stage 2 regression. The first is the simplest, regressing pure spreads on market share, interest rate volatility, and the trade policy variable, GATSPOLICY. The second specification adds a regressor for foreign ownership (FO) and the third adds a regressor specific to foreign ownership in low and middle income countries (FO*LMY). All three specifications find GATSPOLICY statistically significant at the 1 percent level (table D-2); interest rate volatility significant at the 5 percent and 10 percent levels; and market share insignificant.²⁰ A positive sign for market share is consistent with theory, but its statistical insignificance is not. It might be that market share, as computed here, is too crude a measure of market power. The positive sign for interest rate volatility is consistent with theory, in that volatile rates expose banks to greater risk. Falling interest rates imperil earnings of funds placed in the money market, whereas growing rates increase the cost of borrowing in the market. In both cases, banks would want to inflate interest spreads to cover these risks. The positive sign for GATSPOLICY is consistent with expectations; the more liberal the market, the smaller the pure spread. The estimated coefficient indicates that a maximum value of 1 in GATSPOLICY would increase interest rate spreads by between 0.027 and 0.033 percentage points.

Specification 2 suggests that foreign participation is statistically significant at the 10-percent level.²¹ Specification 3 explores the reason for the positive sign found in specification 2, which suggests that foreign participation increases interest spreads, albeit to a small extent. Specification 3 uses a slope dummy variable to estimate the effects of foreign participation in low- and medium-income countries versus high-income countries. Foreign participation tends to have a small but positive impact on interest spreads in low- and medium-income countries, and no significant impact on interest spreads in high-income countries. It is possible that foreign banks are attracted to markets with higher interest margins or, upon entering low- or medium-income countries, find it prudent to hold higher reserves due to greater interest rate volatility.

²⁰ The econometric results are corrected for heteroskedasticity, as detected by the White test. T-scores have been calculated with heteroskedastic - corrected standard errors.

²¹ The correlation coefficient for GATSPOLICY and FO does not suggest this specification suffers from severe endogeneity. The correlation coefficient for GATSPOLICY and FO*LMY is similar, again suggesting no severe endogeneity.

APPENDIX A

Activities Captured in Official U.S. Data on Cross-border Trade in Services by Industry

Appendix A

Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Accounting	Includes accounting, auditing, and bookkeeping services. Excludes data processing and tabulating services.	Same
Advertising	Includes preparation of advertising and placement of such advertising in media.	Same
Air transport <i>Passenger fares</i> <i>Freight</i> <i>Port</i>	<p>Predominantly includes receipts by U.S. air carriers from passengers traveling between the United States and foreign countries, and between two foreign points. Also includes receipts by U.S. ocean carriers for the transport of passengers.</p> <p>Includes receipts of U.S. air carriers for the international transportation of U.S. exports to foreign countries, and receipts of U.S. air carriers transporting U.S. exports between foreign points.</p> <p>Includes goods and services purchased in U.S. airports by foreign-operated carriers, including fuel and oil, station and maintenance bases, wages, and other goods and services except aircraft leasing expenses.</p>	<p>Predominantly includes payments to foreign air carriers by U.S. residents traveling between the United States and foreign countries, and between two foreign points. Also includes payments to foreign ocean carriers for the transport of passengers.</p> <p>Includes payments to foreign-operated air carriers for transportation of U.S. imports from a foreign country to the United States.</p> <p>Includes goods and services purchased in foreign airports by U.S.-operated carriers.</p>
Architectural, engineering, construction, and mining	Includes architectural, construction, engineering, and mining services, including oil and gas field services. Architectural services include services mainly for businesses, but exclude landscape architecture and graphic design services. Engineering services relate to construction and mining services projects only, and exclude industrial engineering services, such as product design services. Land-surveying services are included, as are services of general contractors in the fields of building and heavy construction, construction work by special trade contractors, and drilling wells or erecting and dismantling drilling rigs for oil and gas fields. Data are reported for services purchased in connection with proposed projects (i.e., feasibility studies) as well as projects contracted or underway, but exclude contractors' expenditures on merchandise and labor.	Same, except data include contractors' expenditures on intermediate inputs of wages, services, materials, and other expenses.
Audiovisual	Includes foreign rentals of films and tapes from U.S. sources.	Includes U.S. rentals of films and tapes from foreign sources.

Appendix A—Continued
Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Banking and securities	Includes commissions and fees for brokerage services, private placement services, underwriting services, financial management services, credit card services, credit-related services, financial advisory and custody services, securities lending services, electronic funds transfer services, asset management services, and other financial services. Excludes deposit taking and lending services.	Same
Computer and data processing	Includes data entry, processing (both batch and remote), and tabulation; computer systems analysis, design, and engineering services; custom software and programming services; rights to produce, use, and distribute general use software, except prepackaged computer software physically shipped to or from the United States; integrated hardware/software services; and other computer services (e.g., timesharing, maintenance, and repair). Excludes operational leasing of computer and data processing equipment.	Same
Database and other information	Includes business and economic database services; medical, legal, technical, and similar database services; general news services; and credit reporting systems.	Same
Education	Includes tuition and living expenses of foreign students studying at U.S. colleges, universities, and other institutions of higher education.	Includes tuition and living expenses of U.S. students studying at foreign colleges, universities, and other institutions of higher education through “study abroad” programs sponsored by U.S. institutions. From 2002 onward also includes 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.
Equipment leasing	Includes rentals for computer and data processing equipment, transportation equipment without crew or operators, and all other machinery and equipment. Excludes rentals under leases that have been capitalized, and rentals of any items other than machinery and equipment, such as real estate, film rentals, and employee leasing.	Same

Appendix A—Continued

Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Franchising	Includes fees received under business format franchising agreements. Business format franchising is characterized by an ongoing business relationship between franchisor and franchisee that includes not only the product, service, and trademark, but the entire business format itself. Excludes receipts for the use of trademarks, except where such trademarks are part of a business format franchise.	Same
Health care	Includes inpatient and outpatient fees charged to foreign residents. Inpatient fees include all hospital staff and outside physician fees, tests, drugs, and room and board. Outpatient charges include outpatient surgery, physical rehabilitation and therapy, dermatology, AIDS treatments, and consultations. Excludes fees for ambulatory treatment or drugs provided outside a hospital.	Includes estimates of payments by U.S. residents traveling abroad for incidental medical care and payments by U.S. residents who travel to Mexico and Canada specifically for medical purposes. ¹
Industrial engineering	Includes engineering services related to the design of movable products, including product design services. Includes services performed with the assistance of computers. Excludes engineering and architectural services that relate to immovable products, such as those that relate to proposed construction services projects.	Same
Insurance	Includes primary, reinsurance premiums and premium supplements paid by foreign persons to U.S. insurance carriers operating in the U.S. market, net of 'normal' ² claims paid to foreign persons.	Includes primary, reinsurance premiums and premium supplements paid by U.S. persons to foreign insurance carriers operating in their home markets, net of 'normal' ² claims paid to U.S. persons.
Installation, maintenance, and repair of equipment	Includes maintenance services for machinery and equipment, small maintenance work on structures, and installation and training services that are provided by a manufacturer in connection with the sale of goods, when the price of these services is not incorporated into the price of the goods that is entered on the declaration files with the U.S. Customs Service.	Same

See footnotes at end of table.

Appendix A—Continued

Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Intangible intellectual property (royalties and license fees)	Includes payments for the sale or use of intangible assets and proprietary rights. Includes, among others, license fees and royalties for industrial processes and products; royalties for use of copyrighted material in books, records, and audio tapes; payments for the use of trademarks and brand names; license and rental fees for rights to use or reproduce prerecorded performances and events; payments for rights to broadcast and record live performances; license fees for rights to distribute or reproduce general-use computer software; and fees for business-format franchising.	Same
Legal	Includes legal advice and other legal services.	Same
Mailing, reproduction, and commercial art	Includes direct mail advertising services; mailing services, such as remailing services in connection with direct mail advertising; commercial photography, art, and graphic services; address list compilation; and stenographic services.	Same
Management, consulting, and public relations	Includes management services, except management of health care facilities; consulting services, including computer consulting but excluding consulting engineering services related to construction and mining projects; and public relations services, except those that are part of an advertising campaign.	Same
Maritime transport <i>Freight</i> <i>Port</i>	<p>Includes receipts of U.S.-operated ocean carriers for the international transportation of U.S. exports, and receipts of U.S.-operated carriers transporting foreign freight between foreign points. Includes revenue on cargo outbound from U.S. ports, revenue on cross-trade cargoes, payments for charter hires, and expenses in foreign countries.</p> <p>Includes goods and services purchased in U.S. sea ports by foreign-operated carriers, including port call, cargo, fuel, and other vessel expenses.</p>	<p>Includes payments to foreign-operated ocean carriers for international transportation of U.S. imports.</p> <p>Includes goods and services purchased in foreign sea ports by U.S.-operated carriers.</p>
Oil and gas field	Not available. Data for this industry are included in the architectural, engineering, construction, and mining services category.	Same
Personnel supply	Includes fees paid for employment services and the provision of temporary help and personnel to perform services on a contract or fee basis, and the compensation of workers on the payroll of the agency.	Same

Appendix A—Continued

Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Research, development, and testing	Includes laboratory and other physical research, product development services, and product testing services. Also includes experiments and research and development activities aboard spacecrafts. Excludes medical and dental laboratory services.	Same
Sports and performing arts	Includes fees received for performing arts and sports events, paid through management companies, booking agents, and promoters and presenters; and fees paid directly to U.S. performers by foreign persons.	Includes fees paid for performing arts and sports events, paid through management companies, booking agents, and promoters and presenters; and fees paid directly to foreign performers by U.S. persons.
Telecommunication	Predominantly includes net settlement receipts of U.S. carriers for terminating inbound foreign calls. Also includes telex, telegram, and other basic telecommunication services; value-added services, such as electronic mail, management of data networks, enhanced facsimile, and electronic funds transfers; telecommunication support services, such as repair and ground station services; and the launching of communications satellites.	Same, except predominantly includes net settlement payments by U.S. carriers to compensate foreign carriers for terminating outbound U.S. calls.
Training	Includes educational or training services provided on a contract or fee basis. Excludes tuition and fees charged to individual foreign students by U.S. educational institutions. Also excludes training performed by a manufacturer in connection with the sale of a good.	Includes educational or training services provided on a contract or fee basis. Excludes tuition and fees charged to individual U.S. students by foreign educational institutions. Also excludes training performed by a manufacturer in connection with the sale of a good.
Travel and tourism	Includes expenditures in the United States by foreign travelers (except foreign government personnel and their dependents, and other foreign citizens residing in the United States) for lodging, food, and transportation within the United States, and recreation and entertainment, personal purchases, gifts, and other outlays associated with travel in the United States.	Includes expenditures abroad by U.S. travelers (excluding U.S. Government personnel and their dependents, and other U.S. citizens residing abroad) for lodging, food, and transportation within foreign countries, and recreation and entertainment, personal purchases, gifts, and other outlays associated with travel abroad.

Appendix A—Continued

Activities captured in official U.S. data on cross-border trade in services by industry

Service	U.S. Exports	U.S. Imports
Utilities	Includes electric power generation, transmission, and distribution; natural-gas distribution; operation of water treatment plants or water supply systems; operation of sewer systems; and operation of sewage treatment facilities that collect, treat, and dispose of waste.	Same

¹ Payments are based on the number of U.S. residents traveling abroad, a U.S. Bureau of Economic Analysis (BEA) estimate of the share of travelers requiring medical treatment, and an estimate of the average cost per treatment. USDOC, BEA, *Survey of Current Business* 85, no. 7:67.

² Normal losses are inferred from the relationship between actual losses and premiums averaged over several years. USDOC, BEA, *Survey of Current Business* 83, no. 7:35-36.

Sources: USDOC, BEA, *U.S. International Transactions in Private Services: A Guide to the Surveys Conducted by the Bureau of Economic Analysis*, March 1998; USDOC, International Trade Administration, Tourism Industries, in conjunction with the U.S. Department of Justice, Immigration and Naturalization Service, Statistics Canada, and the Banco de Mexico; OECD, *Services Statistics on International Transactions*, 119; USDOC, BEA, *Survey of Current Business* 83, no. 7:35-36; USDOC, BEA, *Survey of Current Business* 84, no. 7:60; and USDOC, BEA, *Survey of Current Business* 85, no. 7:67.

APPENDIX B

Activities Captured in Official U.S. Data on Affiliate Transactions by Industry

Appendix B
Activities captured in official U.S. data on affiliate transactions by industry

Service	Sales and Purchases
Accounting	Auditing of accounting records, designing of accounting systems, preparing financial statements, developing budgets, preparing tax returns, processing payrolls, bookkeeping, and billing services.
Advertising	The creation of advertising campaigns and placing such advertising in periodicals, newspapers, radio, television, and other media. Activities include advice, creative services, account management, production of advertising material, media planning, and placement of advertisements.
Audiovisual	Motion picture, television tape, film, and sound recording production; distribution services; post-production services such as editing, film/tape transfers, and subtitling; and operating motion picture theaters. Does not include video tape and disk rentals, or wholesale distribution of video cassettes and sound recordings.
Banking and securities	Includes nondepository credit intermediation (credit card issuing, sales financing, mortgage companies, mortgage broking, international trade financing, and consumer finance companies); investment banking and securities dealing; securities brokerage; commodity contracts dealing and brokerage; portfolio management services; investment advisory services; and trust, fiduciary, and custody activities. Excludes lending and deposit-taking activities of depository institutions.
Computer and data processing	Includes the provision of expertise in the field of information technologies through one or more of the following activities: writing, modifying, testing, and supporting software to meet the needs of a particular customer; planning and designing computer systems that integrate computer hardware, software, and communication technologies; on-site management and operation of clients' computer systems and/or data processing facilities; and other professional and technical computer-related advice and services.
Construction	The construction of buildings and other structures, heavy construction (such as highways, power plants, and pipelines), land subdivision and development, additions, alterations, installation, maintenance, and repair services. Includes demolition services or clearing of building sites, along with other land preparation services. Also includes "Special Trade Contractors" which often subcontract to general contractors, such as plumbing, painting, electrical, masonry, and carpentry contractors.
Education	Instruction and training in any subject, either for-profit or nonprofit, by either privately or publicly owned entities. Includes preschools; elementary schools; secondary schools; community colleges, four-year colleges and universities; professional schools; and technical training schools specializing in various subjects, such as secretarial skills, computer training, cosmetology, language instruction, automobile driving, flight instruction, and fine arts. This category also includes educational support services, such as educational consultants, guidance counseling services, and student exchange services.
Environmental	Includes environmental testing and analytical services, wastewater treatment works, solid waste management, hazardous waste management, remediation and industrial services, and environmental consulting and engineering.
Equipment leasing	Rental and leasing of commercial-type and industrial-type (nonconsumer) machinery and equipment. Establishments included in this group are generally involved in providing capital or investment-type equipment that clients use in their business operations. Includes construction, transportation, mining, and forestry machinery, and other commercial equipment rental and leasing. Excludes leasing affiliates of commercial banks.

Appendix B—Continued
Activities captured in official U.S. data on affiliate transactions by industry

Service	Sales and Purchases
Express delivery	(Couriers and messengers) Intercity and/or local delivery of parcels that may be handled by one person without using special equipment. May include collection, pick-up, and delivery operations using limited labor and minimal equipment.
Health care	Includes hospitals; offices of physicians, mental health specialists, and other health care providers; outpatient care centers, including family planning, mental health, and substance abuse centers; medical laboratories; home health care services; nursing and residential care facilities; and providers of social assistance services, including adoption agencies, youth centers, child day-care services, and services for the elderly.
Insurance carriers and related activities	Insurance carriers primarily engaged in underwriting annuities and insurance policies and investing premiums to build up a portfolio of financial assets to be used against future claims. Includes direct life, health, and medical insurance carriers, property/casualty and title insurance carriers, and reinsurance carriers. Also includes insurance agencies and brokerages, which are primarily engaged in acting as agents in selling annuities and insurance policies, and insurance claims adjusters.
Legal	Includes the services of lawyers or attorneys primarily engaged in the practice of law, notaries, real estate settlement services, real estate title abstract services, and patent agent services.
Maritime transport	Deep sea, coastal, and Great Lakes water transportation, including both freight and passenger transportation, using ships, barges, and boats.
Oil and gas field services	Includes drilling of oil and gas wells and other support services for oil and gas operations performed on a contract or fee basis, such as excavating slush pits and cellars; grading and building foundations at well locations; and cleaning out, bailing, and swabbing wells.
Retail distribution	Sales of merchandise to the general public for personal or household consumption, and services related to such sales, including after-sale repairs. Retailers fall into store and non-store categories, such as catalogs, door-to-door sales, and the Internet.
Telecommunication	Includes the operation, maintenance, or provision of access to facilities for the transmission of voice, data, text, and full motion picture video between network termination points, and telecommunications reselling. Includes wired, wireless, and satellite telecommunications.
Utilities	Includes generation, transmission, and/or distribution of electric power; distribution or marketing of natural gas for resale or to final consumers; and operation of water treatment plants, water supply systems, or sewage treatment and/or disposal systems.

Sources: OMB, *North American Industry Classification System*, 1998; and USDOC, BEA, "Guide to Industry and Foreign Trade Classifications for International Surveys," October 1997.

APPENDIX C
GATS Commitments on Selected Chinese
Services

Appendix C
GATS commitments on selected Chinese services¹

Sector or Sub-Sector	CPC Code	Market Access	National Treatment	Notes
Air transport services (excluding passenger and freight transportation)	Aircraft repair and maintenance services (CPC 8868)	1) Unbound* 2) None 3) Joint ventures are permitted, however, the Chinese side shall hold controlling shares or be in the dominant position. Joint venture licenses are subject to economic needs test.	1) Unbound* 2) None 3) Joint ventures are obligated to undertake business in the international market.	*Unbound due to lack of technical feasibility.
	Computer Reservation System (CRS) services	1) Foreign computer reservation systems, with prior agreement, may provide services to Chinese aviation enterprises/agents and foreign representative and sales offices in Chinese destination cities. Direct access and use of foreign CRS services by Chinese businesses are subject to approval. 2) None 3) Unbound	1) None 2) None 3) Unbound	
Banking services	Acceptance of deposits from the public; lending of all types; financial leasing; all payment and money transmission services; guarantees and commitments; and foreign exchange	1) Unbound, except for the provision and transfer of financial information and related software; and advisory, intermediation, and other specified auxiliary financial services. 2) None 3) Specific guidelines on geographic coverage, clients, and licensing detailed. Special conditions listed for establishing foreign subsidiaries, branches, joint finance companies, and local currency businesses.	1) None 2) None 3) None, except for what is listed in the Market Access section.	Foreign corporations may provide financial leasing services at the same time as domestics.
	Motor vehicle financing by non-bank financial institutions	1) Unbound, except for the provision and transfer of financial information and related software; and advisory, intermediation, and other specified auxiliary financial services. 2) None 3) None	1) Unbound 2) None 3) None	

See footnote at end of table.

Appendix C—Continued
GATS commitments on selected Chinese services¹

Sector or Sub-Sector	CPC Code	Market Access	National Treatment	Notes
Banking services— <i>Continued</i>	Other financial services, the provision and transfer of financial information and related software; and advisory, intermediation, and other specified auxiliary financial services	1) None 2) None 3) None, criteria for authorization are solely prudential. Branches of foreign institutions permitted.	1) None 2) None 3) None	
	Securities	1) Unbound, except B share businesses may operate without Chinese intermediaries. 2) None 3) Unbound, except for specific guidelines on Chinese stock exchange membership and joint ventures/foreign investment levels in underwriting A shares, underwriting/trading B and H shares, and government and corporate debts and funds. Criteria for authorization are solely prudential.	1) None 2) None 3) None	
Education services (excluding special education services, e.g., military, police, political, and party school education)	-Primary education services (CPC 921, excluding national compulsory education in CPC 92190) -Secondary education services (CPC 922, excluding national compulsory education in CPC 92210) -Higher education services (CPC 923) -Adult education services (CPC 924) -Other education services (CPC 929, including English language training)	1) Unbound 2) None 3) Foreign majority ownership permitted in joint school establishment. 4) Unbound, in addition to horizontal commitments, foreign individual education service suppliers may enter China through invitation or employment by Chinese educational institutions.	1) Unbound 2) None 3) Unbound 4) Qualifications: a Bachelor's degree or higher and appropriate professional title or certificate, with two years professional experience.	

See footnote at end of table.

Appendix C—Continued
GATS commitments on selected Chinese services¹

Sector or Sub-Sector	CPC Code	Market Access	National Treatment	Notes
Insurance services	Direct insurance (including co-insurance) -Life, health and pension/annuities insurance -Non-life insurance -Reinsurance -Services auxiliary to insurance	1) Unbound, except for reinsurance; international marine, aviation, and transport (MAT) insurance; brokerage for large scale commercial risks and international MAT insurance and reinsurance. 2) None, except unbound for brokerage. 3) Specific guidelines on forms of establishment, geographic coverage, business scope, and licenses detailed.	1) None 2) None 3) None, except foreign insurers may not engage in statutory insurance business and specific guidelines on reinsurance cessions detailed.	Any further authorization provided to foreign insurers after accession, which may provide for more favorable conditions than those set under this schedule, will be made available to other foreign service suppliers upon request.
Legal services	CPC 861, excluding Chinese law practice	1) None 2) None 3) Specific guidelines on foreign representative office locations, business scope, and professional qualifications detailed.	1) None 2) None 3) All representatives shall reside in China no less than six months each year and representative offices shall not employ Chinese national registered lawyers.	

¹ Mode 1 - cross-border supply, Mode 2 - consumption abroad, Mode 3 - commercial presence, Mode 4 - presence of natural persons. Mode 4 is not included because countries tend to list it as unbound, except where noted otherwise in the horizontal commitments. However, where applicable, additional restrictions on Mode 4 are noted in the table.

Source: Compiled by the U.S. International Trade Commission.

APPENDIX D

The Measurement of Nontariff Impediments to Trade in Commercial Banking Services

Introduction

This appendix provides a literature review performed in the course of preparing chapter 9. It also provides information on econometric specifications and results.

Previous Literature¹

The method followed in this chapter was initially developed by Saunders and Schumacher.² They study the determinants of bank net interest margins, using panel data for 614 banks in six European countries and the United States during 1988-1995. They employ the two-stage approach described above, developing pure spreads after controlling for implicit interest payments,³ the opportunity cost of meeting reserve requirements, and holding capital to protect banks from credit risk. They find that all three variables are statistically significant and exert a positive impact on net interest margins. R-squared values for their country regressions range from 0.20 to 0.80. In the second specification, the authors regress pure spreads on market structure and interest rate volatility, finding that both variables generally have statistically significant and positive signs. The authors conclude that segmented markets tend to have higher spreads and, therefore, movement toward interstate branching in the United States and cross-border banking in Europe should reduce interest rate spreads. They also find that stable macroeconomic policies that minimize interest rate volatility tend to be conducive to lower interest margins.

Kalirajan, et. al., examine 694 banks in 27 economies using the two-stage method.⁴ They employ a double log function to regress net interest margins on non-interest operating expenses, liquidity ratios, capital ratios, and country dummy variables.⁵ They find that the capital ratio and non-interest operating expenses are statistically significant and positive, but the liquidity ratio is not significant. They surmise that the definition of liquidity they use (the ratio of total cash to total assets) may be too narrow. They find a good fit in the first regression, with an adjusted R-squared of 0.783. In the second specification, they regress pure spreads (the first-stage constant plus country dummies) on market structure, interest rate volatility, and a foreign trade restrictiveness index. Interest rate volatility and the trade restrictiveness index are statistically significant in the expected direction, but market structure is insignificant. The adjusted R-squared is 0.193.⁶

¹ The main sources for this section include Saunders and Schumacher, "The Determinants of Bank Interest Rate Margins," Dee, *Services Trade Liberalization in South East European Countries and Services Trade Liberalization in Russia and the Baltic States*; Dihel and Kalinova, *Services Barriers and Their Economic Impact*; Kalirajan, et. al., "The Price Impact of Restrictions on Banking Services," and Organization for Economic Cooperation and Development (OECD), Working Party of the Trade Committee, "Modal Estimates of Services Barriers." See bibliography for full citations.

² Saunders and Schumacher, "Determinants of Bank Interest Rate Margins," 2000.

³ Saunders and Schumacher define implicit interest payments as "service charge remissions and other types of depositor subsidy due to regulatory restrictions on explicit interest payments." Ibid., 817.

⁴ For information on subsequent work using Kalirajan's method, see Dee, *Services Trade Liberalization in South East European Countries*; Dee, *Services Trade Liberalization in Russia and the Baltic States*; and Dihel and Kalinova, *Services Barriers and Their Economic Impact*.

⁵ Although the literature defines second stage variables consistently, there is some variation among authors as to the definition of first stage variables. Kalirajan, et. al., measure net interest margin as the sum of total net interest income and total fee income divided by total interest-earning assets; the capital adequacy ratio as tier-1 capital divided by total bank assets; the liquidity ratio as total cash divided by total assets, and non-interest operating expenses as non-interest expenses minus operating income divided by total interest earning assets.

⁶ An additional policy variable, the domestic trade restrictiveness index, yielded no significant results.

TREs estimated on the basis of these regressions vary from 5 percent in Argentina to 61 percent in Malaysia.⁷

A more recent study by the Organization for Economic Cooperation and Development (OECD) implements a method similar to the Kalirajan study, examining interest rates in up to 817 banks among 27 developing economies. The principal difference is that, in addition to developing an overall TRE for each country, the OECD also attempts to develop TREs for each of the four GATS modes of supply. In the first stage regression, the OECD finds that non-interest operating expenses and the liquidity and capital adequacy ratios are significant at the 1-percent level.⁸ The adjusted R-squared value for the first stage is 0.79. In the second stage, the OECD finds interest rate volatility statistically significant at the 1 percent level, various permutations of the trade restrictiveness index significant at the 5- and 10-percent levels, and market share insignificant.⁹ Adjusted R-squared values range from 0.10 to 0.15 for regressions using the aggregate trade restrictiveness index, and from 0.14 to 0.041 using modal indices.¹⁰

STAGE 1 REGRESSION AND RESULTS

The stage 1 specification is as follows:

$$\ln(NIM) = \beta_0 + \beta_1 \ln(NIE) + \beta_2 \ln(K) + \beta_3 \ln(L) + \beta_{4i} \sum_{i=1}^{49} CD_i$$

where:

β_0 = constant;

NIM = net interest margin in 1999, calculated as net interest income divided by total interest-earning assets;

NIE = net non-interest operating expenses in 1999, calculated as net interest income minus pre-tax profits, divided by total assets;

K = capital adequacy ratio in 1999, calculated as total share capital and reserves, divided by total assets;

L = liquidity ratio in 1999, calculated as total cash and equivalents, divided by total assets; and

CD = country dummy variables for 49 countries, such that $\beta_0 + \beta_{4i}$ is the country-specific pure spread in the stage 2 regression.

⁷ Kalirajan, et. al., "Price Impact of Restrictions on Banking Services," 215-230.

⁸ The OECD measures net interest margin as net interest income divided by total assets; the capital ratio as total share capital and reserves divided by total assets; the liquidity ratio as total cash and cash equivalents divided by total assets; and non-interest operating income as net interest income minus pre-tax profits divided by total assets.

⁹ The statistical significance of the OECD's trade restrictiveness index increases when interacted with a dummy variable for MFN exemptions. The dummy takes on the value of 1 if the country lists at least 1 MFN exemption, and 0 otherwise.

¹⁰ OECD, "Modal Estimates of Services Barriers" and Annex, 2005.

Table D-1
First stage results

Explanatory variable	Coefficient estimate (t-score)
Intercept	1.59*** (10.56)
Capital adequacy ratio	0.25*** (11.4)
Liquidity ratio	0.06*** (6.2)
Net non-interest operating expense	0.32*** (18.0)
Adjusted R ²	0.71

Note: These econometric results have been corrected for heteroskedasticity, as detected by the White test. T-scores have been calculated with heteroskedasticity - corrected standard errors.

* = The estimated coefficient is significant at the 10-percent level.

** = The estimated coefficient is significant at the 5-percent level.

*** = The estimated coefficient is significant at the 1-percent level.

Source: Estimated by the U.S. International Trade Commission.

Table D-2
Second stage results

Variable	Specification 1	Specification 2	Specification 3
Intercept	1.93*** (14.61)	1.85*** (14.73)	1.92*** (15.67)
MS	0.001 (0.64)	0.0008 (0.47)	0.0001 (0.09)
IV	0.001* (2.01)	0.001** (2.29)	0.0009** (2.42)
GATSPOLICY	0.033*** (3.24)	0.033*** (3.38)	0.027*** (2.84)
FO	(¹)	0.003* (1.72)	-0.0008 (-0.29)
FO * LMY	(¹)	(¹)	0.007**
Adjusted R ²	0.158	0.213	0.307

¹ Not applicable.

Note: Significance levels are determined by a two-sided t-test after correction for heteroskedasticity, as detected in the White test. T-scores, which appear in parentheses, have been calculated with heteroskedasticity - corrected standard errors. The following indicates the level of statistical significance found for each independent variable:

* = The estimated coefficient is significant at the 10-percent level.

** = The estimated coefficient is significant at the 5-percent level.

*** = The estimated coefficient is significant at the 1-percent level.

Source: Estimated by the U.S. International Trade Commission.

STAGE 2 REGRESSIONS AND RESULTS

The stage 2 specifications are as follows:

$$PS = \beta_0 + \beta_1 MS + \beta_2 IV + \beta_3 GATSPOLICY + [\beta_4 FO + \beta_5 FO + LMY]$$

where:

β_0 = constant;

PS = pure spread estimated in stage 1;

MS = five largest banks' share of deposits in 1999;

IV = variance of quarterly interest rates during 1996-98;

GATSPOLICY = scoring of financial service commitments, described above;

FO = share of banking assets held by foreign banks in 1999; and

FO*LMY = share of banking assets held by foreign banks in low- and medium-income countries.

This research considers three different specifications of the stage 2 regression. The first is the simplest, regressing pure spreads on MS, IV, and GATSPOLICY. Specification 2 adds the regressor FO and specification 3, FO and FO*LMY. The last two specifications focus on the effect of foreign bank ownership on pure spreads.

APPENDIX E

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