COMMISSIONERS

Irving A. Williamson, Chairman
Daniel R. Pearson
Shara L. Aranoff
Dean A. Pinkert
David S. Johanson
Meredith M. Broadbent

____________________________
Robert B. Koopman
Director, Office of Operations

____________________________
Karen Lane
Director, Office of Industries

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436
Recent Trends in U.S. Services

2013 Annual Report

Investigation No. 332-345
This report was prepared principally by

**Project Leader**  
George Serletis  
[george.serletis@usitc.gov](mailto:george.serletis@usitc.gov)

**Deputy Project Leader**  
Isaac Wohl  
[isaac.wohl@usitc.gov](mailto:isaac.wohl@usitc.gov)

**Principal Authors**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Author</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Joann Peterson</td>
<td><a href="mailto:joann.peterson@usitc.gov">joann.peterson@usitc.gov</a></td>
</tr>
<tr>
<td></td>
<td>Cynthia Payne</td>
<td><a href="mailto:cynthia.payne@usitc.gov">cynthia.payne@usitc.gov</a></td>
</tr>
<tr>
<td>2</td>
<td>Joann Peterson</td>
<td><a href="mailto:joann.peterson@usitc.gov">joann.peterson@usitc.gov</a></td>
</tr>
<tr>
<td>3</td>
<td>Eric Forden</td>
<td><a href="mailto:eric.forden@usitc.gov">eric.forden@usitc.gov</a></td>
</tr>
<tr>
<td>4</td>
<td>Samantha Pham</td>
<td><a href="mailto:samantha.pham@usitc.gov">samantha.pham@usitc.gov</a></td>
</tr>
<tr>
<td>5</td>
<td>Tamar Khachaturian</td>
<td><a href="mailto:tamar.khachaturian@usitc.gov">tamar.khachaturian@usitc.gov</a></td>
</tr>
<tr>
<td>6</td>
<td>Isaac Wohl</td>
<td><a href="mailto:isaac.wohl@usitc.gov">isaac.wohl@usitc.gov</a></td>
</tr>
</tbody>
</table>

**Content Reviewers**

James Fetzer and Deborah McNay

**Editor**

Peg Hausman

**Special Assistance from**

Trina Chambers and Lynette Gaboure

**Help Desk and Customer Service Division**

**Under the direction of**

Richard W. Brown, Chief, Services Division  
[richard.brown@usitc.gov](mailto:richard.brown@usitc.gov)
Recent Trends in U.S. Services Trade: 2013 Annual Report discusses developments in the United States’ exports and imports of professional services, with a focus on education, healthcare, and legal services. The United States continues to be a world leader in professional services, which generated a cross-border trade surplus of nearly $50 billion in 2011. The contribution of U.S. professional services to U.S. GDP was $2.2 trillion in 2011, which accounted for nearly 20 percent of U.S. GDP. Employment in most of these industries increased in 2011 and, as a group, professional services were the leading source of U.S. private sector employment. All three of the professional services industries covered in this report are global leaders, yet they face strong competitive pressures at home and abroad. The U.S. market for higher education is mature and relatively saturated, with universities seeking alternative revenue sources due to tight budgets. The U.S. healthcare industry is integrating technology to meet growing demand, cut costs, and improve patient outcomes. Legal services providers are facing increased competition from nontraditional suppliers, technology-driven commoditization of legal services, and increased use of in-house counsel. Although all three industries are expected to maintain their leadership positions in the near to medium term, these competitive pressures should continue to present substantial challenges.
This report is the 17th in a series of annual reports on recent trends in U.S. services trade that the U.S. International Trade Commission (the Commission or USITC) has published. The Commission also publishes a companion annual report on U.S. merchandise trade, titled *Shifts in U.S. Merchandise Trade*. These reports are the product of a recurring investigation instituted by the Commission in 1993 under section 332(b) of the Tariff Act of 1930.¹ The information contained in this report reflects the knowledge, industry contacts, and analytic skills used by the Commission in providing expert analyses of service industries in its statutory investigations and in apprising its customers of global industry trends, regional developments, and competitiveness issues.

In addition to the *Recent Trends* series, the Commission has published one report this year on the services sector: *Environmental and Related Services*.² Two other reports that cover services, *Renewable Energy and Related Services: Recent Developments*,³ and *Digital Trade in the U.S. and Global Economies, Part I*,⁴ are forthcoming.

---

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

² USITC Publication 4389, March 2013.

³ USITC, forthcoming.

⁴ USITC, forthcoming.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>i</td>
</tr>
<tr>
<td>Preface</td>
<td>iii</td>
</tr>
<tr>
<td>Abbreviations and Acronyms</td>
<td>ix</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>xi</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1-1</td>
</tr>
<tr>
<td>Data and organization</td>
<td>1-1</td>
</tr>
<tr>
<td>The U.S. services sector</td>
<td>1-2</td>
</tr>
<tr>
<td>Global services trade</td>
<td>1-2</td>
</tr>
<tr>
<td>U.S. trade in services</td>
<td>1-4</td>
</tr>
<tr>
<td>Cross-border trade, 2011</td>
<td>1-5</td>
</tr>
<tr>
<td>Cross-border trade, 2012</td>
<td>1-8</td>
</tr>
<tr>
<td>Affiliate transactions</td>
<td>1-9</td>
</tr>
<tr>
<td>Bibliography</td>
<td>1-12</td>
</tr>
<tr>
<td>Chapter 2: Professional Services</td>
<td>2-1</td>
</tr>
<tr>
<td>Overview</td>
<td>2-1</td>
</tr>
<tr>
<td>How professional services are traded</td>
<td>2-1</td>
</tr>
<tr>
<td>Barriers to trade in professional services</td>
<td>2-2</td>
</tr>
<tr>
<td>Globalization and fragmentation</td>
<td>2-3</td>
</tr>
<tr>
<td>U.S. trade in professional services</td>
<td>2-3</td>
</tr>
<tr>
<td>Gross domestic product (GDP), employment, labor productivity, and salaries of professional services</td>
<td>2-6</td>
</tr>
<tr>
<td>Bibliography</td>
<td>2-9</td>
</tr>
<tr>
<td>Chapter 3: Education Services</td>
<td>3-1</td>
</tr>
<tr>
<td>Summary</td>
<td>3-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>3-1</td>
</tr>
<tr>
<td>Market conditions in global education services</td>
<td>3-2</td>
</tr>
<tr>
<td>Demand and supply factors</td>
<td>3-3</td>
</tr>
<tr>
<td>Trade trends</td>
<td>3-10</td>
</tr>
<tr>
<td>Cross-border trade</td>
<td>3-10</td>
</tr>
<tr>
<td>Affiliate transactions</td>
<td>3-13</td>
</tr>
<tr>
<td>Outlook</td>
<td>3-14</td>
</tr>
<tr>
<td>Bibliography</td>
<td>3-15</td>
</tr>
<tr>
<td>Chapter 4: Healthcare Services</td>
<td>4-1</td>
</tr>
<tr>
<td>Summary</td>
<td>4-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>4-1</td>
</tr>
<tr>
<td>Market conditions in global healthcare services</td>
<td>4-2</td>
</tr>
<tr>
<td>Demand and supply factors</td>
<td>4-7</td>
</tr>
<tr>
<td>Trade trends</td>
<td>4-14</td>
</tr>
<tr>
<td>Cross-border trade</td>
<td>4-14</td>
</tr>
<tr>
<td>Affiliate transactions</td>
<td>4-16</td>
</tr>
</tbody>
</table>
## Chapter 4: Healthcare Services—Continued

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook</td>
<td>4-18</td>
</tr>
<tr>
<td>Bibliography</td>
<td>4-20</td>
</tr>
</tbody>
</table>

## Chapter 5: Legal Services

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>5-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>5-1</td>
</tr>
<tr>
<td>Market conditions in global legal services</td>
<td>5-1</td>
</tr>
<tr>
<td>Demand and supply factors</td>
<td>5-3</td>
</tr>
<tr>
<td>Trade trends</td>
<td>5-7</td>
</tr>
<tr>
<td>Cross-border trade</td>
<td>5-7</td>
</tr>
<tr>
<td>Affiliate transactions</td>
<td>5-11</td>
</tr>
<tr>
<td>Outlook</td>
<td>5-13</td>
</tr>
<tr>
<td>Bibliography</td>
<td>5-14</td>
</tr>
</tbody>
</table>

## Chapter 6: Services Roundtable

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services liberalization and regulation</td>
<td>6-1</td>
</tr>
<tr>
<td>Prospects for future services trade agreements</td>
<td>6-3</td>
</tr>
<tr>
<td>List of external participants at the Commission’s services roundtable held on November 13, 2012</td>
<td>6-5</td>
</tr>
</tbody>
</table>

## Appendix

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Selected services research</td>
<td>A-1</td>
</tr>
</tbody>
</table>

## Boxes

<table>
<thead>
<tr>
<th>Box</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Services trade under the General Agreement on Trade in Services</td>
<td>1-4</td>
</tr>
<tr>
<td>1.2 The rise of affiliate transactions</td>
<td>1-5</td>
</tr>
<tr>
<td>3.1 International student trends</td>
<td>3-7</td>
</tr>
<tr>
<td>3.2 An explanation of BEA data on cross-border trade in education services and transactions by education affiliates</td>
<td>3-10</td>
</tr>
<tr>
<td>4.1 Understanding available data on trade in healthcare services</td>
<td>4-15</td>
</tr>
<tr>
<td>4.2 The growing global footprint of leading U.S. academic and teaching medical centers</td>
<td>4-18</td>
</tr>
<tr>
<td>5.1 BEA data on cross-border trade and affiliate transactions in legal services</td>
<td>5-8</td>
</tr>
</tbody>
</table>

## Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES.1 The United States posted large increases in cross-border and affiliate trade in recent years</td>
<td>xii</td>
</tr>
<tr>
<td>ES.2 Employment in healthcare services led all professional services in 2011</td>
<td>xiv</td>
</tr>
<tr>
<td>1.1 Global services: The United States led the world in cross-border exports and imports of services in 2011</td>
<td>1-3</td>
</tr>
<tr>
<td>1.2 Affiliate transactions continue to predominate as means of trading services</td>
<td>1-6</td>
</tr>
<tr>
<td>1.3 U.S. services: Travel and passenger fares accounted for the largest share of U.S. cross-border trade in 2011</td>
<td>1-7</td>
</tr>
</tbody>
</table>
CONTENTS—Continued

Figures—Continued

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>U.S. services: Distribution services accounted for the largest share of U.S. affiliate transactions in 2010</td>
<td>1-10</td>
</tr>
<tr>
<td>2.1</td>
<td>U.S. professional services: Management and consulting services accounted for the largest share of U.S. cross-border exports and imports of professional services in 2011</td>
<td>2-4</td>
</tr>
<tr>
<td>2.2</td>
<td>Architectural and engineering services accounted for the largest share of professional services supplied by foreign affiliates of U.S. firms in 2010</td>
<td>2-5</td>
</tr>
<tr>
<td>2.3</td>
<td>Services accounted for the largest share of U.S. private-sector GDP in 2011</td>
<td>2-6</td>
</tr>
<tr>
<td>2.4</td>
<td>Healthcare and social assistance had the largest number of U.S. FTEs in the professional services sector in 2011</td>
<td>2-7</td>
</tr>
<tr>
<td>2.5</td>
<td>Legal services had the highest labor productivity among all U.S. professional service sectors in 2011</td>
<td>2-8</td>
</tr>
<tr>
<td>2.6</td>
<td>Wages per FTE in the private sector were the highest for electronic services in 2011</td>
<td>2-8</td>
</tr>
<tr>
<td>3.1</td>
<td>Education services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2007–11</td>
<td>3-11</td>
</tr>
<tr>
<td>3.2</td>
<td>Education services: China was the leading source of U.S. exports of education services in 2011, while the United Kingdom was the leading source of imports...</td>
<td>3-12</td>
</tr>
<tr>
<td>3.3</td>
<td>Education services: Services supplied by the affiliates of U.S. universities abroad exceeded services supplied by the affiliates of foreign universities in the United States in 2010</td>
<td>3-14</td>
</tr>
<tr>
<td>4.1</td>
<td>Healthcare services: Global healthcare spending continued to rise during 2006–10 due to growth in public expenditures</td>
<td>4-3</td>
</tr>
<tr>
<td>4.2</td>
<td>Healthcare services: Developed countries drive global healthcare spending, particularly public spending, 2010</td>
<td>4-3</td>
</tr>
<tr>
<td>4.3</td>
<td>Medical services: U.S. cross-border trade in private-sector services resulted in a U.S. trade surplus each year during 2007–11</td>
<td>4-16</td>
</tr>
<tr>
<td>5.1</td>
<td>Legal services: U.S. cross-border trade resulted in a trade surplus each year during 2007–11</td>
<td>5-7</td>
</tr>
<tr>
<td>5.2</td>
<td>Legal services: The United Kingdom was the leading market for U.S. cross-border exports of legal services in 2011</td>
<td>5-9</td>
</tr>
<tr>
<td>5.3</td>
<td>Legal services: Developed countries were the leading foreign suppliers of legal services in 2011</td>
<td>5-11</td>
</tr>
<tr>
<td>5.4</td>
<td>Legal services: Services supplied by U.S.-owned foreign affiliates exceeded services supplied by foreign-owned U.S. affiliates</td>
<td>5-12</td>
</tr>
</tbody>
</table>

Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>U.S. private services exports and imports to the world, by category, 2011–12</td>
<td>1-9</td>
</tr>
<tr>
<td>4.1</td>
<td>Healthcare services: Top 10 global healthcare markets by total and private spending, 2010</td>
<td>4-4</td>
</tr>
<tr>
<td>4.2</td>
<td>Healthcare services: Top 10 healthcare services companies, 2011</td>
<td>4-6</td>
</tr>
<tr>
<td>5.1</td>
<td>Legal services: Top 10 global law firms, by gross revenue, 2012</td>
<td>5-2</td>
</tr>
</tbody>
</table>
## Acronyms and Abbreviations [1]

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABA</td>
<td>American Bar Association</td>
</tr>
<tr>
<td>ARRA</td>
<td>American Recovery and Reinvestment Act</td>
</tr>
<tr>
<td>BEA</td>
<td>Bureau of Economic Analysis</td>
</tr>
<tr>
<td>CAGR</td>
<td>compound annual growth rate</td>
</tr>
<tr>
<td>EHR</td>
<td>electronic health records</td>
</tr>
<tr>
<td>EIU</td>
<td>Economist Intelligence Unit</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FTE</td>
<td>full-time equivalent</td>
</tr>
<tr>
<td>GATS</td>
<td>General Agreement on Trade in Services</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>IT</td>
<td>information technology</td>
</tr>
<tr>
<td>J.D.</td>
<td>Juris Doctor</td>
</tr>
<tr>
<td>LLM</td>
<td>Master of Laws</td>
</tr>
<tr>
<td>MOOC</td>
<td>massive open online course</td>
</tr>
<tr>
<td>NAICU</td>
<td>National Association of Independent Colleges and Universities</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>NTD</td>
<td>neglected tropical disease</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PPACA</td>
<td>Patient Protection and Affordable Care Act</td>
</tr>
<tr>
<td>U-M</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UPMC</td>
<td>University of Pittsburgh Medical Center</td>
</tr>
<tr>
<td>USDOC</td>
<td>U.S. Department of Commerce</td>
</tr>
<tr>
<td>USITC</td>
<td>U.S. International Trade Commission</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
Executive Summary

The United States is the world’s largest services market and was the world’s largest cross-border exporter and importer of services in 2011.¹ Global trade in services continued to recover and expand from the 2008–09 recession, with U.S. exports and imports both increasing rapidly (figure ES.1).

This report, part of an annual series prepared by the U.S. International Trade Commission (Commission or USITC), provides an overview of U.S. trade in services. This year’s report primarily focuses on recent developments in certain professional services: education, healthcare, and legal services.² These industries are essential to modern economies; they build human capital, promote human development and well-being, and help businesses navigate the legal and regulatory environment. Professional service providers like lawyers, accountants, healthcare workers, and educators are among the most highly educated and highly skilled workers in the global economy. The United States remained a world leader in professional services, generating a cross-border trade surplus in these industries of nearly $50 billion in 2011.

The expansion of professional services trade in recent years has been driven by a number of factors. Globalization, including businesses setting up operations in foreign markets, has created trade opportunities for diverse professional services providers, such as legal and management consulting professionals. The relatively weak domestic economy has stimulated growth in professional services trade, as U.S. legal, management consulting, and engineering firms are expanding by opening offices in fast-growing foreign markets, particularly in the Asia-Pacific region. Continued progress in digital technologies and the increase in global access to broadband Internet also allow increased trade in professional services—for example, through telemedicine and online education.

¹ This report uses the most recent data available. For example, BEA annual data on cross-border trade are available through 2011, while data on affiliate transactions are available only through 2010. Cross-border trade occurs when suppliers in one country sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. Affiliate trade occurs when firms provide services to foreign consumers through affiliates established in the host (i.e., foreign) countries. A more detailed description of the different modes of services trade is provided in chapter 1.

² Beginning in 2013, Recent Trends will cover three industries per year, rotating on a quadrennial basis between professional services (education, healthcare, and legal or management consulting); electronic services (telecommunication, computer, and audiovisual services); financial services (banking, insurance, and securities or leasing); and distribution services (retail, logistics, and transportation services).
**Key Findings**

**Total U.S. Trade in Services**

The United States was the leading global services supplier in 2010–11

In 2011, services contributed $9.1 trillion (79 percent) to U.S. private sector gross domestic product (GDP) and accounted for 84 million private sector employees (82 percent of the total). In 2011, U.S. services exports were $587 billion, or 14 percent of global cross-border exports, while imports were $393 billion, or 10 percent of global...
imports. Travel services and passenger fares accounted for the largest share of U.S. services trade by value in 2011, representing 26 percent of exports and 28 percent of imports. Professional services were the second-largest traded service category, accounting for 21 percent and 19 percent of total services exports and imports, respectively.

**U.S. cross-border trade in services continued to expand in 2011**

The U.S. cross-border trade surplus in services reached $194 billion in 2011, increasing by 14 percent from 2010. U.S. exports showed continued strength following the 2008–09 recession and grew by 9 percent in 2011, compared to a 7 percent compound annual growth rate during 2006–10. A number of services industries recorded strong export growth in 2011, including construction services (67 percent growth); architectural, engineering, and other technical services (31 percent); and passenger fares (18 percent).

**Affiliates’ services transactions rebounded in 2010**

Sales by foreign affiliates of U.S. firms, the leading channel by which many U.S. services are provided to foreign markets, increased by 6 percent to $1.1 trillion in 2010. Distribution services (including wholesale and retail trade) led affiliate sales, accounting for $354 million or 30 percent of total sales. Professional services accounted for $96 billion or 8 percent of the total. Leading U.S. markets for affiliate sales were the United Kingdom, Canada, Japan, and Ireland. Purchases from U.S. affiliates of foreign firms were $696 billion in 2010, an increase of 4 percent over 2009 as the U.S. domestic economy recovered from the 2008–09 recession. The United Kingdom was the leading supplier of such services (15 percent), and over 55 percent of these services were purchased from affiliates of EU-based firms.

**Professional Services**

**Cross-border exports of professional services accounted for the majority of U.S. trade in professional services during 2010–11**

Professional services accounted for 21 percent of total U.S. cross-border exports in 2011 and 19 percent of cross-border imports. The United States exported $124 billion and imported $75 billion of such services, resulting in a $49 billion surplus in 2011. Leading professional services exports by share were management and consulting services (26 percent), research and development and testing services (19 percent), and education services (18 percent). The United Kingdom and Switzerland were the top markets for U.S. professional services exports in 2011.

In contrast to many services industries, sales by foreign affiliates of U.S. professional services firms were smaller than cross-border exports of professional services in 2010. Such sales totaled $96 billion in 2010 and were relatively concentrated, with three industries accounting for 60 percent of the total: architectural, engineering, and other technical services (26 percent); management, scientific, and technical consulting services (20 percent); and accounting, auditing, and bookkeeping services (13 percent). Services purchased from U.S. affiliates of foreign firms totaled $44 billion and were concentrated in advertising and related services, which accounted for $28 billion—nearly two-thirds of total purchases.
Professional services’ value added, employment, and wages all grew in 2011

The contribution of U.S. professional services to U.S. GDP was $2.2 trillion in 2011, accounting for 24 percent of total services GDP. The output of professional services grew by 3 percent in 2011, outpacing growth in the private sector (2 percent) and in all other major services categories except electronic services (6 percent). Among the professional services industries themselves, however, output growth varied: output rose for miscellaneous professional, scientific, and technical services (6.5 percent) and health care and social assistance (1.8 percent) in 2011, while it declined for legal services (–1.7 percent) and management of companies and enterprises (–0.5 percent).

Professional services employed 26 million full-time equivalent (FTE) employees in 2011, or 26 percent of total U.S. private sector employment. Employment in these services increased by 2 percent in 2011, and all sectors added employees during the year except for legal services, which shrank by 400,000 FTEs. Healthcare and social assistance led all professional services, with over 15 million FTEs, or 58 percent of the total (figure ES.2). Annual salaries in professional services, measured in wages per FTE, grew in all subsectors in 2011, and were led by legal services ($88,949) and miscellaneous professional, scientific, and technical services ($79,218).

FIGURE ES.2 Employment in healthcare services led all professional services in 2011


Professional services trade faces a variety of entry and operational barriers

Barriers to professional services trade in some cases are the byproduct of a country’s focus on protecting and developing its domestic workforce. Such barriers can include economic needs tests, whereby foreign providers are allowed to enter only if domestic firms or individuals cannot supply such services, and quotas limiting the number of foreign providers. Restrictions on commercial establishment (the form a new business
may take) can also impede professional services, such as requirements that foreign firms operate as joint ventures with domestic firms or that a certain number of staff or managerial positions be filled by citizens or permanent residents. Government and private sector certification and licensing requirements can also restrict professional services trade; such requirements are often intended to protect consumers, but they can be unclear and unequal across countries.

Many U.S. professional services firms expect demand abroad to increase faster than domestic demand

While the U.S. economy has recovered in recent years, demand growth in developing countries is likely to continue to exceed demand growth in the United States. For this reason, many large U.S. professional services providers will likely continue to expand overseas by establishing new offices, merging with foreign companies, and recruiting foreign consumers. For example, budgetary constraints may continue to put pressure on U.S. public education funding, prompting universities in the United States to seek more foreign students, who are likelier to pay full-cost tuition. Healthcare spending in developed countries may grow more slowly as consumers bear rising shares of healthcare costs, but demand is expected to grow rapidly in Asia, where populations are becoming both wealthier and older. In the legal services industry, price competition and pressure from nontraditional providers will likely require consolidation in the U.S. industry, motivating firms to follow their clients into high-growth markets abroad.

Education Services

The United States is the global leader in education services; however revenue growth is expected to be modest over the next five years

U.S. education services, limited in this study to services in higher education, accounted for nearly one-quarter of the $903 billion global education services industry in 2011, roughly twice the size of the second-largest market, China (12 percent of global revenues). In 2011, international education services revenues increased by 5 percent, reflecting growth in many developing countries. In the United States and other developed countries, education is a mature industry and growth in these markets is below the global average. By contrast, in developing markets such as China, university capacity is rapidly expanding to accommodate rising education demand. Relatively modest revenue growth, tighter budgets, and weakness in the U.S. economy are expected to lead U.S. universities to continue to seek additional revenue sources by working to attract out-of-state and foreign students, who tend to pay higher tuition.

Growth in U.S. cross-border exports of education services reflected higher numbers of foreign students as well as tuition increases in 2011

The U.S. trade surplus in education services grew by 9 percent in 2011 to $17 billion. U.S. exports of these services (i.e., foreign students’ education expenditures in the United States) grew by 8 percent to $23 billion during the year, as the number of foreign students grew by 6 percent to 764,495 students. Asian countries were the top markets for U.S. education services, including China ($5 billion), India ($3 billion), and the Republic of Korea ($2 billion). Roughly 274,000 U.S. students studied abroad in 2011, causing U.S. imports to increase by 7 percent to $6 billion. Leading destinations for U.S. students were the United Kingdom ($1 billion), Italy ($540 million), and Spain ($498 million).
Healthcare Services

Global healthcare expenditures grew steadily, buoyed by public expenditures during 2006–10, and global expenditures will likely continue to grow moderately in the near term

The United States posted a trade surplus in healthcare services, which totaled $1.9 billion in 2011. In contrast, services supplied by foreign-owned U.S. affiliates significantly exceed services supplied by foreign affiliates of U.S. firms, largely due to opportunities available in the U.S. market. Motivated partly by rising healthcare costs, the United States passed major healthcare reform legislation overhauling the financing and delivery of these services. Global spending on healthcare expanded at a compound annual growth rate of 8 percent during 2006–10 to $6.6 trillion, over 10 percent of global GDP. Public expenditures fueled the increase in global healthcare spending during the period, as private expenditures slowed in the United States (which is by far the world’s largest healthcare market) and many European countries. Globally, healthcare spending is forecast to grow moderately in the near future, given that slow growth in developed countries will temper sharper spending increases in fast-growing developing countries. The healthcare industry is increasingly adopting information technology such as telemedicine and electronic records management to reduce healthcare costs and improve outcomes. Additionally, healthcare consumerism, whereby patients take a more active role in their healthcare decisions and expenditures, also may contribute to improved health outcomes and slow the growth in costs.

The United States continued to post a trade surplus in healthcare services in 2011 as cross-border healthcare investment grew

Trading largely with its regional partners Canada and Mexico, the United States posted cross-border exports of healthcare services worth $3 billion in 2011, while imports were $1.1 billion, generating a surplus of $1.9 billion. At the same time, as the world’s largest and most profitable market, the United States was the leading destination for healthcare investment. Healthcare services purchased from U.S. affiliates of foreign firms exceeded sales by foreign affiliates of U.S. firms by a substantial margin. Certain U.S. healthcare firms are looking overseas to expand, and are providing increasing volumes of services in foreign markets. Most U.S. healthcare firms invest directly in existing facilities and form joint ventures. In certain markets such as India, China, and South America, burdensome regulations and the lack of existing facilities may be limiting foreign participation.

Legal Services

Facing a declining domestic market, the U.S. legal services industry is restructuring, with revenue and profits expected to grow moderately in the near term

The market for U.S. legal services shrunk by 7 percent in 2011, continuing a trend of declining revenues since the 2008–09 recession. By contrast, the EU market grew by 4 percent and markets in the Asia-Pacific region grew by 5 percent in 2011. Despite falling revenues, the United States remained the world’s largest legal services market, accounting for 39 percent of the global total, though this figure is down from 43 percent before the recession. U.S. law firms are likely to continue to face diverse challenges, including lower-cost alternatives and nontraditional providers, technology-driven commoditization of legal services, the growing popularity of alternative fee
arrangements, and the increased use of in-house counsel. In response, law firms are expected to continue the trend of downsizing and holding partners to higher productivity standards; some are de-equitizing equity partners (partners who own a share of the firm’s profits) or reducing their number.

**Despite weakness in the U.S. legal services market, the U.S. trade surplus in these services increased in 2011**

The U.S. trade surplus in legal services expanded to $5.7 billion in 2011, up 4 percent from 2010. U.S. export growth (4 percent) was significantly lower than import growth (16 percent), reflecting recovery of the U.S. legal services market from the economic downturn. U.S. exports of legal services were relatively concentrated, with the United Kingdom and Japan accounting for nearly one-third of the industry’s exports in 2011. Sales by foreign affiliates of U.S. law firms increased by nearly 60 percent in 2009 to $5.0 billion before declining in 2010 to $4.9 billion (still vastly exceeding the $111 million in purchases from U.S. affiliates of foreign law firms). Europe accounted for nearly three-quarters of such sales, with the United Kingdom representing 34 percent of the European total. Japan was the leading non-European market, purchasing 7 percent of exports through affiliates.

**Recent USITC Roundtable Discussion**

The Commission hosted its sixth annual services roundtable on November 13, 2012, with USITC Chairman Irving A. Williamson presiding and Commissioners Meredith Broadbent and Shara L. Aranoff moderating. Participants from industry, government, and academia discussed the need for appropriate regulations that allow economies to reap the gains of services liberalization, including the need for different liberalization sequences for countries with different levels of economic development. Participants also debated the prospects for services trade agreements, both for broad and comprehensive liberalization agreements (such as the World Trade Organization International Services Agreement currently being promoted by many countries including the United States) and for smaller bilateral and plurilateral agreements among like-minded trade partners. Finally, panelists considered the need for a new trade liberalization framework that integrates goods and services, as trade is typically conducted by firms that provide both. A full summary of the roundtable’s discussion is provided in chapter 6.
CHAPTER 1
Introduction

The U.S. economy is dominated by services, which account for nearly 80 percent of U.S. gross domestic product (GDP) and employment, and the United States leads the world in exports of services. This annual report examines U.S. services trade, both in the aggregate and in selected industries; identifies important U.S. trading partners; and analyzes global market conditions in professional services industries, which represent one-quarter of the United States’ services GDP. This year’s report focuses on the following professional services: education, healthcare, and legal services.1

Data and Organization

The U.S. International Trade Commission (Commission or USITC) draws much of the services trade data used throughout this report from the Bureau of Economic Analysis (BEA) at the U.S. Department of Commerce (USDOC). The BEA collects services trade data through a number of surveys, which under most conditions require respondents with more than $2 million in exports or $1 million in imports to furnish details about their international services transactions. The BEA estimates trade flow data using these survey data.2 For this report, the Commission has supplemented the BEA data with information from other sources, including individual firms, trade associations, industry and academic journals and reports, international organizations, and other government agencies.

This chapter examines the U.S. services sector, global services trade, and U.S. services trade. It looks at both cross-border trade in services from 2006 through 2011 and affiliate firms’ sales of services from 2006 through 2010,3 comparing the trade picture in recent years with previous trends. Chapter 2 examines trends affecting professional service industries and discusses the contribution of these industries to economic output, employment, labor productivity, and trade. Chapters 3 through 5 discuss the education, healthcare, and legal service industries. These chapters give an overview of global competitiveness, supply and demand factors, and recent trends in cross-border trade and/or affiliate transactions for each industry. Chapter 6 summarizes the information and views presented at the sixth annual USITC services trade roundtable, hosted by the Commission in November 2012. Appendix A provides a snapshot of recent services research conducted by Commission staff.

---

1 Beginning in 2013, Recent Trends reports will cover three services industries per year, rotating on a quadrennial basis between professional services (education, healthcare, legal, or management consulting); electronic services (telecommunication, computer, and audiovisual services); financial services (banking, insurance, securities, or leasing); and distribution services (retail, logistics, and transportation).

2 For more information, see USDOC, BEA, Survey of Current Business, October 2012.

3 Data on affiliate transactions lag those on cross-border services trade by one year. Thus, while analyses of cross-border trade data compare performance in 2011 (the most recent year for which data are available) to trends from 2006 through 2010, analyses of affiliate transactions compare performance in 2010 to trends from 2006 through 2009. Note also that in 2009, BEA changed its method of reporting affiliate trade data. New affiliate data report “services supplied,” a measure that better reflects services output than the prior measure, “sales of services.” The change is retroactive for data from 2005–08. For more information, see USDOC, BEA, Survey of Current Business, October 2009, 34–36.
The U.S. Services Sector

Service industries account for an overwhelming majority of U.S. production and employment. In 2011, industries producing private services accounted for 79 percent (or $9.1 trillion) of total real GDP of U.S. private industry and 82 percent (or 84 million) of U.S. private industry full-time employees, compared to 21 percent and 18 percent, respectively, for the goods-producing sector. Recent trends in the U.S. services sector have mirrored overall trends in the U.S. economy, as average annual increases in services sector GDP, employment, and wages were within 1 percent of the annual growth rates registered for the United States as a whole from 2006 through 2011.4

Global Services Trade

The United States is highly competitive in the global services market. As the world’s top exporter of services, the United States accounted for $580.9 billion, or 14 percent, of global cross-border commercial services exports in 2011 (figure 1.1). Other top single-country exporters included the United Kingdom and Germany, which accounted for 7 percent and 6 percent, respectively. Although most of the world’s top 10 services exporters in 2011 were developed countries, China was the 4th-largest services exporter, and India ranked 8th. Overall, the top 10 exporting countries accounted for 51 percent of global cross-border services exports in 2011.6

The United States was also the world’s largest services importer in 2011, with $395.3 billion, or 10 percent, of global commercial services imports. In that year, Germany was the second-largest importer, accounting for 8 percent of such imports, and the top 10 importing countries together accounted for 47 percent of global commercial services imports. China was the third-largest importer of commercial services in 2011, and India was the seventh largest.

The World Trade Organization (WTO) reports that the U.S. services trade surplus in 2011 ($185.6 billion) was the world’s highest, followed by that of the United Kingdom ($103.3 billion). China and Saudi Arabia had the world’s largest services trade deficits, with imports exceeding exports by $54.1 billion and $43.8 billion, respectively. 7

---

4 USDOC, BEA, “Real Value Added by Industry,” November 13, 2012; USDOC, BEA, “Full-Time Equivalent Employees by Industry,” August 2, 2012; USDOC, BEA, “Wage and Salary Accruals,” August 2, 2012. Value added is a measure of an industry’s contribution to GDP; it is the difference between the value of an industry’s gross output and the cost of its intermediate inputs.

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


7 Ibid., table A9.
FIGURE 1.1 Global services: The United States led the world in cross-border exports and imports of services in 2011


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

*The WTO includes the following countries under Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan.
U.S. Trade in Services

The BEA annually publishes data on both cross-border trade and affiliate transactions in services, which together account for a substantial portion of the services provided through all four “modes of supply” specified in the General Agreement on Trade in Services (GATS) (box 1.1). The BEA publishes these data at the highest level of detail that its surveys allow. The agency also publishes quarterly cross-border trade data in highly aggregated form.

“Cross-border trade” occurs when suppliers in one country sell services to consumers in another country, with people, information, or money crossing national boundaries in the process. Such transactions appear as imports and exports in a country’s balance of payments. Firms also provide services to foreign consumers through affiliates established in host (i.e., foreign) countries; the income generated through “affiliate transactions” appears as direct investment income in the balance of payments.

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

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

Mode 1 is cross-border supply. In this mode, a service is supplied by an individual or firm in one country to an individual or firm in another (i.e., the service crosses national borders). An example would be a digital file of a final architectural design emailed to a foreign client. WTO data for this mode of supply do not completely overlap with BEA’s data for cross-border trade (see discussion below).

Mode 2 is consumption abroad. In this mode, an individual from one country travels to another country and consumes a service in that country. An example would be foreign nationals visiting the United States for medical care.

Mode 3 is commercial presence. In this mode, a firm based in one country establishes an affiliate in another country and supplies services from that locally established affiliate. An example would be a U.S.-based law firm providing legal services to citizens of a foreign country from its affiliated office located in that country.

Mode 4 is the temporary presence of natural persons. In this mode, an individual service supplier from one country travels to another country on a short-term basis to supply a service there—for example, as a consultant, contract employee, or intracompany transferee at an affiliate in the host country. An example would be U.S.-based engineers traveling to a foreign country to assist local staff on a construction project.

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

---

The channel of delivery used by service providers depends primarily on the nature of the service. For example, retail services are usually supplied through affiliates located close to consumers. Conversely, education, healthcare, and legal services are predominantly traded across borders, as students and medical patients consume services abroad and attorneys travel abroad to consult with clients. Affiliate transactions are the principal
means of providing services to overseas customers, accounting for nearly 68 percent of overall U.S. services trade in 2010 (box 1.2).

**BOX 1.2 The rise of affiliate transactions**

Since 1986, when the U.S. Department of Commerce began collecting statistics on U.S. services trade, the relative importance of cross-border trade and affiliate transactions has shifted significantly. In each of the 10 years from 1986 through 1995, U.S. cross-border exports of services exceeded sales by majority-owned foreign affiliates of U.S. firms. Since 1996, however, sales by U.S. firms’ foreign affiliates have exceeded exports of cross-border services. In 2010, services supplied by U.S. firms’ affiliates abroad ($1.1 trillion) were more than double the value of U.S. cross-border exports of services ($537.7 billion). Similarly, services supplied to U.S. citizens by foreign-owned affiliates have exceeded cross-border services imports since 1989. In 2010, the value of services supplied to U.S. citizens by the U.S. affiliates of foreign companies ($696.0 billion) was nearly twice the value of U.S. services imports ($368.0 billion).

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

---


---

**Cross-border Trade, 2011**

U.S. exports of private sector services totaled $586.8 billion in 2011, while U.S. imports totaled $393.1 billion, resulting in a $193.8 billion trade surplus (figure 1.2). Professional services accounted for 21 percent of exports and 19 percent of imports (figure 1.3). Travel services and passenger fares accounted for the largest share of U.S. services trade in 2011, representing 26 percent of U.S. exports and 28 percent of U.S. imports.

In 2011, U.S. cross-border services exports increased by 9 percent from the previous year, exceeding their compound annual growth rate of 7 percent during 2006–10. This increase was spread across service industries, led by construction services (67 percent).

---

8 Note that the $193.8 billion trade surplus estimated by the BEA differs from the $215.8 billion WTO estimate presented above in the “Global Services Trade” section. See footnote 5.

9 For the purposes of this discussion, trade data for cross-border trade in professional services capture education services; management and consulting services; research, development and testing services; accounting, auditing, and bookkeeping services; advertising; architectural, engineering, and other technical services; industrial engineering services; installation, maintenance, and repair of equipment; legal services; medical services; and training services.

10 U.SDOC, BEA, *Survey of Current Business*, October 2012, 34–35. Travel services are measured through the purchase of goods and services, such as food, lodging, recreation, local transportation, and entertainment, while traveling abroad. For information on the composition of cross-border trade, affiliate sales, and GDP data, see appendix B.

11 In this study, all multiyear growth rates are expressed as compound annual growth rates. Cross-border services trade, as reported in the current account, includes both private and public sector transactions. The latter principally reflect operations of the U.S. military and embassies abroad. However, because public sector transactions are not considered to reflect U.S. service industries’ competitiveness and may introduce anomalies resulting from events such as international peacekeeping missions, this report will focus solely on private sector transactions, except as noted.
FIGURE 1.2 Affiliate transactions continue to predominate as means of trading services


Note: Data for the period prior to 2004 were calculated differently and are therefore not included in this figure.

aData are available through 2010 only.
FIGURE 1.3 U.S. services: Travel and passenger fares accounted for the largest share of U.S. cross-border trade in 2011

**Exports**
- Travel and passenger fares 26%
- Professional services 21%
- Financial services 17%
- Royalties and license fees 18%
- Distribution services 8%
- Electronic services 7%
- Other services 3%

Total = $586.8 billion

**Imports**
- Travel and passenger fares 28%
- Professional services 19%
- Financial services 19%
- Distribution services 14%
- Royalties and license fees 9%
- Electronic services 9%
- Other services 2%

Total = $393.1 billion

architectural, engineering, and other technical services (31 percent); industrial processes (19 percent); and passenger fares (18 percent). At the same time, the value of U.S. services imports grew by 7 percent in 2011. Import growth was particularly high for architectural, engineering, and other technical services (37 percent); advertising services (32 percent); installation, maintenance, and repair of equipment (22 percent); audiovisual services (22 percent); and research and development and testing services (18 percent).

As in previous years, the majority of U.S. service industries registered cross-border trade surpluses in 2011. Royalties and license fees for sales of intellectual property achieved the largest surplus in 2011 ($72.0 billion), followed by financial services ($57.8 billion), travel services ($37.5 billion), industrial processes ($21.3 billion), and education services ($16.8 billion). Service industries with cross-border trade deficits in 2011 included insurance services ($41.1 billion); transportation services ($11.6 billion); computer and data processing services ($12.5 billion); and accounting, auditing, and bookkeeping services ($1.4 billion). Deficits were recorded for a variety of reasons. The deficit in insurance services principally reflects U.S. primary insurers’ payments to European and Bermudian reinsurers in return for their assuming a portion of large risks. The deficit in transportation services (i.e., freight transport and port fees) largely reflects the U.S. deficit in manufactured goods trade and the way in which U.S. imports of freight transportation services are measured. For example, Chinese shipments of manufactured goods to the United States typically exceed U.S. shipments of goods to China, and payments to Chinese or other foreign shippers for transporting U.S. merchandise imports are recorded by the BEA as U.S. imports of transportation services. Lastly, the deficit in computer and data processing services largely reflects U.S. firms outsourcing many of these services to foreign providers.

A small number of developed countries account for a substantial share of U.S. cross-border services trade. Canada, the United Kingdom, and Japan collectively received 26 percent of total U.S. cross-border services exports in 2011. During the same year, the United Kingdom (11 percent), Bermuda and Canada (7 percent each), and Japan (6 percent) supplied the largest single-country shares of U.S. services imports. Separately, in 2011, the European Union (EU) accounted for 32 percent of U.S. services exports and 35 percent of U.S. imports.

**Cross-border Trade, 2012**

Preliminary data for 2012 suggest that the United States’ services exports, services imports, and surplus in services trade all continued to grow that year. Annual services exports in 2012 exceeded those in 2011 by 4 percent or $24.3 billion (table 1.1). Annual services imports in 2012 exceeded those in 2011 by about 3 percent, or $10.9 billion.

---

12 A form of risk management whereby insurance companies buy insurance contracts from other insurers to protect themselves from unexpected large claims.
TABLE 1.1 U.S. private services exports and imports to the world, by category, 2011–12

<table>
<thead>
<tr>
<th>Service industry</th>
<th>2011 (Million $)</th>
<th>2012 (Million $)</th>
<th>% change, 2011–12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>116,115</td>
<td>128,555</td>
<td>10.7</td>
</tr>
<tr>
<td>Passenger fares</td>
<td>36,631</td>
<td>39,521</td>
<td>7.9</td>
</tr>
<tr>
<td>Freight</td>
<td>21,730</td>
<td>21,896</td>
<td>0.8</td>
</tr>
<tr>
<td>Port services</td>
<td>21,334</td>
<td>21,397</td>
<td>0.3</td>
</tr>
<tr>
<td>Royalties and license fees</td>
<td>120,836</td>
<td>121,810</td>
<td>0.8</td>
</tr>
<tr>
<td>Education</td>
<td>22,726</td>
<td>24,096</td>
<td>6.0</td>
</tr>
<tr>
<td>Financial services</td>
<td>74,055</td>
<td>71,247</td>
<td>–3.8</td>
</tr>
<tr>
<td>Insurance services</td>
<td>15,477</td>
<td>17,110</td>
<td>10.6</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>12,650</td>
<td>13,620</td>
<td>7.7</td>
</tr>
<tr>
<td>Business, professional, and technical services</td>
<td>134,416</td>
<td>140,916</td>
<td>4.8</td>
</tr>
<tr>
<td>Other</td>
<td>10,870</td>
<td>10,988</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>586,839</strong></td>
<td><strong>611,156</strong></td>
<td><strong>4.1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service industry</th>
<th>2011 (Million $)</th>
<th>2012 (Million $)</th>
<th>% change, 2011–12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>78,651</td>
<td>83,651</td>
<td>6.4</td>
</tr>
<tr>
<td>Passenger fares</td>
<td>31,109</td>
<td>34,443</td>
<td>10.7</td>
</tr>
<tr>
<td>Freight</td>
<td>40,337</td>
<td>41,773</td>
<td>3.6</td>
</tr>
<tr>
<td>Port services</td>
<td>14,374</td>
<td>13,396</td>
<td>–6.8</td>
</tr>
<tr>
<td>Royalties and license fees</td>
<td>36,620</td>
<td>40,037</td>
<td>9.3</td>
</tr>
<tr>
<td>Education</td>
<td>5,888</td>
<td>6,210</td>
<td>5.5</td>
</tr>
<tr>
<td>Financial services</td>
<td>16,207</td>
<td>16,076</td>
<td>–0.8</td>
</tr>
<tr>
<td>Insurance services</td>
<td>56,619</td>
<td>53,419</td>
<td>–5.7</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>7,690</td>
<td>7,391</td>
<td>–3.9</td>
</tr>
<tr>
<td>Business, professional, and technical services</td>
<td>104,773</td>
<td>106,796</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>797</td>
<td>814</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>393,065</strong></td>
<td><strong>404,007</strong></td>
<td><strong>2.8</strong></td>
</tr>
</tbody>
</table>


Note: Data for 2012 are preliminary.

Annual services trade posted a surplus of $207.1 billion in 2012, or $14 billion more than in 2011.

Affiliate Transactions

In 2010, services supplied by U.S.-owned foreign affiliates increased by 6 percent to $1.1 trillion. Professional services accounted for 8 percent of services supplied by U.S.-owned foreign affiliates in 2010 (figure 1.4). Sales of non-professional services were led by distribution services, including wholesale trade, which accounted for approximately 30 percent of total services supplied by U.S.-owned foreign affiliates. The largest foreign purchasers of services from U.S.-owned affiliates were the United Kingdom (17 percent), Canada (10 percent), Japan (6 percent), and Ireland (5 percent).

---

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

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

15 Data for professional services are underreported due to the suppression of data by BEA to avoid disclosing confidential company information.

16 For the purposes of this report, affiliate transactions in professional services capture education services; management and consulting services; research, development, and testing services; accounting, auditing, and bookkeeping services; advertising services; architectural, engineering, and other technical services; industrial engineering services; installation, maintenance, and repair of equipment; legal services; medical services; and training services.
FIGURE 1.4 U.S. services: Distribution services accounted for the largest share of U.S. affiliate transactions in 2010

Services supplied by foreign affiliates of U.S. firms

- Distribution services: 30%
- Other services: 21%
- Manufacturing: 2%
- Electronic services: 17%
- Professional services: 8%

Total = $1,130.5 billion

Purchases from U.S. affiliates of foreign firms

- Distribution services: 29%
- Other services: 20%
- Electronic services: 12%
- Professional services: 6%
- Manufacturing: 11%
- Financial services: 22%

Total = $696.0 billion


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

*Services supplied by majority-owned affiliates of U.S. parent firms.
*Data are underreported by the BEA to avoid disclosing confidential company information.
*Services supplied by majority-owned U.S. affiliates of foreign parent firms.
The EU accounted for 44 percent of total services supplied by U.S.-owned affiliates in 2010.\textsuperscript{17}

The value of services purchased from foreign-owned affiliates in the United States increased by 4 percent in 2010 to $696.0 billion, as the U.S. economy improved. This increase was larger than the 2 percent annual growth for the period from 2006 through 2009. Professional services purchased from foreign-owned U.S. affiliates accounted for 6 percent of total services supplied by such affiliates in 2010.\textsuperscript{18} Distribution services accounted for 29 percent of purchases and were the largest type of non-professional services supplied by foreign-owned affiliates in the United States. By country, the United Kingdom accounted for the biggest share of services purchased from foreign-owned affiliates in 2010 (15 percent), followed by Germany and Japan (14 percent each). Canada and France rounded out the top five with 10 percent each. Overall, 55 percent of services purchased in the United States from foreign-owned affiliates were from affiliates of EU-based parent firms.

\textsuperscript{17} USDOC, BEA, \textit{Survey of Current Business}, October 2012, tables 8–10.2.
\textsuperscript{18} Data for professional services are underreported due to the suppression of data by BEA to avoid disclosing confidential company information.
Bibliography


———. Survey of Current Business 89, no. 10 (October 2009).

———. Survey of Current Business 91, no. 10 (October 2011).

———. Survey of Current Business 92, no. 10 (October 2012).


CHAPTER 2
Professional Services

Overview

Despite their small share of total services trade, professional services are an important feature of the global economy: they are responsible for establishing the financial, legal, and regulatory framework in which business takes place and for providing services that are critical to human development and well-being, such as education and healthcare. Reflecting the important work they do, professional service providers such as accountants, lawyers, physicians, and educators are among the most highly educated and highly skilled workers in the global economy. Most professional services are subject to registration, certification, and licensing requirements; these requirements are often intended to ensure that only qualified personnel provide such services, but they may also act as trade barriers for foreign service providers when they are overly complex, opaque, or burdensome in nature. Notwithstanding some hurdles, trade in these services is growing rapidly, spurred by increased international demand for them and enabled by advances in the use of information technology.

How Professional Services Are Traded

Professional services may be traded in each of the four modes defined under the GATS (box 1.1). Certain professional services are less likely to involve cross-border transactions because providing them requires either face-to-face contact (e.g., physical examinations and classroom instruction) or commercial presence in the target country for practical or regulatory reasons. In instances where a service results in a deliverable that can be sent to the consumer—such as an architectural plan or a legal brief—mode 1 (cross-border supply) is feasible, and commonly involves the transmission of materials over the Internet. Professional services may be supplied through mode 2 when a resident of one country temporarily travels to another country to consume a service. One example of this type of transaction would be a student from China traveling to the United States to receive his or her college education. Mode 3 trade, commercial presence, is a prevalent form of trade in professional services. This form of trade takes place when a large professional services provider, such as the U.S. law firm Baker & McKenzie or the U.S. accounting firm KPMG, sets up an affiliated company abroad to serve local clients.

Many times, professional services trade through commercial presence entails mode 4 trade, defined as the movement of natural persons. Under mode 4, for example, managers or technical personnel who are employed at a company’s headquarters in the

---

4 USITC, “Sixth Annual Services Roundtable,” November 13, 2012. Cross-border services trade that is facilitated by information technology has grown increasingly widespread, and will likely be an important topic for discussion in any future trade negotiations on services.
home market are sent to do short-term work at one of the firm’s overseas affiliates. Mode 4 trade may also take place when a foreign national enters the United States for a limited time to provide services in the U.S. domestic market—for example, when a healthcare aide from the Philippines immigrates temporarily to the United States to provide home healthcare in this country.

**Barriers to Trade in Professional Services**

Both entry and operational barriers impede trade in professional services, and in particular affect supply through modes 3 and 4. These barriers are typically byproducts of a country’s domestic policy objectives at the national, state, or provincial level—such as the protection and development of its indigenous workforce—and they often take the form of complex and opaque regulations concerning the supply of professional services by foreign providers. Examples of some of the most onerous and restrictive barriers on foreign services providers include economic needs tests (which seek to verify that a certain service cannot be supplied by a domestic firm or individual as a condition for granting temporary entry and stay of foreign service providers) and quotas on the number of foreign providers that may enter the domestic market. Other significant barriers on professional services trade include mode 3 restrictions on setting up a foreign affiliate (requiring, for instance, that a foreign firm supply services through a joint venture with a domestic entity) and requirements that managerial staff be either citizens or permanent residents of the foreign country in which they seek to provide services.

Government certification and licensing requirements may also limit the activity of professional services providers in foreign markets. Such requirements are often intended to protect consumers against the ill effects of information asymmetries when choosing a service provider by ensuring that only qualified individuals supply such services—and, in many cases, they are complemented by industry efforts to self-regulate. However, where these requirements are unclear and unequal across countries, they deter trade in professional services. Many countries are working to make their regulations more transparent, and some groups of countries that are trading partners have negotiated agreements to harmonize and mutually recognize professional service standards. Nonetheless, such requirements remain a challenge for many international service providers.

---

5 Butkeviciene, “Temporary Movement of Natural Persons (Mode 4),” n.d. (accessed December 4, 2012). Under mode 4 of the GATS, temporary entry and stay of foreign personnel is typically granted for an initial period of one, three, or five years, and may be extended beyond these limits.


**Globalization and Fragmentation**

Despite barriers to trade in professional services, such trade remains robust. Growth in professional services trade has largely been driven by two trends: the globalization of commerce, and the fragmentation of services. An example of the first trend would be the decision of a U.S. manufacturing firm to locate its operations abroad, which may create a new cross-border demand for legal services. The second trend, services fragmentation, results from the practice of separating non-core functions within a professional service and outsourcing those functions to third-party providers, who are frequently based overseas. For instance, a U.S. healthcare firm may choose to outsource medical transcription services (e.g., in which a physician’s voice recordings on patient care are transcribed into text) to a provider located in India, even as the firm continues to supply core services (e.g., primary medical care) at home. This geographic dispersion of professional service activities is likely to influence the distribution of services trade in the foreseeable future and will have implications for trade policy.

**U.S. Trade in Professional Services**

In 2011, professional services accounted for 21 percent of total U.S. cross-border services exports (GATS mode 1) (see box 1.1) and 19 percent of U.S. cross-border services imports. The United States posted a cross-border trade surplus in professional services of $49.0 billion in 2011, with exports of $124.0 billion and imports of $75.0 billion. Between 2006 and 2010, the U.S. trade surplus in professional services grew at a compound annual rate of 12 percent, driven by the growth in U.S. trade surpluses in management and consulting (38 percent) and in the installation, maintenance, and repair of equipment (24 percent).

Among the principal professional services subsectors, the trade situation varied substantially in 2011. In that year, management and consulting represented roughly a quarter of U.S. sector exports ($32.2 billion) (figure 2.1). Other leading subsector exports were those in research and development (R&D) and testing ($23.4 billion or 19 percent), education ($22.7 billion or 18 percent), and installation, maintenance, and repair of equipment ($13.8 billion or 11 percent). In 2011, the United Kingdom and Switzerland were the leading markets for U.S. management consulting exports and for R&D and testing exports, respectively. During the same year, the United Kingdom was the largest source for U.S. imports of both of these types of services.

U.S.-owned foreign affiliates (i.e., U.S.-owned companies located abroad) supplied $96.5 billion of professional services in 2010. Architectural, engineering, and other technical services posted the largest share, accounting for 27 percent ($26 billion) of the

---


15 All multiyear growth rates are expressed in compound annual growth rates.


17 Ibid. These services also ranked among the top three U.S. imports of professional services in 2011.

18 The total is underreported due to the suppression of data by the BEA to avoid disclosing confidential company information.
FIGURE 2.1 U.S. professional services: Management and consulting services accounted for the largest share of U.S. cross-border exports and imports of professional services in 2011

Exports

- Management and consulting services: 26%
- Research and development and testing service: 19%
- Education: 18%
- Installation, maintenance, and repair of equipment: 11%
- Other technical services: 7%
- Legal services: 6%
- Other services: 13%

Total = $124.0 billion

Imports

- Management and consulting services: 33%
- Research and development and testing services: 30%
- Education: 8%
- Installation, maintenance, and repair of equipment: 11%
- Advertising: 4%
- Industrial engineering: 4%
- Other services: 10%

Total = $75.0 billion


Note: Trade data exclude public-sector transactions.
total. Management, scientific and technical consulting represented 20 percent ($19 billion) of services provided by U.S. affiliates abroad, and accounting, auditing, and bookkeeping represented 13 percent ($12 billion), rounding out the top three (figure 2.2).

**FIGURE 2.2** Architectural and engineering services accounted for the largest share of professional services supplied by foreign affiliates of U.S. firms in 2010

<table>
<thead>
<tr>
<th>Services supplied by foreign affiliates of U.S. firms&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billion $</td>
</tr>
<tr>
<td>Architectural, engineering, &amp; other technical services</td>
</tr>
<tr>
<td>Management, scientific &amp; tech. consulting services</td>
</tr>
<tr>
<td>Accounting, auditing, &amp; bookkeeping</td>
</tr>
<tr>
<td>Advertising</td>
</tr>
<tr>
<td>Legal services</td>
</tr>
<tr>
<td>Other professional services&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purchases from U.S. affiliates of foreign firms&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billion $</td>
</tr>
<tr>
<td>Advertising &amp; related services</td>
</tr>
<tr>
<td>Management, scientific &amp; tech. consulting services</td>
</tr>
<tr>
<td>Scientific research and development services</td>
</tr>
<tr>
<td>Architectural, engineering, &amp; other technical services</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Other professional services</td>
</tr>
</tbody>
</table>


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

<sup>a</sup>Services supplied by majority-owned affiliates of U.S. parent firms. Data are underreported by the BEA to avoid disclosing individual company information.

<sup>b</sup>Other professional services includes scientific research and development services and education ($4 billion each), health care and social assistance ($3 billion), specialized design services ($2 billion), and all other professional services ($10 billion).

<sup>c</sup>Services supplied by majority-owned U.S. affiliates of foreign parent firms.
By contrast, the value of services purchased from foreign-owned U.S. affiliates (i.e., foreign-owned companies located in the United States) was $44.4 billion in 2010.\(^\text{19}\) Advertising and related services accounted for the largest share (64 percent) of professional services purchased from foreign-owned U.S. affiliates at $28 billion.

**Gross Domestic Product, Employment, Labor Productivity, and Salaries in Professional Services**

The contribution of U.S. professional services to U.S. GDP in 2011 was $2.2 trillion, which represented 24 percent of the U.S. gross domestic product (GDP) in services (figure 2.3).\(^\text{20}\) Among professional service industries, miscellaneous professional, scientific, and technical services (6.5 percent) and health care and social assistance (1.8 percent) had the fastest growth in 2011. By contrast, during the same year, legal services and management of companies and enterprises posted output declines of –1.7 percent and –0.5 percent, respectively.

**FIGURE 2.3** Services accounted for the largest share of U.S. private-sector GDP in 2011\(^a\)

![Bar chart showing services accounted for the largest share of U.S. private-sector GDP in 2011.]


\(^a\)Real value added by industry using 2005 chained dollars.

Employment in professional services accounted for a significant share of total private sector employment in 2011. In that year, the number of full-time equivalent (FTE) employees in professional services stood at 26 million, or 26 percent of total U.S. private sector employment. Health care and social assistance represented more than half (58 percent) of professional services employment at 15.2 million workers (figure 2.4).

\(^\text{19}\) The total is underreported due to the suppression of data by the BEA to avoid disclosing confidential business information or individual company information.

FIGURE 2.4 Healthcare and social assistance had the largest number of U.S. FTEs in the professional services sector in 2011

 Thousands

<table>
<thead>
<tr>
<th>Services</th>
<th>Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal services</td>
<td>0</td>
</tr>
<tr>
<td>Misc. professional, scientific, &amp; technical services</td>
<td>2,000</td>
</tr>
<tr>
<td>Management of companies &amp; enterprises</td>
<td>4,000</td>
</tr>
<tr>
<td>Waste management &amp; remediation services</td>
<td>6,000</td>
</tr>
<tr>
<td>Educational services</td>
<td>8,000</td>
</tr>
<tr>
<td>Healthcare &amp; social assistance</td>
<td>10,000</td>
</tr>
</tbody>
</table>


Miscellaneous professional, scientific, and technical services (18 percent) and educational services (11 percent) were the second- and third-largest sectors in professional services in terms of employment. Among all service sectors, only employment in professional services (1.5 percent) and electronic services (0.5 percent) rose during 2006–10. The largest decline in services employment during the period was in financial services (–2.2 percent) and distribution services (–1.9 percent).

In 2011, labor productivity in professional services (measured as output in dollars per FTE) grew by 0.9 percent. During that year, professional services were the least productive U.S. sector, with an average output per worker of $82,549. However, labor productivity varied substantially among professional service industries: average output per worker ranged from $43,712 in education services to $145,345 in legal services (figure 2.5). From 2006 to 2010, productivity in the professional services sector remained nearly unchanged at –0.2 percent. However, productivity grew by 0.9 percent in 2011, second only to growth in electronic services (10.5 percent).

Professional service workers earned an average wage of $60,368 in 2011, which exceeded the private sector average ($53,463) but trailed wages in electronic services ($91,432), financial services ($88,557) and goods manufacturing ($61,680) (figure 2.6). Average wages varied substantially within the sector. For example, average annual wages in educational services were $42,405, compared to $110,115 for management of companies and enterprises. During 2006–10, annual wage growth in professional services was 2.7 percent, which was in line with the 2.6 percent growth rate for private sector services as a whole. In 2011, average wages for professional services rose by 2.8 percent, the fifth-largest increase after electronic and financial services (4.4 percent each), nonmanufacturing goods (3.4 percent), and manufactured goods (2.8 percent).21

FIGURE 2.5 Legal services had the highest labor productivity among all U.S. professional service sectors in 2011.


FIGURE 2.6 Wages per FTE in the private sector were the highest for electronic services in 2011.

Bibliography


Survey of Current Business 89, no. 10 (October 2009).

Survey of Current Business 91, no. 10 (October 2011).

Survey of Current Business 92, no. 10 (October 2012).


CHAPTER 3
Education Services

Summary

The global market for education services, measured by revenues at colleges and universities, grew by approximately 5 percent in 2011; the United States was the largest country market, followed by China, Japan, Germany, and France. Education is a mature industry, with instruction taking place primarily on physical campuses, although online instruction is growing in popularity. Worldwide, the largest market segment is students aged 18–22 years, although students aged 22–30 years and over 30 years represent growing shares of the market. The industry’s concentration is low due to the sheer number and diversity of institutions worldwide, as well as the tendency of colleges and universities to focus on home-market students. The main factors affecting demand for university education are population growth and demographics, secondary-school completion rates, household income, tuition levels, employer needs, economic conditions, and socioeconomic factors.

The supply of education services, as measured by the number of available student slots, is growing in many developing countries, but tends to be static in developed countries. Competition among universities is shaped by a wide variety of factors, ranging from an institution’s academic reputation to its campus facilities. Budget cuts and rising tuition levels have driven many universities to cover budget shortfalls by actively recruiting foreign students. Over the past decade, mainland China has become the world’s largest source of foreign students. Over the past couple of years, some elite universities have started to experiment with massive open online courses, i.e., free classes streamed over the Internet via specialty websites.

Introduction

Education services include formal academic instruction at primary, secondary, and tertiary (higher education) institutions, as well as instructional services offered by libraries and vocational, correspondence, language, and special education schools. This chapter focuses on instruction at universities and colleges (hereafter referred to as universities) by students studying abroad, because such university-level students represent the bulk of international trade in education services and because university studies are the only education services for which data on cross-border trade are reported. Cross-border trade is the primary means of providing education services to foreign markets. Such trade occurs when a student from one country travels to another country for university-level study; it consists of expenditures by students and their dependents, if any, for tuition, fees, and living expenses. As an example, expenditures incurred by a Chinese student studying in the United States are considered U.S. exports of education services, whereas expenditures incurred by a U.S. student studying in China are considered U.S. imports.
Market Conditions in Global Education Services

In 2011, the global market for education services, measured by revenues earned by colleges and universities, grew by approximately 5 percent to $902.8 billion. The United States was the largest country market in the global education services industry, accounting for 23 percent of total global revenues. Other large markets included China (12 percent), Japan (9 percent), Germany (6 percent), France (4 percent), Brazil (4 percent), the United Kingdom (4 percent), and Italy (3 percent). All other countries each accounted for less than 3 percent of the global market in 2011. Worldwide, more than 17 million people worked in roughly 79,000 colleges and universities in 2011.

Due to the long existence of many universities as well as high start-up costs and market saturation in many countries, education services is a mature industry whose annual revenue growth rates approximate the overall rate of population growth. The primary service offered by universities is educational instruction, involving a specified course of study (in a wide variety of fields) that is certified by an academic degree upon completion. Instruction takes place primarily on university campuses, although online instruction and hybrid programs are growing in popularity. Many universities also provide lodging, food, recreation, and transportation services to enrolled students. Some universities also earn sales revenues, licensing fees, royalties, and other forms of income by operating hospitals, publishing houses, specialized research facilities.

The market for education services is typically segmented by student age. In most countries, the largest single market is students aged 18 to 22 years. Having completed secondary education, students in this age group often enroll in universities to improve long-term job prospects and for family/social/cultural reasons. The second market segment, students aged 22 to 30 years, draws late high school graduates, individuals returning to complete a college degree, and students seeking a professional, graduate, or doctoral degree. Students 30 and older constitute a small but growing market segment for many universities. Often part-time students, people in the over-30 segment, typically return to school to advance their careers or to master new skills for a career change.

The global education services industry displays a very low level of industry concentration, with even the largest university systems, such as the University of California system, accounting for only a tiny share of global industry revenues in 2010.

---

1 The global market is conservatively defined as revenues collected by colleges and universities in 47 countries, including countries in Africa (South Africa); Asia (including Australia, China, India, Indonesia, Japan, Malaysia, New Zealand, Pakistan, the Philippines, Singapore, the Republic of Korea, Taiwan, and Thailand); Europe (including Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, and the United Kingdom); Latin America (including Argentina, Brazil, Chile, Colombia, and Venezuela); the Middle East and North Africa (including Egypt, Iran, Israel, Saudi Arabia, and Turkey); and North America (including Canada, Mexico, and the United States).


3 Most modern universities were founded in the 1800s or the early to mid-1900s. Although the characteristics that define a university are subject to debate, the University of Bologna, which was founded in Bologna, Italy, in 1088, is generally considered to be the oldest university in the Western world. University of Bologna website, http://www.eng.unibo.it/PortaleEn/University/Our+History/default.htm (accessed April 29, 2013).

4 Common academic degrees worldwide include bachelor’s, master’s, and doctoral degrees as well as specialized postgraduate degrees in the legal and healthcare fields.

5 Yang, Colleges and Universities in the US, August 2012.

6 Ibid.
This fragmentation stems largely from the fact that most universities earn almost all of their revenues in their home-country markets. It also results from the sheer number and diversity of universities in the global industry, which comprises more than 80,000 institutions in more than a hundred countries.

**Demand and Supply Factors**

The main factors affecting demand for university-level education include population growth and demographics, secondary education completion rates, household income, tuition levels, employer needs, economic conditions, and socioeconomic factors. The growth and age distribution of the population has a direct impact on the demand, with increasing demand likely in countries with growing populations and/or a growing share of the 18–30 age group. A related trend involves rising secondary education completion rates, which often correlate with increased demand for education services as more students meet universities’ basic eligibility requirements. Tuition levels and household income, which together determine the affordability of higher education, also tend to impact demand, with lower tuition levels and higher household incomes widening access to colleges and universities. Demand also rises when companies require applicants to have specialized skill sets and/or a higher level of general education. Job and income gains associated with periods of economic growth tend to increase demand as well, whereas slowing growth tends to decrease demand, although countercyclical enrollment patterns tend to moderate the impact of economic conditions. Finally, positive personal, family, and societal perceptions of the value of higher education—to satisfy social needs and/or improve employment opportunities—also tend to increase demand for education services.

The supply of education services, as measured by the number of available student slots, tends to be actively controlled by universities based upon institution-specific objectives. In the United States, for example, many universities, particularly high-prestige universities, often maintain a constant number of slots, which decreases acceptance rates (a key measure of status) as the number of applicants rises. By contrast, the number of university seats in some countries, particularly developing countries like China, is expanding to accommodate the soaring demand for educated workers induced by rapid economic growth.

For the most part, competition between universities takes place at the national level, with most universities catering predominantly to home-country students, although a growing number of universities actively recruit foreign students. One of the most important distinguishing factors among universities is an institution’s reputation. This is often based on a subjective assessment of factors, including placement in various rankings, name recognition, perception of academic selectivity and quality, students’ postgraduation prospects, and even a university’s history and heritage. To compete for students, universities, particularly in the United States, have also redesigned curricula, upgraded academic facilities, installed state-of-the-art communications networks, and even...

---

7 Yang, *Colleges and Universities in the US*, August 2012. During a recession, for example, the number of new students tends to increase even as existing students maintain enrollments. Such behavior is motivated by the students’ desire to obtain new skills and/or “wait out” a recession. Conversely, during periods of strong economic growth, some potential applicants prefer to join the workforce.

8 Ibid.

9 The university’s acceptance rate is defined as the number of students accepted divided by the number of students applying to attend the university.

10 Metrics like average entrance-exam score, acceptance rate, student-to-teacher ratio, and student retention rate are often used as proxies for academic quality.
bolstered campus amenities, including expansive landscaping, high-end dormitory facilities, and gourmet dining options. Universities also compete for students, especially highly qualified students, by offering various types of financial aid, including scholarships, tuition grants or waivers, stipends, low-interest loans, and on-campus employment opportunities. Other inducements may include top-quality professors; winning sports teams; a wide range of courses and academic programs, including study-abroad programs; and the existence of strategic alliances with both domestic and foreign universities.

**Elite Universities Experiment with Massive Open Online Courses**

Recently, massive open online courses (MOOCs) have emerged as one of the most notable trends in higher education. MOOCs are free university-level classes offered via streaming video. First emerging in 2009 and 2010, websites like Academic Earth and Open Culture offered videos of professors teaching classes ranging from Corporate Finance to The History of the Roman Empire. Although viewers were unable to earn credit—and video quality and class selection were often poor—these early sites attracted attention because they featured top-level academic instruction at some of the world’s leading universities, including Harvard University, the Massachusetts Institute of Technology (MIT), and Stanford University. After a relatively slow start, MOOCs received a surge of attention in 2012 after the launch of several high-profile websites, namely Coursera, edX, and Udacity.

Student interest in the educational content provided by MOOCs has been substantial, particularly outside the United States. For example, in 2011, Sebastian Thrun and Peter Norvig, both professors at Stanford University, attracted 160,000 students in 209 countries to the online version of their 200-student class on artificial intelligence. Similarly, in the fall of 2012, eight public health classes offered by Johns Hopkins University on Coursera drew more than 170,000 students. However, initial high enrollments for some classes may be deceptive; participation and completion rates are often substantially lower. Coursera, for example, estimates that 40–60 percent of registered students attempt the first assignment, while only 10–15 percent will complete the course.

---

14 Coursera, which received $16 million from venture capital firm Kleiner Perkins Caufield and Beyers, was founded in April 2012 in Mountain View, California. As of December 2012, Coursera offered 210 online classes from 33 universities. Coursera website, http://www.coursera.org (accessed December 19, 2012).
15 edX, located in Cambridge, Massachusetts, is a nonprofit enterprise founded in May 2012 by Harvard and MIT, each of which have contributed $30 million to the project. Georgetown University; the University of California, Berkeley; the University of Texas system; and Wellesley College also recently joined the edX platform. As of December 2012, edX offers seven classes sourced from Harvard, MIT, and the University of California, Berkeley. edX website, http://www.edx.org (accessed December 19, 2012).
16 Udacity, funded by venture capital firms Charles River Ventures (undisclosed amount) and Andreessen Horowitz ($15 million), was founded in February 2012 in Palo Alto, California. As of December 2012, Udacity offered 19 classes taught by leading experts, entrepreneurs, and university professors. Udacity website, http://www.udacity.org (accessed December 19, 2012).
Despite the initial surge of interest, many universities are reportedly wary of the MOOC phenomenon. Even universities that currently contribute educational content to MOOC platforms typically offer only a handful of classes and do not allow registered students to earn grades, credit, or academic degrees, although several MOOCs issue certificates of completion.\footnote{Coursera website, \url{http://www.coursera.org} (accessed December 19, 2012); edX website, \url{http://www.edx.org} (accessed December 19, 2012); Udacity website, \url{http://www.udacity.org} (accessed December 19, 2012).} Such caution seems to stem from concerns that the large-scale delivery of educational instruction will erode academic and social reputations based upon selectivity and scarcity. Some universities, too, appear concerned that profits from their campus-based business model could be undercut by the low-cost delivery of education content over the Internet.\footnote{Anderson, “Elite Education for the Masses,” November 5, 2012.}

Many universities and other observers are also reportedly concerned about the academic integrity of MOOC-based education, with issues like academic rigor, identity verification, and test security foremost among such worries. In response, some MOOCs are attempting to mimic the classroom experience by introducing quizzes, online forums, instructor email access, and final exams.\footnote{Ibid.} Several MOOCs are also experimenting with various schemes aimed at ensuring test security and identity authentication. Coursera, for example, plans to form partnerships with online proctoring companies that use webcams and software to monitor tests remotely, whereas edX and Udacity plan to require students to take exams at specific testing centers.\footnote{Young, “MOOCs Take a Major Step,” November 23, 2012, A23.}

Although most classes are currently free, many MOOCs, particularly those backed by venture capital funding, are exploring ways to generate revenues. One potential source of revenue may be the payment of licensing fees for educational content, likely survey courses and remedial classes produced by traditional universities. Antioch University, for example, has agreed to grant educational credit for students completing two Coursera courses on poetry and mythology produced at the University of Pennsylvania.\footnote{Lewin, “Students Rush to Web Classes,” January 6, 2013.} Similarly, in early 2013 Udacity announced a pilot project to offer remedial and introductory courses in algebra and statistics at San José State University (and several community colleges and high schools) in California.\footnote{Lewin and Markoff, “California to Give Web Courses a Big Trial,” January 15, 2013.} Other ideas that might generate revenue include offering branded certificates of completion as well as job placement services through which recruiters can access details about high-performing students.\footnote{Korn and Levitz, “Online Courses Look for a Business Model,” January 1, 2013; Lewin, “Students Rush To Web Classes,” January 6, 2013.} Some MOOCs may also be able to earn revenues by offering their web platforms for private sector educational training. edX, for example, is allowing companies to use its website to offer in-house training courses.\footnote{Korn and Levitz, “Online Courses Look for a Business Model,” January 1, 2013.} Affiliate revenues may also be a possibility. Coursera, for example, is an Amazon.com affiliate, receiving a small commission for students who click through to the Amazon site to buy recommended textbooks and other products.\footnote{Lewin, “Students Rush to Web Classes,” January 6, 2013.}
Budget Cuts and Rising Tuition Drive U.S. Universities to Actively Recruit Foreign Students

The 2007–08 financial crisis and subsequent economic downturn significantly affected the funding of higher education in the United States, particularly at public institutions. Many U.S. states, which suffered declining tax revenues over the last five or so years, have significantly reduced funding appropriations for public universities. At the University of California, for example, appropriations by the State of California were cut by 28 percent between 2007 and 2011, an amount totaling nearly $1 billion, with cuts of an additional $100 million occurring in 2012. Similarly, at the University of Michigan (U-M), state appropriations have decreased by 25 percent over the past decade, and now cover only 17 percent of the U-M budget compared to 33 percent in 2002–03.

In response to deep and ongoing budget cuts, many public universities have raised tuition prices, now reportedly relying on tuition payments to cover more than half of their annual expenditures. To increase revenues, some universities have actively taken steps to increase the share of out-of-state students in their enrollments. The University of Washington, for example, decreased the number of in-state freshman by almost 500 between 2007 and 2011, even as the school enrolled larger numbers of students, causing the percentage of out-of-state students to increase from 19 percent to 34 percent. On average, residents of Washington state paid tuition of $10,346 during the 2011–12 academic year, whereas nonresidents paid $27,830.

Although less reliant on government funding, private universities are also under financial pressure as parents and students balk at high tuition in the face of poor job prospects, stagnant wages, and large student debt loads. This trend appears to be having an effect on tuition increases; according to the National Association of Independent Colleges and Universities (NAICU), an association representing 960 private institutions in the United States, average tuition grew by only 3.9 percent during the 2012–13 academic year, the smallest percentage increase in at least 40 years. In addition, 24 of NAICU’s member colleges froze tuition, while 8 members cut tuition.

As a way to shore up budgets, many U.S. universities, both public and private, are expanding their share of foreign students (box 3.1). Of the 2011–12 freshman class at the University of Washington, for example, more than half of the nonresident students were from foreign countries, with almost two-thirds of that number coming from China. During that same year, foreign students also represented at least 10 percent of the freshman class at the flagship public universities of Illinois, Indiana, and Iowa, as well as at the University of California campuses in Berkeley and Los Angeles. Private universities are also reportedly increasing their intake of foreign students. In 2011–12, for example, foreign students represented at least 15 percent of the freshman classes at

---

Over the past decade, the number of students studying outside their home country grew by more than 95 percent, from 2.1 million in 2000 to 4.1 million in 2010, for a compound annual growth rate of 7 percent. In 2010, the United States hosted the most foreign students in absolute terms, taking 17 percent of all foreign students worldwide; the United Kingdom (13 percent), Australia (7 percent), Germany (6 percent), and France (6 percent) rounded out the top five spots. Other countries hosting a significant share of foreign students in 2010 included Canada (5 percent), Japan (3 percent), the Russian Federation (4 percent), and Spain (2 percent). Overall, 83 percent of foreign students studied in G-20 countries and 77 percent studied in OECD countries.

At the macro level, growing foreign student mobility results from several factors, ranging from a rising interest in promoting academic, cultural, social, and political ties between countries to reduced international transportation costs to the global expansion of tertiary institutions in developing countries. In addition, the increasing globalization of societies and economies, including the labor market, has provided students an incentive to gain international experience as part of their education. At the micro level, students choose institutions based upon language of instruction; national immigration policies; tuition costs; and perceived educational quality. Other factors that shape foreign students’ decisions to study abroad include the likelihood that foreign degrees will be recognized; restrictive admission policies for home-country universities; geographic, trade, cultural, and historic linkages between countries; the opportunity; future job opportunities; and the opportunity to experience other cultures.

universities but also widespread academic fraud, overcharging, misrepresentation, and even intellectual property violations.\textsuperscript{41}

As a result, some universities have taken steps to circumvent recruiting agencies. For example, a group of 15 U.S. universities—including Colorado College, Wake Forest University, and the University of Maryland at College Park—formed a partnership called CNA-USA to build relationships with select middle schools in China.\textsuperscript{42} A number of state-based consortiums have also emerged over the past few years. Such consortiums, which include Study New Jersey, Study Wisconsin, and Study Oregon, actively promote in-state institutions of higher education by sponsoring websites and educational seminars, representing members at foreign recruiting fairs and conferences, and hosting exchanges for admissions staff and foreign educational counselors.\textsuperscript{43}

**Growing Numbers of Chinese Students Study Abroad**

Over the past decade, mainland China has become the world’s largest source of foreign students. By 2011, for example, approximately 340,000 Chinese students were studying outside of China, a figure that has grown by more than 20 percent per year over the past several years.\textsuperscript{44} In recent years, the United States has been the destination of choice for Chinese students. More than 194,000 students studied at U.S. colleges, universities, and community colleges during the 2011–12 academic year, a figure that represented more than 25 percent of total U.S. foreign student enrollments.\textsuperscript{45} In 2011–12, 46 percent of Chinese students were studying at the graduate level, while 38 percent were undergraduates; nondegree students and students engaged in “other practical training” represented 7 percent and 10 percent of the total, respectively.\textsuperscript{46} The number of Chinese students studying in the United States has grown at an annual rate of 10 percent over the past 10 years.\textsuperscript{47} Although growth has occurred at both the undergraduate and graduate levels, undergraduate enrollments have experienced the most significant growth over the last few years.\textsuperscript{48}

Chinese students enrolled at U.S. universities are reportedly high performers with strong test scores\textsuperscript{49} who tend to study business/management (29 percent), engineering (19 percent), math/computer science (11 percent), and physical/life sciences (10 percent).\textsuperscript{50} Many Chinese students pay full tuition, including out-of-state tuition at public schools, contributing an estimated $5 billion to the U.S. economy for tuition and living expenses during the 2011–12 academic year.\textsuperscript{51} Many Chinese students reportedly covered most or all education and living expenses through family resources.\textsuperscript{52}

The growth of U.S.-bound Chinese students is driven by a combination of social, economic, and demographic factors. Many Chinese students study abroad in response to

---


\textsuperscript{43} Study New Jersey, “A World of Options,” June 2, 2011.

\textsuperscript{44} Waldmeir, “Chinese Students Buck Export Slowdown,” September 27, 2012.


\textsuperscript{46} IIE, “International Students,” November 12, 2012

\textsuperscript{47} All multiyear growth rates are expressed as compound annual growth rates.


\textsuperscript{49} Johnson, “U.S. Colleges Seek Foreign Students for Intellectual Stimulus,” September 2, 2011.

\textsuperscript{50} IIE, “International Students,” November 12, 2012.


\textsuperscript{52} Johnson, “U.S. Colleges Seek Foreign Students for Intellectual Stimulus,” September 2, 2011.
deficiencies in the Chinese higher education system. Such deficiencies include a shortage of universities, particularly top-quality universities;\(^{53}\) fierce competition for university slots;\(^{54}\) and the grueling, high-pressure *gaokao* college entrance exam, which some students and parents believe requires too much preparation and focuses on irrelevant topics.\(^{55}\) An increasing number of Chinese students also want to study in the United States due to the belief that U.S. colleges and universities are the best in the world.\(^{56}\) Some Chinese students, for example, believe that Chinese higher education overemphasizes memorization and repetition, preferring instead the U.S. approach, which they believe focuses on problem-solving, critical thinking, creativity, and innovative ideas.\(^{57}\) Some observers also believe that some Chinese students choose to study in the United States because it offers unique, life-changing experiences.\(^{58}\)

Recent economic changes in China may also play a role. Nearly 20 years of rapid economic growth, for example, have created a large and growing middle class whose members highly value university-level education and have the financial means to send their children abroad. While many middle-class Chinese families are not wealthy by U.S. standards—more than 75 percent of Chinese students studying abroad came from families that earned less than $47,000 per year\(^ {59}\)—one result of China’s long-running one-child policy is that the resources of several generations can be focused on a single child.\(^{60}\) In addition, the gradual decline in the value of the U.S. dollar vis-à-vis the Chinese yuan since 2005 has made a U.S. education more affordable for middle-class Chinese families.\(^{61}\)

---

61 Fischer, “Number of Foreign Students in U.S.,” November 16, 2012. Many Chinese families believe that the prestige of a U.S. degree—as well as English-language skills and international experience—will lead to a good, high-paying job once their children return to China. Recruitment experts, however, question whether the time and money spent on a U.S. degree will pay off in the Chinese job market. For example, Zhaopin, a Chinese employment agency, recently reported that 70 percent of local Chinese companies did not give hiring preferences to candidates with foreign education credentials, while nearly 90 percent stated that they offered no salary premium, or only a small premium, for foreign-educated candidates. McMurtrie, “China Continues to Drive Foreign-Student Growth,” November 16, 2012; Waldmeir, “Chinese Students Buck Export Slowdown,” September 27, 2012.
Trade Trends

Cross-border Trade

In 2011, the value of U.S. cross-border exports of education services (box 3.2), which reflects foreign students’ expenditures for tuition and living expenses while studying in the United States, rose by 8.4 percent to $22.7 billion, exactly in line with the annual growth of 8.4 percent recorded during 2005–10 (figure 3.1). Such strong growth reflected not only an increase in the number of foreign students studying in the United States, particularly from China and India, but also tuition increases. In 2011, the five leading markets for U.S. exports of education services were China ($4.9 billion), India ($3.3 billion), Korea ($2.3 billion), Canada ($925 million), and Taiwan ($782 million).

---

**BOX 3.2 An explanation of BEA data on cross-border trade in education services and transactions by education affiliates**

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

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

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

---


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

---

As noted, foreign students are drawn to the United States due to its reputation for having an extensive and top-quality system of higher education. U.S. universities owe this reputation to several interrelated factors, including highly regarded professors, world-class facilities, cutting-edge research in a wide variety of fields, and decades of substantial funding from both public and private sources.

During the 2011–12 academic year, the number of foreign students studying in the United States grew by 5.7 percent to 764,495, slightly faster than the annual growth of 5 percent from 2005 through 2010. Approximately 25 percent of total number of foreign students came from China, with India (13 percent), Korea (10 percent), Saudi Arabia (5 percent), and Canada (4 percent) also accounting for large shares of foreign students. Overall, international students and their dependents contributed an estimated $21.8 billion to the U.S. economy during 2011–12.

Students studying at the undergraduate and graduate levels each accounted for about 40 percent of total foreign students, with business management (22 percent), engineering (19 percent), math and computer science (9 percent), social sciences

\[ \text{2011 trade surplus} \quad \$16.8 \text{ billion} \]

(9 percent), and physical and life sciences (9 percent) being the most popular fields of study. During 2011–12, the most popular universities for foreign students were the University of Southern California, the University of Illinois at Urbana-Champaign, New

**FIGURE 3.2** Education services: China was the leading source of U.S. exports of education services in 2011, while the United Kingdom was the leading source of imports

**U.S. exports**
- Africa 5%
- Middle East 5%
- Other Western Hemisphere 9%
- Other Asia-Pacific 14%
- Europe 13%
- Taiwan 3%
- Canada 4%
- Korea 10%
- India 15%
- China 22%

**Total = $22.7 billion**

**U.S. imports**
- Africa 5%
- Middle East 2%
- Other Western Hemisphere 17%
- Other Asia-Pacific 16%
- Other Europe 14%
- Mexico 5%
- France 5%
- Spain 8%
- Italy 9%
- UK 19%

**Total = $5.9 billion**


*Note:* Geographic regions are shaded in yellow. Figures may not total 100 percent due to rounding.
York University, Purdue University, and Columbia University, with each university hosting approximately 1 percent of total foreign students.67

U.S. cross-border imports of education services, which reflect U.S. students’ expenditures for tuition and living expenses while studying abroad, increased by 7.3 percent in 2011, roughly in line with the 7 percent annual growth recorded during 2005–10 but much lower than the 20 percent growth for foreign study in the United States that year.68 As a result of these trends, the U.S. trade surplus in education services in 2011 widened by nearly 9 percent to $16.8 billion. The leading sources of U.S. imports of education services were the United Kingdom ($1.1 billion), Italy ($540 million), Spain ($498 million), France ($322 million), and Mexico ($294 million).69

During the 2011–12 academic year, roughly 274,000 U.S. students studied abroad, a figure that represented 1 percent growth over the previous year. Only 4 percent of U.S. students studied in foreign countries for at least one academic year, with the remainder studying for one semester (38 percent) or a shorter period (58 percent).70 In general, U.S. students preferred destinations in Europe, with the United Kingdom (12 percent), Italy (11 percent), Spain (10 percent), and France (6 percent) hosting the largest numbers of students. China also hosted a large number of U.S. students, representing roughly 5 percent of the total. During 2011–12, the most popular fields of study for U.S. students abroad were programs in the social sciences (23 percent), business/management (21 percent), humanities (11 percent), fine or applied arts (8 percent), and physical and life sciences (8 percent).71

**Affiliate Transactions**

Affiliate sales in education services occur when institutions of higher education serve foreign students by offering short-term educational programs abroad or by establishing campus facilities in other countries. The Harvard Business School, for example, offers a variety of short-term executive programs on topics like finance and marketing in Shanghai, China, to employees of Chinese companies.72 Similarly, Michigan State University offers campus-based master’s degree and executive education programs in Dubai, United Arab Emirates, in partnership with Dubai International Academic City.73

In 2010, educational services supplied by U.S. universities in foreign countries totaled $3.5 billion, whereas services offered by foreign universities in the United States totaled $1.3 billion (figure 3.3).74

---

69 Ibid., 45.
70 I.e., a summer program or a program lasting eight weeks or less.
Over the next five years, the number of college students and revenues at U.S. colleges and universities are expected to grow in lockstep at a rate of about 1 percent per year. During this same period, flat or declining tax receipts and competition from other social programs will likely continue to put downward pressure on state-level appropriations for higher education. International student enrollments at U.S. universities, however, are expected to grow over the next five years, driven by rising disposable income levels in several developing countries, the solid reputation of the U.S. system of higher education, and many U.S. institutions’ ongoing recruiting efforts abroad, particularly in China. MOOC platforms like edX, Udacity, and Coursera will likely serve a growing number of students around the world as they expand course offerings and improve Web-based services, although many may struggle to monetize their services and attract enough revenues to survive and expand. Traditional universities may use MOOCs to deliver introductory or remedial courses, but will likely continue to resist the complete migration of educational instruction to online venues because of concerns about education quality and academic integrity, as well as reluctance to undercut lucrative business models and prized academic and social reputations.

Yang, Colleges & Universities in the US, August 2012.
Bibliography


Yang, David. Colleges & Universities in the US. IBISWorld, August 2012.

CHAPTER 4
Healthcare Services

Summary

Global demand for healthcare services (services provided by doctors, nurses, or other professionals in medical facilities such as hospitals, medical offices and clinics, or residential care facilities) has continued to grow. As a result, global spending on healthcare—the best proxy figure available for healthcare services—has steadily risen since 2006. Although the United States and Europe are still the largest markets, they have grown more slowly than the global average. The fastest-growing markets are in developing countries, where private spending on healthcare is increasing dramatically. Healthcare systems around the world have developed new methods of service delivery and increased their use of information technology in response to both growing demand and the trend of “healthcare consumerism,” in which patients take a more active role in their healthcare decisions. Governments have implemented policies to encourage investment in healthcare services; however, the shortage of healthcare workers remains a constraint in many countries.

The United States continues to maintain a trade surplus in healthcare services, which totaled $1.9 billion in 2011. In contrast, services supplied by foreign-owned U.S. affiliates significantly exceed services supplied by foreign affiliates of U.S. firms, largely due to the opportunities available in the U.S. market. However, U.S. healthcare organizations, particularly academic medical centers and hospitals, have increased their global presence in recent years by entering into a growing number of international affiliations and partnerships. Looking ahead, global healthcare demand will continue to grow, but growth in spending will be driven by developing economies, as growth in developed markets, particularly in the United States and Europe, continues to slow.

Introduction

Healthcare services are demanded by almost all populations and provided in every market around the world. Service provision requires cooperation and coordination among a variety of different parties, including public and private providers, financiers, and regulators. Governments take an interest in the healthcare industry, in part, due to its

---

1 This chapter focuses on the provision of healthcare services. However, due to the varied and complex relationships between healthcare providers, payers, and patients in global markets, healthcare markets are typically measured by total spending, which may include both healthcare services and goods. Global healthcare spending, as defined by the World Health Organization (WHO), includes spending on healthcare services and goods by governments, households, and private prepaid plans (insurers), as well as other private resources for health, such as nonprofit organizations. WHO, “Glossary of Terms and Financing Flows,” n.d. (accessed April 29, 2013). Healthcare services encompass individualized and specialized services provided by doctors, nurses, and other healthcare professionals in medical facilities including hospitals; medical offices, clinics, and other ambulatory facilities; and nursing and residential care facilities. Swiss Re, “To Your Health,” 2007, 8.
critical role in economic growth and development. Further, in many countries, access to healthcare is considered a constitutional right, requiring these governments to play a larger role in the healthcare industry. However, comprehensive healthcare coverage often requires a wide range of resources, beyond the scope of most governments. As a result, private firms, particularly healthcare providers and insurers, have found opportunities for profit in meeting demand for services outside of public systems. Hence most countries’ healthcare systems comprise a mix of public and private providers, financed by a combination of public and private sources.

Market Conditions in Global Healthcare Services

Global healthcare expenditures continued their steady growth in recent years. This rise has been driven by sustained growth in public spending, which has counterbalanced less robust trends in private spending (figure 4.1). Global spending grew at a compound annual rate of 7.5 percent from 2006 through 2010, as total spending rose from $4.9 trillion to $6.6 trillion, or over 10 percent of global GDP. However, this relatively high average annual rate masks an abrupt deceleration in growth in 2009 and 2010 following the financial crises and ensuing recession. Growth in global spending declined from almost 10 percent annually in 2008 to 2.5 percent in 2009, driven primarily by slower growth in private spending, and remained slow in 2010. As a result, public spending accounted for a rising share of global healthcare expenditures, growing from 59 percent in 2006 to 63 percent in 2010.

Developed markets—particularly North America (primarily the United States) and the European Union, which account for the bulk of healthcare expenditures (figure 4.2)—have largely driven the slowdown in global spending. The United States is by far the world’s largest healthcare market (table 4.1), with per capita spending reaching

---

2 Better population health has been found to increase national incomes by promoting higher levels of labor productivity, education, and saving and investment. The inverse relationship also holds; higher national incomes promote health through access to better nutrition, sanitation, and quality care. Bloom and Canning, “Population Health and Economic Growth,” 2008, 1.


5 Global healthcare expenditures consist of public (government) spending and private spending. Private expenditure comprises spending by private prepaid plans, households’ out-of-pocket spending, and spending by other private resources for health, such as nonprofit organizations that provide households with goods and services free or for negligible prices. WHO, “Glossary of Terms and Financing Flows,” n.d. (accessed April 29, 2013).

6 All multiyear growth rates are expressed as compound annual growth rates. The 2010 data are the most recent available. Data on healthcare expenditures are reported by the World Bank as ratios. USITC uses these ratios and GDP data to estimate healthcare expenditures. World Bank, World Development Indicators database (accessed October 31, 2012).

7 As reported in the 2011 Recent Trends report, from 2003 through 2008, global healthcare spending grew at an annual rate of 9 percent. However, during the latter half of that period, the rate of growth diverged between public and private expenditures, as public spending rose 10.3 percent in 2008 while private spending rose only 6.7 percent.

8 Growth in private spending measured less than 1 percent in 2009 and 2 percent in 2010, due to the continued effects of the financial downturn.

9 World Bank, World Development Indicators database (accessed October 31, 2012).
FIGURE 4.1 Healthcare services: Global healthcare spending continued to rise during 2006–10 due to growth in public expenditures

Source: USITC staff calculations based on data from World Bank, World Development Indictors database (accessed December 7, 2012)

FIGURE 4.2 Healthcare services: Developed countries drive global healthcare spending, particularly public spending, 2010

Source: USITC staff calculations using data from World Bank, World Development Indicators database (accessed November 1, 2012).
## TABLE 4.1 Healthcare services: Top 10 global healthcare markets by total and private spending, 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Total spending (billion $)</th>
<th>CAGR, 2006–10</th>
<th>Rank</th>
<th>Country</th>
<th>Private spending (billion $)</th>
<th>CAGR, 2006–10</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>2,584.2</td>
<td>5.19%</td>
<td>1</td>
<td>United States</td>
<td>1,213.1</td>
<td>1.05%</td>
</tr>
<tr>
<td>Japan</td>
<td>520.7</td>
<td>9.92%</td>
<td>2</td>
<td>China</td>
<td>139.5</td>
<td>17.46%</td>
</tr>
<tr>
<td>Germany</td>
<td>379.2</td>
<td>5.28%</td>
<td>3</td>
<td>Brazil</td>
<td>102.3</td>
<td>17.39%</td>
</tr>
<tr>
<td>France</td>
<td>302.9</td>
<td>4.89%</td>
<td>4</td>
<td>Japan</td>
<td>91.0</td>
<td>5.54%</td>
</tr>
<tr>
<td>China</td>
<td>300.6</td>
<td>24.91%</td>
<td>5</td>
<td>Germany</td>
<td>86.9</td>
<td>4.54%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>217.0</td>
<td>1.17%</td>
<td>6</td>
<td>France</td>
<td>67.1</td>
<td>5.98%</td>
</tr>
<tr>
<td>Italy</td>
<td>194.7</td>
<td>3.76%</td>
<td>7</td>
<td>Canada</td>
<td>52.6</td>
<td>8.07%</td>
</tr>
<tr>
<td>Brazil</td>
<td>193.0</td>
<td>20.24%</td>
<td>8</td>
<td>India</td>
<td>48.4</td>
<td>13.76%</td>
</tr>
<tr>
<td>Canada</td>
<td>178.1</td>
<td>8.73%</td>
<td>9</td>
<td>Italy</td>
<td>43.6</td>
<td>2.59%</td>
</tr>
<tr>
<td>Spain</td>
<td>132.0</td>
<td>6.34%</td>
<td>10</td>
<td>Spain</td>
<td>35.9</td>
<td>4.91%</td>
</tr>
</tbody>
</table>


Note: CAGR is the compound annual growth rate.

$8,362 in 2010, compared to $3,368 in the European Union and $221 in China. Although this level of spending represents growth of just under 6 percent since 2009, growth in expenditures in the U.S. healthcare market continues to lag growth in the global market. Market fluctuations and economic uncertainty led many consumers to curb spending, and the spike in unemployment resulted in a substantial loss in insurance coverage; both of these trends shrank private healthcare spending. As a result, although the United States remains the world’s largest private healthcare market, for the first time in decades private expenditures no longer accounted for the majority of U.S. healthcare spending; its share fell from 55 percent in 2006 to 47 percent in 2010. Many other developed countries also experienced healthcare spending growth that was slower than the global average of 7.5 percent during this period. In contrast to the historical trend of sustained growth in healthcare expenditure, spending in many European countries actually declined from 2008 to 2010. European markets have been hit particularly hard by the recession. In the face of budgetary pressures and financial constraints, governments have reduced labor forces, curtailed public spending by cutting

---

10 Per capita spending reported in current U.S. dollars. World Bank, World Development Indicators database (accessed December 7, 2012).
12 Differing opinions exist regarding whether the slowdown in healthcare spending is a direct result of the recession. Some researchers argue that the slowdown began before the recession and that while the cause remains unclear, it is not due to cyclical factors; others argue that an uptick in doctor visits following the recession indicates that the slowdown was due to consumers delaying healthcare visits. Kliff, “Healthcare Spending Slowdown,” August 10, 2012. USITC calculations using data from WHO, Global Health Expenditures database, and World Bank, World Development Indicators database (accessed December 7, 2012).
13 Developed countries that experienced particularly low average annual growth during 2006–10 include Greece (4.7 percent), Hungary (0.76 percent), and Ireland (3.1 percent). USITC calculations using data from WHO, Global Health Expenditures database, and World Bank, World Development Indicators database (accessed December 7, 2012).
14 For example, Germany’s total healthcare spending fell from $387.5 billion in 2008 to $379 billion in 2010. Similarly, in the United Kingdom, spending declined from $236.7 billion in 2007 to $217 billion in 2010. USITC calculations using data from WHO, Global Health Expenditures database, and World Bank, World Development Indicators database (accessed December 7, 2012).
wages and administrative costs, and in some cases increased cost sharing. Additionally, countries with compulsory employment-based health insurance, such as France, have seen private expenditures on healthcare decline as unemployment has risen.

In contrast, healthcare spending in developing markets continued to grow rapidly, driving the continued (albeit slower) growth in global healthcare spending. From 2006 through 2010, healthcare expenditures in developing countries in East Asia and the Pacific grew at an annual rate of 23 percent, and spending in developing Latin American and Caribbean countries grew by 15 percent. Private spending has driven rapid growth in these markets, due to expanding insurance coverage and burgeoning middle-class populations with rising incomes and a growing desire for better care and advanced treatments. The expansion of China’s healthcare industry has been driven by government policies aimed at improving access to care and expanding insurance coverage, and by an aging population that is facing a growing incidence of chronic diseases. In China and Brazil, private spending on healthcare nearly doubled between 2006 and 2010, growing from $73.3 billion to $139.5 billion and from $53.9 billion to $102.3 billion, respectively. Although both China and Brazil have some form of national healthcare that provides free services to citizens, many patients are dissatisfied with the system and are willing to pay for high-quality private care. As a result, China and Brazil were among the top 10 largest global healthcare markets in 2010, and (along with India) are among the largest private healthcare markets in the world.

The world’s largest healthcare organizations continue to be located in the United States, and, in contrast to those in other countries, most are private. In 2011, only 2 of the top 10 healthcare companies were located outside the United States, and both (the Japanese Red Cross Society and Alberta Health Services) were publicly funded (table 4.2). The leading healthcare company, based on operating revenue, was Express Scripts, a U.S.-based pharmacy benefit management service. (Pharmacy benefit managers are third-party managers of prescription drug programs.) In 2012, Express Scripts solidified its role as market leader by acquiring Medco, the second-largest U.S. pharmacy benefit manager, increasing its share to 40 percent of the market. The remaining leading healthcare companies, with the exception of Alberta Health Services, were all hospital systems, and other than the HCA hospital system (HCA Holdings, Inc.), none operate outside their home markets. Operations of the leading healthcare companies illustrate the degree to

---

17 USITC calculations using data from WHO, Global Health Expenditures database, and World Bank, World Development Indicators database (November 7, 2010).
21 Such companies typically act as a middleman, negotiating with drug companies and pharmacies—a service increasingly in demand as firms and insurance companies seek to reduce costs. They are also expanding their services, looking for more ways to save their customers money, such as by increasing patient compliance with medication instructions. Gryta, “What Is a ‘Pharmacy Benefit Manager?'” July 21, 2011.
TABLE 4.2 Healthcare services: Top 10 healthcare services companies, 2011

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Country</th>
<th>Operating revenue (thousand US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Express Scripts, Inc.</td>
<td>U.S.</td>
<td>46,128,300</td>
</tr>
<tr>
<td>2</td>
<td>St. Vincent Randolph Hospital, Inc.</td>
<td>U.S.</td>
<td>33,770,183</td>
</tr>
<tr>
<td>3</td>
<td>HCA Holdings, Inc.</td>
<td>U.S.</td>
<td>29,682,000</td>
</tr>
<tr>
<td>4</td>
<td>Methodist Healthcare Memphis Hospitals</td>
<td>U.S.</td>
<td>27,000,000</td>
</tr>
<tr>
<td>5</td>
<td>Regents of the University of California (Nevada Cancer Institute)</td>
<td>U.S.</td>
<td>14,938,600</td>
</tr>
<tr>
<td>6</td>
<td>Kaiser Foundation Hospitals</td>
<td>U.S.</td>
<td>14,795,250</td>
</tr>
<tr>
<td>7</td>
<td>Japanese Red Cross Society</td>
<td>Japan</td>
<td>14,108,888</td>
</tr>
<tr>
<td>8</td>
<td>Community Health Systems, Inc.</td>
<td>U.S.</td>
<td>13,626,168</td>
</tr>
<tr>
<td>9</td>
<td>Catholic Health Initiatives</td>
<td>U.S.</td>
<td>13,360,714</td>
</tr>
<tr>
<td>10</td>
<td>Alberta Health Services</td>
<td>Canada</td>
<td>11,951,494</td>
</tr>
</tbody>
</table>

Note: This table is drawn from firms for which Orbis reported ambulatory healthcare services, hospitals, or nursing and residential care facilities as a primary industry. It does not include all public healthcare systems.

- Most recent revenue data available are from 2010.
- Figure is an estimate. The Nevada Cancer Institute closed on January 31, 2013.
- Most recent revenue data available are from 2009.

which the global healthcare system is fragmented along national borders.23 Both patients and healthcare providers focus primarily on opportunities available in the domestic market.

In response to a variety of pressures, including smaller budgets, rising use of healthcare, and strained healthcare resources, many countries have undertaken healthcare reform. Motivated by cost concerns and a growing incidence of chronic disease, both the United States and the United Kingdom have recently passed major healthcare legislation. In the United States, the 2010 Patient Protection and Affordable Care Act (PPACA) endeavors to increase access to care by providing insurance coverage to previously uninsured individuals beginning in 2014 and by applying significant regulatory changes to the health insurance industry and the healthcare sector.24 In the United Kingdom, where the National Health Service (NHS) provides universal healthcare to all residents, the British Health and Social Care Act 2012 represents the largest reform of the NHS system in its history, as it targets rising healthcare costs by reorganizing and streamlining the system.25

Efforts to contain costs are not limited to developed markets. China has been progressively overhauling its healthcare system since 2009 in an effort to increase access by creating a competitive network that provides affordable care. The program began with the expansion of health insurance to over 95 percent of the population in 2011. More recently it has implemented new regulations to encourage private investment and begun efforts to reduce patients’ costs by preventing providers from selling marked-up pharmaceuticals.27 The implications of reforms for the global healthcare services market remain ambiguous.

---

23 In countries with sub-federal regulation, healthcare systems are also fragmented at a regional level. For example, in the United States, few healthcare companies provide services in all U.S. states.
Demand and Supply Factors

A wide range of factors affect the demand for and supply of healthcare services. Global demand for such services is primarily driven by population growth and other demographic trends, such as rising incomes. The global supply of healthcare services tends to be driven by government policy objectives, as well as by the development of new and innovative technologies. Although these supply and demand factors tend to have the greatest impact on national markets, they also often affect international trade in healthcare services.

The factors discussed below focus on four emerging trends and their effects on either demand or supply in the healthcare services industry. Healthcare IT is changing the way healthcare services are supplied, not only within domestic healthcare systems, but also across borders (mode 1). Consumer-driven medical care has shifted the types of healthcare demanded and has also led to the rise of the medical travel industry (mode 2). Government policies that seek to increase healthcare services by boosting investment (mode 3) and encouraging the migration of foreign health professionals (mode 4) are responses to growing healthcare demand.

Rapid Adoption of Healthcare Information Technology (IT) Is Changing the Delivery of Healthcare

The widespread adoption of IT is changing the way healthcare is delivered and transforming the patient-provider relationship. Healthcare IT refers to the use of information and communication technology by consumers, providers, governments, and insurers to store, share, or analyze healthcare data. The purpose of healthcare IT is to manage information more efficiently and increase communication between stakeholders in the healthcare industry—patients, providers, and payers—in order to improve outcomes while at the same time lowering costs. For example, electronic health records, electronic referrals, and e-prescribing software can streamline communications and reduce administrative burdens. Other healthcare IT applications such as telemedicine involve remote monitoring or computerized decision systems. They directly support treatment and make positive outcomes more likely by providing information that helps providers make better decisions about the method of care. It is difficult to characterize the size or effectiveness of telemedicine programs due to a scarcity of data. However, globally, the most commonly provided service via telemedicine is teleradiology—the

---

28 See chapter 1 for a discussion of the four modes of services trade.
31 Chikotie, Oni, and Owei, “Factors Determining the Adoption of ICTs in Healthcare Service Delivery,” 2011; HealthIT.gov, “Basics of Health IT” n.d. Although electronic health records have been associated with lower overall healthcare costs and improved outcomes, physicians have reportedly found it expensive and time consuming to implement such systems in their offices. Denning, “Why Is Your Doctor Typing?” April 25, 2013.
32 The World Health Organization defines telemedicine as “the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.” Accenture, Making the Case for Connected Health, 2012, 1.
remote viewing or diagnosis of images that were obtained in another location. Other commonly provided remote services include dermatology, pathology, and cardiology/electrocardiology.

High-income countries are, and are expected to remain, the main users of telemedicine. Currently, the global leaders in use of healthcare IT are Denmark, Sweden, and New Zealand. Such countries have widespread advanced IT infrastructure, and use healthcare IT to address challenges such as flat or declining budgets and shortages of healthcare professionals. Healthcare IT also helps reduce disparities and improve the overall quality of care. For example, electronic health records strengthen continuity of care across providers and make it easier to gather information on treatment and outcomes. Other applications improve access to care by reaching traditionally underserved areas and populations, such as remote or rural regions. For example, Japan uses remote health monitoring programs to provide its aging citizens with an alternative to hospital-based care. Patients can submit test results to providers over the Internet without having to visit an office. As of 2009, 70 percent of these Japanese telecare initiatives were carried out in rural areas.

Some health IT applications facilitate international trade (particularly cross-border trade) in healthcare services. For example, telemedicine offers the opportunity for more collaboration between healthcare domestic and foreign professionals through remote training and sharing of information through international partnerships. While these programs are useful to professionals in developing countries, they also enable providers in developed countries to consult on diseases they may not see in person, such as neglected tropical diseases. Greater portability of electronic or personal health records also supports continuity of care for patients who seek health treatments or procedures abroad by facilitating information sharing between foreign practitioners and their primary care providers.

---

35 In a WHO survey, 60 percent of responding countries offered some form of teleradiology, and more than 30 percent had an established service. WHO, *Telemedicine*, 2010, 37, 43.
36 Electronic medical records are “generally defined as computerized medical data that hospitals or physicians create to track patients’ health.” Electronic medical records are usually part of electronic health records, which refer to a “digital file capable of being shared across different healthcare settings, and may include such information as demographics, medical history, medications, immunization status, lab results, radiology images, vital signs and billing information.” Accenture, *Making the Case for Connected Health*, 2012, 6. For example, in Denmark, each patient has an individual electronic “medical card” that provides each practitioner with a comprehensive list of prescriptions and treatments. The government is also implementing clinical databases to “monitor quality in the primary care sector.” Commonwealth Fund, *International Profiles of Healthcare Systems*, November 2012, 30.
39 Neglected tropical diseases (NTDs) are a group of diseases endemic to developing countries in Africa, Asia, and the Americas that receive little attention in developed countries but cause significant sickness and death among the poor in low-income populations. The WHO classifies 17 diseases as NTDs, including dengue, leprosy, rabies, and yaws. USAID website, “About the NTD Program,” http://www.neglecteddiseases.gov/about/index.htm (accessed December 5, 2012); WHO website, “Diseases Covered by NTD Department,” http://www.who.int/neglected_diseases/diseases/en (accessed December 5, 2012); WHO, *Telemedicine*, 2010, 15.
physicians. And remote diagnosis or treatment enables service providers to directly treat patients across borders or outsource certain functions, such as medical transcription or radiology readings.40

Governments of many high-income countries continue to support the adoption of IT in their healthcare systems, but face a number of challenges. The slow adoption of health IT in the United States is largely due to market fragmentation within and across states, networks, and care settings.41 Other obstacles include budgetary constraints; resistance on the part of clinicians and end users due to a dislike of change, reluctance to learn new technologies, or concerns about increased liability; increased implementation costs for physicians; and problems with software functionality; and concerns over data privacy and security. 42 Researchers have identified policy elements common to a successful telemedicine program,43 and many countries have implemented some or all of these elements. For example, the United States passed the Health Information Technology for Economic and Clinical Health Act (part of the American Recovery and Reinvestment Act in 2009), which provided incentives for the adoption of electronic health records. However, as of 2011, only 55 percent of U.S. providers had adopted an electronic health record system.44

**Trend among Patients toward Healthcare Consumerism**

Over the past decade, the composition of healthcare services demand has changed as the trend toward healthcare consumerism has intensified. Healthcare consumerism (or consumer-driven healthcare) refers to a shift in the healthcare delivery model, in which patients take a more active role in their healthcare decisions.45 A number of factors have supported this transition, particularly health IT and the Internet, which offer patients access to vast amounts of information that increasingly influence their healthcare decisions.46 Trends in health insurance policies have also supported this shift. In an attempt to contain rising healthcare costs, new insurance products such as healthcare saving accounts and high-deductible healthcare plans increase the exposure of consumers to the true cost of healthcare services, reducing some of the market distortion from the third-party payer system and encouraging consumers to become their own healthcare advocates. As a result, many patients are playing a larger role in determining the quality and cost of care they receive.

---

40 Some European countries engage in formal cross-border resource sharing (for example, the Baltic eHealth program creates a transnational infrastructure which allows shared resources, including teleradiology, between five countries—Denmark, Estonia, Lithuania, Norway, and Sweden). However, cross-border teleradiology is not particularly common in the United States, due to stringent licensing requirements and the lack of coverage by Medicare and Medicaid for services performed outside the United States. Castro, “Explaining International IT Application Leadership,” September 2009, 22, 23; Baltic eHealth website, http://www.baltic-ehealth.org (accessed November 1, 2012).

41 A 2012 Accenture study of the implementation and use of healthcare IT by eight developed countries (Australia, Canada, England, France, Germany, Singapore, Spain, and the United States) found that Spain and England were the leaders in incorporating IT into healthcare. Accenture, *Making the Case for Connected Health*, 2012, 6–7.


43 These factors are a governing body, or national agency, dedicated to development and promotion of telemedicine programs; a national telemedicine policy or strategy; involvement of scientific institutions in development of telemedicine solutions; and a dedicated evaluation process for the national use of telemedicine. WHO, *Telemedicine*, 2010, 50–60.

44 Jamoom et al., “Physician Adoption of Electronic Health Record Systems,” July 2012.


46 Ibid.
In the United States, one result of healthcare consumerism is the rise of retail clinics. Retail clinics are healthcare facilities found in retail stores, grocery stores, or pharmacies. They generally offer a set list of limited services, often provided by a nurse-practitioner, and are open for more hours than a traditional medical office. These clinics are not owned by traditional healthcare companies; in October 2012, the United States’ largest operators of clinics were CVS-owned MinuteClinic (588 clinics), Walgreens (356 clinics), and Wal-Mart (143 clinics). The number of retail clinics in the United States has grown rapidly in recent years, from around 300 in 2007 to nearly 1,200 in 2010, and more consumers are increasingly choosing to receive care from these clinics rather than from traditional healthcare facilities such as physicians’ offices, urgent care facilities, or emergency rooms.

The number of visits to retail clinics grew from 1.5 million in 2007 to nearly 6 million in 2009. The two factors leading consumers to prefer retail clinics are the convenience of longer hours and walk-in appointments, and lower costs. A recent study using data from the three largest retail clinic operators found that over 44 percent of all clinic visits occurred outside of normal physician office hours. Additionally, clinic visits tend to be significantly less expensive than other healthcare visits; estimated savings tend to range between $50 to $279 dollars per visit. Although initially retail clinics targeted the uninsured population, insurance companies increasingly encourage beneficiaries to patronize retail clinics by either requiring only small co-payments or waiving co-payments entirely. Between 2007 and 2009, over 70 percent of all retail clinic patients had some form of either private or public insurance.

The emergence of patient choice and consumerism is also a key driver in the medical travel industry, which relies on patients making their own healthcare decisions. Medical travel, or traveling to seek specific healthcare services, has long existed, as wealthy individuals in developing countries have traveled to receive advanced procedures and treatments from healthcare leaders in the United States and other developed countries. However, in the past decade, middle-class patients have become increasingly able to travel for medical care, both in developed and developing countries, as many countries have positioned their healthcare industries as medical destinations. It is difficult to quantify the number of individuals who travel for care, as there are no comprehensive data available; estimates range from 60,000 to 50 million travelers each year. Despite the lack of consensus over the size of the market, the medical travel industry appears to be growing, as evidenced by the rising number of countries seeking to enter the market and the development of medical travel facilitators and related services providers. Generally, patients who seek care abroad tend to be uninsured individuals seeking

---

47 Deloitte, Retail Clinics, 2008, 5.
50 Ibid.
51 Weinick et al., “Policy Implications of the Use of Retail Clinics,” 2010, 10.
52 Mehrotra and Lave, “Visits to Retail Clinics Grew Fourfold,” 2012.
53 Retail clinics are usually less expensive than other providers for most services, with the exception of vaccinations and prescriptions. For detailed comparisons, see Mehrotra et al., “Retail Clinics, Primary Care Physicians, and Emergency Departments,” September 2008; Thyeson et al., “Use and Costs of Care in Retail Clinics,” September 2008; Weinick et al., “Policy Implications of the Use of Retail Clinics,” 2010.
54 Deloitte, Retail Clinics, 2008, 12.
57 Chee, “Medical Tourism in Malaysia,” January 2007, 3.
58 Upper estimates are based on a 2008 Deloitte study, while lower figures were estimated in a 2008 McKinsey & Co. study, which used a more conservative definition of medical travelers. Lunt et al., “Medical Tourism,” 2011, 14.
affordable care, individuals seeking economical care for uncovered expenses, or informed patients seeking new or advanced treatments either where they are available or where expertise is greater.

**Governments Encourage Healthcare Investment to Meet Rising Demand for Healthcare Facilities**

Many governments seek to expand their facilities and meet rising demand for healthcare services by encouraging private sector investment. Although data are limited regarding the quantity and source of foreign direct investment in healthcare, anecdotal evidence suggests that cross-border investment is growing. For example, in October 2012, UnitedHealth Group, the largest U.S. health insurer, purchased a 90 percent share in Amil, Brazil’s largest health insurer and healthcare provider. During that same month, the Indian hospital group Fortis raised over $400 million in international funds through an initial public offering on the Singapore stock exchange. These deals also highlight a shift in geographic trends.

Although the United States remains the leading destination for healthcare investment activity, the recent trend towards consolidation, coupled with continued economic uncertainty and steady downward pressure on profit margins, has reduced the number of viable opportunities in the U.S. market. Investors are now drawn to emerging markets, which have growing middle classes, expanding health insurance coverage, and a rising incidence of chronic disease. In turn, many governments, such as China, see private investment as a means to expand access to healthcare, and have encouraged privatization and investment. In January 2012, the Chinese government removed equity caps on foreign investment in healthcare institutions and allowed patients insured under the national system (over 400 million individuals) to receive treatment at private hospitals. In March 2012, Beijing’s local government announced preferential taxes and preferential treatment regarding land use and energy consumption (the same afforded state-owned institutions) for private medical institutions. These policies, as well as rapid economic growth, have attracted some private equity firms. In June 2012 Carlyle-backed Concord Medical Holdings purchased a majority share (52 percent) of China’s Chang’an Hospital, and in August 2012, Carlyle bought a 14 percent stake in China’s largest private medical check-up firm.

Developed countries like the United States also have policies favorable to foreign investors. The U.S. federal immigrant investment (EB-5) program was established in 1990 to “stimulate the U.S. economy through job creation and capital investment by foreign investors.” Under the program, U.S. Citizenship and Immigration Services can allocate up to 10,000 visas annually for entrepreneurs who make sizable investments that

---

create a designated number of jobs. Programs such as EB-5 that successfully attract foreign investment provide benefits to both parties and are increasingly seen as a potential source of funding for healthcare facilities. For example, in Hawaii, the Hawaiian Islands Regional Center (an immigrant investment center established under EB-5) is the primary lender in multiple healthcare projects, including a nursing home in Hilo and a hospital center in Maui. Additionally, the Cleveland International Fund is hoping to fund an expansion of Cleveland’s University Hospitals by attracting investors from China, India, and Brazil under the EB-5 program.

**Widespread Shortages of Healthcare Professionals Increase Movement of Healthcare Workers around the World**

Many governments face not only budgetary challenges in meeting rising demand for healthcare services, but also human resource constraints. The United Nations has estimated the global shortfall of healthcare workers at 4.3 million. However, this figure was based on the minimum requirements to meet Millennium Development Goals and thus underestimates total demand for healthcare professionals, as it does not account for shortages in developed countries or for professionals needed to provide services beyond immunizations and childbirth in low-income countries. In many high-income countries, such as the United States, the domestic healthcare workforce has been unable to meet demand for years, and instead has been supplemented with international recruitment. The past decade has seen a rising number of healthcare professionals moving across borders, as more governments have enacted policies and agreements to attract foreign professionals.

The United States is the world’s leading destination for foreign healthcare workers, and continues to pass legislation that facilitates the migration of foreign physicians. In 2010, U.S. demand for physicians exceeded supply by 13,700 physicians, with the greatest shortfall in primary care positions. During that same year, 22 percent of U.S. physicians were graduates of medical schools outside of the United States or Canada.

---

65 The program requires a minimum $1 million investment (or $500,000 in a target employment area, defined as one with high unemployment or a rural area) that creates a minimum of 10 full-time jobs for U.S. workers within two years. U.S. Citizenship and Immigration Services, “Green Card through Investment,” March 30, 2011. “EB-5 Immigrant Investor,” July 3, 2012.


69 The UN’s Millennium Development Goals set a target of 2.28 doctors, nurses, and midwives per 1,000 people. The World Health Organization (WHO) notes that by comparison, the United States has a ratio of 2.42 doctors and 9.82 nurses and midwives per 1,000 people. WHO, World Health Statistics 2012, 128.


72 The United States has the largest number of foreign healthcare workers in absolute terms, although foreign professionals make up a greater share of the workforce in many European countries. O’Brien and Gostin, “Health Worker Shortages and Global Justice,” October 2011.

with the largest share graduating in India.\textsuperscript{74} The United States’ need for healthcare providers continues to grow, driven by rising consumption of healthcare and recent healthcare reform,\textsuperscript{75} and it is projected that U.S. medical schools will not be able to produce enough graduates to meet the demand. As a result, foreign caregivers are allowed to practice in the United States under specific programs. For example, Congress recently extended a visa waiver program which allows U.S.-trained international medical graduates to stay in the United States if they practice in a medically underserved area for three years. To date, an estimated 9,000 physicians have worked under the program.\textsuperscript{76}

Other countries that have not used foreign workers in the past are also changing their laws to encourage foreign workers. For instance, Japan is facing a rapidly aging population that will require many more caregivers in the near future\textsuperscript{77} and so has begun to open its labor markets to foreign healthcare workers. Nurses and caregivers from the Philippines and Indonesia are allowed to work in Japan under trade agreements signed in 2008, and in 2013 Japan is expected to allow Vietnamese healthcare workers to enter as well.\textsuperscript{78} Opportunities such as these are exacerbating healthcare shortages in some other countries, as the potential for higher salaries motivates health professionals to leave even when their home country is experiencing a shortage. For example, Indonesia is a major exporter of nurses to other Muslim countries and throughout Asia, but does not produce enough nurses to meet both domestic and foreign demand for caregivers.\textsuperscript{79} Consequently, Indonesia faces a shortage of healthcare professionals, particularly in rural areas. However, the government continues to maintain and support a policy of sending healthcare workers to foreign markets,\textsuperscript{80} citing benefits such as improved medical skills and expanded job opportunities, while also acknowledging that wage disparities underlie the shortages in remote areas.\textsuperscript{81}

There are differing viewpoints on the impact of healthcare migration. Most frequently, workers move from low-income to high-income areas, whether from rural to urban areas

\textsuperscript{74} Licensing requirements involve passing board exams and an English language test, as well as completing a residency program in the United States. Reportedly, less than 40 percent of foreign-trained physicians who apply are accepted for U.S. residencies. For more information, see Giovannelli, “Foreign-Trained Doctors Kept Out of Practice in US,” April 14, 2011; Krupa, “Foreign-trained Health Professionals Put on Path,” July 25, 2011; Young et al., “A Census of Actively Licensed Physicians,” 2011, 12.

\textsuperscript{75} By 2030, the percentage of the population over age 65 is expected to grow to 20 percent (from 13 percent in 2011) and it is estimated that half the total population will have at least one chronic disease. Both factors will drastically increase the amount of healthcare services consumed. Additionally, the recently passed Affordable Care Act expanded health insurance coverage to an estimated 32 million patients, compounding the increase in demand for healthcare services. USDOC, U.S. Census Bureau, “State and County Quick Facts,” March 14, 2013; Zywiak, “U.S. Healthcare Workforce Shortage,” 2010, 2 (accessed December 13, 2012).

\textsuperscript{76} Krupa, “Congress Extends Visa Waiver Program for IMGs,” October 3, 2012.

\textsuperscript{77} By 2025, it is estimated that one in three Japanese will be over 65 years of age. Matsuyama, “Aging Baby Boomers Face Losing Care,” September 14, 2012.

\textsuperscript{78} Although Japan has opened its labor market, healthcare professionals must pass a difficult examination in Japanese. Thus far only 7 percent of candidates from Indonesia and the Philippines have passed. Matsuyama, “Aging Baby Boomers Face Losing Care,” September 14, 2012; Torres, “Japanese Still Wary of Asian Healthcare Workers,” October 16, 2012.

\textsuperscript{79} The Philippines, the regional leader in outward healthcare migration, produces 78 nurses per 100,000 population, while Indonesia produces only 15. Statistics are based on most recent year available—Indonesia (2008) and the Philippines (2007). Kanchananitcha et al., “Human Resources for Health in Southeast Asia,” 2011, 771, 777.

\textsuperscript{80} Indonesia has signed agreements to send health professionals to Japan and Timor-Leste, and has announced its desire to sign similar agreements with governments in Kuwait, Qatar, Saudi Arabia, Sudan, and other ASEAN countries. In 2012, the Indonesian government reported that requests for Indonesian healthcare professionals from foreign countries will total 13,000 professionals by 2014. Faizal, “RI to Export More Healthcare Workers despite Shortage,” January 7, 2012.

or from developing to developed countries.\textsuperscript{82} This often exacerbates shortages of workers in the neediest areas, leaving rural populations underserved. Additionally, if the government financed their education, workers who migrate permanently represent a lost public investment.\textsuperscript{83} However, at the same time, migration may have positive impacts on a country’s economy through the significant remittances that migrant workers send home. Additionally, if workers migrate for only a limited time, healthcare systems can benefit from their skills and experience on their return; it is argued that some of these workers might not have chosen a healthcare profession without the possibility of migration and higher wages.\textsuperscript{84}

\section*{Trade Trends}

\subsection*{Cross-border Trade}

The United States continued to run a surplus in trade in healthcare services, as cross-border exports of healthcare services (box 4.1) exceeded imports every year from 2007 through 2011 (figure 4.3). In 2011, the United States exported just over $3.0 billion of healthcare services while imports totaled $1.1 billion.\textsuperscript{85} Both imports and exports of healthcare services have grown steadily over the past five years, although both slowed slightly in 2011. Exports grew 5 percent that year, compared to 7 percent annual growth during 2006 through 2010, and imports grew 12 percent in 2011, slower than the annual growth of 15 percent from 2006 to 2010.\textsuperscript{86} Overall, the U.S. trade surplus increased from $1.7 billion in 2007 to $1.9 billion in 2011.

The majority of U.S. trade in healthcare services is likely with regional neighbors.\textsuperscript{87} In 2010 (the most recent year for which data are available), Canada was the largest reported market for U.S. imports and exports of healthcare services,\textsuperscript{88} importing $368 billion of healthcare services from the United States and reporting exports of $98 billion.\textsuperscript{89} Regional trade is supported by limited but growing cross-border coverage by health insurance plans. For example, three programs offered by Canadian insurer Assured Diagnosis, Inc., cover services provided at the U.S.-based Mayo Clinic.\textsuperscript{90} Similarly, in California, insurance plans are available that offer comprehensive healthcare coverage for services provided by private hospitals in the Mexico’s Baja California region.\textsuperscript{91} Additionally, many U.S. hospitals and medical centers position themselves as regional

\textsuperscript{82} WHO, “Migration of Health Workers,” July 2010.
\textsuperscript{83} Ibid.
\textsuperscript{84} See, for example, Docquier and Rapoport, “Globalization, Brain Drain, and Development,” March 2011; WHO, “Migration of Health Workers,” July 2010.
\textsuperscript{86} U.S. imports of healthcare services are expanding more rapidly than exports of such services. However, because imports are growing from a smaller base, the trade surplus continued to grow during 2007 through 2011.
\textsuperscript{87} The BEA does not break down healthcare imports and exports by country. Data reported in the UN Service Trade Database appear to correspond to BEA estimates of cross-border trade, and thus are used to analyze major U.S. markets. However, very few countries report imports and exports of healthcare-related travel expenditure to the United States. Commission staff estimate that country-specific figures represent 20 percent or less of total healthcare imports and exports to the United States. USITC staff calculations are based on data from UN Service Trade Database (accessed February 15, 2013).
\textsuperscript{88} Recent data are not available for U.S. trade with Mexico. However, historical data suggest that in the past, Mexico has surpassed Canada as the leading market for U.S. imports and exports of healthcare services.
\textsuperscript{89} UN, UN Service Trade database (accessed February 15, 2013).
\textsuperscript{90} Hansel, “Mayo Clinic Included in New Canadian Insurance Options,” April 17, 2012.
\textsuperscript{91} Bustamante et al., “United States-Mexico Cross-border Health Insurance Initiatives,” 2012, 75.
BOX 4.1 Understanding available data on trade in healthcare services

Healthcare services are traded via all four modes of services delivery, but data on global trade in these services are limited. Statistics that are available often are not comparable across countries due to diverse methods of healthcare financing, large disparities in pricing, and the absence of an international standard for data collection. Further, trade in healthcare services may be included with trade in other services. For example, healthcare services provided using information and communication technologies may be reported as trade in computer services.

This chapter’s discussion of cross-border trade primarily uses data from the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (USDOC), supplemented by United Nations (UN) data for analysis of specific export markets. The BEA data on cross-border trade in medical services estimate spending on healthcare services purchased abroad (consumption abroad or mode 2) through 2011. The BEA does not provide U.S. bilateral healthcare trade data.

U.S. export figures, or receipts, estimate spending by foreign residents on medical services provided by U.S. hospitals, and include both emergency services required during travel and services for individuals who travel to the United States for the express purpose of receiving medical treatment. Data from a BEA study on patient headcounts and associated charges from medical facilities in major foreign-visitor destinations are used to estimate medical receipts for other U.S. hospitals that are likely to serve smaller volumes of such patients, and then such estimates are extrapolated forward using price indexes each year.

Data on U.S. imports, or payments, estimate medical expenditures by U.S. residents traveling abroad. These statistics are based on estimates of the share of U.S. travelers requiring medical care from foreign providers. Import statistics include spending by U.S. residents on medical travel in Mexico or Canada (i.e., those who travel specifically seeking medical services); for all other destinations, statistics estimate spending on emergency care.

Cross-border trade data reported in the UN Service Trade database likewise estimate spending by those traveling for medical reasons through 2010. However, unlike the BEA, the UN offers information on bilateral trade flows between the United States and selected countries.

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

---

* For example, foreign specialists provide remote consultations using information and communication technologies (mode 1); individuals seek treatment outside their home countries (mode 2); healthcare facilities establish branches in foreign markets (mode 3); and individual medical professionals migrate across borders (mode 4). For a more detailed explanation of the modes of services trade, see box 1.2 on page 1-7.
* BEA also collects data on trade in healthcare services via mode 1, which occurs when the service supplier and consumer remain in their respective countries. Discrete data on such trade are not available, but are included in the subcategory “Other” within “Other business, professional, and technical services.” USDOC, BEA representative, email to USITC staff, October 22, 2008.
* The comprehensive 1995 BEA study used to collect data was updated in 2005. Price indexes from the U.S. Consumer Price Index series are used to extrapolate estimates forward. The resulting export estimates do not include spending on ambulatory treatment or prescriptions received outside the hospital setting. USDOC, BEA, *U.S. International Transactions Accounts*, June 2011, 33; USDOC, BEA representative, email message to USITC staff, October 22, 2008.

destinations for foreign patients. For example, the Baptist Health system in South Florida opened an office in the Cayman Islands in 2009 to facilitate patient outreach, and indicated plans for additional offices in other Caribbean and Latin American countries. Baptist Health treats about 12,000 foreign patients a year, nearly 70 percent of whom come from nearby Caribbean and Latin American countries.

---

Affiliate Transactions

Affiliate transactions illustrate the significance of the U.S. market for global healthcare firms, as well as the growing market power of U.S. firms as they expand abroad. Purchases of healthcare services from U.S.-based affiliates of foreign firms typically exceed sales of healthcare services by foreign-based affiliates of U.S. firms by a substantial amount, although available data are limited. Foreign companies have been more aggressive in expanding into the U.S. market than U.S. healthcare firms have been in expanding into foreign markets,\(^\text{94}\) in part because the U.S. healthcare market has long been the most desirable destination for healthcare investment due to its size. The diversity, availability, and profitability of private sector healthcare firms attract both domestic and foreign merger and acquisition activity, as well as private equity investment.\(^\text{95}\)

It can be challenging for foreign firms to enter the U.S. market, due to state-level regulation and licensing requirements, as well as difficulties qualifying for reimbursement from third-party payers. Nonetheless, foreign firms continue to expand into the U.S. market, either by acquiring U.S. healthcare firms or establishing new U.S. affiliates. For example, in 2007, Indian hospital operator Wockhardt acquired Radiant Research, a U.S. clinical trial services company.\(^\text{96}\) Similarly, Northstar Healthcare, a

---


\(^{96}\) Bureau van Dijk, Zephyr mergers and acquisitions database (accessed February 11, 2013).
Canadian owner and operator of ambulatory surgical centers, acquired majority shares in two U.S. ambulatory surgical centers in 2007. Acquisitions such as these increase services supplied by U.S. affiliates of foreign firms because spending by U.S. consumers at these facilities is now considered a purchase from a U.S. affiliate of a foreign firm.

At the same time, foreign affiliates of U.S. firms have also been increasing their provision of healthcare services in foreign markets, which reached $2.6 billion in 2010 for an annual growth rate of 13.5 percent during the 2006–10 period. Some U.S. healthcare firms see opportunities overseas, while others are driven to consider investing abroad by the need for new revenue streams associated, in part, with the ambiguity surrounding the effects of recent U.S. healthcare reform, continuing downward pressure on reimbursement rates, and limited domestic opportunities. To set up foreign operations, U.S. firms most often either invest in an existing facility or enter into a joint venture with local partners. Between 2006 and 2011, the majority of foreign healthcare operations acquired by U.S. firms were European.

Nevertheless, governments in many emerging economies are seeking to improve their domestic healthcare systems, and this trend has encouraged the expansion strategies of prominent U.S. academic and teaching medical centers. Academic healthcare systems such as those of Johns Hopkins University and the University of Pittsburgh have traditionally led participation in the global market, either through new collaborations to expand education and research or through non-equity forms of investment, such as consulting agreements or alliances to develop healthcare networks. Now these organizations are expanding their global footprint further (box 4.2), increasingly via equity-based cross-border collaborations. For example, since the Chinese government announced plans to expand private hospital beds by 300 percent by 2015, the University of Pittsburgh Medical Center has entered into three joint ventures in China and recently opened a new Beijing office.

---

100 USITC staff calculations, based on data from Zephyr mergers and acquisitions database (accessed February 14, 2013).
BOX 4.2 The growing global footprint of leading U.S. academic and teaching medical centers

Leading U.S. academic and teaching medical centers are increasing their presence in the global healthcare services market by entering into a growing number of international affiliations and partnerships. For example, Johns Hopkins International, which earlier had focused primarily on international consulting, has become a partner in a number of long-term management contracts with hospitals around the world. The Cleveland Clinic, an academic medical center in Cleveland, Ohio, is in the process of building a hospital in the United Arab Emirates, and the University of Pittsburgh Medical Center manages and operates service-providing centers throughout Europe and Asia.

Many academic medical centers have traditionally entered into international collaborations for training and education purposes. However, new international strategies are increasingly motivated by profit. Most of these organizations previously focused exclusively on exporting healthcare services to foreign patients who traveled to the United States seeking treatment from these providers based on their advanced expertise and good reputations. However, after September 11, 2001, it became more challenging for patients, particularly those from the Middle East, to get visas for the United States. Additionally, as the global medical travel industry developed, U.S. providers faced increased competition for international patients. By partnering with foreign institutions, U.S. providers were able not only to capture a growing share of medical travelers, but also to bolster their reputations in the global market, which in turn draws foreign patients to their U.S. facilities for specialized care.

Outlook

The trade outlook for the healthcare industry in the United States remains uncertain due to the ambiguity over how the U.S. industry and patients will respond to the increased demand generated by the PPACA. In particular, it is unclear how the industry or patients will respond to this increased demand. Rising demand for primary care is expected to further strain the U.S. healthcare system and worsen the shortage of primary care physicians. One study predicts that the rise in the insured population will increase demand for primary care by between 15 and 24 million visits, which would require between 4,300 and 6,900 more primary care physicians. Hofer, Abraham, and Moscovice, “Expansion of Coverage under the Patient Protection and Affordable Care Act,” March 2011, 69. Some sources speculate that implementation of the PPACA will encourage medical travel. Although expansion of health insurance or moderation of healthcare costs could reduce demand for foreign procedures from cost-conscious and uninsured patients (the primary categories of medical traveler), there is some speculation that the PPACA will have little effect on demand for elective procedures (such as dental care) that remain uninsured and could increase demand for foreign services if wait times increase due to the influx of newly insured patients. Further, resource bottlenecks in the United States could encourage more major U.S. health insurers to include foreign providers in their networks, despite the fact that few patients are using the foreign provider options offered thus far. Deloitte, “Medical Tourism: Update and Implications,” 2009, 5; Lunt et al., “Medical Tourism: Treatments, Markets and Health System Implications,” 2011, 17.
healthcare services in the United States by expanding health insurance coverage to 33 million previously uninsured individuals by 2022.\(^{106}\) Globally, healthcare spending is forecast to grow moderately in the near future, as slow growth in developed economies tempers more rapid spending increases in fast-growing developing economies.\(^{107}\) However, demand for healthcare services across the globe is expected to rise as populations increasingly become older, wealthier, and subject to more chronic diseases. For example, in the United States, it is estimated that the population over the age of 65 will nearly double by 2030.\(^{108}\) As a result, both developed and developing economies could face a shortfall in healthcare financing in coming years, requiring other ongoing reforms of healthcare systems, such as limitations on care or increased contributions from patients.\(^{109}\) These budgetary considerations are likely to continue to drive the adoption of healthcare IT, as governments and health insurers alike seek to cut costs further through remote monitoring and care.\(^{110}\)


\(^{108}\) It is estimated that the U.S. over-65 population will reach 72.1 million people in 2030, up from 39.6 million in 2009 (the last year for which data are available). U.S. Department of Health and Human Services, Administration on Aging, “Aging Statistics,” n.d. (accessed February 19, 2013)


Bibliography


American Association of Medical Colleges. “Physician Shortages to Worsen without Increases in Residency Training.” n.d.


———. The Right to Health in the Constitutions of Member States of the World Health Organization South-East Asia Region, 2011.


CHAPTER 5
Legal Services

Summary

The global legal services market grew modestly in 2011, with markets in the Asia-Pacific region outperforming the U.S. and European markets. Increasing growth rates for U.S. cross-border trade in 2011 reflected recovery from the economic downturn and rising demand for legal services. Although U.S. imports of legal services grew much faster, in percentage terms, than U.S. exports, the U.S. legal services trade surplus grew in 2011. U.S. legal services exports were concentrated in Europe, Japan, and Canada, but the fastest-growing destinations were South and Central America and the Middle East. In response to slower demand in developed-country markets, law firms have opened new offices and merged with other law firms in fast-growing economies across Asia, Africa, Latin America, and the Middle East. Sales by foreign affiliates of U.S. law firms continued to exceed purchases from U.S. affiliates of foreign law firms, but after growing from 2006 to 2009, affiliate transactions in both directions declined in 2010. Europe continued to be the largest market for U.S. foreign affiliate sales of legal services, though its share declined from 2006 through 2010. The economic downturn accelerated certain trends in the U.S. legal services market, such as the rise of nontraditional suppliers and the internationalization of law firms, which have increased competition among legal services providers.

Introduction

Legal services are a key input to international commerce: they facilitate trade and investment by increasing predictability and decreasing risk in business transactions. In recent years, overall demand for legal services was depressed by the economic downturn; the global legal industry experienced a decline in 2009, and growth fluctuated in 2010 and 2011. Nonetheless, growth has varied across geographic regions, causing law firms to expand into markets with rapidly growing demand for legal services. This chapter discusses (1) the restructuring and growing competitiveness of the U.S. legal services industry since the downturn, including the rise of nontraditional providers of legal services; (2) the intense competition for employment in the U.S. legal services industry, especially among new graduates; (3) and the increasing internationalization of law firms.

Market Conditions in Global Legal Services

As noted above, the global legal services market fluctuated during 2008–11. Overall, the market grew at a 3 percent compound average annual rate between 2007 and 2010, but slowed to only 0.03 percent between 2010 and 2011 (when the market grew from

---

1 UN, Manual on Statistics of International Trade in Services (MSITS), 2010, 67; USDOC, U.S. Census Bureau, “Industry Statistics Sampler” (accessed February 26, 2013). MSITS defines legal services as “legal advisory and representation services in any legal, judicial and statutory procedures; drafting services of legal documentation and instruments; certification consultancy; and escrow and settlement services.”

$623.1 billion to $623.3 billion).\(^3\) Annual growth rates during these years varied widely by region; Europe’s legal services market grew by 4 percent in 2011 (compared to 3 percent during 2007–10), while the U.S. market declined by 7 percent in 2011 (compared to 2 percent annual growth during 2007–10).\(^4\) Legal services markets in the Asia-Pacific region outperformed the U.S. and European markets during this period, growing by 5 percent in 2011 (equal to the region’s average annual growth rate during 2007–10).\(^5\) Expanding middle classes with rising incomes are driving growth in Asian markets.\(^6\)

Although the United States continued to have the largest single-country legal services market in 2011, its share of the world market has declined in recent years as a result of growth abroad. In 2007, the United States and Europe accounted for 43 percent and 33 percent, respectively, of the global legal services market, while the Asia-Pacific region accounted for 12 percent. However, in 2011, the United States held only 39 percent, while Europe, the Asia-Pacific, and the rest of the world increased their shares modestly (rising from 33 to 34 percent, 12 to 14 percent, and 12 to 13 percent, respectively).

Firms in the United States and the United Kingdom accounted for 76 and 14 of the world’s 100 top-grossing firms, respectively, and all of the world’s top 10 law firms in 2012 (table 5.1).\(^7\) A recent flurry of mergers has resulted in new entrants on the top 100 list and increased the concentration of revenue, especially among the top 25 firms.\(^8\) The largest global firms, where the average number of lawyers per firm was over 1,100 in 2011, are also largely U.S. and UK firms, but include six Australian firms and five Chinese firms.\(^9\) A recent merger between an Australian and a Chinese firm created a

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Country</th>
<th>Gross revenue (million $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baker &amp; McKenzie</td>
<td>U.S.</td>
<td>2,313</td>
</tr>
<tr>
<td>2</td>
<td>DLA Piper</td>
<td>U.S.</td>
<td>2,247</td>
</tr>
<tr>
<td>3</td>
<td>Skadden, Arps, Slate, Meagher &amp; Flom</td>
<td>U.S.</td>
<td>2,165</td>
</tr>
<tr>
<td>4</td>
<td>Latham &amp; Watkins</td>
<td>U.S.</td>
<td>2,152</td>
</tr>
<tr>
<td>5</td>
<td>Clifford Chance</td>
<td>U.K.</td>
<td>2,090</td>
</tr>
<tr>
<td>6</td>
<td>Linklaters</td>
<td>U.K.</td>
<td>1,936</td>
</tr>
<tr>
<td>7</td>
<td>Allen &amp; Overy</td>
<td>U.K.</td>
<td>1,898</td>
</tr>
<tr>
<td>8</td>
<td>Freshfields Bruckhaus Deringer</td>
<td>U.K.</td>
<td>1,827</td>
</tr>
<tr>
<td>9</td>
<td>Kirkland &amp; Ellis</td>
<td>U.S.</td>
<td>1,750</td>
</tr>
<tr>
<td>10</td>
<td>Hogan Lovells</td>
<td>U.S.</td>
<td>1,665</td>
</tr>
</tbody>
</table>


Notes: Revenue figures refer to firms’ most recently completed fiscal year.

---


\(^5\) MarketLine, “Legal Services in Asia-Pacific,” October 2012, 8. The legal services market in countries in the Asia-Pacific region has been growing from a smaller base in comparison to the United States and Europe: in the Asia-Pacific, the 2011 market value was $85.1 billion; in Europe, $209.4 billion; and in the United States, $246.2 billion. The term “Asia-Pacific” comprises Australia, China, India, Indonesia, Japan, New Zealand, Singapore, the Republic of Korea, Taiwan, and Thailand.


\(^7\) American Lawyer, “The 2012 Global 100,” October 2012. Among the top 100 firms by gross revenue, there are also 6 Australian firms and 1 firm each from Canada, France, Spain, and the Netherlands.


\(^9\) Among the largest firms by number of lawyers, there are also three French, two Canadian, two Spanish, and one Dutch firm.
company with approximately 1,700 lawyers, which will likely place the firm high in future rankings. Recent cross-border merger activity has coincided with new office openings in foreign markets, illustrating the continuing globalization of large law firms.

**Demand and Supply Factors**

**The U.S. Legal Services Industry Is Restructuring after the Economic Downturn**

The economic downturn significantly affected the U.S. legal services industry. It impacted trade flows (see “Trade Trends” below) and ushered in changes in firm structures, practices, and industry composition. After averaging 4 percent growth during 2005–08, U.S. demand for legal services declined in 2009 and grew only modestly thereafter, rising by 0.5 percent in 2012. From 1986 (the first year for which data are available) until the downturn, revenue per lawyer at the 100 highest-grossing firms steadily increased, then declined in 2008 and leveled off thereafter. Productivity in U.S. law firms also fell in 2008, and despite staff cuts in 2009 and 2010, productivity has stagnated. In 2011, the 100 highest-grossing law firms saw increases in gross revenue and revenue per lawyer, but performance diverged between the top and bottom 50 firms. Similarly, among a broader set of firms, there was positive average growth in 2012 but large variance in performance.

Underlying market trends—including the rise of nontraditional service providers, the growing role of in-house counsel, and technology-driven commoditization of legal services—have driven competition among the supply of legal services and increased the bargaining power of clients. Nontraditional providers of legal services include legal process outsourcers as well as other types of companies, discussed in more detail below. In-house legal teams at business firms handle legal tasks and outsource them as needed. “Commoditization” refers to the creation of a legal package or another legal consumable made available online for the end user to purchase from a number of potential suppliers. Commoditized legal goods lie at the opposite end of the spectrum from “bespoke” legal services, which are tailored for specific cases or clients.

---

10 Altman Weil, “2012 Law Firms in Transition Survey,” 2012, 6. In a recent survey of 792 U.S. law firms with 50 or more lawyers, 90 percent of respondents from firms with over 250 lawyers indicated they believed “the recession served as a ‘permanent accelerator of trends that already existed.’”
12 Henderson, “Rise and Fall,” June 2012.
13 Georgetown Law, “2013 Report on the State of the Legal Market,” n.d., 4 (accessed February 21, 2013). Productivity is measured as the ratio of the total number of billable hours to the total number of lawyers in each firm.
19 Ibid., 29.
Stagnating demand and productivity have been particularly important in creating a more challenging and competitive environment for big law firms. In the past, firms typically downsized the number of their associates, but now firms are placing higher performance expectations on partners: entering into equity partnerships increasingly depends on the candidate’s ability to generate business, and equity partners with lower productivity may be de-equitized or asked to leave. Among the firms responding to American Lawyer’s 2012 annual survey, 45 percent said they had de-equitized partners in 2012 and 46 percent plan to de-equitize partners in 2013, significant increases compared to the previous year’s survey.

Other trends that have increased competitiveness in the supply of legal services include the emergence of nontraditional providers of legal services and a rise in the use of alternative fee arrangements. Nontraditional providers of legal services include firms that carry out tasks such as document review at lower prices than law firms. For example, Axiom, originally a firm that placed attorneys at corporations on a temporary basis, recently hired a staff of attorneys to handle typically outsourced work. Axiom is offering higher-tier legal services as well, though it faces some restrictions on the type of work it can do as it is not a law firm. Additionally, in the past a client would likely turn to one firm to handle all aspects of litigation; now they may turn to a nontraditional vendor to handle the discovery piece of the litigation and thereby disaggregate their legal needs. Finally, the market for alternative fee arrangements (such as charging flat fees for particular services and other billing arrangements not based on hourly rates) has also grown since the economic downturn as corporations seek to reduce their legal costs. Such alternative fee arrangements offer incentives for efficiency and can increase cost savings and predictability. A survey of 218 firms and 206 corporate law departments found that although traditional billing arrangements still dominate, alternative arrangements are increasingly common: between 2010 and 2011, 63 percent of firms and 50 percent of legal departments saw a rise in such arrangements, and about three-quarters of both firms and departments expect they will increase further by 2016.

---

20 Most of the survey results in this paragraph refer to the participating firms among the 200 highest-grossing U.S. law firms.
28 Industry representative, telephone interview by USTIC staff, May 14, 2012.
29 Smith, “Companies Reset Legal Costs,” April 8, 2012; ALM Legal Intelligence, “Speaking Different Languages,” April 2012. According to the ALM Legal Intelligence article (page 10), a flat fee arrangement calls for the client to pay an agreed-upon amount of money for a given legal task, noting that “The firm, not the client, assumes the risk of cost overruns.” Such an arrangement “encourages firms to perform distinct pieces of work efficiently.” The discussion includes a list of alternative fee arrangements.
30 ALM Legal Intelligence, “Speaking Different Languages,” April 2012, 7.
31 Ibid., 6.
Competition in the U.S. Legal Employment Market

Recent U.S. law school graduates face a threefold quandary. While their law school debt is high and growing, the number of high-paying legal jobs has declined, and the oversupply of graduates relative to available jobs is projected to continue, sharpening job competition in the industry. The proportion of jobs at law firms with more than 250 lawyers (which typically pay higher salaries than smaller firms) declined from 33 percent to 21 percent between 2009 and 2011, and correspondingly the median starting salary for the graduating class of 2011 fell about 17 percent during that time. Additionally, there was a wide disparity between high job placement rates for graduates of top-tiered schools and low placement rates (often under 50 percent) for graduates of lower-tiered schools.

Legal services employment is anticipated to grow by 10 percent between 2010 and 2020—from 728,200 to 801,800—but not enough to accommodate the 45,000 students graduating from law school each year. While demand for legal services will not diminish, demand growth for lawyers will be constrained by the increased use of paralegals, nontraditional providers, and other alternatives to lawyers.

Partly for these reasons, law schools have seen declining applications; the number of applicants dropped by 12 percent from 2010 to 2011, and preliminary statistics show a 15 percent drop in first-year enrollment between 2010 and 2012. The combination of

---

32 Ninety percent of law students rely on debt to finance law school, and student loan debt among private law school graduates has risen from an average of $70,000 in 2001 to $125,000 in 2011 (Bronner, “Law Schools’ Applications Fall,” January 30, 2013). It is reported that average law school debt surpasses $100,000; see Tamanaha, “How to Make Law School Affordable,” May 31, 2012. The figures for 2010 show average debt for 85 percent of law graduates at $98,500, with average debt exceeding $120,000 for graduates at some schools; see Henderson and Zahorsky, “The Law School Bubble?” January 1, 2012 (this article also discusses the Department of Education’s direct-lending program). The debt and uncertain job prospects faced by law school graduates has prompted some to question the return on investment from legal study (especially at lower-tier schools); see Stevens, “Will Law School Students Have Jobs After They Graduate?” February 21, 2013.


34 Bronner, “Law Schools’ Applications Fall,” January 30, 2013. The statistic on job placement comes from the American Bar Association (ABA), which now requires law schools to report specific job-placement data, including “whether graduates are in jobs funded by the schools, and whether graduates are in positions that require bar passage, or for which a J.D. is an advantage, and whether jobs are long-term or short-term.” Palazzolo, “Report,” January 17, 2012. These changes follow lawsuits against law schools alleging that law schools have distorted information about their graduates’ employment and salaries. According to Pearson and Milford (“New York, Chicago Law Schools,” February 1, 2012), as of February 2012, about 15 U.S. law schools had been sued over such allegations, although two of these lawsuits were dismissed in 2012. See Lattman, “9 Graduates Lose Case against New York Law School,” March 22, 2012; Phipps, “Cooley Law Grads’ Lawsuit Dismissed,” July 20, 2012.


38 Industry representative, telephone interview by USTIC staff, May 14, 2012.


rising law school costs and dim job prospects for new graduates has led to what some have called a crisis in U.S. legal education. As a result, a number of legal education reforms have been proposed that may offer more practical legal training at reduced cost.

**Continuing Globalization of Law Firms**

The increasing globalization of law firms stems from two factors. Presence in foreign markets allows firms to better provide services to international clients. And, by expanding into higher-growth markets in Africa, Asia, Latin America, and the Middle East, globalization helps firms offset relatively low growth in demand for legal services in the United States and Europe.

Law firms expand internationally by opening new offices and executing cross-border mergers. In 2012, U.S. law firms opened 56 new offices in foreign markets: 28 in Asia (primarily China and the Republic of Korea [Korea]), 15 in Europe (primarily Germany and Russia), 6 in the Middle East and Africa, and 7 in Latin America and the Caribbean. In some cases firms have entered these markets following liberalization (see “Trade Trends” below).

Mergers offer a faster route to international expansion than opening a new office, but hinge on the ability to successfully meld two firms together. In 2012, 96 cross-border mergers were announced, many more than in previous years. For example, in March 2012, China’s King & Wood merged with Australia’s Mallesons Stephen Jaques to form the firm of King & Wood Mallesons, the first international merger for a Chinese law firm. Among the top 100 global firms by revenue, many have pursued mergers with firms in Australia, as the country is seen as a point of entry into Asia (and especially China). These mergers commonly result in looser organizational structures called vereins, in which merged entities remain financially independent. Mergers have also increased concentration in the international legal services market.

---

47 Liberalization means the relaxation or elimination of legal barriers to trade and investment.
49 Georgetown Law, “2013 Report on the State of the Legal Market,” n.d., 8 (accessed February 21, 2013). The number of the previous year’s mergers were not available, but were reported as being “substantially more [in 2012] than in any prior year.” In another publication, mergers are reported for previous years (48 in 2009, 44 in 2010, and 54 in 2011) and apparently refer to completed mergers “outside the U.S.,” this term appears to mean cross-border mergers, including U.S. law firms’ mergers with law firms from other countries. Hildebrandt Institute, “Law Firm Merges Rebound Strongly in 2011,” January 4, 2012. Also see Smith, “Stark Choice for Lawyers,” January 20, 2012.
52 Ibid.
Trade Trends

Cross-border Trade

U.S. imports of legal services grew at a much higher rate than U.S. exports in 2011, but because U.S. imports increased from a relatively small base, the U.S. legal services trade surplus grew to $5.7 billion (figure 5.1) (box 5.1). Overall, U.S. cross-border exports of legal services increased by 4 percent to $7.5 billion in 2011, mirroring the annual growth rate of 4 percent from 2007 through 2010. U.S. imports of legal services increased by

FIGURE 5.1 Legal services: U.S. cross-border trade resulted in a trade surplus each year during 2007–11


53 Both imports and exports decreased in 2009 and 2010, with imports decreasing at a higher rate than exports in those years. This decreased the base level of U.S. imports in 2010, and consequently, the higher rate of import growth in 2011 marginally depressed the growth of the U.S. legal services trade surplus. The surplus grew by 0.9 percent in 2011, as compared with annual growth of 5.1 percent during 2007–10. Trade data in this section are derived from USDOC, BEA, Survey of Current Business, October 2012; USDOC, BEA, “Table 7” (accessed November 26, 2012); USDOC, BEA, “Table 9” (accessed November 30, 2012); UDOC, BEA, “Table 10” (accessed November 26, 2012).
This chapter’s data on cross-border trade and affiliate transactions are prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (USDOC). Data on legal services capture services provided when legal professionals travel abroad to provide services to clients, when clients travel abroad to engage the services of foreign attorneys, or when legal documents or advice are exchanged across national borders via the postal service, fax transmissions, the Internet, or other means. Data are collected through surveys broken down by the type of service provided, and companies report their sales of legal services, defined as transactions involving “legal advice or other legal services.” The data do not differentiate among the specific categories of legal services that are traded. Cross-border sales of legal services therefore encompass all legal services rendered by U.S. companies through cross-border channels, irrespective of whether companies are law firms. For example, legal services rendered by a corporation’s in-house counsel would be captured in cross-border trade data (though in-house attorneys would more commonly be dispensing advice internally).

BEA data on legal service affiliate transactions capture sales by foreign legal services affiliates of U.S. law firms and purchases from U.S. affiliates of foreign law firms. These data are also collected through surveys, but they are categorized based on the industry classification of the affiliate, rather than the type of service provided. Thus, sales of legal services by foreign affiliates of U.S. firms include only sales by affiliates that are classified under NAICS code 5411 (legal services). Consequently, the data may theoretically exclude sales by affiliates of firms in other industries that also provide legal services or include sales by legal services affiliates with secondary activities in another industry. However, neither scenario is common in practice.

---

**Trends in cross-border trade reflect the impacts of the economic downturn and slow recovery in 2011: both imports and exports declined in 2009 and 2010, and exports in 2011 ($7.5 billion) were just above the 2008 level ($7.3 billion), while 2011 imports ($1.8 billion) were just under the 2008 level ($1.9 billion).**

---

**As a fraction of gross output in legal services ($269.6 billion in 2011), exports ($7.5 billion in 2011) are relatively small. Data on gross output are reported by USDOC, BEA, “Gross Output by Industry” (accessed May 8, 2013).**
exports of legal services are concentrated among a small number of foreign markets. In 2011, the top five export markets for legal services accounted for 50 percent of total U.S. exports of such services, down from 55 percent in 2007. The United Kingdom and Japan were the two leading export markets in 2011, accounting for 16 percent and 14 percent of such exports, respectively (figure 5.2), while Canada, Germany, and Switzerland also ranked in the top five.\textsuperscript{55} Other notable single-country export markets in 2011 included China, Korea, and the Netherlands.

**FIGURE 5.2** Legal services: The United Kingdom was the leading market for U.S. cross-border exports of legal services in 2011

![Bar chart showing trade balance and exports for five countries: United Kingdom, Japan, Canada, Germany, China.]


Although regional shares of U.S. legal services exports remained relatively steady in the recent period, there were notable differences in rates of growth.\textsuperscript{56} From 2007 through 2011, U.S. legal services exports to Africa and Europe grew the slowest (6 percent and 11 percent, respectively); by contrast, exports to the Asia-Pacific region grew by 18 percent, exports to South and Central America grew by 36 percent, and exports to the Middle East grew by 97 percent. Within the regions showing rapid growth during this

\textsuperscript{55} In 2007, the top five export markets were Canada, France, Germany, Japan, and the United Kingdom. In 2011, Switzerland had displaced France, becoming the fifth-largest export market.

\textsuperscript{56} Europe’s share declined from 51 percent in 2007 to 49 percent in 2011, South and Central America’s share increased from 4 percent to 5 percent, and the Middle East’s share increased from 3 percent to 5 percent. The Asia-Pacific’s share remained the same during 2007–11 (30 percent), as did Africa’s (1 percent) and Canada’s (8 percent).
period, seven countries—Chile, India, Indonesia, New Zealand, Saudi Arabia, Singapore, and Thailand—experienced especially high rates of growth in U.S. legal services exports. 57

As noted earlier, fast-growing markets in Asia, Africa, Latin America, and the Middle East have attracted international law firms seeking to diversify away from developed markets with slower demand growth. 58 For example, while only a handful of U.S. law firms have a physical presence in Africa, most U.S. firms with an international focus are seeking to increase their involvement in Africa-related matters, and some are providing cross-border services to the region. 59

Liberalization in certain markets may ease entry to foreign markets and affect legal services trade. For example, Korea recently implemented free trade agreements with the European Union and the United States that contained provisions removing barriers to trade in legal services. 60 Additionally, an Indian high court ruled that foreign lawyers are permitted to provide advice on international law or international arbitration in India on a “fly in, fly out” basis (though foreign firms are not permitted to establish a presence or practice Indian law). 61 There has also been liberalization in the legal services markets in Israel and Malaysia. 62

Five countries accounted for more than half (56 percent) of U.S. legal services imports in 2011: the United Kingdom (21 percent), Japan (10 percent), Canada (10 percent), Germany (9 percent), and China (5 percent) (figure 5.3). The share of the top five markets remained mostly unchanged from 2007, when those same countries accounted for 55 percent of U.S. legal services imports. Regional shares of U.S. legal services imports also remained fairly similar from 2007 through 2011, with the exception of the Asia-Pacific’s share (which increased from 28 percent in 2007 to 31 percent in 2011). Growth rates during that time were highest in the Asia-Pacific, Middle East, and African regions. The source countries with the highest 2007–11 growth rates were China, India, Malaysia, New Zealand, the Philippines, Saudi Arabia, Thailand, and Venezuela. 63

---

57 Each of those countries accounted for less than 1 percent of total U.S. legal services exports in 2011. Other markets with growth rates of 30 percent or higher included Argentina (39 percent), Brazil (43 percent), Belgium-Luxembourg (32 percent), Mexico (34 percent), Norway (232 percent), Spain (38 percent), and Switzerland (63 percent).


60 See Ramstad, “Justice Ministry Approves First Foreign Lawyers,” May 7, 2012; Thomas, “McDermott to Open Seoul Law Practice Following Trade Agreement,” February 14, 2012. The free trade agreement between Korea and the United States includes liberalizing provisions related to legal services (see United States-Korea Free Trade Agreement, Annex II: Non-Conforming Measures for Services and Investment, 44–45). For example, U.S. law firms are allowed to establish foreign legal consultant offices, and U.S.-licensed attorneys are permitted to provide legal services regarding international law and laws of their home jurisdiction. Other provisions permit foreign legal consultant offices to enter into “cooperative agreements” with Korean law firms and permit U.S. law firms to form joint ventures with Korean law firms.


63 A wider group of markets with growth rates of 30 percent and higher include Australia (43 percent), Belgium-Luxembourg (43 percent), Brazil (31 percent), Hong Kong (33 percent), Italy (47 percent), and Korea (37 percent).
Affiliate Transactions

Sales by foreign affiliates of U.S. law firms (foreign affiliate sales) greatly exceeded sales by U.S. affiliates of foreign law firms in recent years (figure 5.4). Nonetheless, foreign affiliate sales declined in 2010, falling by 2 percent to $5 billion. The 2010 decline in foreign affiliate sales growth stands in stark contrast to their average annual growth.
rate of 24 percent from 2006 through 2009. In 2010, Europe accounted for 73 percent of foreign affiliate sales, led by the United Kingdom (34 percent), France (11 percent), and Germany (10 percent). Japan, with 7 percent, was the largest non-European market for foreign affiliate sales. The most significant change in these shares since 2006 is the decline in the European share (down from 80 percent in 2006) and the rise of the share of other countries, from 12 percent in 2006 to 18 percent in 2010.\textsuperscript{64}

Foreign affiliate sales growth has coincided with growth in U.S. direct investment abroad in the legal services sector. Investment abroad by U.S. law firms increased by 37 percent in 2011 and rose at an average annual rate of 16 percent from 2007 through 2010.\textsuperscript{65} On average, U.S. direct investment abroad was highest in Latin America, Africa, and the Asia-Pacific region between 2009 and 2011.\textsuperscript{66}

Although country-specific data on affiliate sales are available for only a small number of countries, including Canada, some European countries, Australia, and Japan, anecdotal information suggests that certain markets have become increasingly important for international law firms. For example, Singapore has emerged as an attractive market from which foreign law firms may provide legal services to other parts of Asia,\textsuperscript{67} and the country recently announced it will accept additional applications from foreign firms

\textsuperscript{64} Other countries include those outside Europe, Canada, Latin America and other Western Hemisphere, Australia, and Japan.
\textsuperscript{65} USDOC, BEA, Survey of Current Business, September 2012, 64–66, table 15.
\textsuperscript{66} Ibid., 43–45, tables 8.1–8.3. Country or regional data on direct investment abroad are not available for legal services.
seeking to provide advice on Singapore law. Mexico, with a growing economy, expanding middle class, burgeoning domestic investment opportunities, and increasing outbound investment into other Latin American countries, has also recently attracted foreign law firms, and an increasing number of U.S. firms are establishing a presence there.

U.S.-owned foreign affiliate sales of legal services in 2006–09 grew at a faster pace than domestic purchases of legal services from U.S. affiliates of foreign law firms in 2007–09. During 2010, the latest year for which affiliate data are available, purchases from U.S. affiliates actually declined by 4 percent to $111 million, in contrast to the average annual increase of 5 percent from 2007 through 2009. Purchases had grown only modestly in the previous year (0.9 percent in 2009). This pattern resembles trends in cross-border imports, for which growth declined in both 2009 and 2010.

Outlook

The legal services industry will likely continue to see increases in the use of alternative fee arrangements and nontraditional providers of legal services. A majority of respondents to a survey of U.S. law firms indicated that they had not changed how they conducted business in 2012 in order to increase efficiency, but that such changes were likely in the future. A majority of respondents to a 2012 survey of leading law firms said that they expected price competition, commoditization of legal work, non-hourly billing, fewer equity partners, more contract lawyers, lower profits per partner, outsourcing of legal work, and smaller first-year classes at law schools to become more common.

Most observers expect demand, revenue, and profits to increase only modestly in the U.S. legal services industry, while competition promises to be more intense. Firms that adjust their business structures will be most likely to succeed when the U.S. economy strengthens. Foreign markets will continue to be attractive, and demand for legal services in higher-growth regions like Asia will become increasingly important. Cross-border mergers will likely continue, as firms combine practice strengths (such as expertise in a particular industry) with global reach. However, international expansion has not necessarily led to higher profits, and emerging economies may not stimulate the global demand for legal services to the same extent as in the past.

---

69 Smith, “Law Firms Follow Business to Mexico,” February 21, 2012. For more specific information on the Mexican market (e.g., the insurance market and the relative ease of conducting business in the market for law firms) see Orlik, “DLA’s Mexico Entrance,” March 9, 2012.
70 Data on purchases from foreign-owned U.S. affiliates were not available for 2006.
72 Ibid., i.
Bibliography


http://www.americanlawyer.com/PubArticleTAL.jsp?id=1202560242148&Disruptive_Innovation (subscription required).


http://www.americanlawyer.com/PubArticleTAL.jsp?id=1202555054300&Rise_and_Fall (subscription required).

http://www.abajournal.com/magazine/article/the_law_school_bubble_how_long_will_it_last_if_law_grads_cant_pay_bills/.


———. Bureau of Economic Analysis (BEA). *Survey of Current Business* 92, no. 9 (September 2012).


CHAPTER 6
Services Roundtable

The Commission hosted its sixth annual services roundtable on November 13, 2012, with Commission Chairman Irving A. Williamson presiding and Commissioners Meredith Broadbent and Shara L. Aranoff moderating. These roundtables are held to encourage discussions among individuals from government, industry, and academia about important issues affecting services trade. This year’s discussion focused on the relationship between services liberalization and regulation, as well as the prospects for upcoming services trade agreements.

Services Liberalization and Regulation

The panel discussed the impact of regulations on the provision and consumption of services. One participant pointed out that the quantity of services regulations is not necessarily related to their quality; for example, life insurance is not only a highly regulated industry, it is often a well-regulated one, inasmuch as governments focus on consumer protection and market stability while maintaining neutrality between domestic and foreign companies. On the subject of regulations that discriminate against foreign companies, another participant noted that state-owned enterprises (SOEs) are a significant impediment to liberalization, since governments try to exclude SOEs from regulations and international standards. For example, governments concerned about declining revenue from postal delivery services have tried to insulate such services from competition.

The panel considered whether countries’ reluctance to liberalize services may be due to concerns that they have too little regulatory capacity to manage increased competition. One participant expressed a wish that countries could be convinced that liberalization implies neither deregulation nor the regulation of formerly unregulated sectors. Another panelist noted that regulations designed to ensure market access address only one type of market failure—specifically, concentration due to economies of scale in industries like telecommunications and logistics, which results in incumbents controlling infrastructure; other types of market failures are not covered under market access discussions. The participant pointed out that while the General Agreement on Trade in Services (GATS) ensures that regulations will not undermine commitments to expand market access (such as commitments to allow foreign telecommunication firms to access essential facilities), GATS does not address pure anticompetitive practices, such as the use of licensing and certification procedures for protectionist purposes.

The panel considered the question of countries’ capacity to regulate. One participant said that developing countries seek rapid improvements in infrastructure services (especially finance, insurance, logistics, and telecommunications), and argued that these services need to be appropriately regulated before liberalization can occur. The participant cited Zambia, where liberalization did not necessarily lead to improved access to services, as an example of a country that prematurely liberalized without having enough prudential regulations in place. Another participant added that financial liberalization can shock domestic banking systems, as local firms often cannot compete with foreign firms that
rely on revenue streams from their home-country operations. The panel discussed whether development requires not just the absence of access-impeding regulations but frameworks to ensure that regulators are not captured by oligopolistic interests that can appropriate the gains from liberalization. One participant suggested that there is no obviously optimal regulatory sequencing for industries like financial services and telecommunication, and it is difficult for countries to pinpoint the moment when they can safely liberalize.

Participants went on to discuss the diversity in size, development level, regulatory capacity, and reliance on SOEs of countries involved in trade negotiations. One participant noted that even among countries that are members of the Organization for Economic Co-operation and Development (OECD), regulations differ markedly (e.g., some countries do not significantly regulate professional services), and there are increasing regulatory divergences in industries like telecommunications as such services become more Internet-based. Another participant pointed out that low-income countries are very different from middle-income countries; for example, some low-income countries have not regulated cross-border banking at all, as they haven’t had the resources to address it, while most middle-income countries have done so. The panelists contrasted informal retail sectors in sub-Saharan Africa, which are largely unregulated, to the retail sector in India, where regulatory measures block foreign entrants. One participant emphasized that low-income countries do not lack the will to regulate services optimally—in fact they are more interested in services and services competitiveness than they are often given credit for—but they lack expertise. The participant drew the inference that incremental liberalization can pave the way for incremental efficiency gains and incremental development in low-income countries.

The panel discussed ways of standardizing regulations across countries. Examples offered by the participants included UN advisory committees that help countries set financial regulations in accordance with anti-money-laundering guidelines; the International Telecommunication Union, which promotes conversations among regulators that can lead to best practices; and mutual recognition agreements. One participant noted that even though regulatory convergence is difficult, given that countries require both incentives and regulatory capacities to implement international standards, discussions among regulators nevertheless can lead to progress and a “meeting of minds.” The panel noted that firms selling services abroad (or trying to) often just want a predictable regulatory environment and reasonable terms for market access, rather than having U.S. or EU regulations (even if they are more open) replicated line by line in every country where they operate. One participant added that harmonization is not practical in many situations due to differing cultural norms, and that if, in developed countries, there is a clash of sophisticated regulatory frameworks, interoperability rather than harmonization may be sufficient. Another participant suggested that if more countries adopt principle-based (or outcome-based) regulatory approaches, the regulatory environment may improve without it being necessary to get all countries to adopt a standard set of laws. One participant emphasized that the goal of setting international standards is to remove regulatory arbitrage (wherein firms seek to maximize profit by taking advantage of regulatory loopholes in certain countries). This participant cited financial services as an example of an industry where liberalization, instead of driving better regulation, led to regulatory cherry-picking by financial firms.

One participant emphasized the need to consider the impact of liberalization on professional workers and on labor standards, especially now as the United States faces high long-term unemployment.
The panel considered the spectrum of liberalization processes, ranging from a large, slow negotiation with many countries and points of contention, to individual countries simply deciding that “self-liberalization” is in their interest. A participant cited the example of a project in Romania that engaged local stakeholders to file antimonopoly lawsuits against the state’s Internet service providers, which resulted in more Internet service providers and lower costs for consumers, illustrating the point that liberalization driven by domestic constituencies can be more successful than top-down liberalization. Another participant argued that attempts to open markets through “tough” negotiations may be unsustainable, as regulators prefer to be driven by a competition agenda rather than a trade agenda. The participant explained that in trade negotiations, countries often agree to commitments on services in order to get provisions they want on manufactured or agricultural exports—but they then find they lack the capacity to implement their services commitments well. One participant countered that regulators are often interested in pressuring their own societies for change, and use trade agreement negotiations as a source of leverage. Another added that there may be a perverse incentive for countries that might have been inclined to liberalize unilaterally to say instead, “I want to see what I can get for this through the negotiation process.”

Prospects for Future Services Trade Agreements

In discussing forthcoming trade agreements, one participant expressed the belief that agreements among small groups of like-minded countries were more achievable than a broader International Services Agreement (ISA). The participant cited the fact that recent international efforts on trade and climate change have ended in a standoff between the United States and the BRIC countries (Brazil, Russia, India, and China), and there is little reason to expect the negotiations for an ISA to end differently. Another participant agreed that the trade negotiation process becomes less useful when it drags on for years and becomes bogged down in controversies and disagreements; instead, it may be more desirable to focus on something that can be accomplished quickly, such as getting a group of countries together to ratify existing levels of liberalization.

A third participant, citing high levels of protection in fast-growing Southeast Asian countries (particularly in transport and professional services), added that negotiators should deal with the levels of protection that exist, rather than developing an ideal agreement among like-minded countries and then looking for recruits. The participant contrasted the current environment with that of the late 1990s when China joined the WTO, suggesting it is much less likely today that negotiators can conceive a perfect agreement and then have large emerging markets simply accede to it. For this reason, the participant continued, it is not clear that the ISA will succeed where other proposed agreements have failed.

However, expressing skepticism that a smaller deal would be easier to achieve, a participant suggested that the presence of additional countries in the negotiation process may be an incentive to potential signatories. It was noted that an ambitious agreement that attracted a growing list of negotiating countries could lead to growing benefits and additional countries calculating that they are better off inside rather than outside the agreement. One participant mentioned the example of the General Agreement on Tariffs and Trade (GATT), which was originally ratified through bilateral agreements and then expanded into a multilateral agreement. Another participant expressed the view that even when final deals are elusive, working on broad agreements is worthwhile, remarking that
the World Trade Organization (WTO) is an important institution and that negotiations build confidence and benefit the United States’ geopolitical position.

The panel discussed the ISA in more depth, questioning exactly how many countries are seriously committed to the prospective agreement at this point. A participant speculated that if the Doha Round eventually collapses, the ISA may be the only ongoing major trade project involving trade in services, other than a proliferation of negotiations toward bilateral agreements. Partly for this reason, the participant emphasized that ISA negotiations need to be future-oriented, as they may set the tone for the next decade of services discussions (though the participant added that this consideration does not imply that negotiators should hold out for a perfect agreement).

The panel discussed ways to address differing levels of ambition among countries and differing levels of enthusiasm among industries, wondering whether these differences would lead to a “gerrymandered” agreement. One participant said that the reluctance of some countries to negotiate stems from political resistance, but also from three regulatory issues: the fear of the loss of regulatory freedom when countries do not know how commitments will be interpreted (such as what happened in the United States-Antigua online gambling dispute); general regulatory weakness (especially in developing countries that are not prepared to deal with competition); and the lack of mechanisms for regulatory cooperation. A participant suggested that industries might not anticipate many benefits from further trade negotiations because there simply are not many benefits left to be had; for example, the United States-EU economic relationship is already the most successful partnership in the world, and industries within the United States and the EU are able to work around the barriers that do exist.

The panel talked about the need for a new framework that integrates goods and services, as trade is, in practice, conducted by firms that provide both. One participant emphasized that the GATS is an artificial construction, categorizing the same activity (such as crossing borders to supply services) differently depending on whether it is done by General Motors or by Citi. Another participant said that market access in retail services is not meaningful without market access in goods, as well as market access for several non-retail services. Expanding on this point, the participant pointed out that retailers rely on a huge array of ancillary services, such as telecoms and financial services, to serve their customers; that retail services additionally require express delivery services to cross the “last mile” and get products to the customer; and that because customers want electronic platforms to learn about prices and products, data flows are involved as well.
**List of external participants at the Commission’s services roundtable, held on November 13, 2012**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title / Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Allgeier</td>
<td>President&lt;br&gt;Coalition of Services Industries</td>
</tr>
<tr>
<td>Erik Autor</td>
<td>Vice President and International Trade Counsel&lt;br&gt;National Retail Federation</td>
</tr>
<tr>
<td>Christopher Benscher</td>
<td>Manager of Government Affairs&lt;br&gt;Halliburton</td>
</tr>
<tr>
<td>Christine Bliss</td>
<td>Assistant U.S. Trade Representative for Services and Investment&lt;br&gt;USTR</td>
</tr>
<tr>
<td>Maria Borga</td>
<td>Assistant Division Chief for Research and Analysis&lt;br&gt;Bureau of Economic Analysis, Department of Commerce</td>
</tr>
<tr>
<td>Ralph Carter</td>
<td>Managing Director, Legal, Trade, and International Affairs&lt;br&gt;FedEx Express</td>
</tr>
<tr>
<td>David Cohen</td>
<td>Executive Director, Department of Professional Employees&lt;br&gt;AFL-CIO</td>
</tr>
<tr>
<td>Greg Frazier</td>
<td>Executive Vice President&lt;br&gt;Motion Picture Association of America</td>
</tr>
<tr>
<td>Ed Gresser</td>
<td>Director&lt;br&gt;Global Works Foundation</td>
</tr>
<tr>
<td>Adam Hemphill</td>
<td>Senior Manager of Federal Government Relations&lt;br&gt;Walmart Stores Inc.</td>
</tr>
<tr>
<td>Charles R. Johnston</td>
<td>Director and Senior Vice President, International Government Affairs&lt;br&gt;Citigroup</td>
</tr>
<tr>
<td>David LeDuc</td>
<td>Senior Director of Public Policy&lt;br&gt;Software and Information Industry Association</td>
</tr>
<tr>
<td>David Long</td>
<td>Director&lt;br&gt;Office of Services Industries, U.S. Department of Commerce</td>
</tr>
<tr>
<td>Aaditya Mattoo</td>
<td>Research Manager, Trade and Integration&lt;br&gt;World Bank</td>
</tr>
<tr>
<td>Hildegunn Nordas</td>
<td>Senior Policy Analyst&lt;br&gt;OECD</td>
</tr>
<tr>
<td>Lisa Rohrer</td>
<td>Director of Research&lt;br&gt;Hildebrandt Baker Robbins</td>
</tr>
<tr>
<td>Jeffrey Schott</td>
<td>Senior Fellow&lt;br&gt;Peterson Institute</td>
</tr>
<tr>
<td>Richard Self</td>
<td>Trade Policy Consultant&lt;br&gt;World Trade Organization</td>
</tr>
<tr>
<td>Ben Shepherd</td>
<td>Principal&lt;br&gt;Developing Trade Consultants Ltd.</td>
</tr>
<tr>
<td>Laurie Sherman</td>
<td>Senior Legal Advisor&lt;br&gt;Transparency International USA</td>
</tr>
<tr>
<td>Brad Smith</td>
<td>Chief International Officer&lt;br&gt;American Council of Life Insurers</td>
</tr>
<tr>
<td>James Wallar</td>
<td>Senior Vice President&lt;br&gt;Nathan Associates</td>
</tr>
</tbody>
</table>
APPENDIX A
Selected Services Research
Selected Services Research

This appendix highlights selected research by USITC staff on the services industry that were completed since the last *Recent Trends* was published. This year’s report provides abstracts and links to four recent research papers and an executive briefing on trade (EBOT):

- “Policy Challenges of Cross-Border Cloud Computing” (*Journal of International Commerce and Economics*)
- “Liberalization of Retail Services in India: A CGE Model” (working paper)
- “Nontariff Measures in the Global Retailing Industry” (working paper)
- “An Overview and Examination of the Vietnamese Service Sector” (working paper)
- “China: A Leading Growth Market for U.S. Services Exports and Investment” (EBOT)

**Cloud Computing Article**


*Abstract*

Providers of cloud computing services are increasingly serving customers outside their home country markets and using service delivery models that require the transmission of data across borders. In this article, we present an overview of the global market for cloud services and explore the role of cloud computing in U.S. exports. We then examine the main policy challenges associated with cross-border cloud computing—ensuring data privacy, security, and the free flow of information—and the ways that countries are addressing them through domestic policymaking, international agreements, and other cooperative arrangements. Finally, we identify the particular challenges faced by developing countries as they seek to participate in the market for cloud computing services. Our discussion includes case studies of two of the most important emerging markets for such services—China and India.

**India Services Modeling Paper**


*Abstract*

In order to address the significant increase in importance of foreign direct investment (FDI) and of multinational corporation (MNC)-related policies, we have developed an extended Global Trade Analysis Project (GTAP) model and associated global database that accounts for both FDI and MNCs, differentiated by the region of ownership. The model is calibrated on the GTAP v8 database, augmented by global foreign affiliate data
described in Fukui and Lakatos (2012) and the FDI stocks data of Boumllassa, Gouel, and Laborde (2007). To illustrate the model’s behavior, we examine the recent policy debate with respect to allowing FDI in multi-brand retailing in India. We find that the unilateral reduction of barriers to FDI in distribution services in India benefits the economy as a whole, consumers, and foreign producers, but hurts domestic distributors. Nevertheless, when we consider the associated productivity improvements documented in the literature to downstream and upstream industries, we find that domestic producers are expected to benefit from the liberalization of the distribution sector as well.

**Retailing Working Paper**


**Abstract**

This paper introduces a new measure of policies and regulations affecting the retailing industry. Our retail restrictiveness index addresses 13 categories of nontariff measures (NTMs), including market entry restrictions and operational regulations. We produce index scores for 75 countries. Southeast Asian countries, including Indonesia, Malaysia, and Thailand, are among the most restrictive retail markets as measured by our index, while the United States is one of the world’s most open. We use econometric gravity models to examine how restrictiveness affects sales of multinational retailers’ foreign affiliates, and find that high (restrictive) scores on our index are associated with decreased affiliate sales.

**Vietnam Working Paper**

Contributors: Lisa Alejandro, Eric Forden, Erick Oh, Joann Peterson, Samantha Pham, Matthew Reisman, George Serletis, Danielle Vu, and Isaac Wohl.

**Abstract**

Vietnam is growing rapidly as it transitions from a state-planned economy to a hybrid economy with an expanded private sector. Besides broadening its international trade relationships, in recent years Vietnam has committed to liberalizing its industries and strengthening its intellectual property laws through bilateral treaties, regional associations, and accession to the World Trade Organization. Service industries account for a growing share of Vietnam’s economy, as new businesses seek services like banking and logistics while consumers with rising income demand education, retail, and telecommunication services. Liberalization and foreign investment have increased the supply of services in Vietnam, but many industries are still hampered by shortages of skilled workers and good infrastructure, and by a weak business environment in which regulations impede commerce and state-owned enterprises have many advantages.
**U.S-China Services Trade EBOT**


*Abstract*

U.S. cross-border exports of private services to China more than doubled in 2006–11, growing more rapidly than exports to all other leading U.S. services markets except Brazil. In 2011, U.S. exports of services to China were nearly $27 billion, which ranked China as the United States’ fifth-largest services export market, up from ninth in 2006. Export growth was spread among a broad array of services industries. Sales of services by affiliates of U.S. firms operating in China also more than doubled during the period. China’s recent focus on stimulating domestic demand through service sector growth, as well as the relatively small current share of services in its economy, suggests future growth of U.S. services trade in the market.