Overview

Should the United States fear increased trade in services?

Several years ago the answer to this question might have entailed a simple "No, services are nontradable" or a dismissive "Why worry about trade in services? The service sector isn't that important—manufacturing is what matters." More recently, however, one is more likely to hear, "Yes, of course, the United States will lose millions of service jobs to India, just like it lost millions of manufacturing jobs to China."[1]

Much of this concern is driven by the unknown. Which services are tradable? Which services will become tradable tomorrow? How many jobs are in tradable services? Which service jobs are likely to face competition from low-wage, labor-abundant countries such as India? Answers to these and other questions about services are hard to come by. One reason is the lack of detailed official statistical data on services in general and trade in services in particular.

This book tries to draw a more detailed picture of US services in the national and global economies. It attempts to provide the most comprehensive fact base on services to date, a framework for interpreting the facts, and a set of factual answers to the many questions that trade in the service sector raises. This task is well worth undertaking, because services are a large and vital part of the US economy and because trade in services is growing rapidly, potentially affecting millions of US workers. Understanding the impact of international trade as a whole on the US economy and the US labor market thus requires a better understanding of service trade.

It is also an ambitious task, and I must acknowledge at the outset that it is not completely fulfilled. The book does not establish once and for all every

1. This concern is perhaps best exemplified by the *Foreign Affairs* article "Offshoring: The Next Industrial Revolution?" by Alan Blinder (2006), discussed in chapter 4.

© Peterson Institute for International Economics | www.piie.com

relevant fact that one would like to know about service trade, nor are all the facts that it does establish integrated into a seamless explanation. Available data simply do not support this more satisfying type of analysis.

Instead, the book presents a mosaic of results from a variety of data sources and perspectives, taking what it can from what each has to offer. This mosaic also draws on a large and growing literature examining the impact of trade on the US manufacturing sector, using the very detailed, plant-level data that do exist for that sector. The hope is that the framework presented here, developed from theory and research on the manufacturing sector, combined with the most detailed picture of the service sector possible, will produce a set of analytical results that prove helpful in informing the public debate on services and service trade. As a natural by-product, I hope that this book will dispel some common misconceptions about the service sector, trade in services, and the risk of losing high-skill service jobs to low-wage countries.

The book provides detailed "how and why" answers to several key questions, both about the service sector itself and about how it compares with the manufacturing sector:

- Is the service sector important?
- Is trade in services important today? Is it potentially important in the future? Which services are "tradable"?
- What is likely to happen as global trade in services increases?
- In particular, is the United States likely to lose service jobs to lower-wage countries?
- Is there evidence of these predicted trends?
- What should the United States do to maximize the opportunities from the service sector?

To anticipate the main results, the mosaic reveals the following broad picture regarding trade in services:

- The service sector is a large and growing contributor to the US economy, employing a majority of American workers. Some important subsectors within services pay high wages, in some cases higher than the average manufacturing wage.
- Trade in services, both imports and exports, is growing and the share of employment in tradable services activities is large, potentially exposing a large share of the US workforce to foreign competition. In that large share of tradable service jobs are many high-skill, high-wage jobs.
- Even though these jobs pay high wages, they are not likely to be lost to low-wage countries. Indeed, precisely because they are high-skill, high-wage jobs, they are jobs that the United States is likely to retain and that can support exports. The United States has comparative advantage in high-skill, high-wage activities.

© Peterson Institute for International Economics | www.piie.com

- Despite rising total imports and a widening trade gap over the past few decades, the United States still imports little high-wage, high-productivity manufacturing output from low-wage countries and continues to export high-wage, high-skill products. There is every reason to think that US service trade will play out similarly, with trade in services that provide high-wage job opportunities growing at the expense of services that pay lower wages.
- The United States has comparative advantage in services and has been successful in exporting services. Indeed, the nation consistently runs a trade *surplus* in services. But US service firms' participation in the international economy lags that of US manufacturing firms: A far smaller share of service output than of manufacturing output is traded. Thus, there seems to be considerable opportunity for US firms and workers from increased service trade.
- But increased service trade does pose some risks. It will undoubtedly cause some dislocation of production and jobs, just as happened in manufacturing. Yet a relatively small share of US employment in tradable services is in the low-wage, low-skill activities likely to face competition from low-wage, labor-abundant countries. The majority of employment in tradable services is in activities where the United States is likely to export *more*. Recent trends offer little evidence of greater job loss in tradable services than in nontradable services.

The analysis yields the following conclusion: The United States should *not* fear increased trade in services. To the contrary, the United States should be aggressively seeking to liberalize the policy impediments to service trade, to take advantage of the many opportunities that expanded service trade offers.

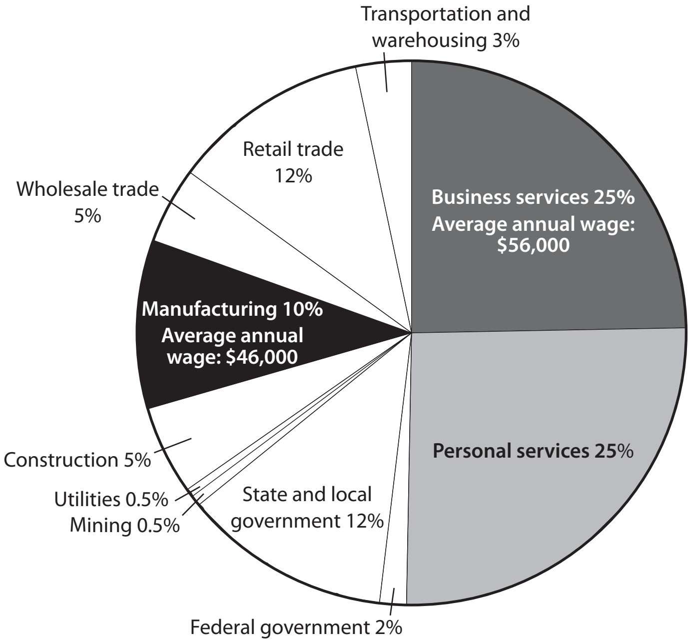
One outstanding opportunity is presented by the enormous infrastructure boom that the developing world will undergo over the next 20 years. Building that infrastructure will require inputs from a wide array of engineering, technical, and other business services in which US firms are highly competitive. Therefore, as an organizing principle and motivating focus for service trade liberalization, the United States should set a goal of ensuring the ability of US service firms and workers to compete fairly for participation in this historic undertaking.

The following more specific findings buttress the above conclusions:

- The business service sector (which includes, among many others, information, financial, scientific, and managerial services) alone accounts for 25 percent of employment in the United States—more than *twice* as many jobs as the manufacturing sector (figure O.1). (It employed only half as many as manufacturing 50 years ago.) Employment in the business service sector *increased* almost 30 percent over the decade 1997–2007, while manufacturing employment *decreased* by over 20 percent.

© Peterson Institute for International Economics | www.piie.com

Figure O.1 Sectoral composition of US employment, 2007

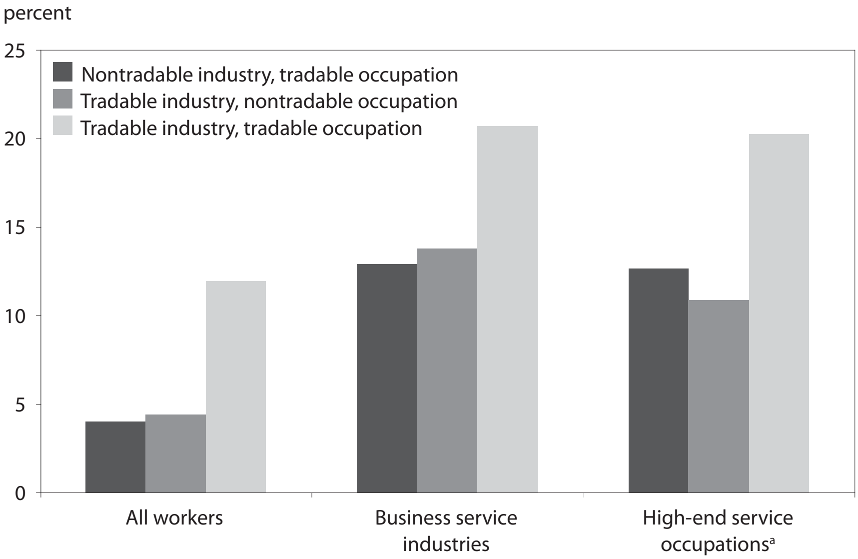


Sources: 2007 Economic Census; 2007 Census of Governments.

- The popular perception that most service jobs are "bad jobs with low wages" is wrong. In fact, the business service sector pays significantly higher wages and salaries on average than the manufacturing sector. Average annual wages in the manufacturing sector in 2007 were about $46,000. The figure for business services that year was about $56,000—more than 22 percent higher (figure O.1).
- Service exports, as measured in official data, have expanded dramatically over the past decade, doubling between 1997 and 2007 (see figure 1.9 in chapter 1). And although service imports have also increased significantly over the same period, the United States consistently runs a trade surplus in services—in contrast to its sizable trade deficit in goods (figure 5.1 in chapter 5).
- Many service activities—movie and music recording production, software production, research and development services, and engineering services, to cite a few examples—appear to be "traded" (that is, transacted across distances) within the United States and thus are at least potentially tradable internationally. Approximately 14 percent of the US workforce is in business service industries that this book classifies as tradable. By comparison, about 10 percent of the workforce is in the entire manufacturing

© Peterson Institute for International Economics | www.piie.com

Figure O.2 Average differences in earnings between US workers in tradable and nontradable industries and occupations



a. Occupations in the following Standard Occupational Classification (SOC) groups: management (SOC 11), business and financial operations (SOC 13), computer and mathematical (SOC 15), architecture and engineering (SOC 17), life, physical, and social sciences (SOC 19), legal (SOC 23), health care practitioner and technical (SOC 29), and health care support (SOC 31).

Note: The figure shows the percentage by which the wages of the average worker employed in either a tradable industry or a tradable occupation, or both, exceed the wages of the average worker in a nontradable occupation within a nontradable industry, as estimated in a regression that controls for workers' demographic characteristics.

Source: Author's calculations using the 2007 American Community Survey.

sector. When workers in tradable occupations (such as computer programmers in the banking industry, or medical transcriptionists in the health care industry) within nontradable industries are included, the share of the workforce in tradable service activities is even higher.

- Tradable service jobs, such as those at engineering or research and development firms, are good jobs, paying higher than average earnings. Part of this premium is due to workers in these activities having higher educational attainment on average than other workers, but even when one controls for educational and other personal differences, workers in tradable service activities have 10 percent higher earnings. Within business service industries, a worker in a tradable industry and a tradable occupation has almost 20 percent higher earnings than a similar business service worker in a nontradable industry and occupation (figure O.2).

© Peterson Institute for International Economics | www.piie.com

- The fact that earnings in tradable service activities are high does not mean that these jobs will be lost to low-wage countries. High-wage, high-skill activities are consistent with US comparative advantage. In the manufacturing sector, it is low-wage, labor-intensive industries like apparel that have been most vulnerable to low-wage import competition. Just as the United States continues to have strong export performance in high-wage, skill-intensive manufacturing industries, so it should continue to perform well—and retain and even create jobs—in high-wage, skill-intensive service industries.
- Although it is common to discuss jobs "lost" and jobs "created," in the long run trade does not affect the number of jobs in the economy. As evidence of this, large trade deficits are typically associated with periods of relatively low unemployment. What trade does affect is the *composition* of activities in the economy: Jobs are created in some sectors and lost in other sectors, reallocating economic activity across industries.
- Many commentators on service trade focus on the US jobs that are threatened by foreign competitors but neglect the fact that the United States has comparative advantage in many service activities. For example, the United States is currently a net exporter of high-wage, high-skill services like computer software and satellite telecommunications services. Increased trade in services is likely to lead to increased US exports of services (and to more "inshoring" than "offshoring"), to the benefit of many US firms and workers.
- In contrast to the general impression that the United States imports services primarily from low-wage, labor-abundant countries like India, most US service imports come from other high-wage, high-skill countries. This supports the notion that it is skill-abundant (and high-wage) countries that have comparative advantage in high-wage, high-skill services.
- As many as two-thirds of jobs in tradable business service industries require a high enough level of skill to be consistent with US comparative advantage. US workers and firms in these industries are likely to be beneficiaries of increased trade in services through increased export opportunities. Only about one-third of jobs in tradable service activities will face meaningful competition from low-wage countries (or risk being offshored) in the medium term.
- To date, there is little evidence of trade in services influencing US labor market outcomes. Net employment growth in the average tradable service activity is roughly the same as net employment growth in nontradable service activities. Median wage growth in tradable service occupations is nearly equal to wage growth in the average nontradable occupation. Rates of job displacement in tradable service activities are no greater than in nontradable service activities—and much lower than displacement rates in the manufacturing sector.

© Peterson Institute for International Economics | www.piie.com

- Although traditional trade barriers such as tariffs and quotas seldom apply to services, many other impediments to trade in services do exist, ranging from language and cultural differences to regulation and technological barriers. These impediments are likely to provide some protection for some US service firms and workers from import competition but also likely to restrain exporting by these firms and workers and others. These impediments reduce the gains to the United States (and the rest of the world) from trade in services, thus slowing the rise in living standards that such trade promotes.
- Despite US comparative advantage in the high-skill, high-wage business services that are tradable, the sector still lags behind manufacturing in terms of participation in exporting. In the manufacturing sector, about 25 percent of plants export; in business services, only about 5 percent do. Exports-to-sales ratios for service exporters are slightly lower than those in manufacturing. These statistics suggest that the impediments to trade in services, whether they are culture and language differences, technological barriers, or policy impediments, remain significant.
- Exporters within the business service sector show the same desirable characteristics as exporters in manufacturing: They tend to be larger and more productive and pay higher wages than nonexporting business service firms. In fact, exporter wage premiums in business services are double what they are in manufacturing. When one compares exporters and nonexporters within services without taking into account which specific industry they are in, one finds that exporters pay 40 percent higher wages. When exporters and nonexporters within an industry are compared, exporters pay 20 percent higher wages.

What do these findings imply for US trade policy? Although the United States has comparative advantage in services, turning that advantage into real economic benefits for US firms and workers is not automatic. A number of large and fast-growing economies around the world are less open to service trade than the United States. Liberalizing service trade with these countries is sure to be difficult, because it means not just reducing tariffs and other border controls as was the case with trade in manufactures, but also fighting through a tangle of regulations, licensing requirements, and other barriers well within countries' borders. But the historic opportunity that increased service trade represents, in particular because of the coming infrastructure boom—over $20 trillion by some estimates—in the developing world, well justifies the effort required. Other developed economies also have comparative advantage in services and would be natural partners with the United States in persuading the large, fast-growing countries with high service barriers to liberalize. This leads to the first key policy implication:

The United States, working through the General Agreement on Trade in Services (GATS), should join with other developed countries in pushing for further liberalization of business

© Peterson Institute for International Economics | www.piie.com

services, to ensure that US service firms and workers have the opportunity to compete in the coming infrastructure boom.

Much of the spending for infrastructure in the coming boom is likely to be controlled or financed, at least in part, by governments—national, regional, and local. Those governments are sure to be subject to domestic political pressure to favor domestic producers in granting contracts for this work. This makes guaranteeing equal treatment in government procurement a crucial issue for foreign service providers.

The World Trade Organization's (WTO) Agreement on Government Procurement was negotiated during the Tokyo Round of the General Agreement on Tariffs and Trade (GATT) negotiations in the early 1980s with the intention of reducing preferences to domestic firms in public procurement and opening public works spending to international trade. Its coverage was extended tenfold in the subsequent Uruguay Round and now extends to government purchases totaling several hundred billion dollars annually. However, this large sum obscures the fact that to date only a relative handful of countries have signed the agreement, virtually all of them in the developed world. In particular, none of the large developing countries expected to account for the bulk of infrastructure spending in coming decades—Brazil, China, India, and Russia—are participants in the agreement. From this stems a second key policy implication:

The United States, again in cooperation with other developed countries, should strongly encourage large and fast-growing countries to sign on to the WTO government procurement agreement.

Although liberalizing policy toward services abroad will benefit the United States and the rest of the world, there is also work to be done within the United States to strengthen and maintain the nation's comparative advantage in high-skill, high-wage services. Here the most important task involves education.

Some observers contend that service offshoring negates the benefits of education, claiming that having an education does not prevent one's job from being outsourced. But this is far from true. What *is* true is that having an education does not prevent one's job from being *tradable.* Indeed, tradability and education are positively correlated: workers in tradable jobs, in both manufacturing and services, tend to have more skills and more education than workers in nontradable jobs. But to argue that because a job is tradable it will therefore be traded away, and that therefore education confers no protection, is a counsel of despair—and unwarranted. In fact, high-skill, high-wage service jobs are precisely the types of jobs that are likely to stay in the United States. That is the lesson of comparative advantage—and of the US experience in manufacturing. Also, better-educated workers have lower displacement rates and higher reemployment rates.

Education remains a good investment for individual workers. The United States has historically been well out in front of the rest of the world in the

© Peterson Institute for International Economics | www.piie.com

share of its workforce that is college educated. However, this is less true today than it has been in the past, and from that unfortunate fact flows the third policy implication:

The United States should make access to a good primary, secondary, and postsecondary education a high national priority.

So, should the United States fear increased trade in services? No. Indeed, quite the contrary: The United States should embrace trade in services and pursue liberalization in the service sector aggressively. Both the United States and the world have much to gain and little to lose.

© Peterson Institute for International Economics | www.piie.com

© Peterson Institute for International Economics | www.piie.com