V. SERVICE TRADE AND GLOBALIZATION

The provision of education in the U.S. is generally classified as a service industry. Services have been described as anything you pay money for but cannot drop on your foot. More concretely, they include (besides education): medical care, legal services, restaurants, and tourism. The service sector, defined most broadly, provided about 67 percent of the total GDP of the U.S. in 2001. The service sector also provided about two-thirds of total U.S. employment in 2001 and provided the *entire* net increase in employment over the past 15 years. It is a generally accepted rule of thumb in economics (known as Engel's Law) that in a rich nation like the U.S., as incomes rise, the new consumer demand created by this income growth will be disproportionately directed towards the service sector. Many manufactured products have a long life, while services are more ephemeral. If you already own a washing machine and get a big raise at work, you probably will not see much value in owning another washing machine. However, you may well decide to travel more or eat out in restaurants more often (both services).

One reason for the growing importance of the service sector in providing employment in the American economy is its relatively slow rate of productivity growth. Since manufacturing industries are characterized by faster productivity growth, fewer employees are needed to produce the same amount of output over time. This differential rate of productivity growth implies that there will be a natural tendency for employment to shift from the manufacturing to the service sector. Somewhat paradoxically, employment grows in those sectors in which we are most inefficient.

This slow growth of service sector productivity has been thought to be an immutable fact of service production; something about providing services just makes it hard to foster productivity growth. Manufacturing production often lends itself rather easily to mechanization and automation, a prime cause of growing productivity. Much of the output of the service sector *necessitates* labor-intensity. The classic (and only somewhat misleading) example is that of a musical quartet that provides live entertainment. Mechanizing this (say by playing a pre-recorded CD in a concert venue instead of having live musicians) would totally change the character of the service. In this case, service sector output (live music) simply cannot be made more efficient through automation. A less extreme example may be medical services. While some improvement in record-keeping and related matters may be possible, it may still be the case that many people value personal contact with their doctors, and would not wish to see productivity enhanced at the cost of less face-to-face interaction.

To date, manufacturing has been the sector most impacted by globalization, for reasons both political and technological. Trade in services has grown in recent years, but is still dwarfed by goods trade. It is commonly thought that the nature of services makes them less amenable to international trade than manufactured goods. This is probably true to a degree. Still, the growth in services trade has been a notable development in the American economy.

Trade in manufactured goods is pretty easy to conceptualize: physical, tangible output moves across national orders. It may be useful to more precisely sketch out what international trade in services means.

As examples, each of the following scenarios would constitute a services import to from France to the U.S. These scenarios are frequently referred to as "modes" of service trade, and they form the basis for current international negotiations regarding the future treatment of trade in services.

A. Modes of Service Trade

1) **Cross-border supply:** a company in France provides education services to students in the U.S., perhaps through "distance learning" classes available on the Internet.

2) **Consumption abroad:** a U.S. student goes to Paris and attends classes at a French university

3) **Commercial presence:** a French company opens a for-profit private university in the U.S.

4) **Movement of natural persons:** a U.S. private or public college brings a teacher from France and pays them to work here.

The issue of the growing service trade is important to the U.S. economy for a number of reasons. First, the U.S. remains a net exporter of most services, including those services that are dominated by college-educated labor. Our service trade surplus increased substantially in the 1989-1997 period, rising from $40 billion to $102 billion. This increase led many economic observers to posit that growing surpluses in service trade would help offset the enormous deficit the U.S. has been running in merchandise trade over the same period. The manufacturing balance of trade deteriorated from a deficit of $120 billion to one of $480 billion during the 1989-1997 period. However, since 1997, the service trade surplus had declined significantly, falling to $80 billion by 2000. This is somewhat worrying, as it seems to indicate that the U.S. will not be able to count on growing service trade surpluses to offset manufacturing trade deficits.

The total trade deficit of the U.S. in 2002 was 4.5 percent of GDP, and this would have been much larger without the service surplus (5.2% of GDP). If service imports tend to grow faster than service exports, the U.S. will not being able to count on surpluses in this sector providing a balance against merchandising deficits.

In the last two to three years the U.S. economy has seen a precipitous decline in technology jobs. This decline is mostly attributable to the bursting of the technology sector bubble and the investment overhang in telecommunications. However, service imports may have contributed marginally to this decline, and the trend of growing service imports is worrying many observers of the labor market for workers with skills in the information technology sector.

It is frequently asserted that the growth of total service trade is higher than the growth of manufactured trade. This is incorrect. During the 1990s, growth in manufacturing trade outpaced growth in service trade. However, going below the raw rate of increase, something interesting has happened in the composition of service trade. The bulk of service trade has been travel fares, tourism, and transportation. This sort of trade is rarely thought to be competitive between nations, or threatening to domestic employment. However, since 1986, the share of total service imports accounted for by travel fares, tourism, and transportation has fallen from 78 percent to 63 percent. At the same time, the share of service imports accounted for by business, professional, and technical services has risen from two percent to five percent. These services generally are considered competitive between nations, and have domestic employment consequences. So, while the raw rate of service trade increase is not particularly high, service trade occurs more and more in those industries that are competitive and is more likely to have employment consequences.

The business press abounds lately with examples of service trade. A recent *Business Week* cover story detailed the phenomenon of firms outsourcing service industries to poorer nations. The most commonly cited example of this type of service trade is telephone call centers, handling customer service queries, being located abroad. Labor cost savings apparently dominate the increased telecommunications expense of this activity, making it more efficient to locate these centers abroad. In this example of service trade, the pattern of trade in commodities that dominated until the recent decade seems to be replicated—jobs that are most likely to be lost to international trade are disproportionately those performed by workers without a four-year college degree.

However, the pattern of job-relocation that seems to increasingly characterize manufacturing industries has appeared recently (at least in the anecdotal evidence) in service trade as well—jobs requiring a college degree are also being moved from the U.S. In one prominent example, in the last year, the Charlotte-based Bank of America (BOA) has cut almost 15 percent of its technology and back-office jobs, with an additional three percent set to go by March. Ex-BOA managers say that about a third of these jobs will now be performed by workers offshore, primarily in India.

"You will see an explosion of work going overseas," says Forrester Research Inc. analyst John C. McCarthy. He goes so far as to predict at least 3.3 million white-collar jobs and $136 billion in wages will shift from the U.S. to low-cost countries by 2015. This is almost surely an over-estimate, for various reasons. That said, the trend of outsourcing knowledge-intensive work has many employees in these sectors worried.

Workers in educational services sectors tend to have a higher skills profile than most other sectors. While this fact alone may have insulated them from the effects of foreign trade in the past, the developments in other knowledge-intensive industries suggest that this may not always be the case.