Globalization of Services: Why, How Much, and What To Do About It
Some Issues for the ‘North’ and the ‘South’

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Globalization of services: A new thing?

There has always been international trade in services. Transportation and communication services bridge the physical distance between buyer and seller of a good. Tourists travel to experience new cultures, students go to school abroad, and temporary workers send money home.

In most economic literature, however, services were termed ‘non-traded’ because, as a matter of fact, high transactions costs (measured in time, distance, or otherwise) prevented the close proximity of buyer and seller deemed necessary for the economic activity to take place. For the price of a hair-cut, it was not worthwhile to cross the border. Custom and regulation also raised transactions costs and limited international trade in services: Financial services, legal services, or administrative services may require hand-shakes, face-to-face signatures, a local examination, or passing papers between contracting parties. Many services require skills (including language and local knowledge) that have kept them from being traded internationally. Finally, the ‘production’ of certain services, such as responding to a customer question, reading a radiological image, drafting a blue print, or writing a computer program, have been functions integral to an organization’s business strategy or at least the task was not easily separable from the on-going activities of the firm.

The question of the moment is, what has changed to increase the range of services that can be traded across borders? To what extent is this globalization of services different from or similar to the globalization of goods that has been underway for some time? What attributes of a country enable it to participate in this globalization process, and what challenges do workers and firms face? Finally, is there any natural stopping point for globalization of services?

Globalization of services: Different from goods?

Several factors have enabled more services to be traded internationally. First, the raw technology of the Internet in conjunction with telecommunications network and IT hardware (such as personal computers) create the potential for linkages between countries and businesses that simply did not exist before.

Second, IT software codifies, standardizes, and digitizes knowledge which greatly enhances tradability of services, as well as allows the disaggregation of service activities into component parts, which are separable from other activities of the firm. For example,
once the ‘expert system’ for answering questions is written, anyone anywhere with high enough (although not expert) skills can navigate through the decision tree on the computer screen and sound like an expert. Spreadsheet software with embedded equations and the ability to download data implies that anyone can ‘run the numbers’ for a financial enterprise. Computer programming, at one time akin to an art, has been modularized and decomposed into three stages: design, implementation in computer code, and maintenance and repair (fixing bugs).

At the same time, the use of IT in the course of a business function (such as real-time monitoring of production facilities or web-sites) throws-off a vast amount of data (information) that can be analyzed to create new processes and products, some of which could be internationally traded. As international trade and direct investment linkages increase, the melding together of local resources and tastes with foreign technology and ideas creates new products to serve both home and host countries.

To a great degree, these forces promoting tradability and hence globalization of services—reduced transactions costs, codification and separability of business functions, new product creation, localization and trade via direct investment links—are the same forces that underpin tradability and globalization in goods. So, in what way is the globalization of services different?

First, the pace of change in the globalization of services is much more rapid. The advent of the Internet and associated information technology hardware and software exploded the possibility of trading services internationally. But, telecommunications costs at both ends had to fall far enough to initiate the international links. The stepped-up pace of reform or other approaches to presenting attractive capability, such as favorable telecom costs and bandwidth and other services such as electricity offered in technology parks have been an important factor driving the direction of international trade in services.

At the same time as the transactions costs of trade were falling, the codification and standardization of service activities—ranging from expert systems to support call centers to spreadsheets for accounting to modularized computer programming—made tasks separable from the internal functions of a firm. Once separable from the main function of the firm, these activities can be ‘out-sourced’ and once out-sourced, they can be ‘off-shored’, that is done abroad if the location abroad has the appropriate characteristics. The confluence of these two factors turbo-charged the rate of change in international tradability of services.

Second, globalization of services means an increasing share of the labor force exposed to international market forces. With the rapid increase in globalization of services, there has been the associated step-up in the share of the labor force in industrial countries exposed to challenges of globalization. At the same time, in the countries in which these service jobs are increasing on account of globalization, more workers are moving into the service sector. Between the two groups of workers in the industrial and developing world both, a rapidly increasing share of the global labor force is engaged in activities exposed to global competition and the international division of labor. This is in contrast to
manufactured employment, which has been declining in both industrial and developing world mostly on account of technological change that has increased productivity in manufacturing firms.

Third, the skill profile demanded by internationally traded services is different from that of goods. In the industrial countries, the educational demands for internationally traded services range from low (call-centers and transcription) to high (engineering design and computer programming). Educational levels in the developing world have increased, and the supply of appropriately educated workers in some countries is not insubstantial. Overall wage differentials between the industrial and developing world, in conjunction with the narrowed education gap between the industrial and parts of the developing world, enhances the potential for international trade in service-sector activities. What makes this scenario different from goods production is that the marketplace has not demanded particularly high educational attainment for workers in manufacturing, with instead the emphasis on industry-specific skills gained on-the-job and through training.

Fourth, globalization of services and globalization of goods may differ in the degree to which firms can change the location of their activities to take advantage of better capabilities in one country vs. another. Service sector firms may well be even more footloose than factories because there are fewer ‘just-in-time’ or ancillary plants that would have to move too if the main plant were to be moved.

In sum, this collection of separable services are coming to be known as Information Technology-Enable Services (ITES), a clunky term, but one that acknowledges first, that the services rendered are not necessarily information-technology related, but rather could be accounting, call-center, architectural drafting, rather than computer programming; and second, that the network of information and communications technologies (the Internet and associated devices to connect to the Internet) is what allows these services to be performed at a distance from the business or customer.

**Developing Countries: Making the most of the coming growth in global trade in ITES**

What should developing countries do to the make the most of the coming growth in global trade in ITES? First, it must be clear that the export of ITES is not the final goal. Rather, the targeting of this market should be viewed as an opportunity to catalyze support for reforms to key service-sector infrastructures that are integral to broad-based economic and human development in the country. That is, success in the export ITES marketplace requires good telecommunications links, adequate financial services, excellent human capital, fast post/distribution/logistical services, and physical infrastructure appropriate for work and leisure. If a country can provide these broadly to its citizens, then the gain in GDP growth and indicators of human development will far exceed revenues from exports. These broad-based gains come as a result of cheaper service inputs to all manner of productive activity, as well as to the transformation of business activities that results when resources are freed-up to be used in new business endeavors throughout the economy.
In fact, if exports of ITES is the measure of success, then policymakers can be tempted to attract investors to technology parks that have preferential access to telecommunications, distribution, and financial services, as well as clusters of skilled workers and attractive residential and office space. These technology parks and clusters are a valid stepping-stone to broader-based development, so long as the policies that enhance the attractiveness of a specific location ultimately become the standard facing domestic and foreign businesses alike.

Policies directed toward service-sector infrastructures, including telecommunications services, financial services, and distribution/logistics services, are essential. Each of these infrastructures play a key role in creating an environment conducive to successful ITES as well as for the economy-wide transformation in business activities.

Structural reform and policies to shape a policy environment conducive to transformation and effective use of information and technology are necessary but may not be sufficient for an economy to get the full benefits offered by this new wave of globalization. Fostering entrepreneurship and creating a business environment where new ideas can take hold is also important. It is important to preserve local incentives and interests, to avoid permanent subsidy projects, and to ensure diffusion out of technology parks into the real world of the local economy.

Finally, basic education and skill development are important to extend the opportunities created by ITES more broadly throughout the economy. Governments in many countries play a significant role in public education, particularly in the early years; some play a role in fostering technical training and access through technology parks and incubators. The most successful education programs go beyond donating or subsidizing computers or networking equipment to training and instruction on how to use the equipment and make it relevant to everyday life and current business activities. Often the private sector plays a key role by targeting training to the skills demanded. Through social policy, governments also affect the incentives workers face to adjust to dynamic change.

**Industrial Countries: How do they gain from ITES?**

The benefit achieved through globalization of IT hardware is a model for the potential benefits of globalization of ITES. In the US in the 1990s, globalization of IT hardware reduced its price further than it would have been based on technological advances alone. This lower price increased investment and use of IT hardware, as well as freed up resources for other activities within firms. Both the increased IT investment as well as transformation of business activities raised productivity and real GDP growth in the US. Moreover, on account of the greater diffusion of IT hardware throughout the economy, jobs demanding skills related to the integration of this equipment into the workplace grew twice as fast as jobs overall in the economy.

The globalization of ITES likely will follow a similar path. In the US, certain sectors and size of firms did not participate in the productivity revolution of the 1990s; health care, and particularly SMEs, for example. Reasons ranging from cost to culture to regulatory
constraints help explain why information technology may be used less intensively in some sectors and by some size of firms.

Globalization of ITES, if it takes the pattern of price declines that enables development of higher-valued added and sector-specific applications (as has been the case with globalization of IT hardware), could help surmount these hurdles. The result would be diffusion of IT hardware and ITES into and more extensive transformation of sectors and firm-sizes that have lagged in terms of productivity growth.

Since the demand for ITES is more price-elastic than for IT hardware, the potential increase in new business opportunities and job creation from the globalization of ITES could be even greater than that experienced in the 1990s from the globalization of IT hardware. Indeed, based on ten-year forecasts for occupation demands in the US, jobs demanding skills in using information technology-based goods and services are expected to grow at three times the rate of job growth overall. In sum, the second wave of productivity growth based on ITES could be even greater than the one experienced in the 1990s.

Industrial Countries: Moderating the Backlash

The advent of the Internet, along with codification, standardization, and digitization of knowledge separate services into stages that do not need to be done contiguously and can instead be done globally. While this may contribute in a positive fashion to job creation and productivity growth, as detailed above, the specter of immediate job loss, particularly in high skill and white-collar occupations looms large. Some projections indicate that millions of jobs will be lost from the industrial countries to developing countries. These projections ignore the market-expanding aspects of globalization of ITES, which yields faster growth in jobs overall (in industrial and developing countries) and they play on the very real evidence that some jobs, indeed, are going from one country to another.

A first type of job loss comes, as it has in manufacturing, from technology itself. Bank tellers, answering services, and secretaries are being replaced by automated teller machines, voice-answering technologies, and word-processing software. These jobs tend to be at the low-wage, low-skill end of the jobs that currently demand IT skills in the industrial countries. A second kind of jobs loss is coming as some higher-skill jobs are now separable, codified, and digitized, such as some computer programming and financial analysis. A third type of job loss is projected job loss; That is higher-paid jobs demanding IT skills are, by US projections, expected to grow very quickly. If workers in industrial economies are not prepared for these new jobs, the jobs may well be taken by workers in foreign countries.

These types of real and potential job loss point to several policy approaches. Right now, it is imperative that adjustment assistance be made available to the white-collar workers hurt by international competition just as Trade Adjustment Assistance (in the US) is designed to aid those in the manufacturing sector. Arguably, trade should not be the
distinguishing factor, because as noted above, some workers are losing their jobs on account of advances in technology.

A second approach, which may in particular assist older workers needing to make the jump to a new career path is the program of wage insurance included in the Trade Promotion Authority legislation. Under this type of program, workers above a particular age and earning within a particular wage bracket would receive half of the difference between their old and new wage for a limited period of time. The objective of this kind of program is to encourage workers to get back to work as soon as possible, without rejecting a new career path that might require an initial period of learning and on-the-job training by the employer.

Going forward, a partnership between private and public sector and a real commitment to effective skill-building is crucial. For many years, tax policy has been used to promote capital investment through the investment tax credit. Going forward, an essential ingredient to the second wave of productivity growth coming from globalization of software and IT services is human capital here at home. The time has come to integrate human capital into investment tax credit policies. Such a tax credit recognizes that there are spillover benefits to the whole economy of having training undertaken in the workplace. Yet, because of these spillovers, the firm does not capture the full value of training that they provide. Hence the tax credit aligns public and private interests.

In the end, globalization of ITES specifically and transformation in economic activities generally means volatility in employment and businesses and differential returns to skills. To the extent that the government social policy smoothes-out these changes, either the transformations may not occur or the cost of smoothing them out could be quite high in terms of income support. Therefore, “new” social policies to deal with this new wave of globalization should focus on approaches that encourage and enable workers and firms to fill opportunities coming from change, rather than focusing on moderating outcomes and avoiding change.

Globalization of Services: Is there no end to it?

If the main motivators propelling forward ITES are the technological revolution, along with lower wages in developing countries and a narrower education gap, then is there nothing to stop all ITES from going to lower wage countries?

There are several factors that point to retained jobs in industrial countries (in addition to the market-expansion effect noted earlier). First and foremost, not all jobs can be codified, separated, and digitized. Face-to-face interaction is still required at many points in the chain of development, marketing, delivery, and maintenance. It may be that local knowledge is critical, for example to understand the thicket of health care regulations or legal codes. It may be that certain size businesses need more ‘customer care’, as appears to be the case for SMEs. It may be that other businesses demand face-to-face presentation, as may be the case with certain financial activities. At rock bottom, there are differences in tastes and preferences, such that some people will pay to have a service
provided locally. Moreover, for some activities, transactions costs remain high enough so that local production and delivery in the industrial country is preferred.

Other factors that may limit globalization of ITES relate to murky areas where the marketplace is global, but the jurisdiction of policy is local. First, there are no global rules specifying how cross-border transactions of data should be treated. There are no global privacy rules and no global treatment of intellectual property (TRIPS notwithstanding). Moreover, because attitudes toward private sector vs. government intervention in these arenas are not homogeneous, the best that is likely to be achieved in the long run is mutual recognition agreements; yet in general, these do not yet exist. Consequently, globalization of ITES, since it is all about data, could founder. Second, ITES could be slowed by inconsistent tax treatment of income earned by various parts of the value chain of services production. Source-based vs. destination-based taxation issues are particularly relevant for ITES. Because ITES has substantial virtual activity, such issues become relevant.

A final factor that may limit ITES is that, although the education gap has narrowed between industrial and developing worlds, the supply of appropriately educated workers may not be as limitless as some think. Anecdotal commentary on rapid wage increases in countries currently enjoying ITES boom (in India for example) suggest a veneer of appropriate workers, rather than a deep pool. If this is indeed the case, then an important question becomes who can train faster—the industrial or the developing worlds—and for which jobs?
References


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