

A doctor in Bangalore, India, discusses a scan with a physician in the United States.

David T. Coe

HINA and, more recently, India are emerging as major trading countries at the same time that a new form of international commerce is taking shape—technologically assisted offshoring of jobs, especially of jobs once thought immune to international competition.

China's burgeoning share of world exports and the increase in India's share (see Chart 1) have been recognized as a major development in international economics with a significant impact on employment, wages, and production in developed countries. Now it is becoming clear that offshoring—the outsourcing to other countries of jobs or tasks that produce intermediate inputs, including services—could have potentially long-lived effects on employment, relative wages, and the job security of workers in advanced economies.

In the long run, most economists and policymakers agree, this recent acceleration of globalization will have beneficial economic effects, in both advanced economies and their emerging market trading partners. But in the short run, particularly in countries with less flexible labor markets, there could be large disruptions. Moreover, the sizable number of potentially offshorable jobs has exposed new groups of workers to international competition, and these workers may increasingly be a receptive audience for special-interest protectionists.

The recent phenomenon of the offshoring of business services has stimulated a debate in many advanced economies. The two sides of the academic debate in the United States are probably best exemplified by the attitudes of Harvard economist Gregory Mankiw and Princeton economist Alan Blinder.

In 2004, when he was chairman of the U.S. Council of Economic Advisers (CEA), Mankiw called offshoring a long-run plus for the economy, with effects that are not qualitatively different from those of conventional trade in goods. Blinder-a member of President Bill Clinton's CEA and former vice chair of the Federal Reserve Board-has said the debate is not about basic economic gains, which he acknowledges, but about whether offshoring and the entrance of China and India into the world economy are a "big deal" or simply "business as usual." Blinder (2007) says the developments are a big deal because they will force major changes in industrial structure and types of jobs, as well as in wages, job security, labor turnover, and-at least in the short run-employment and unemployment.

Whether offshoring is a big deal or business as usual depends on a number of factors: how many jobs have already been "lost," how many jobs might be lost, how rapidly new jobs are created, the potential impact on incomes and job security for different types

Outsourcing of service jobs to other countries could affect industrial countries' economies and attitudes toward globalization

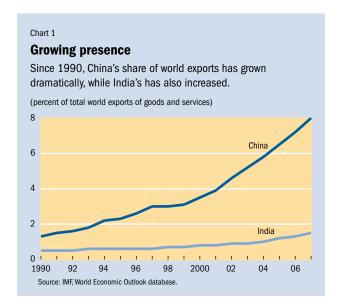
of workers, and how long or smooth the transition is likely to be.

The offshoring threat

Hard data are scarce on how many jobs in advanced economies have actually been lost because of offshoring, but estimates suggest the effects have been limited to about 0.3–0.7 percent of total employment in the United States and those European countries for which estimates are available (Baldwin, 2006). There is also evidence, however, that service offshoring has been steadily increasing in recent years.

The potential number of service sector jobs that could be affected by offshoring is much larger. Van Welsum and Vickery (2005) estimate that in 2003 close to 20 percent of total employment in the European Union countries, Australia, Canada, and the United States could potentially have been affected by offshoring of services enabled by information and communications technology. Blinder has higher estimates for the United States: 22–29 percent. Other studies also produce large estimates.

The distinction between estimates of the potential number of service sector jobs that could be exposed to international competition and the actual number of job losses is often missed in the public debate. That debate often implicitly assumes that industrial countries will have no comparative advantage in any of the service sector jobs newly exposed to international competition. That is, industrial countries will only offshore, not attract, or onshore, jobs. Yet the United States, the United Kingdom, and a number of other advanced economies are net exporters of services, and in many cases this net surplus has been increasing in recent years. It is possible that advanced economies will onshore more services than they offshore. In addition, productivity increases in offshoring enterprises may lead them to increase hiring, potentially resulting in a net increase in jobs. In the United Kingdom, for example, firms that import services have faster employment growth than those that do not (Hijzen and others, 2007).



Incomes and job security

A key issue is whether offshoring will affect the relative wages of workers differently than did earlier episodes of globalization. It is more likely that offshoring will be a big deal in advanced economies if offshoring reduces incomes of medium- and high-skilled workers, many of whom were not previously exposed to international competition, rather than mainly restraining wages of low-skilled workers, as skillbiased technical change and globalization have tended to do in the past. The possibility of downward pressure on wages of skilled workers is suggested by ample anecdotal evidence: workers in India reading X-rays of patients in advanced economies, developing software for firms in advanced economies, and preparing tax forms for citizens of advanced economies. Moreover, some low-skill tasks, such as those performed by gardeners, garbage collectors, and caregivers, are, with current technology, not able to be done abroad, suggesting that wages for these types of jobs are unlikely to be affected by offshoring.

Whether, on balance, highly skilled service tasks are offshored or onshored in a specific country, with concomitant pressures on incomes, will depend on that country's comparative advantage. Although offshoring of some skilled services has grown rapidly in Indian cities such as Bangalore, it seems likely that the comparative advantage of emerging market countries, such as China and India, will remain in low- or medium-skill tasks for some time, given the challenges of increasing the quality of education and average levels of education of their vast populations.

In general, offshoring does not appear to be having a disproportionately large effect on skilled tasks in advanced economies. Of course, this could change if high-skilled jobs in industrial countries that are potentially offshorable get offshored. Thus far, however, the effects of offshoring appear to be consistent with findings in the broader literature indicating that skill-biased technical change tends to reduce the wages of low-skilled workers.

Offshoring may also have important effects on workers' actual or perceived job security and on labor's bargaining power. Evidence of this is found in the United States, for example, where workers in industries and occupations involved in tradable goods express higher levels of economic insecurity than other workers. Needless to say, insecurity will increase if the impact of offshoring on workers is sudden and unpredictable, as has generally been the case.

How bumpy the transition?

Whether increased offshoring occurs smoothly or in a massive and disruptive transition will depend on a variety of macroeconomic and structural factors. Important factors are the macroeconomic, trade, and exchange rate policies in China and India and in their industrial country trading partners that will determine the overall size and configuration of world current account balances. Structural policies are also important because countries with flexible labor and product markets, good education institutions and training systems, and effective employment and innovation policies will more

easily and rapidly adapt to the challenges and opportunities from increased trade and offshoring.

The actual number of tasks that become tradable and how rapidly they start to be traded will also depend on the capacity in China, India, and other developing countries to take on new types of tasks from advanced economies. As noted, it seems likely that it will take some time before China and India develop a broad-based comparative advantage in more technologically advanced services. Capacity to onshore new types of tasks will also require improvements in infrastructure in India; in China, it will depend on strengthened English-language skills, property rights, intellectual property rights enforcement, and rule of law. These structural issues suggest a drawn-out transition.

The transition will also depend on wage developments for the limited number of suitably skilled workers in China and India. There are already tentative signs of rising real wages and anecdotal evidence of labor shortages in the coastal regions of China and in Bangalore. Other things being equal, rising real wages in key regions in China and India will erode these countries' comparative advantages and limit the number of tasks they take on from developed economies.

A final question is how many other developing and transition countries will join the party as offshoring destinations—and how rapidly. So far, the participation of many countries in sub-Saharan Africa, the Middle East, Central Asia, and South America appears limited to nonexistent. For a number of reasons related to geographic proximity, cultural and linguistic similarities, and the unique roles of the Chinese and Indian diasporas, other countries may find it difficult to emulate China's and India's recent successes as offshoring destinations (Coe, 2007).

The longer the transition takes, the less likely it is to be disruptive. But regardless of how long the transition is, it is clear that the ongoing integration of China and India into the world economy is likely to have lasting effects on the distribution of income and on job security in advanced economies.

Globalization and inequality

The recent intensification of globalization has occurred while many workers in industrial countries perceive an ongoing and sustained rise in economic inequality. The causes of the rise in income inequality are not fully understood, but the balance of empirical research indicates that skill-biased technical change has been a more powerful driver of increased wage dispersion than globalization, itself a reflection of technological advance (IMF, 2007).

Although the increase in inequality has been fairly general, it has been particularly large in countries such as the United States, the United Kingdom, and Australia. It has often been especially pronounced when comparing the very top of the income distribution with the rest of the population. In the United States, for example, on some measures income inequality is greater today than at any time since the 1920s. And it is not only the low-skilled who are affected: workers with relatively high levels of education are also experiencing declining real wages (Aldonas, Lawrence, and Slaughter, 2007).

Chart 2 Inequality and trade views In industrial countries, the higher the level of income inequality, the less positive are the attitudes toward trade. Gini index (percent) 36 -United States 34 _ Ireland United Kingdom 30 Australia Germany 28 Hungary 26 _ 24 _

Sources: Förster and Pearson (2002); and International Social Survey Programme (2007). Note: The Gini index is a measure of income inequality, At 0, there is perfect equality (everyone has the same income); at 100, there is total inequality (one person has all the income). The Gini index here is from the mid-1990s. The attitudes toward trade are from a 2003 survey.

30

Favorably disposed toward trade (percent)

40

50

20

22 10

That the acceleration of globalization has coincided with rises in income inequality in some countries has important implications for public support for globalization. Voters whose incomes remain stagnant while globalization is boosting the incomes of a few may see themselves as outsiders not benefiting from globalization and may increasingly identify with the losers from globalization. This may even be the case if voters—correctly—view technology as the driving force behind income developments, because increased trade may be the most evident manifestation of technological change. Moreover, voters have the political power to influence policies that can slow, halt, or even reverse the process of globalization, whereas they are largely unable to influence the pace of technological advance.

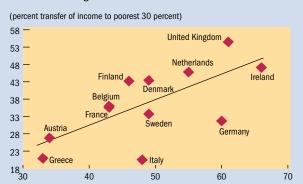
Public opinion surveys in many countries indicate that an individual's relative economic status has a very strong positive association with pro-trade attitudes (see Chart 2). Aldonas, Lawrence, and Slaughter (2007) argue, for example, that the U.S. public is becoming more protectionist because of stagnant or falling incomes, not because of a failure to understand the benefits of globalization. This suggests that the public appreciates that the gains to the winners from trade liberalization exceed the losses of the losers. But they also understand that liberalization is an improvement for the nation as a whole only if the losers are *actually* compensated, which they seldom are.

The most important policy implication of the emergence of China and India and of the increase in offshoring may stem from their coincidence with the perception of widespread increases in economic inequality in many advanced economies. The large number of *potentially* offshorable jobs exposes new groups of white-collar workers, many of whom may be politically active, to international competition. If large numbers of workers believe their jobs are potentially at risk of being offshored and the benefits from globalization

Chart 3

Income transfer and globalization

In the euro area, the more income that is redistributed to the poorest 30 percent of the population, the more positive are attitudes toward globalization.



Sources: Förster and Pearson (2002); and European Commission (2003). Note: Income transfer data are from the mid-1990s; attitudes toward globalization from a 2003 survey.

Favorably disposed toward globalization (percent)

are not being shared fairly, they are likely to be increasingly receptive to special-interest protectionists.

Creating a consensus

Policymakers need to ensure that the gains from trade are broadly shared and that social policies are in place to facilitate adjustment of those workers adversely affected by globalization and technological change. One way to do this is to improve education and training, which is crucial to adapt successfully to globalization. But this is likely to have only limited effects in the short run. Education reforms are often difficult to implement and have an impact only as new generations of students complete their education.

In the time frame relevant for political decisions, redistribution policies to compensate losers or outsiders may be key to obtaining political support for continued participation in—or to prevent a retreat from—globalization. This appears to be the case in the European Union: countries that do relatively more redistribution, proxied by the percent of total benefit payments that are paid to the lowest 30 percent of the working-age population, are those in which the population is most in favor of globalization (see Chart 3).

Although the need to compensate the losers from globalization has been widely appreciated, the question of how best to do so has not received much attention. The changing nature of globalization in recent years, however, suggests that this issue may become increasingly important in some countries because larger groups of workers may now consider themselves losers. To maintain political support for globalization, therefore, compensation may need to be broadened beyond the narrowly defined group of workers who lose their jobs as a result of trade liberalization to include employed workers at the low end of the income distribution.

Redistribution, however, will have adverse incentive effects, reducing the economic gains from globalization. This highlights the importance of designing efficient redistribution schemes to maximize the net gains from globalization. Redistribution schemes that do a relatively good job of preserving the incentive to work allow a country to derive relatively large net benefits from globalization (Snower and Coe, 2008).

Fortunately, there are examples of relatively efficient redistribution schemes: the Earned Income Tax Credit in the United States and the Working Families Tax Credit in the United Kingdom, among others (OECD, 2006). But this is only one aspect of the issue. There is also the question of whether the amount of redistribution being done is sufficient to create and maintain a consensus for globalization.

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