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Muddles in the Debate Over Outsourcing

Jagdish Bhagwati, Arvind Panagariya and T.N. Srinivasan

IN THE early 1980s, "outsourcing" typically referred to the situation in which firms expanded their purchases of physical inputs in manufactures, as with car companies that purchased window cranks and seat fabrics from outside the firm rather than making them inside. But in 2004, outsourcing took on a different meaning. It refers now to a specific segment of the growing international trade in services. This segment consists of arm's-length or what Bhagwati (1984) has called "long-distance" purchase of services abroad, principally but not necessarily via electronic mediums such as the telephone, fax and Internet.

Outsourcing can happen both through transactions by firms, like phone call centers staffed in Bangalore to serve customers in New York and x-rays transmitted digitally from Boston to be read in Bombay, or with direct consumption purchases by individuals, as when someone hires an offshore firm to provide plans for re-designing or re-decorating a living room.

Thus in February 2004 the members of President Bush's Council of Economic Advisers stated: "Outsourcing of professional services is a prominent example of a new type of trade." (Mankiw, Forbes, and Rosen, 2004). The chairman of the CEA, Gregory Mankiw, made a similar point in a press interview (Andrews, 2004):

> ''I think outsourcing is a growing phenomenon, but it's something that we should realize is probably a plus for the economy in the long run. We're very used to goods being produced abroad and being shipped here on ships or planes. What we are not used to is services being produced abroad and being sent here over the Internet or telephone wires. But does it matter from an economic standpoint whether values of items produced abroad come on planes and ships or over fiber-optic cables? Well, no, the economics is basically the same.''

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Summary
The public debate over outsourcing is muddled by confusions about the phenomenon that outsourcing represents and whether it is something to which the conventional principles of international trade may not apply. Critics use the term interchangeably to refer to altogether different phenomena such as on-line purchases of services, direct foreign investment and, sometimes, all imports.

Professors Bhagwati, Pangariya and Srinivasan argue that clarity requires distinguishing among these various phenomena to define outsourcing explicitly as the services trade at arm's length that does not require geographical proximity of the buyer and the seller – the so-called Mode 1 services in WTO terminology – conducted principally via the electronic mediums such as the telephone, fax and Internet.

Dr Mankiw's comments caused a considerable stir, with critics complaining that he had endorsed a reduction in U.S. jobs. Journalists jumped on the bandwagon, with Lou Dobbs of CNN going so far as to list on his program U.S. companies that "ship jobs abroad". Many Americans had similar concerns; for example, an Associated Press-Ipsos poll in May 2004 found that 69 percent of Americans thought that "outsourcing" hurts the U.S. economy, against only 17 percent who think it helps (reported at <http://www.pollingreport.com/trade.htm>).

The resulting public debate over outsourcing has been marred by two sets of serious muddles. The first set of muddles relate to what is meant by outsourcing. When many politicians, journalists and even some economists start discussing "outsourcing", they soon leap beyond purchases of offshore arm's-length services to include, without analytical clarity, phenomena such as offshore purchase of manufactured components and even direct foreign investment by firms. Thus, we begin by discussing how outsourcing, properly defined as the offshore trade in arm's –length services, is addressed at the World Trade Organization in its General Agreement on Trade in Services. Based on this definition, we then discuss recent estimates of the extent of outsourcing.

The second set of muddles is more subtle. Even some economists who use the appropriate definition of outsourcing sometimes worry about whether arm's length trade in services should be treated with the same tools as trade in goods, or whether it presents different analytical issues. In our article for the *Journal of Economic Perspectives*, we present some models to illustrate the effects of outsourcing; and we use the models to consider how trade in offshore purchase of such arm's-length services might affect national output, wages and distribution of income. We argue that outsourcing is fundamentally just a trade phenomenon; that is, subject to the usual theoretical *caveats* and practical responses, outsourcing leads to gains from trade and its effects on jobs and wages are not qualitatively different from those of conventional trade in goods.

We also distinguish between outsourcing issues arising in two alternative ways: first, because of new technological possibilities which convert previously non-traded services into traded arm's-length services (at any given skills and factor endowments of countries) and, second, as skills accumulate in countries such as India and China in information technology activities that can augment internationally traded arm's-length services (at any given technology for trading such services).

Muddles over the Definition of Outsourcing

The economics literature on trade in services has long made distinctions based on the different ways in which the provider and the user could transact. For example, Bhagwati (1984)

The definition is appropriate because this is the phenomenon that is relatively new and scary in public consciousness and has fueled the recent "outsourcing" debate. Under this definition, the total number of the U.S. jobs outsourced annually is minuscule; and it is expected to remain so over the next decade, even on a gross basis (i.e., without adjusting for the jobs in-sourced to the United States).

The fears that offshore outsourcing will lead to high-value jobs being replaced by low-value jobs down the road are also argued here to be implausible in view of several qualitative arguments to the contrary.

The authors also demonstrate that offshore outsourcing of Mode 1 services raises no new analytical issues, contrary to what many fear. Thus, it leads to gains from trade (with the standard caveats applicable to conventional trade in goods) and, in specific cases, to income-distribution effects.

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distinguished between "long-distance" arm's-length services and those requiring the provider and the user to get together.[1] Sampson and Snape (1985) offered further distinctions in the latter group. The language of the World Trade Organization (WTO), under its General Agreement on Trade in Services (GATS), categorizes four different ways in which services can be traded.

In Mode 1 of the WTO terminology, trade in services involves arm's-length supply of services, with the supplier and buyer remaining in their respective locations. Although Mode 1 purchases have come into prominence because of the advances in electronic information and communications technology that allow rapid flow of voluminous data across international boundaries, such transactions also take place through conventional communications; for example accounting work for a firm in New York can be done in Bangalore with records going back and forth by snail-mail. Mode 1 trade in services is generally distinguished from goods trade in that it cannot be readily subjected to customs inspection. Both individuals and firms can provide Mode 1 services. In the former category, we have independent designers, architects and consultants who sell their services electronically to manufacturers and consumers around the world. In the latter, we have large firms that manage call centers, back offices and software programmers.

Mode 2 services are provided by moving the service recipient to the location of the service provider. Travel by foreign residents including tourists is the dominant form of Mode 2 exports and contributed $64.5 billion to the U.S. services exports in 2003, according to the U.S. Bureau of Economic Analysis (<http://www.bea.gov/bea/di/home/bop.htm>). Other examples of Mode 2 exports include medical care rendered to foreign patients and education provided to foreign students. The latter generated as much as $13.4 billion in export revenues for the United States in 2003.

In Mode 3, the service provider establishes a commercial presence in another country, requiring an element of direct foreign investment. The direct investment involved is assumed to be minuscule, existing only to facilitate sales and purchases. The most prominent examples of Mode 3 services are banking and insurance. Mode 3 is therefore held to entail only the "right to establish," to distinguish it from full-scale direct investment.

In Mode 4, the service seller moves to the location of the service buyer. Construction and consulting services are often provided through this mode. Also included in this category are medical and educational services provided by moving doctors and teachers to the location of the recipient. Thus, Mode 4 implies temporary migration, which will often shade over into permanent migration since the experience with the guestworker (gastarbeiter) program in western Europe has shown that it can be enormously difficult to

return temporary workers to their countries of origin. As the Swiss novelist Max Frisch remarked movingly when the German authorities could not bring themselves to return the guestworkers to their countries of origin in the distressed economic times of the 1970s, "We imported workers and got men instead."

Trade in Mode 1 services is what most economists have meant when they discuss "outsourcing". Moreover, international trade in tourism (Mode 2), banking and insurance (Mode 3) and programs of temporary or permanent migration (Mode 4) present distinctive issues of their own, so that Mode 1 trade in services is the primary focus of this article. But it is worth noting the historical irony that when trade in services was brought into the fold of international trade rules via the General Agreement on Trade in Services (GATS), concluded as a part of the Uruguay Round agreements that created the World Trade Organization (WTO) in 1995, trade in Mode 1 services was the least controversial, while Modes 3 and 4 were most controversial.

The developed countries demanded the expansion of the right to commercial presence abroad (Mode 3) and opposed the inward movement of people (Mode 4). Developing countries, on the other hand, resisted liberalization in Mode 3 services and pushed for the liberalization of Mode 4 services, which offers their unskilled populations the possibility of offering services in developed countries. Neither side showed much resistance to the Mode 1 cross-border trade in services, perhaps because by definition, it did not involve accepting a foreign presence on one's soil. Indeed, the bulk of the liberalization commitments made as a part of the GATS negotiations under the Uruguay Round were under Mode 1. In the years immediately following the creation of the WTO in 1995 the United States aggressively pushed the idea that the WTO members commit to zero duty on the Internet trade.

In the public controversy over outsourcing and its effects on American prosperity, jobs and wages, at least two phenomena have been muddled up with the purchase of long-distance services a la Mode 1 of WTO, making the discussion of the outsourcing phenomenon opaque and misleading, to say the least.

First, the public outcry often slides over into imports of all services, not just Mode 1 services. Sometimes the critics of outsourcing appear to include even the imports by firms of manufactures components, as under the early-1980s definition of "outsourcing." In fact, such enlargement of the scope of the phenomenon of outsourcing should include imports of products for final consumption as well. After all, there is no difference in principle between an American factory owner importing French brie and Burgundy for his supper, instead of consuming Milwaukee beer and Kraft cheese, and his importing a Japanese lathe rather than one manufactured in Ohio for his factory in Youngstown.

Second, the phenomenon of direct foreign investment is often added indiscriminately to the discussion of outsourcing of Mode 1 services, as when a firm closes its plant in Boston and invests in production in Bombay, or when a firm simply opens up a factory in Nairobi instead of in Nantucket.[2] This confuses the phenomenon of trade in services with direct foreign investment.

But direct foreign investment is not the same as offshore outsourcing, even though sometimes both phenomena are tied together as, for example, when Dell invests in an outsourcing facility for call-answering in Bangalore. The two phenomena are both empirically and analytically distinct. The pros and cons of direct foreign investment are much discussed in the massive academic literature on the subject. It would be fair to say that today direct foreign investment is considered to be desirable, even if the gains from it to the recipient and to the sending countries need not always be substantial and occasionally a downside can occur.[3] Regardless, we will ignore this question, concentrating instead on analyzing outsourcing (of Mode 1 services), as defined and distinguished above.

How Many U.S. Jobs Have Been Outsourced?

Despite the heated level of rhetoric over outsourcing, the magnitude of jobs affected by outsourcing of Mode 1 services in the U.S. economy appears quite modest. The smallness of the number emerges whether we look at the buyer's side of the transaction or that of the seller.

On the buyer's side, perhaps the most frequently cited estimate is due to a 2002 report from Forrester Research, Inc., authored by McCarthy (2002), according to which the total number of U.S. jobs outsourced will reach 3.3 million – recently revised to 3.4 million in McCarthy (2004) – by 2015. Forrester does not explain whether the prediction is that the U.S. economy will have 3.3 million fewer jobs in 2015 than it would otherwise have had because of outsourcing. This seems implausible given the common belief among economists that the number of jobs in the long run is determined by the natural rate of unemployment, or whether the prediction is that outsourcing will cause 3.3 million U.S. workers to shift from jobs that they might otherwise have had into different jobs, which is a more plausible claim. Nor does this report focus on just Mode 1 services and so in that sense the estimate for outsourcing is likely to be overstated.

But even accepting these estimates at face value, Forrester is suggesting an average annual outflow of jobs of at most 300,000 (without any offset for the inflow of jobs due to outsourcing by other nations from us). The Forrester report associates this outflow to nine occupational categories – for example, management, architecture and engineering and computer and mathematical operation – identified as especially subject to outsourcing. The

estimated number of jobs affected turns out to be a minuscule 0.53 percent of the 56.7 million jobs in 2002 in these nine occupational categories.[4] Alternatively, consider that the U.S. economy destroyed as many as 30 million jobs in 2003 and created approximately as many of them, according to the Business Employment Dynamics survey of the Bureau of Labor statistics <http://www.bls.gov/bdm/home.htm>, the Forrester estimate of job outflows is about 1 percent of the number of jobs destroyed and created annually currently.

Evidence on job losses from yet other sources reinforces the conclusion that the aggregate effect of outsourcing has so far been negligible. Companies that lay off 50 workers or more are asked by the U.S. Department of Labor to explain the reason. **Source?** Only 2 percent of the layoffs in the past five years **what years?** are reported to have come from companies reallocating operations overseas or from import-competition pressure. Evidently, Mode 1 outsourcing of services must be only a small part of these 2 percent of the total layoffs.

Likewise, Mann (2003) calculates that once we cut through the dotcom boom and bust and adjust for the business cycle downturn, and compare more meaningfully therefore the employment in the information-technology-related industries during the period end-1999 to October 2003, employment in architecture and engineering occupations is stable, that in computer and mathematical occupations is 6 percent higher, and in business and financial occupations is 9 percent higher. These figures do not directly measure the extent of outsourcing, but insofar as the occupational categories they represent are the ones subject to outsourcing, a stable or rising employment trend in them suggests relatively little impact of outsourcing on employment.

The number of outsourced jobs can also be measured from the seller's side. India is by far the largest provider to date of offshore Mode 1 services. According to India's National Association of Software and Service Companies (NASSCOM), employment of workers such as software developers and call center operators serving clients outside India increased by 353,000 between March 2000 and March 2004 reaching 505,000. Of the increase, 70 percent or 247,000 workers went into serving clients in the United States. This works out to 61,750 jobs per year. In the Philippines, the increase in the number of workers doing back-office work for non-Philippine companies between 2002 and 2003 was 14,500. [5] Adding up these numbers and accounting for some missing countries and categories, it is unlikely that the number of workers engaged in providing offshore services to the United States companies could have averaged more than 90,000 to 100,000 per year.

Moreover, even if outsourcing sometimes reduces jobs proximately at certain firms or in certain sectors, in other cases it can help to

create new U.S. jobs. This happens when the availability of the cheaper lower-end skilled workers abroad makes an activity that also uses higher-end skilled workers in the United States financially feasible. For example, the Information Management Consultants (IMC) of Reston, Virginia, several years ago considered producing software that would allow biotech companies to better exploit the new human genome research. The project seemed financially nonviable if undertaken entirely in the United States. But having its Indian subsidiary do the bulk of the coding work made the project viable. The outcome was a thriving line of business in bio-informatics for IMC and employment at six-figure salaries in the United States. For each engineer in India, the firm now employs six engineers in the United States (Pearlstein, 2004).

Besides, the proximate job losses due to outsourcing from the United States must be set against the proximate job gains due to others outsourcing to the United States. The United States is a substantial exporter of services in fields as diverse as legal, medical and accounting services. These include outsourcing of Mode 1 services, of course. We analyze more fully below the consequences of outsourcing for jobs in the United States, but we may remark here that while linking sectoral trade balances to aggregate jobs is inappropriate on theoretical grounds, if we were to disregard this caveat and join the policy debate on whether we proximately export more service jobs than we import, the large U.S. trade surplus in services -- $51.1 billion in 2003 according to the U.S. Bureau of Economic Analysis -- surely has to favor outsourcing. Since the U.S. economy offers high-value Mode 1 services while importing low- value ones instead, the net trade balance in Mode 1 services is also almost certainly in America's favor, just as it is on services more generally.

Given then the meager evidence that outsourcing has been or will be quantitatively important in U.S. labor markets, why has the issue risen to such prominence? One answer is that the stagnant job growth since the recession of 2001 has led to a search for possible causes. This attempt to draw a connection between international trade in services and slow U.S. job growth in the early 2000s is surely linked to the crude and incorrect view often used by protectionists that all imports, whether of goods or services, cause a "loss of jobs" for Americans. These complaints reduce to the conventional witticism: Trade is good but imports are bad. This fallacy is, of course, all too pervasive; but it has regained popularity at a time when trade deficits are large and job generation has been slow. Another reason for the furor over outsourcing is that the technological advances in computing, communications and information technology have made the outsourcing of services a practical possibility in a way that was not possible in the past, creating fear of job loss among white-collared workers. A presidential election campaign in 2004 has added intensity to this volatile mix of ingredients.

Implications for Outsourcing and the U.S. Economy: Welfare, Jobs, Wages and Dislocation

Let us now turn to a consideration of the implications of outsourcing for the U.S. economy. There are four issues to consider: overall welfare; the total number of jobs; the quality of jobs; and dislocation.

Overall Welfare

Our theoretical analysis then leads us to conclude that there is a strong presumption that outsourcing that turns previously nontraded services into Mode 1 tradable services is beneficial to the United States. We have also shown that taking the phenomenon of outsourcing as given, the expansion of skills abroad that we already import is also beneficial for the U.S. economy, for it makes the imported services even cheaper. The main qualification results from the possibility of the deterioration of the terms of trade in other goods—specifically, that the primary beneficial impact of the introduction of outsourcing or expansion of skills abroad may give rise to sufficiently strong adverse secondary terms of trade effect in the traded goods to offset the former.

This may happen, for example, because the U.S. exports goods that are more intensive in information technology services and imports goods that are less intensive in information technology. Taking outsourcing as given, foreign (say, Indian and Chinese) growth then makes the outsourced information technology services cheaper to us, which is beneficial, but it also has the harmful effect that it expands the world supply of the information-technology-intensive good that the U.S. economy exports and thus worsens the U.S. terms of trade.

There are good reasons to believe, however, that this last possibility does not capture the reality of outsourcing. For one thing, growth in China and India in the near future is likely to remain concentrated in low-end information-technology services that they are already exporting to us. The notion that India and China will quickly educate 300 million of their citizens to acquire sophisticated and complex skills at stake borders on the ludicrous. The educational sectors in these countries face enormous difficulties.

As of today, the students enrolled in colleges and universities in India account for only 6 percent of the population in their age group (18-24 years). And of those that do, only a tiny fraction have the minimal English language skills that would enable them to function even moderately well in occupations such as call-answering. Moreover, with the exception of a handful of institutions such as the Indian Institutes of Technology and Indian Institutes of Management, the higher education system in India is in a dire state and starved of resources. Adding 300 million to the pool of the skilled will take some decades.

Even if we were to grant the possibility of substantial expansion of complex skills in China and India, the conventional Johnson (1955)-type model that predicts losses due to the deterioration of the terms of trade becomes less relevant. Just as the revival of Europe and Japan brought their skill levels closer to those of the United States, and the gains from "factor-endowment differences"-induced trade were increasingly replaced by gains from "intra-industry" trade, and just as the United States now specializes in high-end chips such as Pentium while leaving more standard semi-conductor chips to foreign producers, we can confidently expect "intra-service" and "intra-industry" trade to grow between the U.S. on the one hand and China and India on the other as the latter acquire more skills. Models such as those of Johnson in the 1950s do not provide a particularly helpful handle on the analysis that is called for today.

One final source of gains from outsourcing is the gain in productivity that lower-priced services used as intermediate inputs can bring. Mann (2003), drawing on Mann and Kirkegaard (2003), points to very substantial productivity gains for the United States from the globalization of information-technology hardware production. She reports that the globalized production and trade made information-technology hardware 10 to 30 percent cheaper than it would have been otherwise. Taking the mid-point of these estimates, she calculates that the price decrease translated into higher productivity growth and a faster real GDP growth of 0.3 percent per year from 1995 to 2002 in the United States. She hypothesizes that globally integrated production of information-technology software and services will follow a similar pattern, reduce the prices of these products and promote further diffusion of information technology throughout the U.S. economy. In turn, this would give further boost to productivity growth.

Total Number of Jobs

Economists typically argue, with plausibility for the United States today, that macro-economic policy determines the total number of jobs, whereas trade policy affects the composition of jobs.[6] Thus, Brainard and Litan (2004) note in their recent analysis of outsourcing that the number of jobs has flexibly adjusted to the growth in the labor force in the United States. Despite declining barriers to trade, rapid expansion of the volume of imports, and the innovation of what appear to be job-displacing technologies, the United States economy has added 30 million workers to its payrolls since 1985—including the 2001 recession and the relatively slow growth in jobs during the recovery. Moreover, the growth in jobs has been attended by a rise in the median family income by 20 percent during the last two decades.

Those who contend that all or most service jobs will be outsourced to India and China are both empirically and theoretically mistaken. The empirical mistake is that not all service jobs can be

outsourced. About 70 percent of the jobs in the United States are in service industries such as retailing, catering, restaurants and hotels, tourism and personal care that require the consumer and producer to be present in the same place and, therefore, cannot be outsourced (Agrawal and Farrell, 2003). The theoretical mistake is that the possibility that all jobs, in both manufactures and services, will go to China and India, whether through outsourcing or other trade, because of low labor costs, comes perilously close to confusing absolute and comparative advantage.

Finally, not all outsourcing results in direct displacement of the U.S. workers. In some cases, it may create services not previously available, which is like opening an economy to the imports of products not produced in the country. For example, getting telephone numbers through 411 and 555-1212 had become very expensive and as a U.S.-based service, it would have been virtually eliminated. Instead, the availability of call centers abroad has made it possible to retain this service. In other cases, outsourcing may replace capital rather than workers in the United States. Outsourcing allows some human operators abroad to answer the phone for many billing and business inquiries, rather than having such tasks replaced by fully automated electronic response systems. Likewise, outsourcing may lead to a return to manual inputting of checks into the computer system instead of using expensive imaging software.[7]

But even if outsourcing and trade are unlikely to reduce total employment, specific types of jobs can certainly be lost, like jobs in telephone call centers or in routine tax preparation. The interesting question is whether the new jobs that workers displaced by outsourcing will find are going to be "better" jobs that pay more or "worse" jobs that pay less. Are computer programmers earning $60,000 going to be bumped down into $15,000 jobs stocking shelves and bagging groceries at Wal-Mart?

Will other high-value jobs arise?

There are several reasons to expect that other high-value jobs will arise for any workers displaced by outsourcing, so that outsourcing is unlikely to lower overall wage level of the displaced U.S. workers.

First, outsourcing from the U.S. economy is generally for low-value jobs, like back-office operations, phone centers and data entry. There are admittedly some exceptions – R&D laboratories have been set up in India, for instance – but this process seems unlikely to go very far in intermediate run, since the labs often have to be close to home where new products tend to be developed. This effect of outsourcing is like the first stage of what Raymond Vernon (1966) famously called the "product cycle" where innovating firms introduce and debug the product in the domestic market and once the product matures and is standardized, they shift its production

to countries where it is cheapest to produce, with the home country eventually becoming an importer of the product. On the other hand, in-sourcing to the United States -- where others buy American-produced legal, medical, educational and other services online -- leads to higher-value jobs. Thus, outsourcing means that the U.S. economy loses low-wage call centers, but gains high-wage jobs in medical, legal and other services. On balance, therefore, the outsourcing phenomenon, or the expansion of trade in Mode 1 services, seems likely to offer America a transition to higher-value jobs.

The claim that outsourcing will lead to a reduction in information technology jobs in the U.S. economy seems especially far-fetched. The *Occupation Outlook Handbook* (OOH) of the Bureau of Labor statistics, as discussed in Mann (2003), projects that three of the 10 largest numerical increases in job categories will be computer-related occupations: computer support specialists, computer software applications engineers, and computer software systems engineers. OOH also predicts that 13 percent of the total number of jobs created in the economy up till 2010 will be related to information technology. The growth in these occupations will be 43 percent, compared with an economy-wide job growth rate of 13 percent. Although the precise growth rates in the OOH predictions should not be taken too seriously, the general direction of the trends seems clear.

The general point is that the dynamic U.S. economy grows by a continuous infusion of new products and processes, which in turn offers a stream of new jobs. Even if some computer support technicians start answering phone questions from overseas, an increased number of service firms will provide technicians to set up, repair, and manage computer and infrastructure services here in the United States. These "electronic plumbers" of the future, like the water-oriented plumbers of old, will earn more money than many professors. Similarly, even if some jobs for medical technicians like reading x-ray charts migrate overseas, surely no one expects that the U.S. health care industry as a whole will diminish its number of jobs as new needs arise as with the obesity epidemic and the cosmetic needs of an ageing population. As long as the U.S. economy continues to raise its levels of technology, human capital, and physical capital, and to run an economy not too far from full employment, then the dynamic twists and turns of that economy will produce higher-wage jobs.

Job Dislocation

Popular economic models of trade, at least the basic ones used in this paper, typically assume that workers who lose one job can readily find another (although the wage may change, and not necessarily for the worse). But in the real world, workers may suffer through a period of joblessness and displacement.

The **mockingbird** is the state bird of Tennessee. Cordell Hull represented a district of Tennessee in the Congress of the United States, and was elected a senator from there, before becoming U.S. Secretary of State (1933-44).

"The mockingbird is known for fighting for the protection of his home – falling, if need be, in its defense. Mockingbirds are not intimidated by animals larger than themselves and have been known to attack eagles"

– Diana Wells, *100 Birds and How They Got Their Names* (Chapel Hill, NC: Algonquin, 2002)

Trade Policy Analyses

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One of the most influential studies of the costs of trade displacement, by Lori Kletzer (2001), divides manufacturing industries into low, medium and high import competing groups, based on the change in the import share during 1979-94. For example, the import-competing group includes the usual labor-intensive industries such as apparel, footwear, knitting mills, leather products, textiles, blast furnaces, radio and television and toys and sporting goods and accounts for 6.5 million or 38 percent of the total jobs displaced in manufacturing during 1979-99. Interestingly, she finds that across all three groups of industries, about two-thirds of those displaced are reemployed within two years, with about half of that group ending up with jobs that paid roughly as much or more than their previous job, and the other half experiencing a wage cut of 15 percent or more. Thus, the rate of re-employment and wage changes for workers that Kletzer characterizes as trade-displaced are quite similar to those for other workers. In other words, a common factor, most likely technological change, is behind the displacement in all categories.[8]

The issue of how society should deal with displaced workers will arise in any dynamic market-oriented economy. For example, the United States has unemployment assistance that applies regardless of whether a worker loses a job because of poor management, poor personal performance, a shift in demand, a shift in the technology of production, a shift in many of the domestic policies, domestic competition, foreign competition, or outsourcing. The United States has also had specific assistance programs for the manufacturing-sector employees displaced by imports competition for over four decades (Baicker and Rehavi, 2004). Trade adjustment assistance of this type seems a prudent political compromise if openness to international trade is to be maintained. Such trade adjustment assistance could be extended to workers who are displaced by outsourcing. More broadly, wage insurance schemes for all dislocated workers, such as the one proposed by Kletzer and Litan (2001) and experimentally built into the Trade Promotion Authority legislation of 2003, are also an important innovative idea.

Concluding Remarks

A productive public debate about outsourcing might usefully begin by restricting the "outsourcing" phraseology to services traded internationally at arm's length and principally on-line: what the WTO calls Mode 1 services. Next, it would help to admit that outsourcing is a relatively small phenomenon in the U.S. labor market. Finally, it would be useful to discuss outsourcing as a trade phenomenon, with effects that are not qualitatively different from those of conventional trade in goods. Thus, outsourcing leads to gains from trade and increases in national income, with the caveats that are standard in this literature. For example, at a theoretical level one must recognize, as trade theorists have long done, the complexity introduced by induced deterioration in the

terms in trade if the country has monopoly power in trade. At a policy level, one needs instead to be concerned about workers who are displaced from certain sectors. But outsourcing is not a small step that will take a preponderance of U.S. workers off the edge of an abyss into prolonged unemployment and re-employment only at low wages. Over time, high-value jobs can be expected to arise and expand.

We hope that our analysis will dispel some of the fear of outsourcing. But fear, as the Russian proverb says, has big eyes. It also can have deaf ears. However, we remain optimistic.

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[1] Bhagwati (1984) also initiated the analysis of what he called "splintering" of services from manufacturing. Splintering occurs when part of the manufacturing value-added such as, say, painting a car is done by contracting it out to a separate painting firm and the painting value added then becomes part of the service sector, with little change in the overall real situation. Some economists now call this the "fragmentation" phenomenon.

[2] For a prominent recent example of these confusions in a journalist, see Dobbs (2004), the jacket of whose book, *Exporting America*, condemns that: "Employment in the auto industry has dropped by 200,000 jobs over the past four years, while imports of Chinese auto parts have doubled." Similarly, Dobbs complains on the flap of his book jacket: "Carrier, maker of air-conditioning and heating units, closes its Syracuse, New York, plants – and most of its 1,200 jobs go to Singapore and Malaysia." Politicians on all sides make similar conceptual errors. For example, John Kerry's website advocates "Close Loopholes In International Tax Law That Encourage Outsourcing," and the surrounding discussion makes clear that "outsourcing" covers any company with a foreign subsidiary <http://www.johnkerry.com/issues/economy/jobs.html, checked 9/2/04>. Matching this confusion, Republicans like U.S. Senate Majority Leader Bill Frist have struck back at the critics of outsourcing by highlighting the number of major foreign companies like Nissan who "in-source", that is, build manufacturing plants in the United States (for examples, see <http://www.ofii.org/facts_figures/>). Whatever the merits of such arguments about foreign subsidiaries and the location of manufacturing, it is conceptually quite different from Mode 1 trade in services.

[3] The voluminous literature has been reviewed by many including Richard Caves (1996), a principal researcher in this area. A review and assessment from the perspectives of civil-society complaints about direct foreign investment, including whether multinationals exploit foreign workers in poor countries, can be found in Bhagwati (2004).

[4] Kirkegaard (2003) offers a detailed and careful analysis of the job losses in the nine occupational categories between 2000 and 2002. Though manufacturing accounted for less than 10 percent of employment in these categories, it accounted for the vast majority of the job losses in them. Services experienced a net gain in jobs in the categories. Among the nine occupational categories, management accounted for 60 percent of the job losses.

[5] We take the numbers cited in this paragraph so far from the Hilsenrath (2004) story in the *Wall Street Journal.* He also says that, in Ireland, the number of jobs created by U.S. multinationals between 2002 and 2003 was only 1,139 per year; but these numbers relate to direct foreign investment rather than outsourcing.

[6] In certain situations, however, trade policy can affect the total number of jobs. For example, in a Keynesian economy, tariffs can shift a given expenditure towards home goods, yielding an expansionary effect on output and employment. Or in a situation of sticky real wages with associated unemployment, trade policy can affect total employment, as analyzed in pioneering articles by Brecher (1974a, b). But neither possibility applies in a significant manner to the U.S. economy currently. This view seems implicit also in the writings of labor economists like Alan Krueger who say

that the number of jobs in the U.S. is determined by the supply of workers: a view that is inconsistent with Keynesian unemployment or inflexible-real-wage neoclassical models.

[7] The example here has been drawn from Agrawal, Farrell and Reemes (2003) who cite several others.

[8] One can raise methodological questions about this study, like how the industries are categorized. Also, the study focuses on manufacturing rather than services or outsourcing, and that job-specific or industry-specific skills are likely more important in manufacturing firms while service-oriented skills like accounting or payroll may transfer across firms and industries more easily. But these kinds of concerns seem unlikely to overturn the main result.