US Offshoring:
Rethinking the Response

December 2005  Diana Farrell
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The McKinsey Global Institute (MGI) was established in 1990 as an independent economics think tank within McKinsey & Company to conduct original research on important global issues. Its primary purpose is to provide insights into the workings of the global economy and a fact base for decision-making for the benefit of business leaders and policymakers.

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Preface

This perspective is based on the McKinsey Global Institute’s ongoing research on the impact of offshoring and conducted as part of a broader effort to understand the process of global economic integration and its implications.

This work is part of the fulfillment of MGI’s mission to help global leaders understand the forces transforming the global economy, improve company performance, and work for better national and international policies.

MGI combines McKinsey’s business experience with the rigor of academic discipline. This document reflects active dialogue with US policy makers, industry experts, researchers from leading institutions, and McKinsey’s worldwide business process outsourcing and offshoring practice. I would particularly like to thank Jaeson Rosenfeld, Martha Laboissière, Susan Lund, Sascha Stürze, Fusayo Umezawa, and Gina Campbell for their contributions to this work.

As with all MGI research, we would like to emphasize that this perspective is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

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Companies from the United States lead the world in offshoring white-collar jobs to low-wage countries. Today they employ more than 900,000 offshore service workers, doing everything from developing software to answering customers’ questions and conducting R&D. By 2008, US companies are expected to employ more than 2.3 million offshore service workers (Exhibit 1). Foreign Affairs magazine’s recent poll of US public opinion finds widespread concern about the effects on the US job market.¹ Some policy makers have responded by calling for legislation to limit offshoring and a few states have already adopted such legislation.

in the single month of May 2005. Because of this limited scale, the impact of offshoring on wage levels will also be negligible.

Preventing companies from offshoring will deprive high-wage economies of the multiple benefits it confers. Savings from offshoring allow companies to invest in next-generation technologies, creating jobs at home as well as abroad. Global competition sharpens companies’ skills: US software makers improve their performance by competing with China, just as call centers do through competition with India. And refusing to buy services provided overseas will invite retaliation. Since it runs a trade surplus in services and leads the world in attracting inward foreign direct investment, the US has the most to lose from a services trade war.

There is no doubt that maintaining an open market in services brings substantial benefits to developed economies (see Is offshoring a harmful form of trade?). But none of these benefits at present flow directly to those who undeniably suffer as a result – those workers whose jobs move overseas. This doesn’t weaken the case for free trade; rather, it warrants a shift in the debate. Instead of trying to limit offshoring, we need to allocate the benefits from this new form of trade more thoughtfully. Companies and governments can – and should – help citizens cope with the faster rate of job change. Together, they should offer retraining and lifelong educational opportunities, wage insurance, and portable health and pension benefits. Doing so would cost only a fraction of the economic benefits that offshoring will bring.

Is offshoring a harmful form of trade?

In 2004, Nobel Laureate Paul Samuelson published an article reminding readers that, in certain circumstances, free trade can erode the comparative advantage of rich countries and leave them worse off. He presents a theoretical model with two countries (one high-wage, one low-wage), and two goods (one high value-added and one lower value-added). He shows that if the low-wage country has a massive workforce that can produce the high value-added good and if its relative productivity in that good rises, the developed country’s terms of trade will deteriorate dramatically and so leave it worse off.

3 This figure is for gross job gains. Subtracting job losses, there were 2.09 million net new jobs created. Source: Bureau of Labor Statistics.

4 Nobel Laureate Paul Samuelson has argued that offshoring will not benefit the home economy if the terms of trade for a nation change enough. Our research shows this is unlikely to be the case, however. See sidebar for more.

Does this model apply to offshoring today? Our data suggests it does not. First, despite huge populations, low-wage countries don’t currently have huge numbers of university graduates with the skills needed to work for a multinational company (a proxy for their ability to produce high value-added goods). Despite having many more college graduates than high-wage countries, on average only 13 percent of them could work for a multinational company. As a result, the number of workers with comparable skills in high-wage countries far outweighs the number in low-wage countries. The United States, for instance, has 10 times the number of skilled workers that China has.

Furthermore, the actual rate has been, and will continue to be, at too low a level to have an adverse impact on a developed country’s terms of trade. Indeed, academic researchers have found that, since 1990, the terms of trade for the United States have been stable, or even slightly improved. Finally, our evidence shows that offshoring most often involves relocating the lower-value added parts of a business process to low-wage countries, not high value-added services. This reinforces, rather than erodes, the productivity advantage of high-wage countries.

So even in a two good, two country model of trade, the implication that offshoring is a harmful form of trade is not supported by our data. Furthermore, in the real world, countries trade not just two but many services, creating even more opportunities to specialize and develop a comparative advantage.

LITTLE IMPACT ON EMPLOYMENT AND WAGES

Given that service industries account for nearly 80 percent of employment and virtually all of new job creation in the US, worries about job losses due to offshoring are understandable. Alarmists claim that nearly all service jobs can be done remotely, owing to advances in technology and telecommunications, and that wages will decline as a result. But the reality is far different.


Pace of offshoring is evolutionary, not revolutionary

Our research shows that, even theoretically, only 11 percent of all US services jobs could possibly be performed offshore. This is mostly because a large percentage of service jobs – for example, shelf stocking, dental work, medical care, and network installation – require face-to-face customer interactions or a worker’s physical presence. In two of the largest sectors in the service economy – health care and retail – only 8 percent and 3 percent of jobs respectively could be performed remotely for this reason. And the industries in which the highest percentage of jobs could be performed remotely – packaged software (49 percent) and IT services (44 percent) – represent only 1 or 2 percent of overall employment (Exhibit 2).

Moreover, only a small fraction of the service jobs that could theoretically be performed offshore actually will be. There are several reasons. First, about one third of US workers are employed by companies with less than 100 employees and these companies lack sufficient scale to justify the cost involved in offshoring.
For a company with, say, just three to five finance and accounting people, the potential wage savings from moving the tasks to India are too small to justify the management time and effort required.

Even larger companies find offshoring is more complex than they expect. Many would need to put in place a comprehensive package of measures to streamline and adapt their processes and information systems before offshoring could be feasible. The US health care system, for instance, is dominated by paper-based processes that would need to be simplified and digitized; banking and insurance companies would have to integrate their legacy computer systems with those of overseas service providers. Other companies have little global experience and this makes them hesitant to employ people offshore. In fact, our research finds that management resistance is the biggest factor holding back offshoring today, not government regulations.

Furthermore, the rational location for many of the jobs that could, in theory, be performed remotely will still be the US. Our research shows that companies consider a host of factors beyond labor cost when deciding where to locate an activity, and then assign different weights to each. These factors include the location’s risk profile, the quality of its infrastructure, the size of its domestic market, non-labor costs, its business and living environment, and the availability of vendors.\(^8\) Because of its low-cost, reliable telecommunications and electricity infrastructure, large domestic market, and low political risk, the US remains the most logical choice for many companies that do not rank cost well above other factors. That’s why it attracts so much job-creating investment from foreign companies.

**Job loss will be limited**

All these factors mean that just a fraction of the jobs that could potentially go offshore actually will. We expect that US companies will create 200,000 to 300,000 offshore jobs per year over the next 30 years. By 2008, our research shows that offshoring will affect less than 2 percent of all service jobs.

It’s important to keep in mind that jobs performed in low-wage countries do not necessarily represent jobs lost at home. In fact, many of these jobs would not be viable at higher wage levels. Take E-Telecare, a call center vendor in the Philippines. It employs one manager for every eight customer service agents, compared to a ratio of 1:20 or more in comparable US call centers. A US airline has found that, because of lower wage levels in India, it can employ additional staff to pursue much smaller

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8 We created a Location Cost Index (LCI) database that captures data on over 50 factors that companies use when deciding where to locate an activity, for xx countries.
delinquent accounts than it could afford to chase before. Another example is the fact that more newspapers are now digitizing back issues, because offshore wages make it economical to do so.

There is a growing body of evidence in addition to our own findings that offshoring will not lead to massive net job losses. The US Bureau of Labor Statistics reports that only 1 percent of service layoffs involving more than 50 employees in the first quarter of 2004 was due to offshoring. A new academic study by Mary Amiti and Shang Jin Wei confirms that, in the US and the UK, those service sectors subject to offshoring do not experience net job losses. Put another way, these sectors are creating as many – or more – new jobs than the ones that move offshore.9

**Imperceptible impact on wages**

Because offshoring has such a limited impact on the US jobs market, the effect on wages in the US will be negligible. This is the case even in the computer and data-processing industry, one of the sectors most affected by offshoring. In the US, overall employment in that industry has been growing at over 2 percent per year since 2000, compared to 0.4 percent for the rest economy. Although many programming jobs have moved offshore, more positions for systems analysts and software engineers have been created in the US. And average wages have actually grown at a faster pace than elsewhere in the economy, since the new jobs have higher productivity and create more value (Exhibit 3).10

Indeed, new research by Brad Jansen and Lori Kletzer finds that service sectors facing international trade competition, such as software publishing and the securities industry, have fared better in terms of employment and wages than sectors that don’t, such as newspapers and waste management.11 Between 1999 and 2003, employment grew 7.6 percent per year in tradable services compared to 6.7 percent annually in non-tradable services. Wages are 5 to 10 percent higher in tradable service industries. The authors conclude that exposure to trade in services is consistent with building US competitive advantage.

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9 “Demystifying Outsourcing: The numbers do not support the hype over job losses.” Mary Amiti and Shang-Jin Wei, December 2004, Finance and Development.

10 In the UK, employment in the sector grew at 6.6% per year from 1998-2004, while employment decreased by 1.8% per year across all occupations. Wages in the sector grew slightly less fast than overall wages, however.

WHY OFFSHORING IS GOOD FOR THE US

Worries about job losses resulting from offshoring have diverted attention from the substantial benefits it generates. Past MGI research found that for every $1 of cost on services that US companies move offshore, at least $1.14 of value is created for the US economy in return. This is, in fact, a conservative estimate since it assumes that only two-thirds of workers find new jobs within six months, as they have historically. But the evidence suggests that the lower cost structure that companies achieve through offshoring results in new business opportunities that, in turn, lead to more jobs being created.

A large part of the benefit of offshoring accrues to companies. For every dollar of cost that US companies move offshore, on average they save 0.58 cents and yet receive largely identical – and sometimes even better – services. This gives them the scope to invest in new technologies and business opportunities that create

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jobs both at home and abroad, and to distribute some of the savings to shareholders (in the form of higher dividends) and consumers (in the form of lower prices and better quality).

Of arguably even more importance, offshoring enables companies to enhance their competitiveness by taking advantage of distinctive skills abroad.\(^\text{13}\) For instance, Chinese wireless chip and software designers, Taiwanese notebook manufacturers, and Philippines call centers have some of the most sophisticated capabilities in the world. By moving its operations to China, one US electronics maker has tripled its manufacturing productivity and, at the same time, cut product development cycle times and defects. In an era of global competition, companies can’t afford to pass up on such opportunities.

The US also benefits from offshoring because it is often on the receiving end of jobs and investment. In 2004, the US received $121 billion of direct investment from foreign companies, the highest in the world.\(^\text{14}\) Foreign subsidiaries provided jobs for 5.4 million US workers in 2002 – 5 percent of all private sector jobs. They also accounted for 14 percent of US private sector R&D expenditures in 2002, and 20 percent of US exports.\(^\text{15}\) Examples of such investment include Novartis opening an R&D lab in Boston, and Philips Electronics moving the headquarters of its global medical systems to Andover, Massachusetts.

With the world’s most developed and competitive service industries, the US stands to benefit more than any other country from free trade in services. It continues to maintain a trade surplus in services, even with India. In 2003, the US exported $15 billion more business services than it imported\(^\text{16}\) (Exhibit 4). US trade negotiators have long argued for freer trade in services, precisely because so many companies in financial services, accounting, law, consulting, and IT services, to name a few, stand to benefit. They should continue to press their case – MGI found that the US could eliminate up to a third of its current account deficit if countries in the European Union imported as many services from the US as it imports from them.

\(^\text{14}\) Source: UNCTAD.
\(^\text{15}\) Data is from the US Bureau of Economic Analysis; 2002 is the latest available. See Matthew J. Slaughter, “Insourcing Jobs: Making the Global Economy Work for America”, Dartmouth University, October 2004.
\(^\text{16}\) “Demystifying Outsourcing: The numbers do not support the hype over job losses.” Mary Amiti and Shang-Jin Wei, December 2004. Finance and Development.
Finally, growth in the US workforce will slow in coming years as the baby boomers retire, so reducing the ratio of workers to retirees. According to figures from the US Census Bureau, US companies will have to make do with 15.6 million fewer workers by 2015. That means they will have to find improvements in productivity and using offshore labor can be part of the solution – even if only a small part.

**SHIFTING THE DEBATE**

It is clear that offshoring and openness to trade generate substantial economic benefits. But it is also doubtless the case that a price is being paid in terms of individual job security. Workers face a higher level of job turnover than ever before. Rather than a single career with one or two companies, most workers in the US and other developed economies today can expect to have jobs with many employers, perhaps even in different fields, and that’s a difficult adjustment.

In liberalized, competitive economies with flexible labor markets, there will be plenty of new jobs. According to the OECD, the US has the world’s highest re-employment rate by almost a factor of two. Remaining open to offshoring and
inward investment will stimulate more new jobs. Nevertheless, workers need help coping with the accelerated pace of job change that accompanies openness.

Rather than trying to prevent offshoring, governments and companies should therefore turn their attention to designing programs to ease the transition for workers displaced by trade and adjusting education policies to prepare citizens for more flexible careers.

**Ease the transition for displaced workers**

Historical data show that not all workers who lose their jobs will find new ones quickly and many that do will have to accept pay cuts. A study by J. Bradford Jensen and Lori Kletzer of the University of California Santa Cruz\(^\text{17}\) finds that more than 75 percent of service workers who lose their jobs due to trade find new jobs within six months; however, the median wage of those re-employed is 11 percent below their median wage in their previous jobs, reflecting a loss of seniority and experience, and the fact that some switch to new fields.\(^\text{18}\)

The US already has some policies in place to assist workers displaced by trade and other factors, but they are not sufficient. The largest program is unemployment insurance, which absorbs 80 percent of the budget for displaced workers. Full-time, involuntarily displaced workers receive up to 26 weeks of benefits that average around 50 percent of their earnings in their previous jobs. Since the ratification of the Workforce Investment Act of 1998, they have also been offered a set of active re-employment services through one-stop employment centers. These include job search assistance, counseling and access to training (often through training vouchers).

In addition, the US has two policies specifically geared to workers displaced by trade: the Trade Adjustment Assistance (TAA) and Alternative Trade Adjustment Assistance programs (ATAA). Two factors motivate special trade adjustment programs: first, they are often used as bargaining tools in Congressional negotiations on free trade agreements; second, if entire industries are suffering from trade competition, then workers may suffer longer spells of unemployment and more acute wage loss when displaced. The TAA extends unemployment

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benefits by 52 weeks and offers training support and health care credits to workers displaced by trade to help them build a skill that will minimize their wage loss. The ATAA provides wage insurance upon re-employment, a relocation allowance, and training credit. Unfortunately, neither the TAA nor the ATAA has lived up to its promise. The TAA training budget has often run short, and TAA recipients averaged 80 weeks of unemployment in 2001-2003, as opposed to 14.1 weeks for all displaced manufacturing workers. Furthermore, their earnings in their new jobs were 21 percent lower, compared with a drop in earnings of 20 percent for all displaced manufacturing workers. The ATAA meanwhile enrolled only 288 participants in 2001-2003.  

Spending only 0.5 percent of GDP on all policies to assist displaced workers, the US certainly ranks low in the range of what developed nations allocate to this area – the UK spends 0.9 percent of GDP, Germany 3.1 percent of GDP, and Denmark 3.7 percent of GDP. Yet the US has the highest job churn rate among developed countries. Further spending on several policies could do much to ease displaced workers’ transition into new employment. For example, job retraining credits given to employers would create an incentive to hire displaced workers. Moreover, on-the-job training has been shown to have an internal rate of return of 10-26 percent, the highest of all forms of training. Continuing education grants give workers a chance to build those skills that are in demand, particularly from growing areas of the economy such as healthcare, education, and social services. These programs are most effective when targeted at skills that have clear job relevance, such as math and science skills. Portable medical insurance plans and pension benefits are also essential to a workforce changing jobs more frequently.

Companies benefiting from offshoring also have a responsibility to displaced workers. Generous severance packages are an obvious way they can help. Companies could also fund wage insurance programs that make up some or all of the difference between workers’ previous wages and their new ones, thus encouraging them to get back into the workforce quickly and avoid long-term unemployment. Building on a proposal by Robert Litan and Lori Kletzer, MGI calculated that US companies could make up 70 percent of lost wages for all full-time employees displaced by offshoring, as well as give them healthcare subsidies for up to two years, at a cost of just 4 to 5 percent of their cost savings from offshoring over the same period.

In addition, policy makers might consider extending wage insurance to all displaced workers, whether the cause of their displacement is trade, automation, corporate restructuring, or other factors. Globalization and advances in technology require a more flexible and fluid workforce than ever before and giving companies this flexibility is critical to the national well-being. But there is no reason that individual workers should bear the full cost. Lael Brainard, Robert Litan and Nicolaos Warren recommend a wage insurance that insures 30-70 percent of wage loss for two years for all involuntarily displaced full-time workers with two years or more of tenure. The program would cost only $1.5 billion to $7 billion under the various designs, which amounts to only $12 to $50 per worker per year.24

Forward-looking labor unions are already beginning to push for this kind of approach instead of trying to protect existing jobs. For instance, the US IT firm Computer Sciences Corporation (CSC) has struck a deal with the UK union Amicus that it will retrain 10,000 UK staff when it moves their work offshore. Similar deals have been agreed between unions and UK banks.25 This kind of response to offshoring gives union members a better chance of long-term future employment than struggling to preserve existing jobs at all costs.

Prepare people for more job changes during their working lives

Globalization is producing more frequent and dramatic shifts in companies’ demand for labor and it is vital to prepare people to work in such an economy. This will require changes to the US educational system, and a new approach to career changes.

Students will need a broader set of skills beyond technical ones. While IT jobs that require only technical knowledge may well go offshore, those requiring business knowledge, teamwork, and interactions with technology users at home will continue to grow. For example, systems analysts and software engineers in the US will still be required to set up and customize computer networks for companies, even if computer programmers in India write the software code. (This is why the BLS predicts that employment in computer-related occupations will continue to grow, and why, despite offshoring, it reached a five-year high in the last quarter of 2004). Engineering, computer science, and other science programs at US universities must adapt their curriculum in response to these shifts and increase the number of courses students take in other disciplines. Understanding how IT can be applied

25 Andrew Taylor, “IT group agrees landmark jobs deal with union”, Financial Times, August 9, 2005.
in various fields will be more important than specialist knowledge of particular technology tools. Students will need to combine IT skills with business knowledge, psychology, and anthropology, for instance. In response to shifts in the economy, several US universities are already offering multidisciplinary programs in “services science” that combine insights from engineering, computing, social sciences and economics and will enable students to develop innovations that will improve productivity in the economy’s huge service sectors.

At the same time, industry associations, unions and companies can combine to help workers anticipate job changes. They can, for example, monitor occupations where employment demand is rising – in healthcare, business services, communications and leisure – and plot potential career paths for workers switching into them. Software programmers may be required to become systems analysts; radiologists may need to become specialists in treating diabetes. Instead of leaving it to individual workers to spot opportunities and become qualified to grasp them, companies and unions can identify what steps are needed to switch. Continuing education grants and job re-training opportunities are also essential.

**Remain attractive to offshoring investment**

Although the US is a world leader in receiving offshoring investment from foreign companies, it still needs to take care to maintain this enviable position and offset those jobs lost to offshoring. Two potential weaknesses are its telecommunication infrastructure and rising health costs. The quality and breadth of US wireless networks lag behind most other developed countries – and even many emerging markets. The US has fallen to 16th in the world in broadband connectivity. At the same time, employee healthcare costs have been rising – by 38 percent between 2001 and 2004 – and this is imposing a huge burden on employers. CEOs and other executives regularly mention rising health benefit costs as a factor in their decision to offshore. US policymakers cannot avoid addressing both of these issues if the country is to continue being a magnet for foreign investment.

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Fears about job losses and wage cuts in the US due to offshoring are vastly overstated. Protectionism may save a few jobs in the short-term, but it will stifle innovation and job creation in the longer term. Rather than trying to stop globalization, the goal must be to facilitate and ease the changes it brings.

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