

Offshoring: Is It a Win-Win Game?

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From time to time, the institute issues public reports. These reports are issued at the discretion of MGI's director and its McKinsey Advisory Board when they conclude that the institute's international perspective and its ability to access McKinsey's knowledge of industry economics enable it to provide a valuable fact base to policy debates. The McKinsey Advisory Board is made up of McKinsey partners from Europe, the Pacific Basin, and the Americas.

The institute's staff members are drawn primarily from McKinsey's consultants. They serve 6- to 12-month assignments and then return to client work. MGI also commissions leading academics to participate in its research. The institute's director is Diana Farrell, a McKinsey partner. MGI has locations in Washington, DC and San Francisco, California.

PREFACE

“Offshoring: Is It a Win-Win Game?” is a McKinsey Global Institute (MGI) perspective developed during the course of our extensive work in the IT and business process offshoring sectors in India, conducted as part of a broader effort to understand cross-border activities and how they are shaping the global economy. This paper is a first for MGI in that it provides perspectives from ongoing research in advance of the publication of the overall findings and conclusions of the project. We felt it was important to release the report now, given the din of the current debate on the issue and the need for a broader fact base. The report is part of the fulfillment of MGI’s mission to help global leaders: 1) understand the forces transforming the global economy; 2) improve the performance of their corporations; and 3) work for better national and international policies.

The work conducted on the IT and business process offshoring sectors in India was led by Vivek Agrawal, an Engagement Manager from our San Francisco office serving as an MGI Fellow for the year under my direction. Over the course of the year, Vivek Agrawal spent several months in India, leading the analysis and conducting a large number of interviews with senior executives and policymakers. Vivek Bansal of our Business Technology Office in London and Tim Beacom in our Washington, DC office were invaluable team members as well. This team worked in close collaboration with our India offices and our worldwide Business Processes Outsourcing and Offshoring Practice. We would particularly like to thank Noshir Kaka and Manish Kejriwal from our India offices and Anil Kumar from our Silicon Valley Office for their valuable comments and support. In addition, inputs from other consultants and Fellows at MGI working on the broader project were helpful in drawing out important cross-sector comparisons and contrasts. Vincent Palmade, Jaana Remes and Thomas-Anton Heinzl all provided valuable leadership to the overall project. This perspective, and our choice to publish it separately from the overall results, also benefited from the advice of the academic advisors to our broader cross-border research project, including Martin Baily from the Institute for International Economics, as well as Richard Cooper and Dani Rodrik from Harvard University. We are also grateful to Lori Kletzer from University of California at Santa Cruz whose work we heavily draw upon and whose comments were very valuable in shaping this perspective.

Throughout these projects, we always benefit from the unique worldwide perspectives and knowledge that McKinsey consultants bring to bear on the industries researched in our case studies. Their knowledge is a product of intensive work with clients and a deep investment in understanding the structure, dynamics, and performance of industries to support client work. McKinsey sector leaders

provided valuable input to our case studies and reviewed our results. McKinsey's research and information specialists provided timely response and critical information under trying deadlines. Finally, we appreciate the warm response, useful information, and insight we received from numerous interviews with corporate executives, industry associations, government officials, and others.

Before concluding, I would like to emphasize that this work is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

Diana Farrell
Director of the McKinsey Global Institute
August 2003

Offshoring: Is It a Win-Win Game?

MGI Perspective.

The business practice of offshoring has created a flurry of controversy in recent months, the media and politicians frequently characterizing it in terms of India stealing America's jobs.

- ¶ “America's pain, India's gain,” *The Economist*, January 2003
- ¶ “American Legislators Are Accusing India of Stealing Jobs,” *BusinessWeek*, June 2003
- ¶ “Tech Jobs Leave U.S. for India, Russia. Who's To Blame?,” Associated Press, July 2003

Much of this debate is understandably emotional. Before deciding what should be done, however, it is important to step back and examine the underlying causes of the trend in offshoring, its business justification, and where the balance of benefits lies. To put this in terms of the public debate: Does India benefit at America's expense or are the benefits shared more widely?

The nature of offshoring

What drives offshoring? The business practice of offshoring focuses on the relocation of labor-intensive service industry functions to locations remote to the business center, such as India, Ireland or the Philippines. It has been enabled by two main changes in the business environment. First, the improvement in international telecommunications capacity, and the concomitant step-change reduction in global telecommunications costs, is fundamental to the economics of offshoring. Second and just as important, over the past two decades the PC has enabled the computerization and digitization of most businesses services. As a result of these two changes information can now be transmitted over long distances at very low cost and with little loss of quality. These changes make organizational boundaries and national borders much less important in deciding the location of service functions.

What are the economic benefits of offshoring? As is commonly realized, the prime motivation for offshoring is that it reduces labor costs. There are very large differences in the wages paid for equivalent skills between the U.S. and developing countries such as India and the Philippines. For example, the equivalent of a software developer who costs \$60 an hour in the U.S. costs only \$6 an hour in

India. Similarly, a data entry agent who costs \$20 an hour in the U.S. costs only \$2 an hour in India. However, there is also a second reason why offshoring brings economic benefits. Whereas in the U.S. many of the offshored jobs are seen as relatively undesirable or of low prestige, in the countries they are offshored to they are often considered desirable and attractive. As a result, workers in low-wage countries often have higher motivation and outperform their counterparts in developed countries in terms of performance measures such as the number of transactions per agent, or the number of errors per transaction.

The differential in wages alone exaggerates the potential economic benefits. Though the wage-saving is substantial, additional costs are incurred in terms of telecommunications and the management of the offshore facility. Nevertheless, once these costs are taken into account, there is at least 45 to 55 percent saving in the cost base (Exhibit 1). Reengineering the process design can further increase this potential saving to 65 to 70 percent of initial costs. A simple example is changing the sequence for processing a customer service call, which would result in a penalty on labor productivity but a substantial improvement in capital productivity and thus a net impact of a 50-percent increase in profits (Exhibit 2).

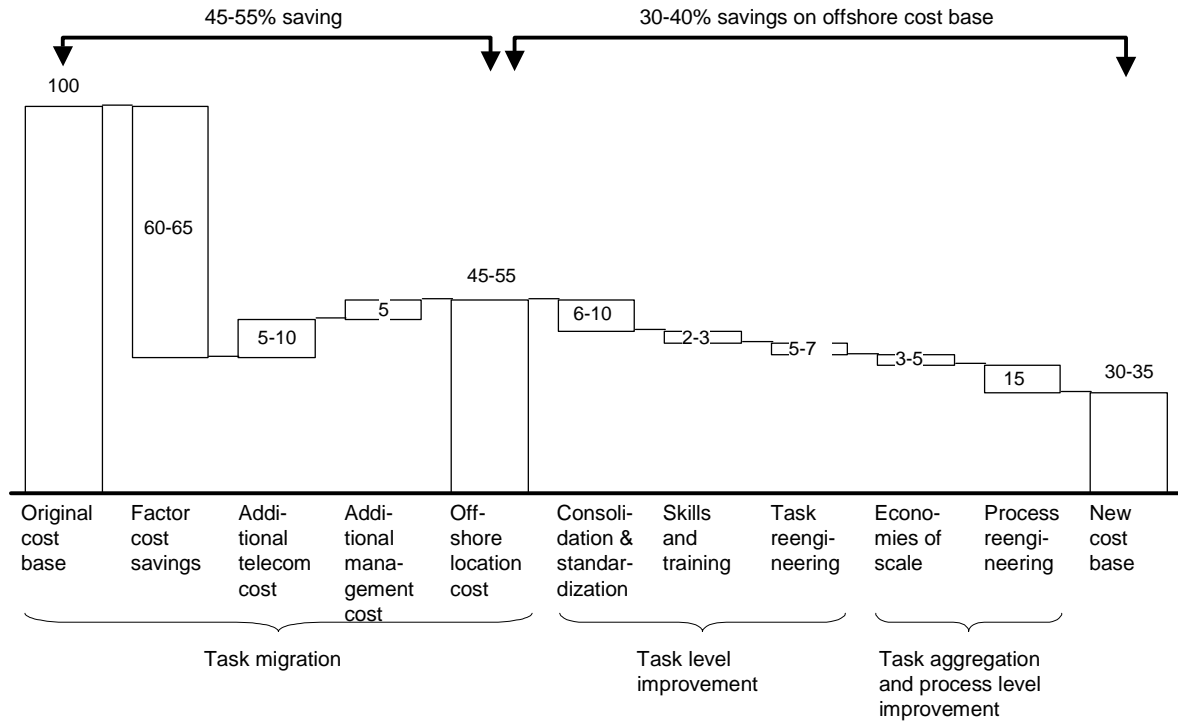
In addition to significant cost savings, companies are also using offshoring as an opportunity to drive revenue growth. For example, by leveraging cheap labor, airlines are now able to chase delinquent accounts receivables that they would earlier be forced to ignore. Similarly, computer manufacturers are increasing market penetration by offering customers services they could not afford to offer earlier. As a result, by offshoring, many companies are creating far more value from increased revenues than from reduced costs.

Who is offshoring and where do they go? U.S. businesses dominate the global share of offshoring, accounting for some 70 percent of the total market. Europe and Japan account for the remainder of the market, with the U.K. as a dominant player. Both the U.S. and the U.K. have liberal employment and labor laws that allow companies greater flexibility in reassigning tasks and eliminating jobs. This flexibility is essential to capture offshoring opportunities effectively.

There is also a supply-side element shaping the current pattern of offshoring. It has been conducted primarily in countries where English is the main business language. In general, the presence of an English-speaking population is a key factor in the choice of location of offshore services, as the commonality of language helps to ensure that quality and performance criteria can be fulfilled. Without a shared language, errors are much more likely to occur, thereby undermining the benefits of offshoring. Canada, India, Ireland and Israel have all proved particularly attractive in that they have large English-speaking populations.

OFFSHORING AND REENGINEERING PROCESSES CAN IMPROVE PERFORMANCE SUBSTANTIALLY

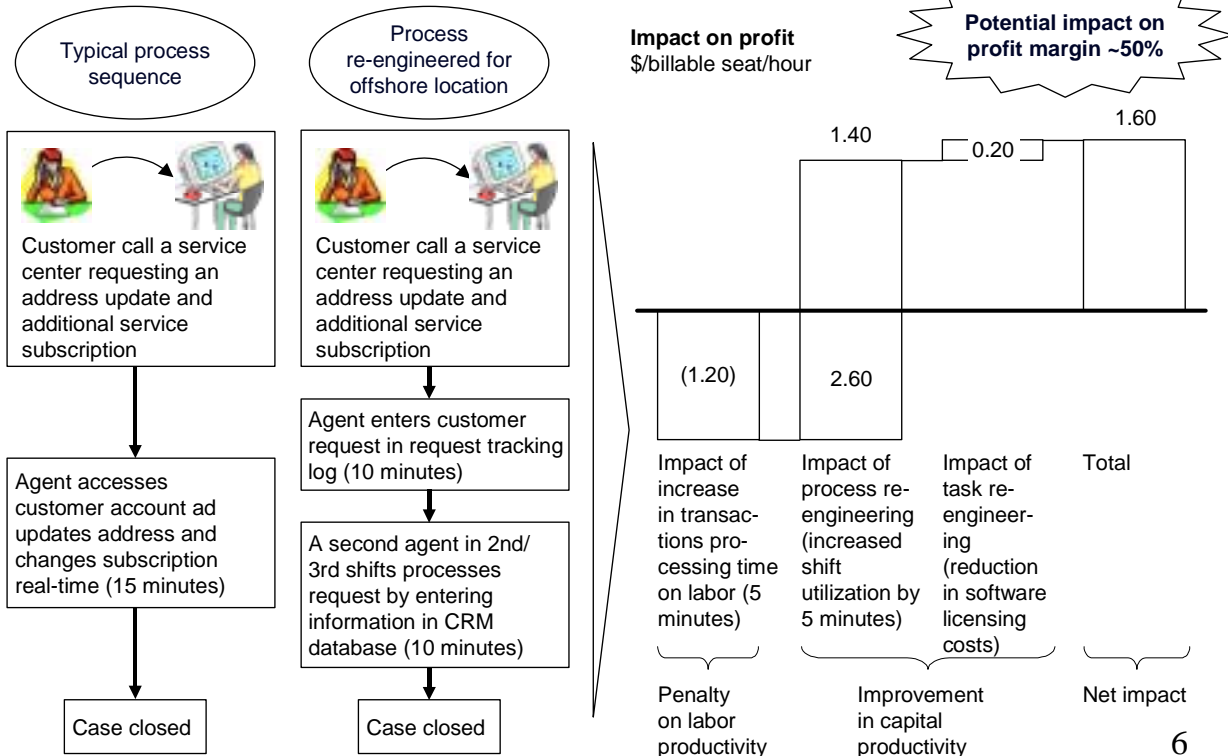
ESTIMATE



Source: McKinsey analysis

REENGINEERING PROCESSES TO OPTIMIZE FOR CAPITAL CAN IMPROVE MARGINS SUBSTANTIALLY

Process sequence for customer service call center



Source: McKinsey Global Institute

Other countries with English-speaking populations, such as Australia, South Africa, and the Philippines, are also potentially attractive to a greater or lesser extent (Exhibit 3). This emphasis on the commonality of language might also explain in part why non-English-speaking countries have not resorted to offshoring to the same extent. There are limited opportunities for Japanese or German companies to offshore support functions such as call centers or human resource services, for example, because a common language is vital for effectiveness.

What services can be offshored? There is potential to offshore a very wide range of functions. The criteria for successful offshoring include the requirement that the function can either be digitized or handled by telephone, and that appropriate skills are available or easily developed at the offshoring center.

Among the functions to be offshored first are back-end processing, call centers, and accounting. Higher-value work has since been added to this list, particularly in areas where there is an offshore abundance of what are otherwise scarce skills. The prime example of this is software maintenance and development, which continues to attract increased investment in offshore facilities. Other high-end offshored functions include automotive and aerospace component design (CAD/CAM), and pharmaceuticals research. The range of functions that have been offshored successfully is substantial and widening all the time (Exhibit 4).

The debate about offshoring

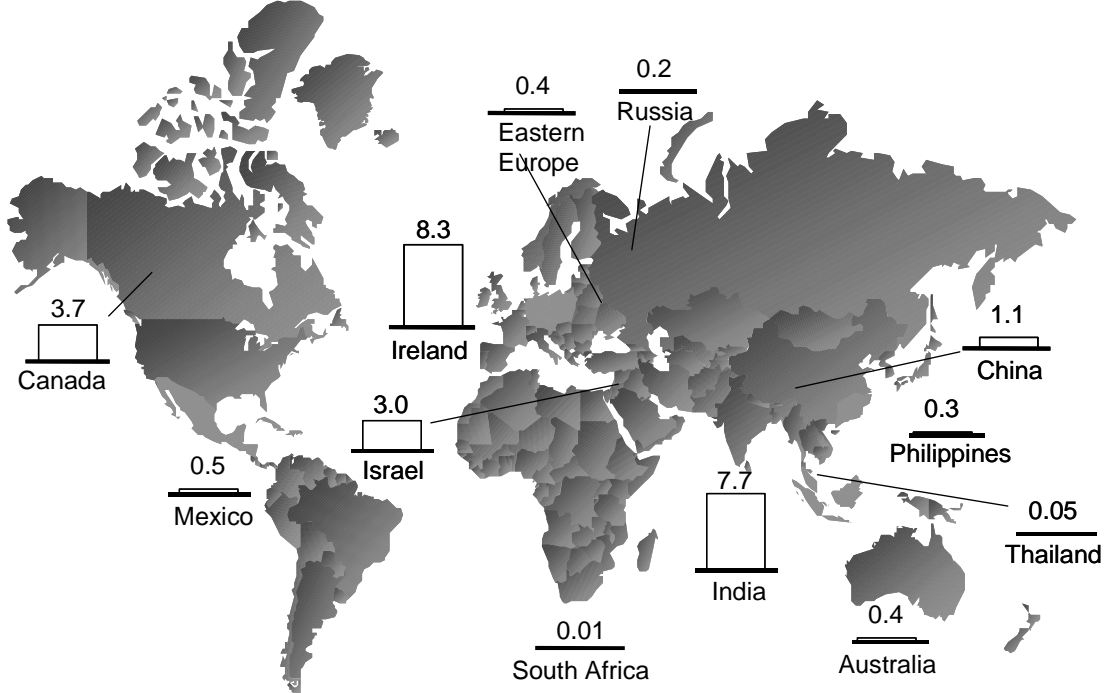
Offshoring is expected to grow at the rate of 30 to 40 percent a year over the next 5 years. Forrester, a leading IT analyst, projects that the number of U.S. jobs offshored will grow from 400,000 jobs today to roughly 3.3 million jobs by 2015, accounting for some \$136 billion in wages. Of this total, Forrester expect 473,000 jobs from the IT industry to go offshore over next twelve years, representing eight percent of all current IT jobs in the country.

Such projections have led *BusinessWeek* to ask, “Is your job next?” The matter has even been discussed in the U.S. House of Representatives sub-committee on business, which, in July 2003, asked the question, “Can America lose these jobs and still prosper?” Indeed, the fear implied in these questions is already being acted upon. Reports suggest that New Jersey, Maryland, Connecticut, Washington and Missouri have sponsored or are actively considering legislation to prohibit or severely restrict the state government concerned from contracting with firms that offshore to low-wage developing countries. Labor unions, most notably the Communications Workers of America (CWA), have also been active in lobbying Congress against offshoring.

BPO&O DESTINATIONS WORLDWIDE

Offshored services market size 2001

\$ Billions



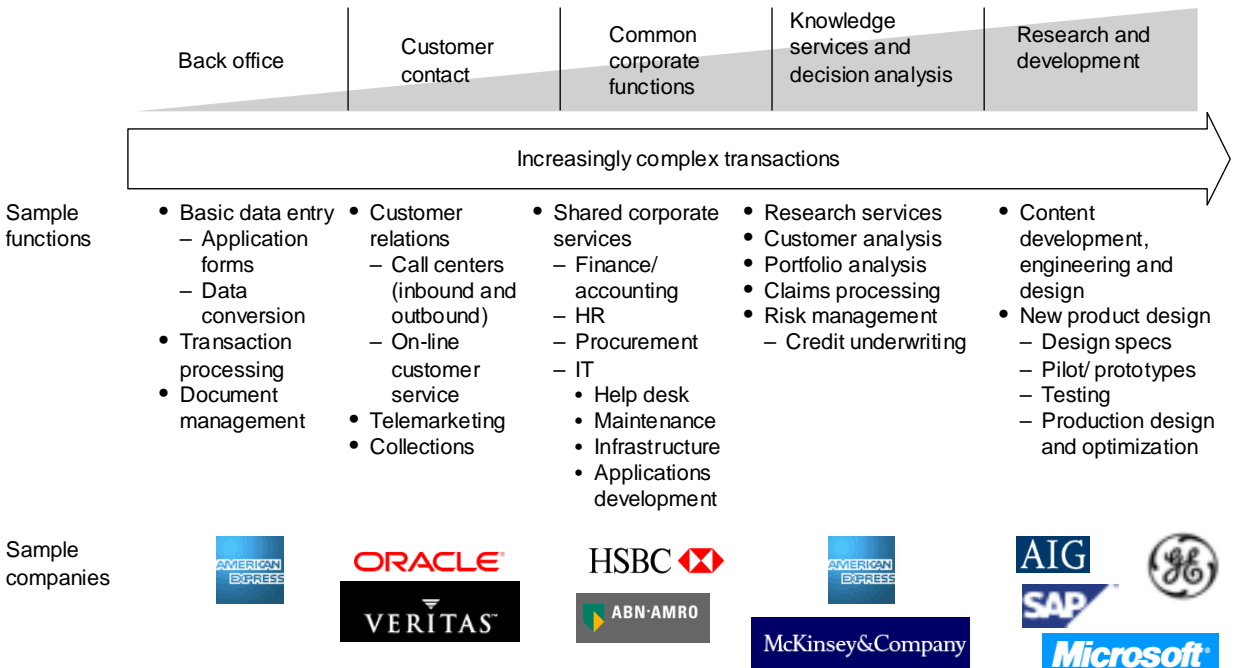
* Includes Poland, Romania, Hungary, and Czech Republic

** Primarily composed of MNC captives

Source: Software Associations; U.S. country commercial reports; press articles; McKinsey analysis; Gartner; IDC; government websites; Ministry of Information Technology for various countries; Enterprise Ireland; NASSCOM

OFFSHORING OPPORTUNITIES ACROSS THE ORGANIZATION

Low-cost labor
 Access to highly skilled labor pool

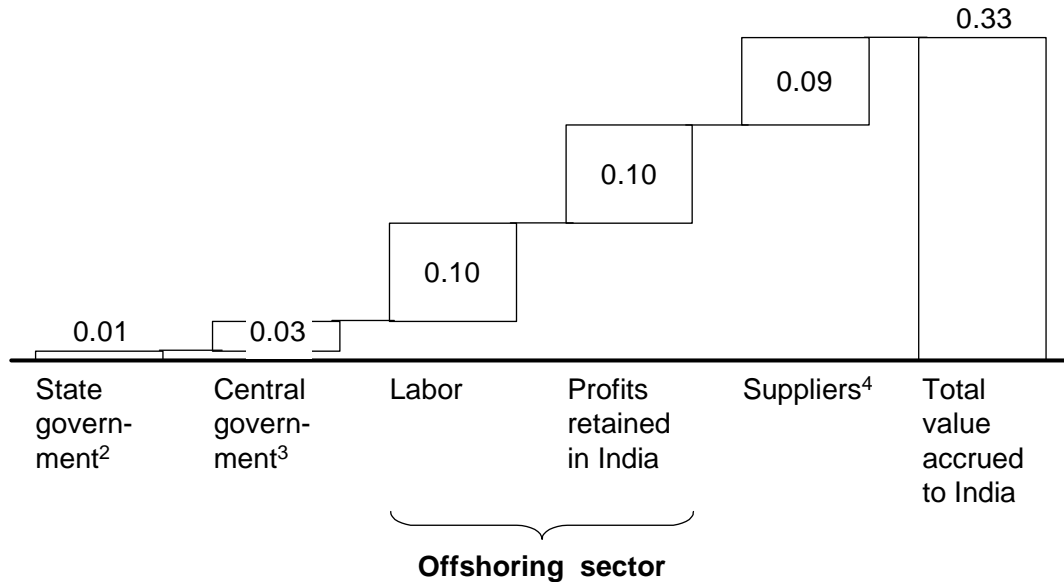


These questions and concerns cannot be dismissed lightly. Very few doubt that offshoring is good for India – by our estimates India gains a net benefit of at least 33 cents for every dollar of spend offshored (Exhibit 5).

Exhibit 5

VALUE POTENTIAL ACCRUED TO SUPPLY COUNTRY – INDIA EXAMPLE

Value accrued from \$1 of U.S. spend offshored¹
Dollars; 2002



¹ Estimated using the India offshored services industry case

² Includes sales tax on the supplier industries and revenue from the sale of power to offshored service providers

³ Includes income tax from labor employed in the offshored services sector and the supplier industries and corporate tax on the supplier industries

⁴ Includes revenue accrued to the supplier industries less sales taxes, income taxes to employees and corporate taxes

Source: McKinsey Global Institute

But, is offshoring really bad for the United States?

What is the impact on employment? The evidence available to MGI suggests that fears about job losses, however reasonable they might be, tend to overplay the likely impact of offshoring. The vast majority – some 70 percent – of the economy is composed of services such as retail, restaurants and hotels, personal care services, and the like spanning very broad wage and value added ranges. These services are necessarily produced and consumed locally – and therefore cannot be offshored.

This is not to say that no jobs will go overseas. They will. And as with any trade-related or other industry restructuring, the changes will be painful for many

involved. But even if Forrester is right, and 3.3 million jobs do go offshore by 2015, the United States has been there before. It has the world's most dynamic economy and is fully able to generate new jobs. The job losses Forrester references translate into a loss of about 200,000 jobs a year over the next decade. Even in good times, mass layoff numbers are much higher than this. In 1999, for instance, 1.15 million workers lost their jobs through mass layoffs (out of a total of 2.5 million job losses). In 1996, the number was 1.18 million. It is not only offshoring that can result in job displacement: technological change, economic recession, changes in consumer demand, business restructuring and public policy, including trade liberalization or environmental regulation all can and do play their part. The recent changes driving offshoring are not that different or radical from the changes that dynamic, competitive, technologically evolving economies have experienced for the last few decades.

What is the impact on the economy? We would argue that not only is the United States fully able to withstand these changes, as it will be able to create jobs faster than offshoring eliminates them, but that the current debate misses the point entirely. Offshoring creates wealth for U.S. companies and consumers and therefore for the United States as a whole: that is why companies choose to follow this course. Offshoring is just one more example of the innovation that keeps U.S. companies at the leading edge of competitiveness across multiple sectors. If it did not benefit U.S. businesses, they would not offshore. The more companies innovate, the more competitive they become and the more benefits are passed on to consumers.

Moreover, while still receiving services that employees were previously engaged in, the economy could now generate additional output (and thus income) when these workers take new jobs. Thus, offshoring not only captures every bit of economic value, dollar for dollar, that exists in the U.S. economy prior to the decision to offshore, but it also creates a net additional value for the U.S. economy that did not exist before.

The U.S. will capture economic value through several different channels: reduced costs, increased revenues, repatriated earnings, and the redeployment of additional labor (Exhibit 6).

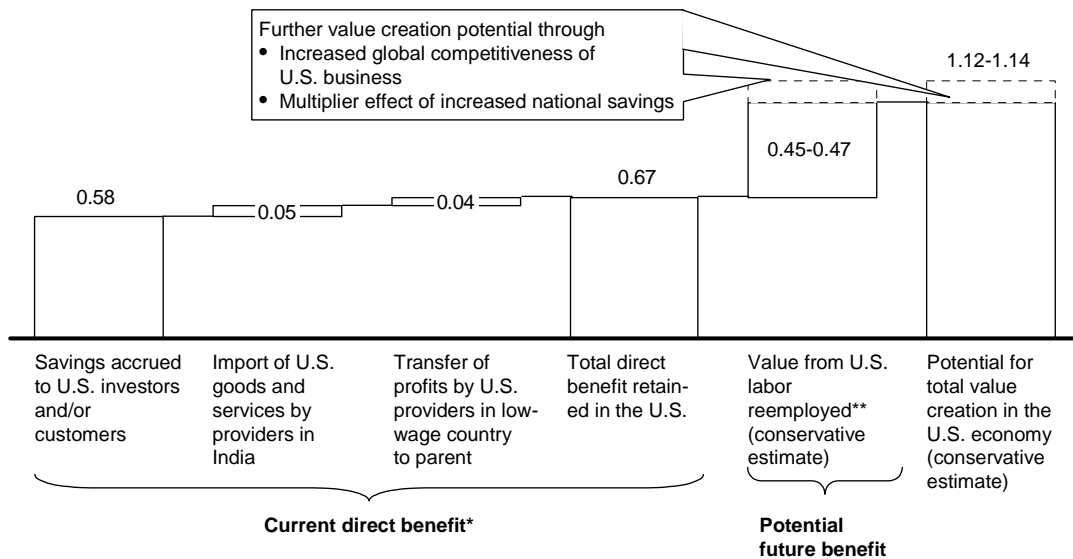
- ¶ *Reduced costs.* Cost savings represent the largest form of economic value capture. For every dollar of spend offshored, 58 cents are captured as net cost reduction to businesses even as they often receive an identical (or better) level of service. A more competitive cost position will lead to higher profitability, increased valuations and help keep U.S. companies highly competitive in the world economy. Initially, the savings will flow

to investors, or they will be invested in innovations or new business ventures. Eventually, as offshoring becomes more prevalent, competition will yield the savings to consumers. In either case, offshoring will contribute significantly to increasing national earnings.

Exhibit 6

VALUE POTENTIAL ACCRUED TO U.S.

Value potential to the U.S. from \$1 of spend offshored to India 2002
Dollars



* Estimated based on historical reemployment trends from job loss through trade in the U.S. economy
Source: McKinsey Global Institute

¶ *New revenues.* For every dollar of spend offshored, offshore services providers buy an additional five cents worth of goods and services from the U.S. economy, thereby creating exports and extra revenue for the U.S. economy. Providers in low-wage countries require U.S. computers, telecommunications equipment, other hardware and software. In addition, they also procure legal, financial, and marketing services from the U.S.

Already imports from the U.S. to India have grown to \$3.8 billion today from less than \$2.5 billion in 1990.

- ¶ *Repatriated earnings.* Several providers serving U.S. offshoring market are incorporated in the United States. These companies repatriate their earnings back to the U.S., which amounts to an additional 4 cents out of every dollar of spend offshored.
- ¶ *Redeployed labor.* As low value-added service is sourced from overseas, U.S. workers previously engaged in providing those services are freed up to take other jobs. If redeployment continues at the rate it has over the past two decades, then for every dollar of spend offshored, the economy will capture an additional 45 to 47 cents per dollar of offshoring from the new jobs that are generated. This appears a reasonable assumption given the empirical evidence that services workers find employment more quickly than do manufacturing workers, and job-displacement during the last two decades – when jobs offshored were primarily in manufacturing – was at least as high as the projected job displacement in services.¹

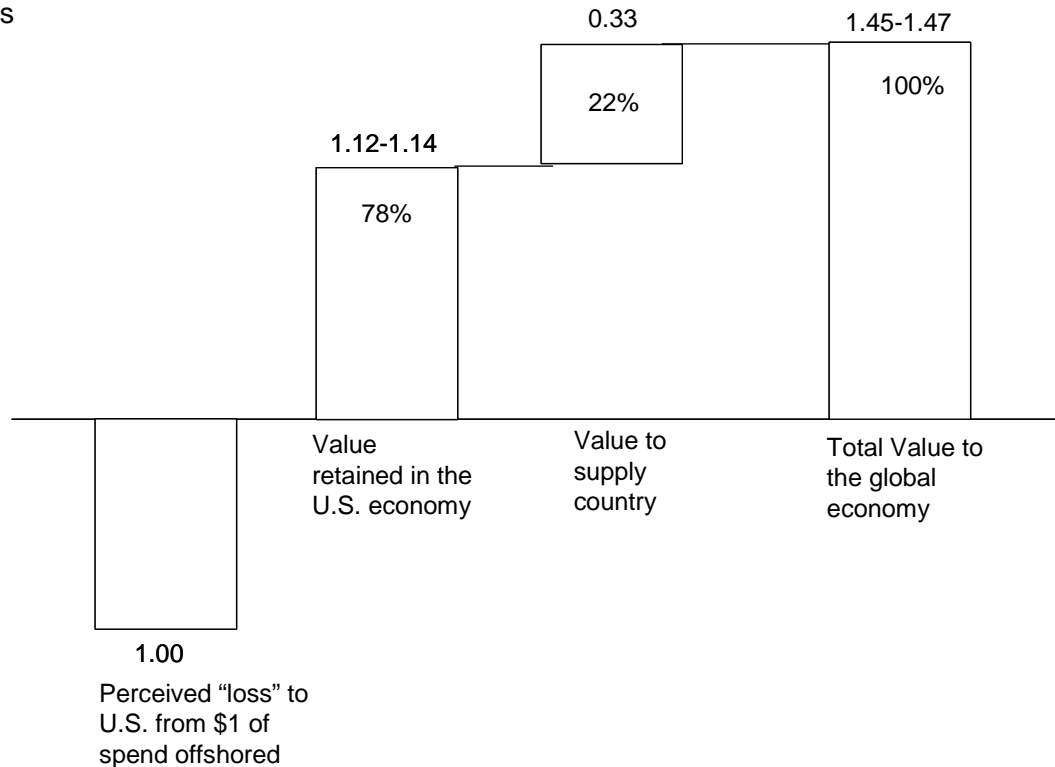
Far from being bad for the United States, offshoring creates net additional value for the U.S. economy that did not exist before, a full 12-14 cents on every dollar offshored. Indeed, of the full \$1.45 to \$1.47 of value created globally from offshoring \$1.00 of U.S. labor cost, the U.S. captures \$1.12 to \$1.14, while the receiving country captures, on average, just 33 cents. (Exhibit 7)

The openness of the U.S. economy and its inherent flexibility, particularly in terms of its labor market, are recognized widely as two of its great strengths. These aspects need to be reinforced, not undermined. The current danger is that policy makers will inadvertently pander to protectionism. To do so would be dangerous for America's future well being.

OFFSHORING VALUE IN THE GLOBAL ECONOMY

Distribution of value from \$1 of spend offshored 2002*

Dollars



Source: McKinsey Global Institute

The win-win solutions

Can we trust the resilience of our economy? The starting point is convincing people of the probability of re-employment. The U.S. today employs over 130 million non-farm workers. According to the OECD, despite the lowest employment protection legislation, it has the highest rate of reemployment of any OECD country by a factor of nearly two times.² Over the past 10 years, the U.S. economy has created a total of 35 million new private sector jobs, or an average of 3.5 million new jobs per year. At this rate of job creation, the vast majority of displaced workers are re-employed within 6 months.

Even within trade-related job losses, where job creation has not matched the growth in the overall economy, redeployment is strong. Detailed longitudinal data in the non-manufacturing sector between 1979-1999 collected by the Bureau of Labor Statistics (BLS) substantiate very high expectations of redeployment for the economy as a whole.³ More than 69 percent of workers losing jobs to imports were

reemployed. Among those reemployed the mean wage recapture was 96.2 percent. Since the wage loss for every dollar of spend offshored is 72 cents, these levels of reemployment and recapture translate into an additional 45 to 47 cents of value recapture for the economy, even taking into account the typical period of unemployment before a worker is reemployed.


What has made this possible is the flexibility in the job market and the mobility of workers across the country. Unless we pander to protectionism, there is no good reason to believe that our dynamic job creating economy cannot absorb the level of change posed by offshoring.

Going forward, the U.S. population will continue aging and a greater share of workers will retire (Exhibit 8). A 5 percent increase in the number of workers (15.6 million people) will be needed in 2015 to maintain the ratio of workers to total population that existed in 2001. Maintaining our standard of living will require a combination of more innovation and ever-greater productivity gains – including offshoring activities to where there are more workers, or increased immigration. Offshoring will likely prove the easier to embrace.

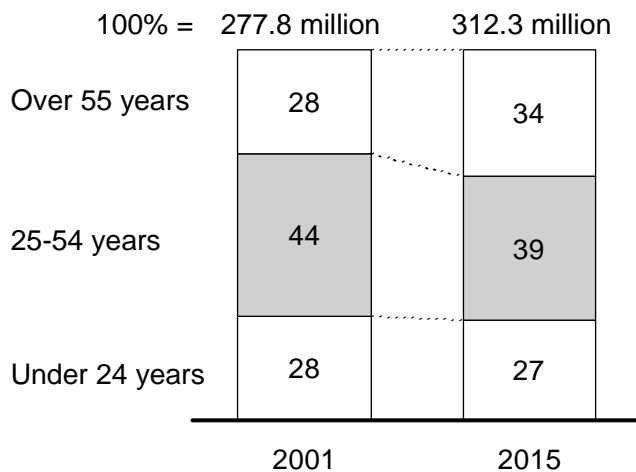
If offshoring is potentially so easy, why has it been so hard? The fact that offshoring offers a great opportunity for global wealth creation on the whole, and that the U.S. economy will benefit disproportionately, will not in itself make the worries and anxiety go away.

Exhibit 8

U.S. ECONOMY IS EXPECTED TO SEE A SIGNIFICANT DECLINE IN SHARE OF WORKING-AGE POPULATION

 Working segment of population

Age of U.S. population
Percent



- As the U.S. population retires, 5% (15.6 million) additional workers needed by 2015 to maintain similar share of working population as in 2001
- Shortfall must be addressed through a combination of
 - Increased innovation/productivity
 - Increased labor inputs (e.g., immigration)

Competitive pressures will mount (even if to the relative advantage of U.S. companies). Significant numbers of individuals will be displaced and their lives will be disrupted. Many of these individuals work in higher-wage service sectors that historically have been immune from foreign competition. The promise of economy-wide value creation will not easily dispel the fears of unemployment and loss of personal income or the reality of painful change.

A hard look at the facts reveals that the wealth created by offshoring does not completely offset the hardships it creates for some of those affected. Over the period studied (1979-1999) the Bureau of Labor Statistics found that 31 percent of those whose jobs were displaced by trade were not fully reemployed. While some workers were able to find higher-paying jobs, most did not. The statistics reveal that 36 percent of displaced workers soon found jobs that matched or increased their wages but 55 percent were at best working for 85 percent of their former wages. As many as 25 percent saw pay cuts of 30 percent or more.

These concerns are real and they must be addressed.

What can be done to help assuage the inevitable displacement and disruption?

Given the very large potential for surplus generation, workers can be motivated to participate more willingly by sharing in the gains being created by offshoring. To date, some companies have resorted to boosting their training programs to enhance reemployment opportunities and to sweetening severance packages to ease the pain of transition. This is important and should continue. But more can be done. Especially because the perceived risk of unemployment is higher than actuarial risk, and because the pain of unemployment is greater than the economic cost of it, the situation lends itself well to highly targeted insurance products. Specifically, as part of a severance package, and for a small percent of the savings from offshoring, companies could purchase insurance for their displaced workers that would cover their loss of wages for the time a worker is unemployed. To avoid the “moral hazard” of such insurance, that is, “What incentive do I have to find a job, as I am insured,” the insurance program could insure occupational groups and not individuals, covering only the median period taken by an occupational group to be reemployed. Individuals needing or wanting to take more time than the median would do so at their own cost.

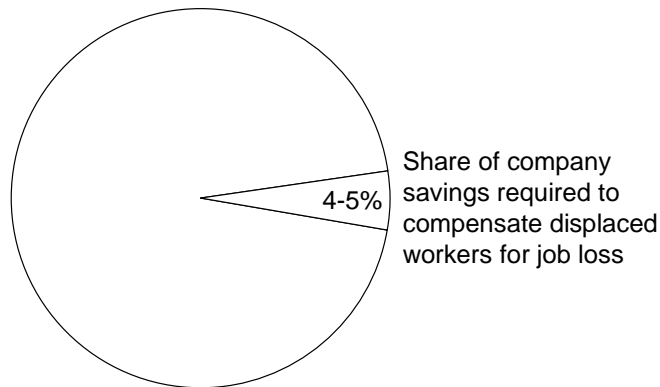
Building upon an insurance proposal developed by Lori Kletzer of University of California at Santa Cruz and Robert Litan of the Brookings Institution for trade-displaced workers⁴, MGI estimates that for as little as 4 to 5 percent of savings, companies could insure all jobs displaced from offshoring. The program would cover wage loss for all full-time workers once they are reemployed, compensating

them 70 percent of wage loss between their old and new jobs (in addition to healthcare subsidies) for up to 2 years. (Exhibit 9)

Exhibit 9

JOBS DISPLACED BY OFFSHORING CAN BE INSURED FOR A SMALL FRACTION OF SAVINGS CAPTURED BY COMPANIES

100% = \$0.58 savings on every \$1 of onshore spend diverted offshore



Note: Insurance offered for only 2 years following initial date of job loss and begins only when workers find a new job; subsidies for health insurance provided. Average payment is 70% of net wage loss with no cap on amount. Only workers who are full-time before displacement and after reemployment are covered

Source: Kletzer and Litan, "A Prescription to Relieve Worker Anxiety", *IIE*, February 2001; McKinsey Global Institute

We believe that these measures will not only go a long way toward relieving the current anxieties but will also help ensure that the U.S. economy becomes even more flexible and competitive in the years to come.

It is a matter of debate whether such insurance should be provided by businesses or by the government. We would favor business taking this responsibility for two reasons. First, it is in their interest to help reassure their workers about the security of their future. By taking on the responsibility, management is more likely to pursue offshoring opportunities, gain the cooperation of the workforce, and capture much of the large pool of savings. Second, this form of insurance will create a self-regulating mechanism, by aligning the rate of offshoring with the rate of reemployment. As offshoring volumes rise, displaced workers are likely to take longer to be reemployed. If this happens, the insurance premiums will increase,

cutting into the gains from offshoring and, thereby, making offshoring less attractive to companies in periods of higher unemployment.

* * *

Offshoring brings substantial benefits to the global economy, and the lion's share will likely go to the U.S. economy. Businesses can dramatically reduce costs and improve their competitive position and the economy can generate more output. As a result, offshoring is likely to increase in volume by 30 to 40 percent over the next 5 years. This will mean a loss of some 200,000 jobs a year in services over the next decade. Rather than shrink from this, U.S. policy and businesses need to reinforce the flexibility of the economy and soften the impact to those workers likely to be affected by offshoring. Given the large surplus generated from offshoring activities, doing so is highly feasible. By doing so, they will help ensure their own competitive interests and America's. In doing so, they will create a win-win situation for the global economy.

Notes

¹ US Department of Labor reports that trade-related job displacement between 1989 and 2000 was 270,000 jobs per year.

² OECD has developed an employment protection legislation index to measure the strictness of dismissal regulation in countries. Using this index, it ranks the U.S. at 0.2, lowest among all OECD nations. The U.K. and Canada, the next two most flexible countries, have an index of 0.5 and 0.6 respectively. All other European nations have an index of 2.0-3.0. See *OECD Employment Outlook*, 1999.

³ Kletzer, Lori, "Job Loss from Imports: Measuring the Costs," *IIE*, September 2001.

⁴ Kletzer and Litan, "A Prescription to Relieve Worker Anxiety," Policy Brief 01-2. *IIE*, February 2001.