

Implications of the offshoring of service jobs on regional office markets

In this issue:

- Behind the hype: Why headlines overstate potential job loss from offshoring
- The reality: Impact on regions will not be evenly distributed
- How to identify office markets at the most risk
- How should savvy real estate investors react?

Behind the hype: Offshoring will not be a net negative for the United States

Studies that estimate the impact of offshoring on the U.S. service industry have been the pet of the press, academia and politicians over the last few months. Recent news reports about offshoring are the latest in a string of stories that have whipped up worries about dramatic structural declines in real estate demand. For instance, retail goods sold on the Internet were supposed to make malls and shopping centers obsolete, and telecommuting was going to destroy demand for commercial office space. Neither of these had the apocalyptic effect that the press cited. Internet sales still account for less than 2% of total consumer spending nearly six years after the tech boom started, and telecommuting appears to have had virtually no impact on the office market. We believe that the ultimate impact of offshoring on office absorption has been overstated as well. In fact, the expansion of offshoring platforms to include service jobs will not, in our view, depress U.S. office-using employment and, consequently, will not lead to a secular decline in office occupancy.

As the scores of recent press articles have made obvious, the barriers to offshoring service jobs have fallen. The 89% of Americans who now work in non-manufacturing industries have not had to worry about this trend until recently because service occupations have traditionally had characteristics that kept them onshore, not the least of which is constant interaction with coworkers or clients. By facilitating worldwide communication, the information technology revolution has opened the American service sector to inexpensive, highly educated overseas labor. India, for one, has been minting millions of English-speaking college graduates who are capable of doing similar work as their American counterparts at a fraction of the cost. At the same time the availability of offshore labor has increased for service companies, economic conditions have conspired to make American boardrooms more receptive to looking there.

Studies by consultants such as Forrester¹ and Gartner² have been at the center of most articles on the subject. These studies overstate the net macroeconomic impact of this trend because they only account for potential jobs lost. However, over long periods, the basic constraint to job growth (except in recessions) is the number of Americans willing to work. In other words, as jobs are “offshored,” new jobs, often higher value-added ones, will be created in their place. This happens because productivity gains from offshoring accrue largely to companies and owners of capital who then create additional economic activity — and create new jobs in the process. The U.S. experience over the past

¹ McCarthy, John C. “3.3 million U.S. service jobs to go offshore.” November 2002. <<http://www.forrester.com>>.

² Morello, Diane. “U.S. offshore outsourcing: Structural changes, big impact.” July 15, 2003. <<http://www3.gartner.com>>.

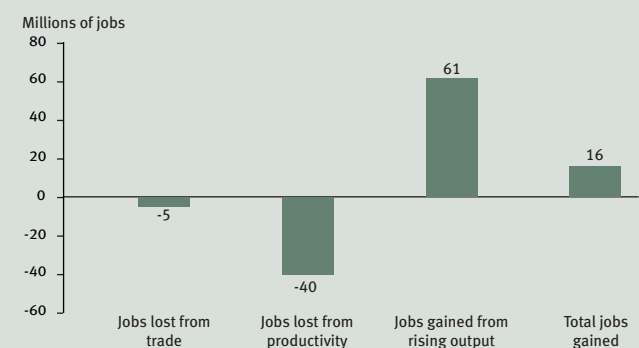
10 years is evidence of this. From the third quarter 1993 through the third quarter 2003, the U.S. current account deficit rose from just 1.2% of GDP to a record-breaking 5% — and approximately five million U.S. jobs, mostly manufacturing, were offshored. This may seem like a huge loss, but during the same period, approximately 40 million U.S. jobs were lost to productivity gains. Yet, the U.S. economy more than reversed the combined loss of 45 million jobs by ending this period with 16 million more jobs (see exhibit 1).

Most economists believe that the current account deficit will actually narrow — implying that international trade in goods and services will be a job creator, not a job destroyer, in the United States.

Based on past experience, we believe overseas job transfer will not be a net negative for the U.S., but rather will lead to cheaper goods and services and a higher overall standard of living for Americans.

Going forward, most economists believe that the current account deficit will actually narrow — implying that international trade in goods and services will be a job creator, not a job destroyer, in the United States.

Exhibit 1: More jobs were lost to productivity than to trade in the past 10 years: 1993Q3 to 2003Q3



Sources: Bureau of Economic Analysis; Bureau of Labor Statistics; JPMorgan Fleming

Impact on office space demand similarly exaggerated

A recent study by Ernst & Young³ used Forrester’s estimate of U.S. job leakage to conclude that 40 million square feet of additional office space will be vacated each year until 2015. That equates to one downtown San Francisco office market emptied every year for the next 12 years. To arrive at this extraordinary number, Ernst & Young assumed that each lost job would empty 200 square feet of office space. This overestimates the impact on office occupancy since the jobs at highest risk for overseas transfer tend to use far less space. For example, operators of call centers spend very little on real estate per employee. Our research indicates that state-of-the-art call centers, which employ the most modern technology, lease 60 square feet per desk, which equates to 40 square feet per employee after accounting for multiple shifts.

The reality: Offshoring impact will vary across regions

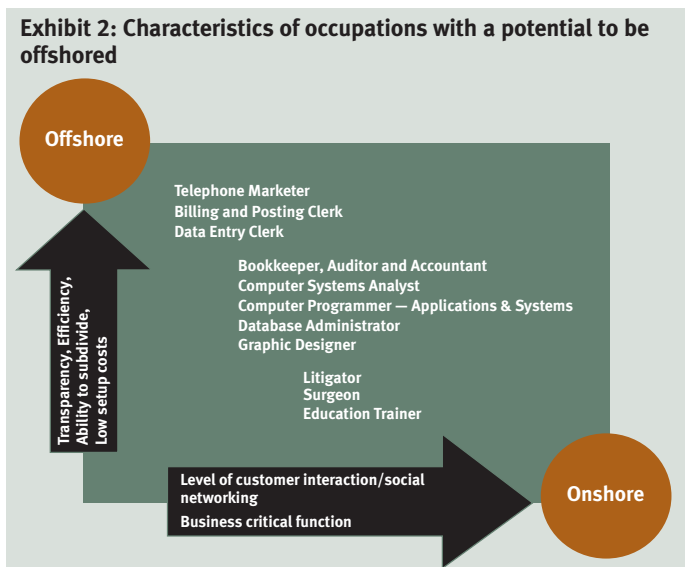
While we believe that fears of a chronic decline in total U.S. services employment due to offshoring are vastly overblown, we recognize that it will have a greater impact in some U.S. metro areas than others. Offshoring will lead to weaker demand for certain types of jobs. A region’s exposure to at-risk employment depends on the reliance of its base industries on “offshore-able” occupations. For example, investment banks and money management firms employ the same percentage of computer programmers as semiconductor equipment manufacturers, primarily to maintain proprietary trading applications and investment models. This is also evidence of the importance of a skill set to an industry; the potential for offshoring may be larger to the extent firms can offshore part of individual jobs.

For the purposes of this analysis, we focused on occupations where offshoring is well established. We believe the offshoring of high value-added, revenue-generating positions will be slower because this employment may require specialized skills and may be

³ Maccomb, Scott. “Developers and owners face questions on whether structural changes in U.S. economy portend slower long-term growth in office demand.” *Real Estate Newsline*, Winter 2003. <<http://www.ey.com>>.

more productive as a result of physical proximity to other business functions, competitors and industry groups. Jobs that are most ripe for offshoring must not require face-to-face customer contact or social networking because international travel is difficult and extremely costly. Likewise, real-time communication with the business unit is limited because there are few common working hours. For this reason, the business process must be transparent, documented and as efficient as possible. It is useful if job functions can be subdivided, so the firm can develop performance measurement criteria for the overseas unit and assign accountability for results (see exhibit 2).

Telephone marketers, document preparers, credit agents, account clerks, computer support and programming positions fit most of the criteria: the business processes are transparent, self-contained and not capital or training intensive. The offshoring experts we spoke with indicate that bandwidth costs are six to eight times greater in emerging nations such as India. Consequently, it is less feasible to offshore positions that require high bandwidth security software. This includes account clerks that manipulate confidential information as well as network and server maintenance positions.



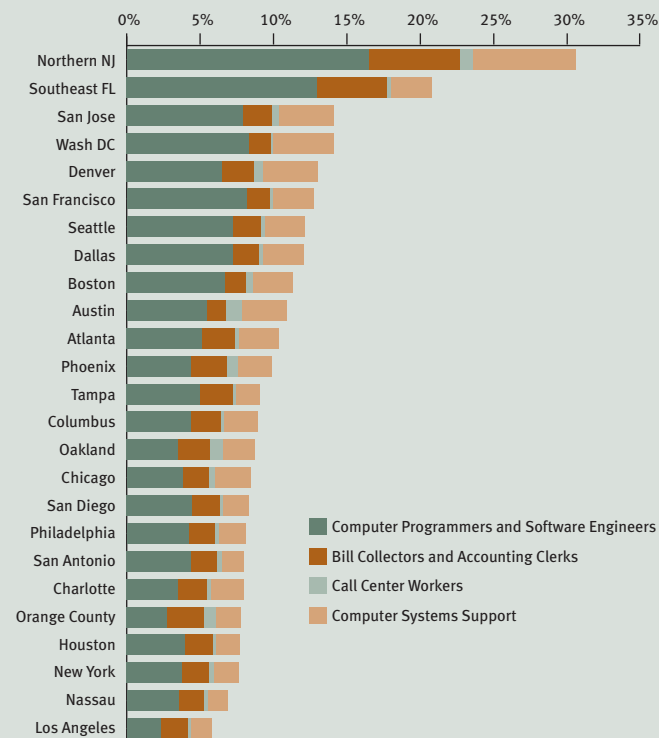
Source: JPMorgan Fleming

To determine which metro areas have the greatest exposure to occupations at risk, we analyzed the con-

tribution of these occupations to total labor income in the metro area. We believe that a job's salary is the most useful measure of how much its loss will hurt the local office market. We use this measure because a worker's pay is correlated to the value of the office space the worker occupies. Additionally, the loss of high-paying jobs has a multiplier effect on secondary employment.

Northern New Jersey, Southeast Florida and San Jose have the greatest percentage of their total incomes at risk from services offshoring — primarily due to their high exposure to computer programmers and software engineers (see exhibit 3). Since these positions garner high annual wages, they place a large percentage of the metro area's labor income at risk. For instance,

Exhibit 3: Percent of metro area wages in occupations with a potential to be offshored



Data through Dec. 2002

Sources: Bureau of Labor Statistics; JPMorgan Fleming

computer programming occupations account for 17% of all wages earned in Northern New Jersey, but just 9% of all workers in the region are employed in this occupation.

Since call center jobs are not regionally concentrated and pay relatively low salaries, they have a minimal impact on the medium- to large-sized metro economies that institutional investors generally consider for opportunities. Even the nation's largest call center markets such as Southeast Florida, Tampa, San Antonio and Phoenix derive less than 5% of their employment from call center jobs, and they account for an even smaller share of the labor income in these metro areas. Call center jobs in Austin, San Jose and Dallas likely provide technology support services, and therefore they command higher salaries due to the required level of skill and education. Loss of these positions presents greater risk to metro area economies since there is a greater impact on the area's total wages.

Metro areas with dominant central business districts (CBDs) such as New York, Boston and San Francisco have a large number of vulnerable jobs because they attract industries that require a high degree of support services. Accountants and computer systems support personnel represent over 5% of the employment at financial services, insurance, publishing, architecture and advertising firms; the addition of software programmers brings that number above 10%. For this reason, we don't believe that central business districts will emerge from this trend unscathed.

High-cost markets with exposure to large companies have the most at stake

To rationalize offshoring decisions, companies use the same metrics that portfolio managers use to evaluate investment opportunities: risk-adjusted returns. The process of shifting employees overseas is expensive and must be treated as an investment with long-term potential gains that will accrue to the firm. Our research indicates that firms use a high hurdle rate of return — upwards of 20% — to compensate for the risks associated with moving *within the United States*, namely unexpected downtime and disgruntled customers and employees. As with investment opportunities, an even higher hurdle is warranted for riskier offshore projects such as shifting jobs to India.

Regardless of whether a firm opts for opening a branch office in India or hiring an offshore outsourcing firm, a large initial investment is required. Technology costs for a branch office “captive” arrangement are inflated by the fact that bandwidth, data storage and systems maintenance are roughly six times more expensive in India than in the United States. Initial technology costs are hefty even if a firm opts for hiring an Indian outsourcing company because the U.S. firm must ensure the adequacy of the third party's information security and reliability procedures. In some cases, costs associated with outsourcing may be higher since the firm must pay the third party a profit. Additional one-time costs for relocating an existing operation include severance pay, unemployment insurance, and duplication of facilities during the transfer or until lease expiration.

Given the high technology and occupancy costs overseas, U.S. companies can only achieve high risk-adjusted returns by offshoring jobs with salaries that are much higher in the United States than in India. In theory, U.S. metro areas with a high cost of doing business have the most at stake from services offshoring since the wide salary differential between these markets and India allows firms to earn back their initial investment more quickly. However, the reality is more complex. Part of the salary differential between high- and low-cost U.S. markets may be explained by productivity. For this reason, decisions about offshoring or even moving work to cheaper locations in the United States must be made with the understanding that the hourly wages in the cheaper locations may be paying for less output.

So, does the higher productivity overcome the higher cost of doing business in places like New York? For many jobs that face offshoring, the answer is no. Not all employment in high cost areas warrants above-average wages. The location of employment may be a historical artifact, depending on the evolution of the business, acquisitions, and the availability of labor or real estate. To the extent low value-added jobs are left in high-cost areas, firms have the greatest incentive to

relocate them. Because services offshoring is a new venue for migrating jobs out of high-cost areas, it presents an opportunity for firms to reassess and possibly redefine their locational strategy.

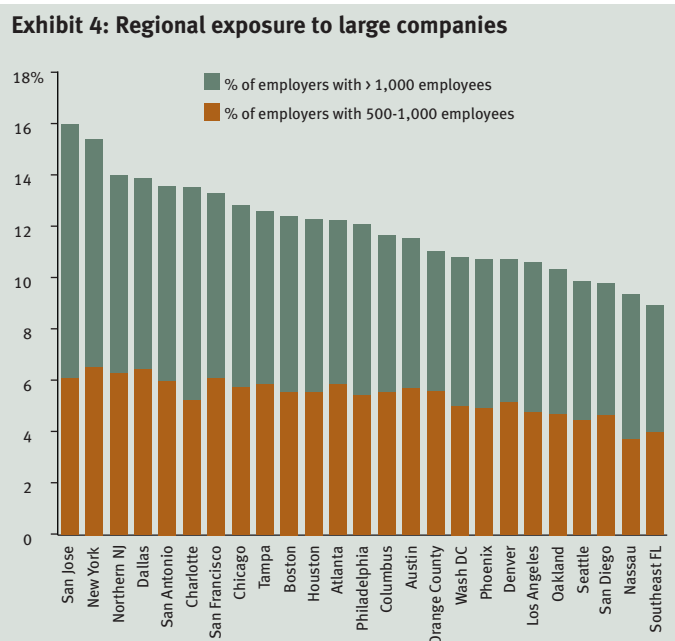
Multinational firms with more than 500 employees have a greater ability to execute offshoring strategies than smaller firms because they can rationalize the substantial initial investment required for migrating jobs overseas. Relocation decisions made by large firms can be leveraged among multiple business units to achieve scale, allowing the firm to amortize the fixed initial investment across larger cost savings.

Branch office captive arrangements may not make financial sense for small firms due to the high sunk costs. At a minimum, organizing a captive arrangement requires an understanding of applicable laws, the impact on the company's financials and tax and hedging strategies to the extent the unit is a profit center. Imagine how difficult it would be for a U.S. law firm with 50 employees to open a branch office in India.

Instead, small firms may need to hire an outsourcing company. However, doing this limits the ability of small firms to take advantage of offshore salary differentials since firms usually do not outsource their core business activities. A major risk to outsourcing is the leverage ceded to the third party because of the firm's high level of reliance on its services; this may limit the firm's ability to negotiate the fee structure, to enforce performance criteria and, most importantly, to terminate the contract. This risk necessitates sophisticated planning and management of the relationship — costly resources small firms may not have at their disposal.

Only 5% of Americans work for companies with over 1,000 employees, and 11% of Americans work for companies with over 500 employees. High technology and telecommunications centers such as Middlesex, NJ, and San Jose and financial services hubs such as New York and Charlotte have an above-average exposure to large firms (see exhibit 4). CBDs tend to attract large companies as well; average company size is 1.5 times larger in

central business districts than in the suburbs. The largest companies are located in Boston's financial district and Midtown Manhattan (see exhibit 5).



Sources: Bureau of Labor Statistics; JPMorgan Fleming



Sources: Bureau of Census; TortoWheaton Research; JPMorgan Fleming

Hope, not hype, for at-risk markets

We conclude that markets with the greatest exposure to offshoring of local jobs have three characteristics (as summarized in exhibit 6). Clearly, markets with above-average income in vulnerable jobs have the most at risk from the offshoring trend. To the extent possible, firms have the incentive to offshore jobs located in markets where the salary level is above the industry average. Markets with higher percentages of large companies will be more affected since these firms are most capable of executing offshoring strategies. Offshoring does not signal the economic decline of high-risk markets; regions will be affected by their ability to capture high quality labor flows.

Some markets have proven their ability to re-invent themselves in response to structural change. In the late '80s, the outlook for Charlotte was bleak as its textile manufacturing industry withered away in favor of Asian-made goods. Since then, Charlotte has emerged as a headquarters location for commercial banking, and it has continued to benefit from the wave of bank mergers as firms tap Charlotte's low-cost structure.

Real estate investors should look for metro areas with strong demographics, a high quality of life and dynamic intellectual capital because these regions will find new sources for growth.

Exhibit 6: Risk factors for offshoring

	Above-average income in at-risk occupations	Wages in at-risk occupations above industry average	Above-average exposure to large companies
Atlanta	✓		✓
Austin	✓		
Boston	✓	✓	✓
Charlotte			✓
Chicago		✓	✓
Columbus			
Dallas	✓	✓	✓
Denver	✓	✓	
Houston			✓
Los Angeles			
Nassau		✓	
New York		✓	✓
Northern NJ	✓	✓	✓
Oakland		✓	
Orange County		✓	
Philadelphia			✓
Phoenix	✓		
San Antonio			✓
San Diego			
San Francisco	✓	✓	✓
San Jose	✓	✓	✓
Seattle	✓	✓	
Southeast FL	✓		
Tampa	✓		✓
Washington DC	✓	✓	

Note: "At risk" refers to occupations with a potential to be offshored.

Sources: Bureau of Labor Statistics; Bureau of Census; JPMorgan Fleming

Silicon Valley is another example. After the government pulled back procurement dollars in the early '90s, former defense contractors started a revolution in Silicon Valley that led to unprecedented growth in the region. Not all of America will be on the right side of the trend. Real estate investors should look for metro areas with strong demographics, a high quality of life and dynamic intellectual capital because these regions will find new sources for growth.

Postscript: Legislation is unlikely to slow the trend

As the trend of white-collar outsourcing has gained momentum, it has raised the interest of influential constituents, especially as an election year approaches. Legislation may do little to slow the trend, at least in the near term, because what the unions and lobbyists feel is achievable will have little impact. Nine states are actively debating legislation to prevent the offshoring of government-subsidized employment such as unemployment insurance and welfare claims processing. Lobbyists and labor unions argue the government is spending tax dollars overseas instead of stimulating job creation domestically. However, opponents argue that the government can recycle the savings to other government-subsidized pro-

grams or to re-train displaced workers with higher value-added skills. Lobbyists recognize the difficulty in applying this rationale to the private sector because U.S. firms must be able to pursue efficiency gains to remain internationally competitive. Unions are also lobbying state legislatures for “truth in labeling,” which would require all customer service employees to state their real names and locations. The Communications Workers of America strongly advocated this for overseas call centers in its contract negotiations with Verizon in August 2003, but the company would not agree, evidence that they are concerned about consumer backlash.

Real Estate Research Team: (212) 837-1776


Dave Esrig, CFA
dave.esrig@jpmorganfleming.com
(212) 837-5346

Anne R. Hoagland
anne.hoagland@jpmorganfleming.com
(212) 837-1131

Susan M. Kolasa
susan.kolasa@jpmorganfleming.com
(212) 837-1496

Scott J. Strauss
scott.j.strauss@jpmorganfleming.com
(212) 837-2991

Aditya Parikh
aditya.parikh@jpmorganfleming.com
(212) 837-8972



This document is intended solely to report on various investment views held by JPMorgan Fleming Asset Management. Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable but should not be assumed to be accurate or complete. These views and strategies described may not be suitable for all investors. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations. Past performance is no guarantee of future results. Please note that investments in Alternatives are subject to special market and liquidity risk.

JPMorgan Fleming Asset Management is the marketing name for the asset management business of J.P. Morgan Chase & Co.