



The Emerging Global Labor Market: Part II—The Supply of Offshore Talent in Services

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The Emerging Global Labor Market:

Part II—The Supply of Offshore Talent in Services



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Guiding Principles

We consider any job that is not confined to a particular location as having the potential to be performed anywhere in the world (i.e., globally resourced). If the activities comprising a job do not require physical proximity, local knowledge, or complex interactions, then it is not confined to a particular location. In Part I of this report, the section Global Resourcing Potential—Theoretical Maximum addresses this potential to remotely locate jobs.

Jobs that are not confined to a particular location may be performed wherever a company deems most attractive. A company may choose to have a particular "location insensitive" job performed in the demand market (that is, in the market in which the resulting output is sold), in a border zone (nearshore), or remotely (offshore). Therefore, not all location insensitive jobs will move offshore.

Although manufacturing jobs may be insensitive to their location, this study focuses on service jobs only. Besides service jobs in service sectors, the study also includes service jobs (e.g., accounting) in manufacturing sectors.

We primarily evaluate the demand for low-wage employment from high-wage countries (i.e., offshoring). To estimate labor demand by global industry sectors, we treat countries as neither inherently on the supply side nor inherently on the demand side in the global labor market. However, as cost is a major determinant of companies' location decisions, developed countries are clearly likely to provide the bulk of demand for offshore labor, and developing countries the bulk of supply. When we discuss how fast offshoring will grow, we examine only the demand for low-wage labor from high-wage countries. The evaluation of "degree of adoption" refers only to the demand for low-wage labor.

We assume that the demand for labor per activity is equal in all countries. Capital/labor tradeoffs and increased service levels may cause high-wage countries to seek more labor in low-wage countries than they would for performing the same activity in the demand market. Productivity differences between the original location and the new location may also influence demand for labor. As these effects can be both positive and negative, our default assumption is that the number of FTEs needed for an activity is the same whether located onshore or offshore.

Executive Summary

"What makes this trend so viable is the explosion of college graduates in low-wage nations. In the Philippines, a country of 75 million that churns out 380,000 college grads each year, there's an oversupply of accountants trained in U.S. accounting standards. India already has a staggering 520,000 IT engineers, with starting salaries of around \$5,000."¹

"The quest for workers is creating a talent crunch that some believe might dull India's competitive edge in outsourcing. 'With rising wages, many companies are just not making money here in India, especially in call centers,' says Chiranjit Banerjee, a director for human resources firm Quest Research Ltd."²

Today there are conflicting views on the potential for offshoring service jobs to low-wage nations. This report, the second of three to analyze the emerging global labor market, quantifies the supply of talent in 28 low-wage countries and 8 mid- and high-wage ones.³ The analysis covers a range of occupations that could be performed

¹ "The new global job shift; The next round of globalization is sending upscale jobs offshore. They include basic research, chip design, engineering even financial analysis. Can America lose these jobs and still prosper? Who wins? Who loses?" Pete Engardio, Aaron Bernstein, Manjeet Kripalani, Frederik Balfour, Brian Grow and Jay Greene, 3 February 2003. *BusinessWeek*.

² "Good help is hard to find; Higher wages and lavish perks reign as outsourcing outfits scramble for talent." Josey Pulienthuruthel and Manjeet Kripalani, 14 February 2005. *BusinessWeek*.

³ Mid- to high-wage countries studied in-depth were: Canada, Germany, Ireland, Japan, the United Kingdom, and the United States; Australia and South Korea were studied by way of extrapolation. Low-wage countries included in the in-depth study were: Brazil, China, Czech Republic, Hungary, India, Malaysia, Mexico, Philippines, Poland, and Russia; other low-wage countries studied were: Argentina, Bulgaria, Chile, Colombia, Croatia, Estonia, Indonesia, Latvia, Lithuania, Romania, Slovakia, Slovenia, South Africa, Thailand, Turkey, Ukraine, Venezuela, and Vietnam.

remotely: engineers, finance and accounting professionals, analysts, life science researchers, doctors, nurses, and generalists. The findings have wide-reaching implications for both multinational companies (MNCs) seeking to tap into low-wage labor pools and for countries seeking to attract such investment and spur job creation.

Offshore talent potential exceeds high-wage country potential by a factor of two

We found there are approximately 33 million young professionals⁴ (university graduates with up to 7 years of experience) in our sample of 28 low-wage countries. This compares to 15 million in our sample of 8 higher-wage nations (United States, United Kingdom, Germany, Japan, Australia, Canada, Ireland, South Korea) and 7.7 million in the United States alone. Including support staff, doctors, and nurses of all tenure groups, the figures rise to 392.8 million potential workers in low-wage countries, compared to 181.3 million in high-wage countries.

In each of the eight occupations we studied, the total number of young, university-educated talent in low-wage countries like China, India, and the Philippines, surpasses that in our high-wage sample. India alone has nearly as many young professional engineers as the United States, and China has more than twice as many; China has twenty times the number of doctors as the United Kingdom; Russia has almost 10 times as many finance and accounting professionals as Germany.

Three factors reduce the potential talent supply in low-wage nations

Although the potential supply of talent in low-wage countries is large and growing rapidly, only a fraction of potential job candidates could successfully work at a foreign company. The reasons are limited suitability, dispersion of the labor force, and domestic competition for talent.

⁴ Young professionals include engineers, finance and accounting, analysts, life science researchers, and professional generalists. It excludes doctors, nurses, and support staff.

Thirteen percent of the potential talent supply in low-wage nations is suitable to work for multinational companies

Interviews with 83 human resource managers in multinational companies⁵ reveal that 13 percent of potential job candidates in degree specific occupations could successfully work at a multinational company. This share rises to 19 percent when taking into account the possibility that many graduates who are unsuitable for their own profession may be found suitable for a generalist position (e.g., an engineer could work as a call center agent or an analyst).

The reasons for low levels of suitability are: lack of necessary language skills; the low quality of significant portions of the educational system and its limited ability to impart practical skills; and a lack of cultural fit, which can be seen in interpersonal skills and attitudes towards teamwork and flexible working hours.

The suitability of job candidates varies by occupation and by country. On average, 15 to 20 percent of the engineers, finance and accounting majors, life science researchers, and analysts could be hired by foreign companies, while only 10 percent of generalists could due to stricter language requirements (Exhibit 1). There is a wide variation among countries, however. While 50 percent of engineers in Poland or Hungary are suitable to work for multinational companies, only 10 percent of Chinese ones and 25 percent of Indian ones would be suitable (Exhibit 2).

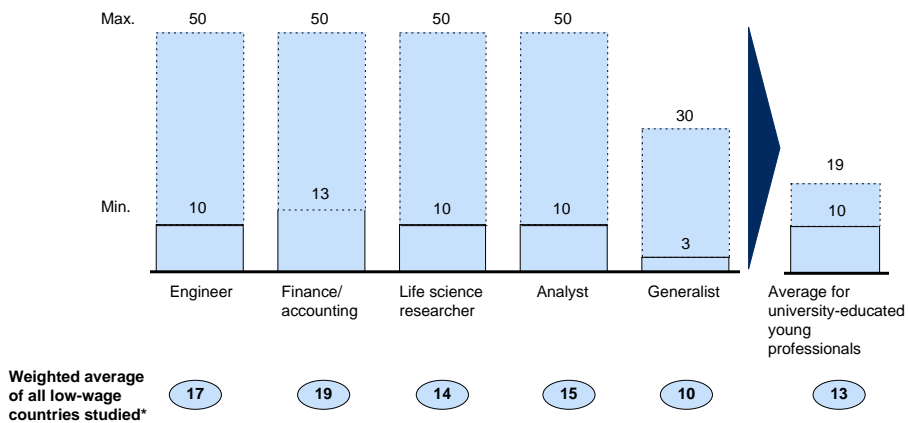
Interviews indicate that, in general, university graduates from Eastern European countries are, on average, well-suited to work for multinational companies. Job candidates from Russia are well-educated but often lack a grounding in practical skills from their university education, while in India the overall quality of the educational system, apart from the top universities, could improve significantly. In China and Brazil, language deficiencies are the most pressing issue.

⁵ We conducted 83 interviews with HR managers at multinational companies, HR agencies primarily supplying MNCs as well as heads of remote centers in each country. For each occupational group, we asked a quantitative question ("Of 100 random candidates with the correct degree, how many could you employ if you had sufficient demand for all 100?") and a qualitative question ("What are the main deficiencies of the candidates you turned away?"). Answers to both questions were surprisingly homogeneous across interviewees in most of the countries.

Exhibit 1

IN LOW-WAGE COUNTRIES, ON AVERAGE ONLY 13% OF UNIVERSITY GRADUATES ARE SUITABLE TO WORK IN A MULTINATIONAL COMPANY

"Of 100 graduates with the correct degree, how many could you employ if you had demand for all?"
%



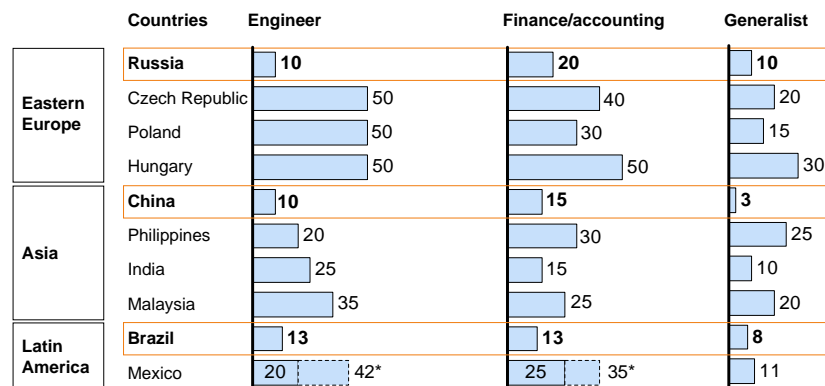
* Argentina, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Czech Republic, Estonia, Hungary, India, Indonesia, Latvia, Lithuania, Malaysia, Mexico, Philippines, Poland, Russia, Romania, Slovakia, Slovenia, South Africa, Thailand, Turkey, Ukraine, Venezuela, Vietnam.

Source: Interviews with HR managers, HR agencies and heads of global resourcing centers; McKinsey Global Institute analysis

Exhibit 2

SUITABILITY VARIES MARKEDLY BETWEEN COUNTRIES AND SEEMS ESPECIALLY LOW IN NASCENT GLOBAL RESOURCING MARKETS

"Of 100 graduates with the correct degree, how many could you employ if you had demand for all?"
%



All suitability rates are empirically based on a total of 83 interviews with HR professionals working in each country

* Mexico is the only country where interview results (higher number) were adjusted since interview base was thinner and risk of misunderstanding high.

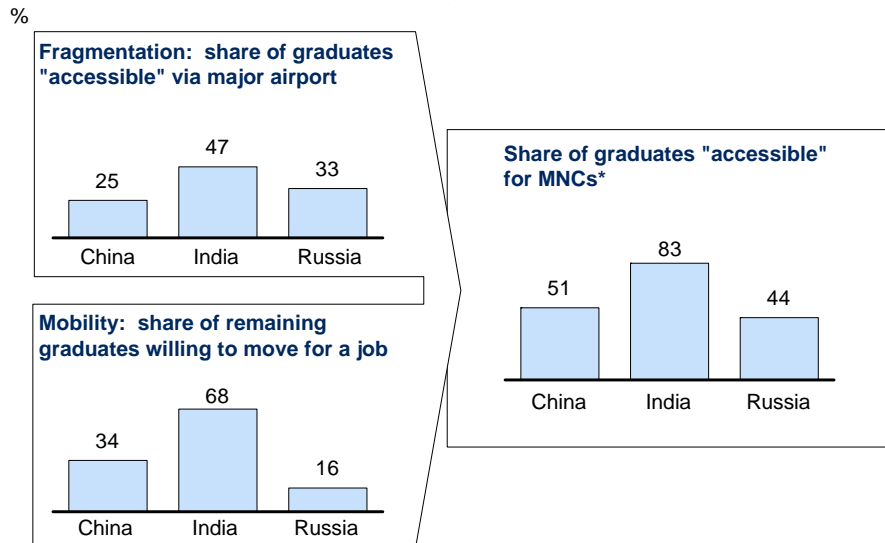
Source: Interviews with HR managers, HR agencies and heads of global resourcing centers; McKinsey Global Institute analysis

Dispersion of the labor force reduces the pool of suitable talent further

In large emerging markets, such as China, India, and Russia, the pool of potential talent is further diminished by the fact that many university graduates do not live in major cities with international airline connections (usually a key criteria for multinational companies seeking an offshore location) and are unwilling to relocate. In China, we estimate that just half the potential talent pool is geographically accessible to multinational companies. In Russia, only one-third of students graduate close to a major international airport, and few are willing to relocate. In contrast, nearly half of all Indian students graduated close to a major international hub, such as Mumbai, Delhi, Bangalore, or Hyderabad, and Indian graduates are also the most willing to move (Exhibit 3).

Exhibit 3

RUSSIAN UNIVERSITY GRADUATES ARE LESS FRAGMENTED, BUT ALSO LESS MOBILE THAN CHINESE ONES, INDIA'S ARE MOST "ACCESSIBLE"



* Accessible graduates = Graduates who studied close to a major international airport + (Remaining graduates x Empirical mobility rate)

Source: Country labor & graduation statistics; Surveys on student mobility; McKinsey Global Institute analysis

Competition for talent from non-offshoring companies reduces available supply in China

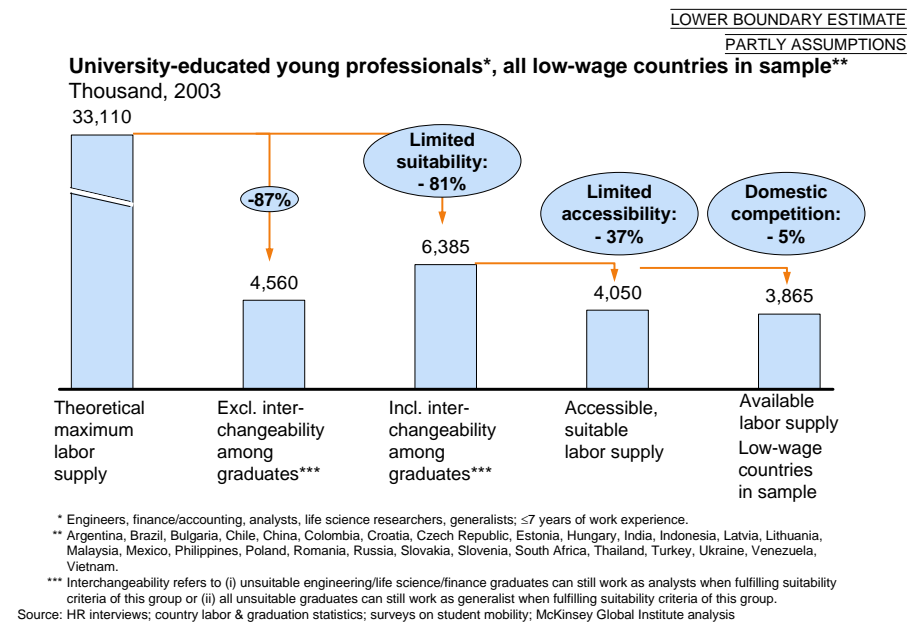
In China, the suitable labor supply is further reduced by competition for talent from non-offshoring oriented companies within the country (including domestic companies, multinationals meeting domestic demand, and foreign joint ventures).

The available talent pool for multinational companies is 8 to 12 percent of the total and is growing rapidly

The three factors described above greatly reduce the pool of talent available for multinational employment. While there are 33 million potential young professionals in emerging markets, 4.6 million are suitable to work for a foreign company. If we include the fact that some professionals unsuitable for positions in their occupations might be suitable for generalist positions, suitable supply increases to 6.4 million. Lack of accessibility and competition from non-offshoring employers reduces these pools further still (Exhibit 4). Altogether, we estimate that 2.8 to 3.9 million—or 8 to 12 percent—of the young professionals in low-wage countries are available for hire by export-oriented service offshoring companies. This compares to 8.8 million in our sample of high-wage countries.

Exhibit 4

SUITABILITY HAS THE STRONGEST IMPACT ON AVAILABLE, UNIVERSITY-EDUCATED LABOR SUPPLY FROM LOW-WAGE COUNTRIES



But even the 3.9 million is a lower boundary estimate of the potential talent pool in low-wage countries. In reality, the most suitable job candidates are also likely to be the most mobile and to have studied in a major city.

At 6.4 million, the pool of talent available for offshoring is large. In some occupations, such as engineers, finance and accounting, and analysts, it is 75 percent or more of the suitable pool of labor in our sample of high-wage countries. Given their sheer size, India and China dominate the suitable labor supply in many occupations. India accounts for nearly 30 percent of the young professionals,⁶ for instance, while China and Russia have 11 percent and 10 percent, respectively.

The large pool of suitable talent in low-wage countries is also growing quickly. The stock of suitable, young professional talent in emerging markets is growing at 5.5 percent annually, while the number in developed countries is growing just 1 percent annually. This growth in stock is fueled by a strong increase in graduates in these countries. Growth is particularly rapid in degrees for which there is high demand from multinational companies. The share of degrees awarded in business and economics jumped from 18 percent to 31 percent in Russia, and from 16 percent to 36 percent in Poland in just five years.

By 2008, we expect the supply of suitable young engineers to be nearly the same between the developing and developed countries in our sample, and suitable finance and accounting professionals will surpass the supply in our high-wage sample.

Middle manager shortage looming in low-wage nations

Middle-manager scarcity is a constraint to growth in offshoring for many countries. India has been developing its export-oriented service sector, especially in IT and call-center businesses, for more than a decade, creating a sizeable pool of experienced middle managers. Nonetheless, India still has a scarcity of managers because growth in the offshoring sector has averaged more than 20 percent per year over the last 10 years, and even more briskly in some cities. Rapidly rising wages for IT project managers, which have increased 23 percent annually over the last four years, signal this scarcity.

⁶ This includes engineers, finance and accounting, analysts, life science researchers, and professional generalists with less than 7 years of experience. It excludes 3 occupations: doctors, nurses, and support staff.

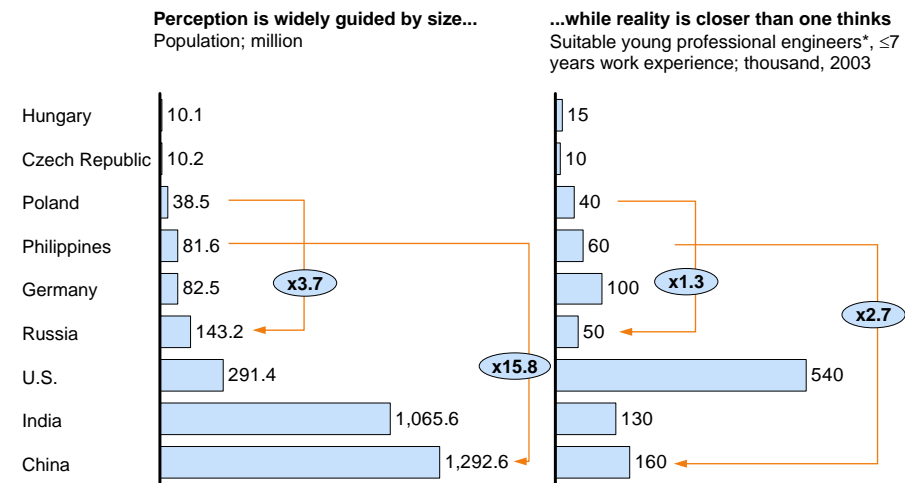
More nascent offshoring markets—like Russia and China—are also growing rapidly and, even worse, they lack India's depth in the market, making manager scarcity even more severe. In fact, some Russian entrepreneurs have tapped India for middle managers.

Many smaller countries have sizable, attractive talent pools and multinational companies should look beyond aggregate numbers

Given differences in the portion of university graduates that could successfully work for a multinational company, many smaller countries can be attractive offshoring locations (Exhibit 5). Even though China's population is 16 times the size of the Philippines, for instance, its pool of suitable young professional engineers is only 3 times the size of the Philippines. Poland has nearly as many qualified engineers as the much more populous Russia. Poland, Hungary, Russia, and the Czech Republic together have as many suitable generalists as India, and nearly as many suitable engineers. As a result, many countries are likely to play a role in the emerging global labor market.

Exhibit 5

POPULATION IS NOT ALWAYS AN APPROPRIATE INDICATOR FOR SUITABLE LABOR SUPPLY



* Including all engineering disciplines (except civil engineering); including all IT and computer science degrees.
 Source: Global Insight; Country Ministries of Education/Labor Statistics Offices; HR interviews

Multinational companies should thus focus specifically on the suitable talent supply for the job categories they need, rather than relying on the size of a country's overall population. As we will see in the next report, the "follow the leader" strategy that so many companies have used in choosing an offshore location to date leads to accelerating wages and high turnover. Within countries, companies should size the labor supply at the city level, and explore multiple locations, smaller cities, and telework options to alleviate limited talent accessibility. Multinationals should also consider emigrant talent in other countries to fill middle-manager positions in offshoring operations.

Countries should focus on improving the quality of talent

Countries seeking to play a role in the emerging global labor market should concentrate on improving the *quality* of their talent, not just the *quantity* of educated workers. In many developing countries, a large potential labor supply could be unlocked by improving the suitability of college graduates, particularly their language skills. For instance, if Chinese engineering graduates were to reach the current suitability rate of Indian engineers by 2008, the supply would nearly double, jumping from 212,000 today to 395,000 in 2008. Improving the suitability of graduates is far from simple, but educational improvements can be coordinated closely with domestic and multinational companies to develop practical skills training in universities and external management training programs. Study and work abroad programs can help students gain international experience and create a worldwide diaspora of highly educated and globally minded workers.



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