

Tradable Skills and Globalization

❖ How does global task unbundling influence Texas workers and employers?

Introduction

Economist and former Secretary of Labor Robert Reich once remarked that economies are like bicycles: the faster they move, the better they maintain their balance unaided. Few would argue that the economy seems to be changing at a dizzying pace. One cannot pick up a newspaper or listen to the news without some mention of the “global economy.”

Rapid changes in technology, communications and transportation, coupled with accommodating political and trade policies, have created unprecedented access to the international marketplace. Though this marketplace includes new customers for American products, it also allows American companies access to new production facilities and new sources of labor around the globe. One consequence of these new production and staffing alternatives is increased forethought on the part of business before hiring full-time staff or raising wages.

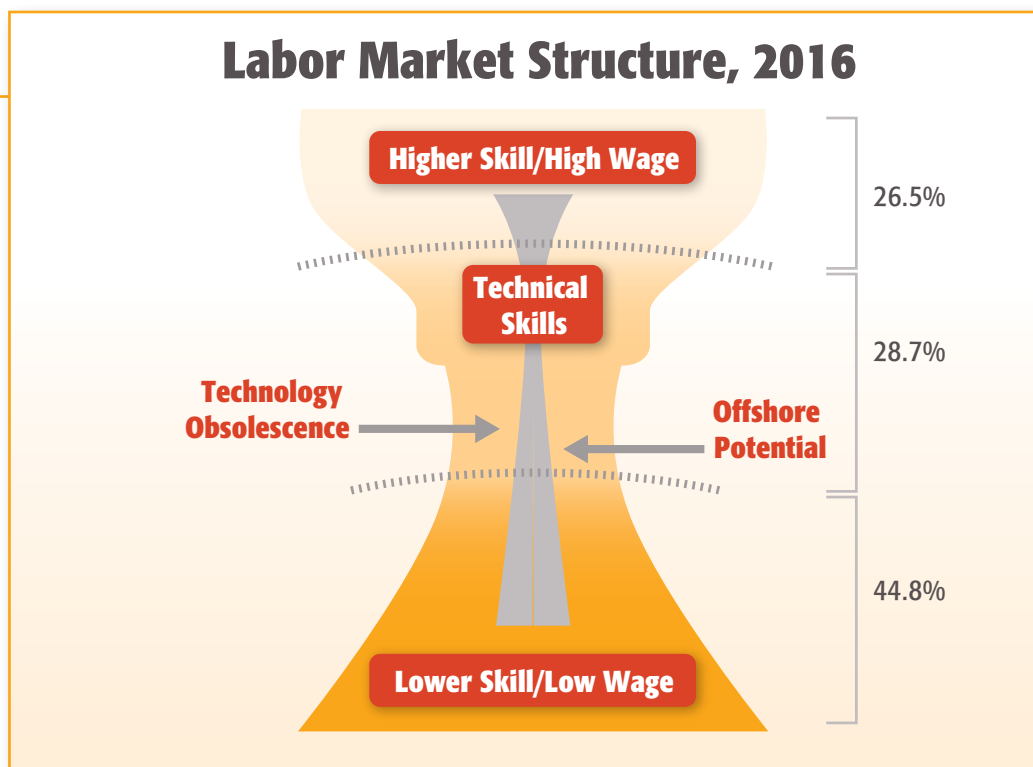
As managers think about work tasks and specialized knowledge in a more granular fashion, the notion of an “occupation” becomes more arcane. An ever-increasing number of skills are being redefined as “tradable.” At the same time, skills are being unbundled from tasks in given occupations and outsourced, offshored or transferred to lower skill, lower wage jobs. Such skills can be performed by workers, both foreign and domestic, who possess discrete knowledge or skill sets in demand for specific projects, contracts or customers. Or the skills can be removed from human hands entirely and automated through technology.

What’s Happening

In a globally competitive, knowledge-based economy, the changing nature of comparative advantage requires higher resolution analysis. In the original low resolution theory of comparative advantage put forth by political economist David Ricardo in the 1800s, industries were the unit of analysis for trading goods among nations. Today, globalization of the economy complicates regional employment demand projections. First, the unit of analysis for assessing comparative advantage shifts from whole industries to discrete occupations. Lower transportation costs and faster travel times reduce the significance of proximity to raw materials or to customers as an industry-level comparative advantage. This often makes cost of labor a higher priority than climate or natural resources in production-location decisions. The result is whole industries — primarily those in which most of the tasks entail simple, repetitive, manual activities with little required cognitive ability — can relocate from developed nations (United States, Europe, Japan) to lower wage countries.

Entire occupations become tradable once improvements in and falling costs for telecommunications enable managers to coordinate and integrate economic activities from afar. These technologies eliminate the need to locate all of an industry’s functions in close proximity to another industry. In short, industry staffing patterns have started to become unbundled. Occupations engaged in routine manual and simple cognitive tasks can be offloaded to machines or

Figure 4.1



subcontractors or relocated to lower wage countries. Meanwhile, the same industry’s workers who engage in “thinking for a living” continue to be deployed in high-wage, culturally diverse, metropolitan areas of developed nations, where most global corporations are headquartered and where most world-class postsecondary institutions or advanced research entities are located (for more on this topic, see Ray Marshall and Marc Tucker’s *Thinking for a Living: Education and the Wealth of Nations*, 1994, and the recent works of Michael Porter and Richard Florida).

Conceptual discussions about tradable occupations serve as the prelude to an even more granular way of thinking about comparative advantage. Currently, tasks that made up job duties or detailed work activities (DWAs) of a discrete occupation are being unbundled. The unit of analysis for assessing comparative advantage and tradability has shifted from whole industries to occupational groupings to discrete sets of work activities. Businesses now can improve their efficiency, productivity and profits by dividing labor at this more granular task level.

The remaining challenge for industry managers is to determine which work activities should be assigned to their own workers and which can be performed more efficiently in other ways.

The Data

Existing data to document the phenomenon of tradable skills is largely anecdotal. As occupational tasks are unbundled, labor market analysis needs to become more granular as well. Theoretically, an occupation’s discrete, requisite work activities need to be assessed to predict which unbundled tasks are most likely to be rendered obsolete by automation or offloaded to lower skill workers.

Determining which skills are tradable and how soon they may be shipped offshore is difficult with detached desktop analyses. Alan Blinder of Princeton University and others are contributing to a growing but inexact body of economic research designed to estimate the tradability potential of certain occupations. According to Blinder’s 2007 research, 22%–29% of

all U.S. jobs could move offshore within this decade. A study by Harvard Business School students essentially confirmed these findings (see **Figure 4.1**).

It would be reasonable to hypothesize that the longer it takes a worker to acquire particular knowledge or skills required for each work activity — and the more formal education and training required — the more the job will add value to the organization and the less likely the job will be defined as tradable. However, tradability can be dictated by other factors, including the proximity between worker location and the location of the workplace or where the work is performed, which could include tasks that require complex pattern recognition such as those involved in truck dispatching or those that can be easily broken down into routine binary decision or If-Then-Do rules. (For an extensive discussion of such factors, see Frank Levy and Richard Murnane’s *The New Division of Labor*, 2004.) The Harvard Business School replication of Blinder’s study found that “occupations with higher educational attainment are (slightly) more offshorable.” Levy and Murnane attribute this finding to the number of research-related and computerized tasks associated with highly skilled work that can be performed anywhere. Thus, it appears that offshoring and the use of digital technology are serving to hollow out job opportunities at both the high skill and low skill strata.

Offshoring decisions will vary from one region to another, depending on local employers’ assessments of the following factors:

- **Technology trajectories** relative to their own capital investment budgets
- **Structural changes** in their own industries’ employment patterns
- **The quality and wage demands** (costs) of the local talent pool
- **The local education and training** pipeline’s graduation capacity and curriculum relevance
- **The role local establishments’** outputs play in the life cycles of their parent company’s overall product portfolio

- **The parent firm’s ownership**

characteristics or availability of foreign subsidiary operations

| So What?

Just because the essential skills necessary to perform a work-related task (DWA) are redefined as tradable does not condemn their shipment to offshore workers. Given the relatively slow pace of the unbundling process, we hypothesize only that the higher the tradability potential of a work activity, the greater the likelihood that it eventually will be redeployed outside the region (in a lower cost region inside Texas or even abroad). As the Harvard study concluded, “The possibility of grouping tasks [work activities] in novel ways gives businesspeople a breathtakingly broad menu of new options for taking advantage of differences across borders.”

There are many reasons why the unbundling process is proceeding at a slow — albeit accelerating — pace. Lower costs and expanding profit margins are attractive but not wholly irresistible forces. Aside from those few world-class, globally competitive, multinational corporations, most employers are likely to bide their time to outsource functions that hinge on tradable skills. Many will wait until they can digest the successful practices of other firms. They may redeploy work activities at a later time that coincides with either an anticipated local labor shortage (e.g., when significant numbers of their Baby Boom employees retire) or an organization’s timetable for replacing current technology (e.g., when their capital investment in the technology has been fully depreciated or when the parent company schedules the local establishment’s conversion to produce a newer product line).

Some companies won’t elect to unbundle and offshore jobs or DWAs. They may choose instead to continue paying local workers premium wages to sustain a “Made in America” philosophy, which in turn helps reinforce strategic marketing campaigns, take advantage

“The productivity of work is not the responsibility of the worker but of the manager.”

*—Peter Drucker,
Claremont Graduate
University*



of government initiatives to save U.S. jobs or maintain close relationships with customers.

Some employers are not convinced that lower wages for foreign workers provide sufficient competitive advantage to offset the litany of disincentives. For others, a modest increase in anticipated profits is not enough to offset the cost of workflow redesign, risk of intellectual property rights violations or the permit fees and red tape associated with setting up a foreign subsidiary.

Still other firms are motivated more by local attachments, loyalty to their incumbent workers, nationalistic sentiments or prejudices rather than profit making.

In the end, skills tradability may lead to increased automation and to intrafirm task offloading and outsourcing within the same region or to other domestic sites, rather than offshoring. Offloading or outsourcing customer-support tasks to call centers in Abilene, Amarillo or Albuquerque can boost profits enough to keep a firm globally competitive without redeploying jobs or work activities to a foreign country, such as India or China.

The unbundling of occupational work activities is occurring at a slow

but steady pace. Given the challenges of recognizing and adapting to the new high-resolution global economy and the concept of tradable skills, American employers are hardly uniform in their approach to domestic staffing issues. In any case, given the emerging potential for work-task restructuring, local economic developers (especially those with longer term time horizons) and their workforce board partners have a responsibility to work through this issue with any relocating employer prospect, especially firms likely to receive taxpayer subsidies for job creation.

This discussion is primarily intended to bring awareness to the evolving issue of skill unbundling and to offer a framework for understanding the implications of employer labor input decisions. Ultimately, the intricacy of the myriad strategies for optimizing labor inputs used by companies in the emerging global economy cannot be ignored. As management guru Peter Drucker reminded, “The productivity of work is not the responsibility of the worker but of the manager.” With more options than ever before, how management chooses to best deploy worker talents will vary significantly across industries, professions and projects.

Chapter 4 | Suggested Strategies



Think Globally, Plan Regionally

Offshoring accounts for a small percentage of American job losses — far less than job losses due to automation or simple day-to-day job churning in the national economy. Offshoring is only one of many ways of improving productivity and profits by realigning labor in combination with other factors of production. Alternatives to offshoring are plenty; for example, Toshiba and Lexmark repair laptops and printers in Louisville, Kentucky, where the delivery company UPS achieves economies of scale and uses its expertise in logistics to reduce costs other than those associated with labor.

But globalization is real and growing. Companies will emerge from the recession and determine how to increase profitability through effective business practices. That DWAs can be unbundled from traditional jobs or occupations and easily automated or offshored should get the attention of students and training institutions alike. It also should factor into workforce training efforts to improve the chances that skill sets earned by dislocated or unemployed workers do not quickly become obsolete, rendering workers unemployed.

Task unbundling can work both ways. Economic developers should be willing to ask business prospects if components

of work can be performed in their locale, even if a wholesale relocation is not in the near future. Community promoters should understand the types of work functions performed by area businesses and market those capabilities independent of industry designation.

Today's workplaces are becoming more like the "Hollywood model," which values discrete skills and talents of workers for shorter, more contract-oriented work projects. Individuals, including those with disabilities and military veterans, must better understand and market their skill sets. If individuals possess core skills for a variety of jobs but need additional education and training to fill skills gaps, the training doesn't need to be provided through two- or four-year college programs. Instead, employees need to obtain shorter term training with industry certification. Higher education can carve out portions of their curricula to serve those in need of marginal skill acquisition, perhaps offering work activity-based certificates of mastery designed to meet industry requirements. In a world where what you know and how you can apply it matters as much or more to employers than an academic credential, understanding the composition of work and requisite levels of performance becomes critical.