Economic Development Research Partners Program
Roadmap to Globalization

PRIMER

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# ECONOMIC DEVELOPMENT RESEARCH PARTNERS

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<tr>
<th>Company Name</th>
<th>President/CEO</th>
<th>Executive Officer</th>
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<tr>
<td>York County Economic Development Corporation</td>
<td>Darrell Auterson, CEcD</td>
<td>President and CEO</td>
<td>Creative Sheffield</td>
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<td>Creative Sheffield</td>
<td>Ian Bromley, FM MA MBA</td>
<td>Chief Executive</td>
<td>City of San Jose</td>
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<td>Ronnie Bryant, CEcD</td>
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<td>President</td>
<td>North Dakota Department of Commerce</td>
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<td>Dennis Burnside</td>
<td>President and CEO</td>
<td>Lincoln Economic Development Association</td>
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<td>President and CEO</td>
<td>Greater Oklahoma Chamber of Commerce</td>
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<td>Burnside Analytics</td>
<td>Barry Matherly, CEcD</td>
<td>Executive Director</td>
<td>Greg Wingfield, CEO</td>
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<td>Denny Coleman, CEcD FM</td>
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<td>Director</td>
<td>Greater Richmond Partnership</td>
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<td>Saint Louis County Economic Council</td>
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<td>Saginaw Future Inc.</td>
<td>Buzz David, CEcD</td>
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<td>Amarillo Economic Development Corp</td>
<td>Marty Vanags</td>
<td>CEO</td>
<td>Oklahoma Department of Commerce</td>
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<td>Cedar Hill Economic Development Corp</td>
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<td>Executive Director</td>
<td>Georgia Tech Enterprise Innovation Institute</td>
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<td>Research Triangle Foundation of North Carolina</td>
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<td>Manager, Community Innovation Services</td>
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Introduction

Globalization is the process by which regional and national economies are integrated into a larger, more diverse and more competitive global economy. It drives, and is driven by, the greater mobility of capital, people, businesses and information. It is enabled by the spread of the Internet and other information and communication technologies (ICT), which link economies worldwide—a process similar to the building of roads and rail in the U.S. that created a national economy from isolated regional markets. As markets enlarge, trade and competition grow, which endows wealth to some locations and disruption to others. While globalization presents serious threats and unquestionably has created a more volatile, uncertain and riskier economy, it is also rife with significant and unprecedented economic opportunities, if we better understand these processes.

The International Economic Development Council has prepared this primer on globalization for economic developers, shaped under the guidance of its Economic Development Research Partners Program, to help economic developers navigate this globalizing world. Its purpose is to demystify the process of globalization and emphasize the urgency of responding to it. Case studies and a roadmap report which summarizes effective strategies communities have used to harness globalization to their advantage are also included as part of this effort.

What Are the Core Components of Globalization?

Globalization at its most basic is the creation of a larger, more complex marketplace in which economic activities flow into and out of the economy. For economic development, the fundamental issue is that it changes the conditions of competitiveness for both places and businesses, which has significant implications for promoting sub-national economic prosperity. Those conditions are an increase in the number of competitors, a larger market, and globally standardized technologies which together are substantively restructuring how business is organized. Let us look at each issue.
More Competitors in the Market

Several issues converge to create increased competition:

- Liberalized capital and trade flows allow money and goods to flow more easily to more places. This has been facilitated by expanded, strengthened international trade agreements and alliances such as the North American Free Trade Agreement (NAFTA), the World Trade Organization (WTO), the Information Technology Agreement and the European Union, and the growing international role of its common currency, the Euro.

- Rapidly growing emerging economies, unencumbered by legacy investments, are significantly outpacing U.S. growth rates and gaining an increasing share of global markets and foreign direct investments. For example, developing countries generated over 52 percent of global GDP growth in 2007 but only about 37 percent in the late 1990s (Hale 2008).

- With growth comes wealth. Of the U.S. $6 trillion that comprise the world’s foreign exchange reserves, developing countries account for 75 percent (Hale 2008). More specifically, the second world countries of Eastern Europe, Central and Southeast Asia, China, and the Middle East hold the majority of global foreign exchange reserves and savings. In fact, the initial public offerings of the so-called BRIC countries (Brazil, Russia, India and China) accounted for about 40 percent of the volume of total global corporate financing in 2007 (Khanna 2008). Notably, much of the wealth in the developing world is situated in sovereign-wealth funds, which have assets of $2.5 trillion (Hale 2008). These sovereign-wealth funds, which are the major holders of foreign exchange, are currently buying into large shares
of Western banks and oil companies and searching for additional investment opportunities.

- Emerging trends suggest that although corporations originating in the developed world still dominate the Fortune 100, this is expected to change dramatically within a 10-year time frame (Hammerich 2007).
- Newly competitive countries, which provide lower cost locations, now are willing to also offer attractive business incentives.
- Competitors are increasing their technological and workforce competencies rapidly. For example, in 1985, high technology manufacturing comprised 14 percent of total U.S. manufacturing and eight percent of total Chinese manufacturing. Ten years later, it comprised 21 percent of U.S. manufacturing and 28 percent of Chinese manufacturing (NSF 2008).

A Larger Market

While there is more competition, there is also a larger market for goods and services and more investors looking for opportunities. First, there has been a substantial broadening of the consumer base globally. In 2007, consumer spending in the 17 largest emerging-market countries reached 65 percent of U.S. consumer spending, up from 48 percent in 2000, and is expected to surpass U.S. consumption by 2015 if this trend continues (Hale 2008).

Second, global trade has been generally accelerating over the past decades. According to World Trade Organization statistics, the global volume of world trade in goods (agriculture, fuels, mining products and manufacturers) has been growing at twice the growth of GDP since 2000. In 2006, world GDP increased by 3.5 percent while global trade of these goods increased by 8 percent.

According to World Bank data (2008), however, that growth was much stronger in the developing world. Overall, trade volumes (both goods and services) have increased an average of 6.7 to 6.9 percent during the 1990s and over the first seven years of the 21st century. However, if we break that down to developed and developing countries, we see a stark difference. In the 1990s, both averaged around 6.8 percent growth in exports, but in the 21st century, the developing world average export growth was 10.8 percent, compared to a stagnant 5.1 percent in the developed world. In terms of imports, developing countries' growth is even larger, with an average 5.7 percent growth in the ‘90s skyrocketing to 14.3 percent in 2006. Developed countries' import growth increased much more modestly, from a 7 percent average in the ‘90s to just 7.9 percent in 2006.

The U.S. leads the world in the import and export of commercial services and the import of goods, and ranks second for the export of goods. For example, in 2003, the U.S. purchased $77 billion worth of office services from abroad, but sold over $130 billion of the same services in global markets (Federal Reserve Bank of

Trade export and import figures, while clear evidence of accelerating and expanding markets, can also be a misleading measure of the benefits of globalization. Two thirds of Chinese exports, for example, include foreign inputs (Economist.com 2008). A recent study from the University of California illustrates this little-understood fact. The study determined the accrual of benefits from the U.S. sale of Apple’s iPod. Although the final product is manufactured in China, only $4.00 of each unit’s sale stays in China. About $160 returns to the U.S. to the firms involved in iPod design, transport and retail (ibid.). Moreover, a focus solely on trade obscures the increasing range of global exchange activities. Inter-firm exchanges, business partnerships and foreign direct investment (FDI) are outpacing traditional trade. To illustrate, in 2003, global companies sold $3.4 trillion through their foreign subsidiaries, while U.S. exports totaled $1 trillion (Council on Competitiveness 2007). As another example, the sale of services through foreign affiliates in 2004, the latest available WTO data, is double the value of traditional cross-border service exports (WTO 2008).

Third, FDI is growing. Like trade, investments flow in two directions. While competition for FDI is increasing, so are overall FDI opportunities, and the U.S. remains a significant FDI recipient. In 2006, India, China and the U.S. were the three largest recipients of FDI in terms of job creation (IBM 2007). While the U.S. is also the most important source of FDI investments, China and India are becoming visible sources as well. The U.S. also remains a significant recipient for R&D investment, with India emerging as a significant front runner (ibid.).

### Trends in FDI 2004-2006

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<th>2004</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Total New FDI in the U.S. in Billions</td>
<td>86.2</td>
<td>91.4</td>
<td>161.5</td>
</tr>
<tr>
<td>Finance/Insurance</td>
<td>48 percent</td>
<td>18 percent</td>
<td>16 percent</td>
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<tr>
<td>Manufacturing</td>
<td>22 percent</td>
<td>37 percent</td>
<td>35 percent</td>
</tr>
<tr>
<td>Real Estate</td>
<td>6 percent</td>
<td>6 percent</td>
<td>10 percent</td>
</tr>
<tr>
<td>Information</td>
<td>4 percent</td>
<td>11 percent</td>
<td>6 percent</td>
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<th>Source</th>
<th>2004</th>
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<tr>
<td>Europe</td>
<td>49 percent</td>
<td>66 percent</td>
<td>68 percent</td>
</tr>
<tr>
<td>Canada</td>
<td>41 percent</td>
<td>15 percent</td>
<td>7 percent</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>6 percent</td>
<td>12 percent</td>
<td>11 percent</td>
</tr>
<tr>
<td>Middle East</td>
<td>1 percent</td>
<td>3 percent</td>
<td>8 percent</td>
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Source: Bureau of Economic Analysis
Larger markets and the increased personal use of information technologies strengthen the power of consumer preferences in a global marketplace. In fact, the current push for greener, more sustainable business products, services and practices is a direct response to increasing consumer demand. Consumers, however, are not a monolithic entity but rather are quite segmented. A larger market of diverse consumers (individual and business) means more target or niche markets that open a wider space for entrepreneurship. The growth of disruptive technologies often occurs first within emerging, niche or insignificant markets. These markets are often too small to be attractive investments for existing firms; thus, smaller, innovative firms tend to bring them to the market (Christiansen 1997).

While global market expansion is threatening in terms of the competition and complexity it brings, it may also offer U.S.-based businesses a safety net in the face of domestic economic woes. For example, in 2007, Illinois-based Caterpillar Inc. saw its U.S. sales drop by 11 percent, yet sales grew internationally by 8 percent. As a result of global trade growth China is rising as a second economic power, creating a potential buffer to our domestic economic downturn (Chang and Hall, 2008). On the other side, globalization also increases our vulnerability in an economic recession because when the globally economy contracts, it reverberates to a certain extent across the globe, making it harder to find venues for market development and growth.

**Globally Standardized Technologies**

At the heart of globalization are information and communication technologies that undergird the World Wide Web, electronic mail, satellite-based communications and handheld devices. These technologies link people, data and knowledge in the blink of an eye and form the basis of global transactions. What is often overlooked is that they do not just provide technological capacity; they also provide a common technology standard for information exchange that cannot be stopped at a country border. Moreover, the standards were established before they could be regulated and consequently are becoming the basis of general business standards, enabling the emergence of the global corporation.

These global technology standards have created a platform for any business, of any size, to enter the global marketplace. While around one third of all U.S. small businesses participate in cross-border trade, the Institute for the Future (IFF) estimates that approximately half of all U.S. small businesses will be involved in global trade by 2018 (IFF 2008). In fact, small businesses with fewer than 20 employers already account for about 7 percent of exports (ibid.). As an example, take Etsy.com, a website for selling artisan handicrafts. Enabled by PayPal, the site now functions globally, connecting artists and customers in multiple countries. Individuals and small entrepreneurs are already trading across borders on the shoulders of globally standardized technologies.
The Emergence of the Global Corporation

The way business models have changed in response to globalization portend the most significant implications for economic development practice. According to Samuel Palmisano (2006), President and CEO of IBM, the multinational corporation (MNC) has evolved into the global corporation, and the differences between the two are significant. First, MNCs organized production in a market-by-market framework. Each affiliate worked within the borders of the country in which it was located. Businesses located their affiliates strategically to enter specific national markets. For example, Toyota built manufacturing plants in the U.S. to sell their products to U.S. consumers. Ford did the same thing in Asia. The MNC structure and location patterns emerged in response to a global economy that was sliced up into national markets, each protected by strong tariff, non-tariff (e.g., strict regulatory standards) and quota barriers.

As capital and trade flows liberalized to weave national economies into a single global economy, the information technology revolution provided the technological capacity and standardization that allows businesses to function within this new market structure. Palmisano emphasizes that the convergence of these elements has caused a fundamental shift in corporate culture and organization—from a focus on products to an emphasis on the production process. Put another way, the global company’s emphasis is on “the integration of production and value delivery worldwide,” which has led to significant changes in where things are produced and who actually produces them (p. 129).

From an economic development perspective, understanding this transition is essential for comprehending how businesses make investment decisions in a global economy, and has implications for strategies to help regional firms enter global markets. First, MNC business investment targeted entry into national markets, while global corporations target locations that better enable firms to meet global supply demands. Second, as discussed above, international trade patterns are changing. Intra-firm exchanges, business partnerships and FDI are outpacing traditional national trading relationships in terms of value exchanged. In fact, around 88% of all U.S. FDI is attributable to mergers and acquisitions as opposed to greenfield investments. Third, these global businesses have affiliates in more countries. In 1990, the average MNC operated in four countries. Now, the average global company has affiliates in ten countries (Dirks et. al. 2008).

Fourth, as shared business and technology standards continue to spread worldwide, companies now can externalize formerly internal functions (e.g., employee benefits administration, clinical trials, research and development) and link those pieces together in new ways. This corporate change is what enables global sourcing of core business functions in particular, the piece of globalization most feared in American communities. Each company will have different
collaborative relationships that link the components of their production process; the key words here are \textit{collaborative relationships}. In Palmisano's words,

Sustainable competitive advantage has never come only from productivity or inventiveness. Today more than ever, the premium comes from the fusion of invention and insight into how to transform how things are done. Real innovation is about more than the simple creation and launching of new products. It is also about how services are delivered, how business processes are integrated, how companies and institutions are managed, how knowledge is transferred, how public policies are formulated—and how enterprises, communities and societies participate in and benefit from it all (p. 132).

This transition has significant geographic implications. Under the MNC model, the company reproduced its business model and supply chains within a national market—thus, industrial clusters comprised backward and forward linkages and various suppliers within a defined geographical space. Under this emerging global corporation model composed of global supply chains, clusters may not represent the full range of an industry’s activities, but may specialize in component functions, such as production or design. For example, Ford recently announced that it would divide its operations according to segment rather than geography—concentrating its engineering work on electrical and body components in North America and developing chassis bits, diesel engines and manual transmissions in Europe (MotorTrend 2008).

The rise of the global corporation is also changing the overall structure of the global economy in a way that suggests that economic developers may need to shift their attention to entrepreneurship development as the core economic development strategy. In a nutshell, industry assets, market share, and revenue are being consolidated among fewer and fewer of these global businesses (IIF 2008). The consolidation of market power in fewer global businesses is creating, according to McKinsey, a barbell structure with big global corporations on one end, few mid-size corporations in the middle (as many have been acquired or eliminated) and a large small business population at the other end. While this emerging barbell shape may be threatening on the one hand, the opportunities for small business entry into global markets are staggering, particularly with their greater flexibility to serve niche markets (McKinsey cited in IFF 2008, p.6).

The emergence of the global corporation based on global sourcing networks shifts our understanding of the competitive advantage of firms, with subsequent implications for the competitiveness of regions and economic development practice. There are four areas of significant change:

- A dependence on continuous innovation
- The growth of global sourcing patterns
- A voracious appetite for skills
Global R&D Patterns

- U.S. and Japan account for 45 percent of total global R&D investment
- China is ranked within the top five for R&D investment

Source: National Science Foundation, 2008

Dependence on Continuous Innovation

As we saw above, a firm’s competitive advantage comes from its ability to continuously innovate across a range of functions—products, management, processes—to stay ahead of competitors and meet changing consumer demands. Consequently, businesses are the largest investor in R&D, representing 75 percent of all U.S. R&D investment (NSF 2008). Sustaining this capacity in the global organization has meant the following changes in the structure of a company’s innovation process:

- Innovation is increasingly a collaborative venture. Hierarchically integrated, transaction-based supply chains are flattening into more complicated, interdependent value chains that help generate technological and process innovations. NSF (2008) found that trade in research, development and testing services is significantly larger among corporate affiliates than it is among unaffiliated companies.
- An expansion of locations for R&D investment. For example, U.S. affiliates located abroad are increasing their local R&D investments (NSF 2008) and creating technology transfer opportunities in emerging countries.
- Expansion of open-source knowledge sharing methods, networks and opportunities. See www.pgconnectdevelop.com as an example of Proctor and Gamble’s open source efforts. The need to access new innovations, as well as to tailor or customize certain goods and services, opens substantial opportunities for small firms and even individual inventors to channel their ideas into global products and networks.
- The rise of innovation intermediaries globally to facilitate technology transfer, and enable business to tap into opportunities. Examples include InnoCentive in the U.S., InnovationXchange in Australia, or Shanghai Silicon Intellectual Property Exchange in China.

Innovation is inseparable from the growing value chains that link the components of the global company. However, the need for continuous innovation opens large market niches for entrepreneurial companies who take on technologies and markets that global corporations do not or cannot. Many entrepreneurs provide technological and operational innovations that eventually feed into these existing value chains or emerge as disruptive competitors. But overall, the drive for continuous innovation makes a focus on both entrepreneurship and global supply chains critical for the economic development of regions.
The growing role of immigrants in both entrepreneurship and innovation

The U.S. immigrant population represents a substantial and growing percentage of new entrepreneurs, including gazelle entrepreneurs. Over the past 15 years, 25 percent of all venture-backed public companies were started by legal immigrants, who represent only about 8.7 of the overall U.S. population. Moreover, these companies are predominantly innovative technology companies, specifically in IT, life sciences and advanced manufacturing. In fact, 40 percent of public, venture-backed advanced manufacturing companies were started by immigrants (Anderson and Platzer 2007). In technology regions, these numbers tend to be even higher. For example, in Silicon Valley, about half of start-ups were founded by immigrants. In Research Triangle Park, about 19 percent of start-ups had an immigrant founder, which may be lower than the national average but is higher than the North Carolina average of 14 percent (Wadhwa et. al. 2007A).

Immigrants also are increasingly contributing to U.S. patent activity. Between 1998 and 2004, the percent of U.S.-based, non-citizen immigrants that applied for international patents rose from 7 percent to 25 percent (Wadhwa et. al. 2007B). Through the Internet, immigrants easily can use their home contacts to do business on a global scale (IFF 2008).

The Growth of Global Sourcing Patterns

Communities tend to find the growth of global sourcing patterns threatening, as some activities do move many good U.S. jobs overseas. When the economy was stronger, the outsourcing market was indeed quite substantial - estimated to be around $930 billion in 2006 - and growing (Dirks et. al. 2008). The national impact of global sourcing, usually referred to as off-shoring, is actually unclear. While jobs are lost, increased international investment creates jobs here. In fact, jobs from FDI increased 30 percent between 1991 and 2001, from 5 million to 6.5 million (Federal Reserve Board of San Francisco 2004). At the regional level, however, the impacts of these patterns can be dramatically different: a stimulus to some and a challenge to others.
Moreover, off-shoring itself has been a rapidly changing phenomenon. In its initial inception, starting in the 1970s with manufacturing jobs and later software development and back office services in the 1990s, off-shoring moved highly codified transactional activities to lower-cost labor locations. This manifestation of off-shoring does represent a net loss to U.S. jobs. In the late 1990s and early part of this century, off-shoring expanded into more technically sophisticated white-collar work such as accounting procedures. In its most recent manifestation, paralleling our new understanding of the global corporation and emerging global sourcing patterns, we are seeing core business functions such as clinical trials management and chip design being relocated globally.

We are also seeing new in-sourcing patterns emerge as jobs return from abroad, often to rural locations in the U.S. For example, Northrop Grumman Corporation opened information technology centers that employ IT specialists and software engineers in several small cities throughout the U.S., including Lebanon, Virginia, Helena, Montana, and Corsicana, Texas, rather than India for similar cost savings. As another example, Xpansion, an Atlanta software developer, moved its testing facility from Pune, India, to Kearney, Nebraska, because the time difference created inefficiencies (Pae 2007).

Furthermore, global companies are outsourcing to the U.S. Wipro, for example, one of India’s largest software corporations, has opened operations in Atlanta because catering to the U.S. market required access to U.S. talent (Pae 2007). Therein lies a new opportunity for communities.

Booz Allen Hamilton and Duke University have been studying this phenomenon for several years in their combined Off-shoring Research Network (Cuoto et. al. 2006). Their findings on current trends in white-collar off-shoring - including core R&D, design and engineering components - shed light on economic development priorities in a globalized world. Some of their findings are good news; the impact of other findings depends on what we do next.

Here’s the good news: They found that the off-shoring of high-skilled functions does not replace U.S. jobs. Unlike off-shoring of lower-skilled work, which does lead to direct losses here, this new trend represents a global hunt for talent, leading to net job creation and by extension, market expansion. They also found that overall, companies were moving away from purely labor-cost-driven sourcing decisions to more strategic approaches to creating competitive advantage, increasing their speed to market and accessing talent.

Here’s the not so good news: They also found that one of the reasons companies are searching for talent abroad is because they are not finding it here. According to the National Science Foundation, R&D employment in U.S. firms’ affiliates outside the U.S. grew 76 percent between 1994 and 2004. However, in the same firms in the United States, that employment grew only 34 percent. Meanwhile,
R&D job growth in U.S.-based foreign subsidiaries grew only 18 percent. NSF also reports that while our science and engineering workforce has grown rapidly, science, technology, engineering and math (STEM) occupations have grown at a faster rate, outpacing the supply of talent. Moreover, a significant percentage of the current STEM labor force is over 50 (26 percent for all degree holders and 40 percent for doctoral degree holders), with an average retirement age in the early 60s.

A Voracious Appetite for Skills

The rise of the global corporation that can troll the world for talent, and the expansion of talent pools internationally, paints an unclear picture for the future of the U.S. On one hand, this has been a traditional competitive asset for the U.S. both in terms of the quality of its primary and secondary education systems and its ability to attract foreign students and skilled workers. While other countries have increased in attractiveness, the U.S. remains the most important destination of global migrants generally, attracting 20 percent of global flows. Moreover, the U.S. attracts 50 percent of all global skilled migrants (United Nations 2005).

Currently, immigrant labor represents around 12.5 percent of the total U.S. labor force. Of the immigrant population, around 42 percent are high skilled. Even in the case of Mexico, which has the highest flow into the U.S., a significant proportion is highly skilled. From an economic development perspective, it is noteworthy that the immigrant populations entering the U.S. over the past decade are making different location choices than their predecessors. Before 1990, immigrants clustered in California, New York, Texas, Florida, Illinois and New Jersey. Today, one third of U.S. immigrants locate outside these destinations. The biggest winners for attracting immigrant labor are North Carolina, Georgia, Nevada and Arkansas. Some traditional gateway cities such as Cleveland, Pittsburgh and Buffalo have experienced decline for over 30 years (Segal and Licko 2007). Many industries and communities continue to rely on international talent to compete. Recently, many communities and their businesses have begun to feel stifled in their attempts to recruit talent from international sources by the increasing Federal limits on workforce visas, particularly (but not limited to) the H1-B visa that allows skilled workers to enter for a temporary time period.

However, within the U.S. and other developed nations, the increased business need for highly skilled people intersects with substantial demographic changes, particularly the aging of the baby boomers. To fully absorb the economic implications of the baby boomers’ coming exit from the labor market, we must first understand their impact on economic growth. In the second half of the 20th century, when the baby boomers entered the labor market, the U.S. labor pool doubled in size from 65 million in 1960 to 140 million in 2005. This was due not just to high population growth but also to immigration and the entry of women into the labor force. Moreover, the availability of college-educated workers increased
400 percent, skyrocketing from 10 million to 50 million workers (Segal and Licko 2007). As baby boomers exit the economy and birth rates slow, the size of the labor force will decrease just as employers’ appetite for talented workers increases. Thus, of the three forces that spurred the growth of the U.S. labor force in the 20th century, only immigration remains significant in the 21st century, and that faces extreme opposition from segments of the U.S. population.

This intersection of demographic shifts with the global restructuring of the economy has shined the spotlight on the importance of developing, attracting and retaining talent, with an emphasis on young professionals in the 25-34 age range. These Millennials, also known as Generation Y, represent the emerging knowledge workforce and are the most mobile, ethnically diverse, tech savvy, the most global and the most education-oriented of any generation in our history. They are also predicted to be comprise a growing proportion of the entrepreneurship population (IFF 2008).

What is often overlooked in discussions about talent attraction and retention of young professionals is that this age group is dominated by women, who now comprise over 50 percent of the workforce and have a higher percentage of bachelor’s degrees than men (Segal and Licko 2007). In other words, places not only need to be attractive to young professionals, they have to be attractive to young female professionals.

Looking at the skill issue through a different lens, skills equal income and increasingly, only the highly skilled have experienced real and significant income growth. For the average American worker, income has not grown even though U.S productivity has, with the gains going disproportionately to higher-skilled workers (Aldonas et. al. 2007). While productivity gains lift average wages, they affect individuals, industries and communities quite differently, especially as the majority of workers fall into the lower-skilled categories (ibid.) Moreover, data suggest that about two thirds of workers who lost their jobs in manufacturing and other import-competing sectors were re-employed with an average wage loss of 13 percent.¹

While globalization may in fact play only a part in the stagnation of wages and the destruction of jobs, especially in manufacturing, the strong visible

¹ There is in fact a large variation somewhat disguised by an average of 13 percent wage loss with significant proportion finding new jobs with higher salaries and equally significant segments experiencing wage decreases of 30 percent or more (ibid.)
consequences of outsourcing in terms of worker dislocation and real wage stagnation has led to an increasingly more protectionist and xenophobic U.S. public which does not fully understand the benefits of globalization (ibid). While protectionist and anti-immigration sentiment pose a greater threat to economic growth than do globalizing markets and immigration, they are a critical reminder that the issue of income needs to be an important economic growth concern.

**Resilience in the Face of Increased Risk and Enhanced Vulnerabilities**

With trends that include increased connections and growing interdependence, accelerated technology development, political instability, terror, international crime, growing resource constraints, and increased climate and energy volatility come increased risk and enhanced vulnerabilities for companies and regions. For example, operating in a world market means increased vulnerability to foreign currency exchange values, just as the oscillating value of the dollar creates market uncertainty.

For communities, recovery from such a catastrophic event is overwhelming. To quantify the risk, hurricanes Katrina and Rita caused around $250 billion in property and infrastructure damage and caused the loss of over 500,000 jobs, impacting 1.25 million people (Engle 2005).

Risk management for business and communities, however, cannot be equated to disaster management. Rather, it is about regularly managing change to ensure business and community sustainability. Risks have been compounded by the rise of extended supply chains and the widening of vulnerabilities due to increased dependence on technology (e.g. data security risks) and energy. For businesses, global exposure mitigates risk by creating back-up sites, but it also increases vulnerability by having more sites in which a turbulent event might occur.

In fact, the World Economic Forum (2008) identified supply chain vulnerability along with systemic financial risk, food security and energy as four key areas shaping the global risk landscape. Value chains, while distributed, can also geographically concentrate risk in certain regions. For example, in 1999, semiconductor prices doubled globally due to an earthquake in Taiwan, a global center for chip supply. Notably, global supply chain vulnerability is not unique to the private sector but also threatens the public sector, which depends on external

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**The New World of Business Risk**

- Of firms with an IT outage of 2-6 days, 25 % went bankrupt immediately
- Of firms that lost their data centers for 10+ days, 93% went bankrupt within a year
- Between 1989 and 2000, 835 firms had a supply chain disruption, leading to a 1/3 lower stock return than similar businesses

Source: Council on Competitiveness (2007, 6)
suppliers who may themselves be involved in intricate supply chains, so risk factors are not immediately recognizable.

According to the Van Opstal (2007),

   Risks also are increasingly interrelated; disruptions in one area can cascade in multiple directions. The ability to manage emerging risks, anticipate the interactions between the different types of risk, and bounce back from disruption will be a competitive differentiator for companies and countries alike in the 21st century (p. 6).

In sum, the competitive environment for communities and businesses as we know it is changing. When the essentials of competition change, economic development must, by definition, alter if economic developers are to maintain the competitiveness of their communities and their businesses.

NEXT STEPS: What Does Globalization Mean for Economic Development Practice?

To better understand how economic developers were turning globalization to their advantage, we undertook six in-depth case studies, which are listed below. The cases were then examined together to develop the report “Roadmap to Globalization.” The Roadmap report identifies six foundational strategies which inform each community’s efforts to adapt economic development activities to the demands of the globalized economy.

Case Studies

Each case we examined represents a singular set of geographic, economic, demographic and institutional variables. In turn, each case reflects a different path to success, dependent upon its particular assets and liabilities. The cases include:

- Akron, Ohio
- Cambria County, Pennsylvania
- Greenville-Spartanburg, South Carolina
- Invest in Sweden
- Spokane, Washington
- World Trade Center St. Louis
Roadmap to Globalization

The Roadmap identifies six strategies, listed below, which communities can implement that have a cumulative effect on a community’s ability to react to and take advantage of the global economy.

1. Creatively leverage existing strengths, activities and allies
2. Synergize ‘going-global’ strategies with existing ED structures and programs
3. Create new relationships and partnerships that enable global reach
4. Position yourself as a knowledge hub
5. Invest in amenities
6. Build capacity for economic development
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APPENDIX:

USER’S GUIDE
The Economic Development Research Partner’s Primer on Globalization
User’s Guide

IEDC’s Primer on Globalization summarizes the major global phenomena shaping the new competitive environment for US communities. Unlike most publications of its kind, the Primer approaches this subject specifically from an economic development practitioner’s perspective.

The report includes key stats and figures which depict the real and anticipated changes in trade patterns, business practices, global job sourcing and skilled labor supply which are impacting the way economic developers function.

IEDC’s goal with this Primer is to unpack the myths surrounding globalization and reframe the debate in terms of real challenges and opportunities. The Primer will be followed this Fall with a set of community case studies which profile success stories in globally-minded economic development.

IEDC hopes you will distribute this report among key stakeholders in your community to spark dialogue and build momentum for a more innovative, sustainable and resilient approach to economic development.

Key audiences for this report in your community include:

- Local Elected Officials
- Board Members
- Chambers of Commerce/Business and Technology Councils
- Business Leaders
- Target Industry Sector Contacts
- Institutions of Higher Learning
- K-12 Players (Superintendent, Principals, City Education Administrators, Foundations)
- State, Regional or Local WIBs and Workforce Development Organizations
- State, Regional and/or Local Economic Development Counterparts

Don’t miss out on this opportunity to build stronger networks within your community!

Next Steps: Outreach and follow-up

In addition to distribution channels such as newsletters and web links, consider the following uses:

- A take-away after existing business and board meetings
- Fodder for visits to Cityhall by staff or volunteers
- Distribute before business networking dinners/cocktail events
- Post for discussion on your community’s Facebook or other social network profile
- Invite community leaders to a brainstorming session or discussion on the issues
- Kick-off a regional visioning process which transcends traditional boundaries to meet the competitiveness challenge