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THE NEW GLOBALIZATION SERIES

WHY COUNTRIES NEED NEW JOB CREATION STRATEGIES

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This article is the fifth in a series exploring the profound changes in globalization and how to navigate this new world.

IN MANY PARTS OF the world, governments are grappling with a vexing puzzle. Even though economic growth appears to have recovered since the financial crisis of 2007–2008, job creation has been mixed. While global GDP increased by 2.7% from 2010 through 2016, global employment grew by only 1.3% per year during that time.

The story is even more complex upon a closer look. China continues to report robust urban job growth that outpaces growth in the country's labor force—despite a slowdown in economic expansion. By contrast, employment in India grew by only 1.4% per year from 2000 through 2016—despite a compound annual growth rate of 7.2% for the country's GDP. And in some countries, including Germany and the US, millions of skilled positions remain vacant while millions of workers continue to search for work. Economists have hypothesized that this mixed jobs picture is a result

of skills mismatches, changing expectations of the workforce, and mobility limitations.

This uneven job growth, combined with disparity in income growth in some parts of the world, has created differing narratives about the benefits of an integrated, global economy. Unequal wealth distribution and inequity in opportunities, which have been exacerbated by technological and socioeconomic changes, have helped fuel a backlash against globalization. This reaction has been amplified in recent years by populist rhetoric arguing for protectionist policies as a panacea and by a renewed focus on traditional job-creation strategies.

The reality however, is that the strategies for generating jobs and prosperity in the past are no longer sufficient to deliver inclusive prosperity to economies around the world. The already significant impact of digital technologies and rising economic nationalism is further magnified by profound societal changes as the world's population becomes even more connected, more mobile, and more aware of global trends.

At BCG, we call the confluence of these megatrends the new globalization. (See “The New Globalization: Going Beyond the Rhetoric,” BCG article, April 2017.)

Amidst such change, job creation strategies that rely on growing world trade in physical goods and cross-border capital investment will be less successful than they have been in the past. Nations will need to devote more attention and resources to increasing employment by promoting digitally enabled services, nurturing local expertise, enabling small and midsize enterprises (SMEs) to participate in global value chains, digitally empowering the self-employed, and boosting personal consumption.

A Changing Economic Landscape

Structural shifts that are already visible in many economies underscore the need for such a change in focus. China, for example, has relied for decades on exports, particularly of manufactured goods, to power its growth. Yet exports as a percentage of GDP have already declined from 37% in 2006 to less than 20% in 2016. In Indonesia during the same time frame, exports dropped from 31% of GDP to 19% and are projected to account for just 11% in 2030. Personal consumption is the chief economic contributor in the so-called BRIC economies—Brazil, Russia, India, and China; indeed, it is on pace to account for half of China’s economy by 2020 (compared with 35% in 2010). The contribution of services to GDP has surpassed that of manufacturing in China, Indonesia, Malaysia, the Philippines, and Thailand.

These trends will accelerate in the coming years as digital technologies continue to transform the global business landscape. The falling costs of gaining access to and transacting business with customers in distant parts of the world are fundamentally altering traditional notions of scale and global competitiveness.

Consider a digital platform that aggregates buyers and sellers globally, for example. Once a company builds a platform, the cost

of serving an additional customer or adding a new supplier is close to zero. Such zero marginal cost enables members—especially SMEs—to operate at a large scale and compete globally. They can take advantage of the platform to reduce unit costs, enter new and distant markets, and meet trade and regulatory requirements. Similar examples illustrate the changing nature of global competition and a greater reliance on data-enabled services and digital goods.

In the new globalization era, growth around the world will be driven increasingly by services, personal consumption, and trade in digital goods. We see five key strategies that nations should pursue to enhance their competitiveness and create jobs:

- Promote digitally enabled services and solutions to all sectors of the economy.
- Nurture global centers of expertise and ecosystems of highly skilled workers.
- Enable SMEs to participate in global value chains.
- Digitally empower the self-employed to participate in the so-called gig economy.
- Stimulate domestic consumption by broadening the scope of the formal economy and promoting greater social and financial inclusion.

Promoting Digitally Enabled Services to All Sectors of the Economy

Some of the fastest-growing services are those enabled by digital technologies. The explosive growth in e-commerce—with an estimated \$22 trillion in global annual revenue—is the clearest evidence. In China, for example, e-commerce currently accounts for 15% of consumption, compared with just 3% in 2010, and is projected to account for more than 40% of growth in consumption through 2020. As the world’s population becomes more sophisticated in all things digital, and more of the world’s machines and devices are connected through the Internet of Things, surging de-

mand for value-added services and solutions of all kinds will continue to transform sectors as diverse as industrial goods, home appliances, and medical care.

This explosive growth is not limited to domestic demand for digitally delivered services. Even though exports of services, overall, have declined globally in constant dollars over the past few years, exports of digitally enabled services, such as communication and information services, have been growing steadily. In the BRIC economies, exports of digitally enabled services have increased by about 30% over the past decade to approximately \$100 billion, according to data provided by the United Nations Conference on Trade and Development. Exports of digitally enabled services by developed economies have doubled, to more than \$1 trillion.

As digital technologies continue to transform the competitive landscape, we expect to see greater reliance on both domestic and cross-border digital value creation. To translate this trend into jobs in digitally enabled services and solutions, governments must prioritize the development of digital infrastructure stacks—software-defined service platforms built on high-speed broadband networks—just as they did physical infrastructure during the previous era of globalization. To promote wider usage, governments must provide incentives to companies that invest in digital infrastructure, develop necessary regulatory mechanisms, and ensure information security and transparent pricing.

The importance of digital infrastructure is particularly evident in India. Even though the physical infrastructure continues to lag behind world standards, India has leapfrogged other nations in digital terms thanks to innovations in the telecom sector that have resulted in the lowest prices, worldwide, for mobile connectivity. Further, through the Digital India initiative, the government has promoted bank accounts for all and created a personal identity system called Aadhaar. Under the program, all Indian residents are given unique identity numbers, issued on the basis of their biometric

and demographic data, that enable them to receive public services and that help the government to better formulate policy.

On top of this infrastructure, the government has built layers of applications that provide a universal payment gateway, electronic signatures, and a secure document locker that allows Indians to safely store documents in the cloud. These “public goods” enable consumers to make electronic payments, help merchants authenticate signatures, and facilitate the exchange of digital documents. Such features have already allowed utilities to offer electronic bill payments—and other businesses to offer new services, such as wireless value-added services—to Indian customers.

Nurturing Global Centers of Expertise and Ecosystems of Highly Skilled Workers

As the global economy becomes more digitally connected, businesses are creating tremendous value by analyzing the immense volumes of information traveling over data highways. Advanced data analytics is being used to identify new segments of customers who are defined by their buying preferences rather than by geographic boundaries, for example. Data analytics will become increasingly important in areas such as product design, pricing strategies, marketing decisions, and the operation and maintenance of equipment. Teams of data scientists and other specialists in diverse fields, working in global centers of expertise, will perform much of this analysis. Real-time communication will make their analysis accessible to technicians and front-line personnel all over the world.

One such global center of expertise is Rolls-Royce’s global analytics center in Derby, England. Rolls-Royce gathers terabytes of real-time data from more than 4,500 of its engines in service on civilian aircraft. In order to maximize engine uptime, an advanced analytics team of about 45 people monitors the data to proactively plan for maintenance and repair. Once a need is identified, the regional service network moves into action. Spare parts are

sent. In some cases, the fixes are performed remotely by experts from around the world.

Countries can create high-paying knowledge jobs by identifying the shifting nature of skill needs and promoting the development of such centers of expertise within their borders. They can support the development of globally competitive knowledge ecosystems by boosting investments in higher education and training for highly skilled professionals in the service sector. Countries can also support investment in R&D centers and global corporate hubs for data analytics.

As advanced manufacturing technologies, e-commerce, and artificial-intelligence software replace human beings in traditional jobs in factory, retail, and back-office work, significant numbers of workers are being uprooted. Experienced and older workers will therefore need access to retraining programs that are geared to their needs. Traditional curricula and teaching methods will have to be replaced with skills training, short-term “microlearning,” and experience-based content curation. Continuous learning should be a national priority; companies, educational institutions, and government agencies should collaborate to identify rapidly changing skill needs and offer programs to produce workers who are employable in the new global environment. Government services will need to provide licensing and certification platforms to enable the authentication of skills and ensure that they are portable from one employer to the next. Managing the transition of workers to the new types of jobs created will not be a trivial endeavor. But the effort will be necessary to bridge the gap between the available skills and those that will be needed in the new globalization.

Enabling SMEs to Serve Global Markets and Global Value Chains

As digital technologies continue to reduce the costs of cross-border collaboration and reaching customers, SMEs are able to compete on a more equal footing with large

companies for global business opportunities. The growth of global platforms that bring together vast communities of buyers and sellers, combined with the aggregation of distribution and logistics services, has made entering new markets and serving remote customers much more cost effective. As a result, SMEs can now compete with large companies on costs when serving global markets or parts of global value chains. Such markets and customers used to be primarily the domain of large companies that could build global logistics operations and coordinate the delivery of products or services.

Because of these developments, global value chains will continue to disaggregate. This will further enable SMEs to provide value-added products and services on a global scale through digital platforms. For instance, the success and reach of the Taobao marketplace, a Chinese digital platform, has led to the emergence of so-called Taobao villages—rural clusters of online entrepreneurs that are able to sell to global markets. As reported in a well-known case study by the World Bank Group, for example, the town of Shaji in Jiangsu province has transformed itself into a thriving manufacturing cluster for wooden furniture by using the Taobao platform to sell its products to buyers worldwide.

In many nations, however, starting and expanding small businesses to engage in the global economy can be costly and complicated. Governments can foster more supportive environments for SMEs by easing regulatory requirements for starting small businesses, particularly in the service sector. Governments can also help by increasing access to credit for small businesses and offering them financial incentives for creating jobs in the value-added services and solutions sectors.

Digitally Empowering the Self-Employed

The new globalization is also opening opportunities for entrepreneurs everywhere to participate in the rapidly expanding sharing economy and the gig economy. De-

spite some concerns that sharing-economy and gig economy jobs provide low wages and only part-time employment, both trends appear to be accelerating.

Uber Technologies' ride-sharing service and Airbnb are two of the most visible examples of the sharing economy. To expand its business worldwide, Uber provides a platform to connect independent drivers with customers on demand. Due to Uber's scale, the cost of the asset—in this case the car—is distributed across customers. In most cases, paying Uber per mile is much more affordable than owning the car outright. The service is also more convenient than trying to hail a cab at a moment's notice in a busy city. This business model has fueled Uber's rapid growth. Similarly, Airbnb allows homeowners to monetize their assets (houses and apartments) when they are not using them. Global sharing-economy revenue is projected to reach about \$500 billion by 2025, compared with less than \$100 billion now, according to the BCG Center for Sensing and Mining the Future. In the US alone, the number of individuals working on demand in the sharing economy is projected to surpass 9 million by 2021, up from 3.7 million in 2016.

Sharing-economy workers typically are not full-time employees of a company. Rather, they work on a part-time basis in the gig economy. Digital platforms enable part-time freelancers to connect with customers when their services are needed. On-demand services—such as for domestic help, construction projects, handymen, delivery, and pickup—essentially represent the digitization of the informal sector. They are being enabled by digital platforms such as TaskRabbit, Upwork, and Sittercity, which authenticate the history and quality of providers through customer reviews or validation by third parties. They also provide payment processing and guarantees.

Governments can facilitate growth in the sharing and gig economies by easing regulatory requirements, such as by making it easier for handymen, drivers, construction workers, and designers to obtain the licenses and accreditation they need to work on

their own. Governments can also open these new modes of job creation to a wider array of industry and personal needs by facilitating identification and authentication mechanisms through public-domain technology stacks.

Stimulating Domestic Consumption

As economies mature, exports and government spending will no longer be enough to power job creation and growth. But private consumption will play an increasingly dominant role. Some of the strongest growth in consumption will be in service sectors, such as health, finance, education, transportation, and entertainment.

One factor that limits consumption, especially in many developing countries, is the high proportion of the population that subsists in the informal sector. Because people at the bottom of the economic pyramid are largely undocumented, they have little access to credit to make investments in housing, education, or business ventures. Governments should place a high priority on documenting and authenticating everyone within their borders, as India has done with its Aadhaar system.

As connectivity and access to information increasingly become prerequisites to growth and private consumption, governments should actively explore providing their citizens with universal basic services, including internet access and mobile digital connectivity, as public goods. Removing barriers to social and financial inclusion is also imperative for governments to promote broad-based inclusive growth. Engaging state, social, and commercial stakeholders to deliver microlearning, flow-based lending, and social safety nets will further expand the pool of economic participants and create jobs.

THE UNDERLYING SHIFTS in the global economy will take decades to fully unfold. But countries should start taking bold action now to prepare their economies and workforces for the challenges and opportu-

nities that lie ahead. Governments should reimagine their approaches to creating jobs. They should capitalize on the digitally integrated global economy by placing greater policy emphasis on digitally enabled services, building expertise, encouraging SMEs, supporting self-employment, and stimulating domestic consumption. They should move forcefully to address the root causes of joblessness, underemployment, and rising income inequality—challenges that are expected to intensify as employers deploy next-generation digital technologies.

Globalization's next phase will bring disruptive changes to economies and societies worldwide. Countries that understand the underlying forces of change and move decisively to adapt will ensure that their citizens find fulfilling jobs, enjoy better living standards, and build broad-based, inclusive economies in the decades ahead.

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