Market insights

Berkeley Street Emerging Markets

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Automation and the future of Emerging Markets

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The rapid development of robotics and artificial intelligence will undoubtedly have a major (and often disruptive) impact on economies, companies, and individuals over the next fifty years. Many pundits have suggested that emerging markets will bear the brunt of this disruption, based on the assumption that automation will replace their perceived position as a provider of low-cost labor to the global supply chain. For instance, Taiwanese electronics manufacturer Foxconn announced in May that it was replacing 60,000 jobs with robots. Could this be the tip of the iceberg and the beginning of the end for emerging markets?

Probably not. We think that it is not at all clear that automation will be the death knell for globalization, global supply chains, or emerging markets in general. First, emerging markets are no longer simply the low-cost cog in the global supply chain, ready to be replaced by the next cheapest option. Second, the growth of the emerging markets and the increase in intra-emerging market trade suggest that growth within emerging markets is becoming more self-sustaining. Finally, the impact of automation will be unpredictable and not necessarily all bad for emerging markets.

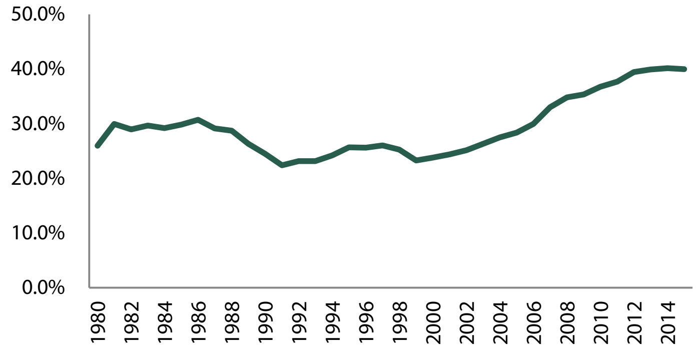
Over the past fifty years, emerging market manufacturers have steadily moved up the value chain. Today, innovations in technology, branding, and supply chain management are just as likely to come out of China or South Africa as they are out of California. Remember: even the Japanese first entered the global supply chain as the low-cost producer. Japanese cars, for instance, were long viewed as underpowered, ugly, and cheap. Nowadays the Honda Minivan, in which I cart my kids around, competes with cars from the best manufacturers in the world. Emerging markets are no different. I recall that 15 years ago "Made in Taiwan" was most likely to be printed on a cheap trinket from the county fair. Now it is printed on the most complex computer chips in the world (made, by the way, in highly automated foundries). Increasingly, emerging markets are delivering cost and innovation advantages.

As I look across our portfolio, there are very few companies that rely solely on cheap labor for their competitive advantage. Two of the largest names in the portfolio, Samsung Electronics and Taiwan Semiconductor Manufacturing Co., can credibly claim to be at the very cutting edge of one of the most sophisticated industries on earth. The massive amount of computing power that automation and artificial intelligence technology will require will be a powerful tailwind for these companies. Of course, many products made in emerging markets take advantage of low labor costs, but I think that emerging market manufacturers are farther up the value chain that many people think.

The same applies to consumer goods and the rise of the emerging middle class. It used to be that the key to success as a supplier of consumer goods in the emerging markets was a strong distribution network and the cheapest cost of production. As a new generation of emerging market consumers has come of age, they have more money to spend and are looking for interesting brands, innovative products and value-added services. This is a major change, and companies are responding in kind. Automation will help them make and distribute consumer products more cheaply. For instance, when Portfolio Manager Jerry Zhang was in China earlier this year, he visited a distribution center for e-commerce giant Alibaba, where they were testing a number of world-class logistics techniques, all of which were highly automated. However, success no longer depends solely on having the strongest distribution network or being the cheapest producer. Understanding the customer, the route to market, and product innovation will be the key to success for emerging market consumer companies. These skills are harder to automate.

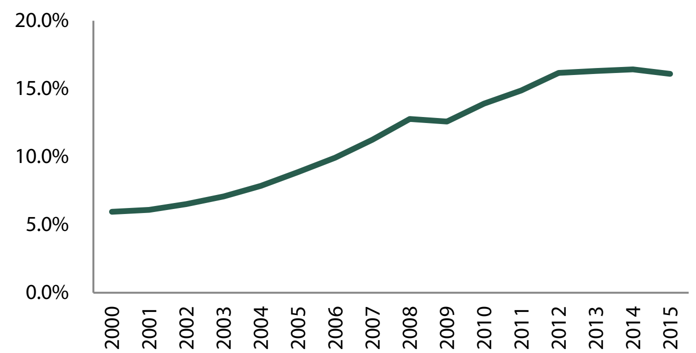
Supply chains are also rapidly becoming more regional, which will further insulate emerging markets from disruption. It is true that Mexico is seeing a lot of manufacturing either coming back from Asia or being set up there in preference to Asia. However, we are also seeing regional supply chains being set up in other emerging markets. Central Europe, particularly Hungary, Czech Republic, and Slovakia are increasingly developing robust ecosystems for automobile manufacturing. These facilities are already highly automated and will likely become more so in the future. However, one must take into account the network of suppliers, manufacturers, and service providers that provide a structural advantage that is difficult to disrupt. This is similar to what Michael Porter describes in his book *The Competitive Advantage of Nations*. According the International Monetary Fund, the share of emerging market exports going to other emerging markets was 40% in 2015, up from less than 24% in 2000. The charts below illustrate this nicely. This suggests that a) emerging markets are not just the workshop for the developed world and b) regional ecosystems are developing to give certain emerging market industries a sustainable competitive advantage. This competitive advantage may well be strengthened through automation, not weakened.

Chart 1: Intra-EM exports - % of total EM exports



Source: The International Monetary Fund (IMF)

Chart 2: Intra-EM exports - % of global exports



Source: The International Monetary Fund (IMF)

The ultimate impact of automation and artificial intelligence on the global economy is unpredictable. In fact, much of the advances in artificial intelligence and even automation are aimed at higher-paid workers. It is also interesting that the changes taking place at Foxconn (discussed above) are driven by automation occurring within an emerging market—suggesting automation can be a boon for some emerging market players, too. Conversely, one has to wonder if the Indian IT service sector, which is highly sophisticated but also dependent on cheap labor, is more at risk than Vietnamese t-shirt makers.

To this point, the assertion that countries such as Vietnam and those in Africa are poised to replace China at the low-end of the supply chain is only partially correct. Vietnam will never have the scale or population to replace China as a manufacturing base, but it will be able to play an important role in the pan-Asian supply chain. Africa, while theoretically a source of cheap production, suffers far more from dysfunctional politics, inefficiency and corruption. Sadly, automation will not solve those three problems. However, the continent is endowed with natural resources and substantial arable land, which could allow it to climb the rungs of the global supply chain if the above structural impediments can be addressed. Additionally, one of the key challenges in emerging markets has been to give large numbers of low-earning people access to technology. To the extent that automation brings the cost of devices and infrastructure down, this will open up entire new markets and create unforeseen opportunities from growth.

Automation and artificial intelligence will be as disruptive as the information technology revolution has been. However, we need to be careful about drawing sweeping conclusions. From my 20 years of investing, one thing that is clear to me is that people are responsive to change and find creative solutions to new challenges. Nowhere is this more true that in the emerging markets. What is certain is that new technologies will make our jobs even more interesting as we try to sort through the prospective winners and losers of each new wave of innovation.