The Automotive Industry in Developing Countries

Could local automakers leverage the global supply base to rapidly become more competitive locally—and perhaps globally?

Foreign direct investment in developing countries by large multinational firms has accelerated dramatically since the late 1980s in a range of industries. At first these investments were mainly for export back to the developed world, but more recently the focus has shifted to burgeoning local markets as well. A common view of global value chains of this sort is that innovation and design functions—the higher value added activities in the chain—can remain in industrial countries while production migrates to the developing world. In this “win-win” scenario firms in developing countries can upgrade their capabilities by participating in global value chains while knowledge-intensive jobs continue to grow at home. As a result, trade and investment rules have been liberalized to support the development of global value chains.

Yet national- and regional-scale production has remained durable in some industries, and knowledge work is gradually coming under greater pressure from globalization. In the automotive industry political pressure, in the form of indirect, latent protectionism, drives automakers to hedge their bets by locating production as close to end markets as is practical. Because automakers are few in number and therefore powerful, they have been able to force their largest suppliers to follow them abroad as they have globalized. This facilitates just-in-time production and design collaboration. It provides local content. But it makes it hard for local suppliers in developing countries to compete.

Indeed, as Sturgeon and Van Biesebroeck argue in a recent paper, policy makers in the developing world seeking to cultivate the automotive industry have limited options. Political opposition to large-scale finished vehicle imports, combined with high minimum efficient scale in production, means that local market size dictates the potential for the industry’s growth. The dream of a viable, full-blown national automotive industry lies beyond the reach of all but the very largest developing countries, such as Brazil, China, and India. And even in these countries it seems inevitable that multinational firms will continue to dominate the domestic industry for a long time to come.

But the authors suggest that there are several other avenues open for development. First, a few midsize developing countries, such as South Africa, Thailand, and Turkey, are large and rich enough to support vehicle assembly for their domestic markets as long as they can export to their wider regions as well. Second, several developing countries are close enough to developed countries to supply parts on a just-in-time basis within regional trade blocs, such as Mexico in NAFTA and several Eastern European countries in the European Union. These countries have become export hubs for labor-intensive parts and more recently for low-cost vehicles as well.

Third, a nascent possibility is for local automakers to leverage the new, relatively open global supply base to rapidly become more competitive locally and, perhaps, in world markets. For example, Chery Automobile, a small, state-controlled company based in Wuhu, China, has been able to develop and market a line of Chery brand vehicles within a remarkably short time by tapping the expertise of first-tier global suppliers with operations both in China and in the West. Chery obtains a full range of inputs from the global supply base, from parts to production equipment to design and system integration expertise. But since learning is relatively shallow, the sustainability of Chery’s approach will need to be proven over the long term.

Even when local firms have opportunities to move up the automotive global value chain, learning tends to be slower than in other industries because new vehicle programs typically have four- to six-year life cycles. In addition, winning significant new contracts with multinational assemblers can require that suppliers colocate engineering work in or near the world’s main automotive design centers: southeast Michigan, Stuttgart, and Tokyo/Nagoya. Such investments are beyond the reach of local suppliers in poor countries.

Nevertheless, as the markets for motor vehicles shift to the developing world and production inevitably follows, more development and design work will shift as well. The automotive cluster in Shanghai has only a few important design centers so far, but local Chinese firms are trying hard to fill the vacuum. In India domestic firms have deeper engineering capabilities, and the small, bare-bones vehicles that dominate the local market comprise a segment that has eluded most multinational firms so far. It remains to be seen whether these vehicles can be successfully exported. The prospects for local companies in automotive global value chains are still less promising than in other industries, but the future could eventually become significantly brighter.