

Poland Gangnam Style

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For the last quarter century, the Polish economy has been an underappreciated success story – underappreciated certainly in my country, the United States. GDP per capita tells the tale. In the early 1990s, at the outset of the transition, average income, in purchasing power parity terms, was barely a quarter the European Community average. Three decades later, on the eve of the COVID-19 pandemic, Polish GDP per capita had risen to more than two-thirds the Euro Area average. Income per capita, again in purchasing power parity terms, tripled over the period. Few economies outside of East Asia can claim something similar.

Poland accomplished this by developing a diverse and dynamic manufacturing base. Agriculture and services played a part, to be sure, but the main way Poland achieved rapid growth is by expanding and upgrading its manufacturing sector, the part of the economy where value added per worker is relatively high. The range of manufacturing subsectors is impressive – everything from food and beverages to automotive parts, metal products, rubber and plastics, chemicals, machinery and electrical equipment.

More recently, Polish industry has embraced the digital and green transition. In response to COVID-related economic disruptions, companies have redoubled their efforts to adopt advanced manufacturing solutions and digital technologies. The country has an increasingly vibrant high-tech sector, with start-ups, venture capital, and R&D labs operated by the like of Intel and Samsung. It is investing in green technology, such as wind farms in the Baltic. As part of the European Green Deal, it is diversifying out of coal mining and carbon-intensive activities and sectors.

So far, so good. The question is what comes next. The experience of other middle-income countries suggests that Poland has much still to do in terms of completing its green and digital transitions. Take South Korea for comparison, an economy that resembles Poland in important respects, including similar per capita GDP, a modest raw material endowment, reliance on manufacturing exports, and demographics. South Korean experience suggests that the expansion of Polish manufacturing still has room to run: the percent of national output accounted for by manufacturing is half again as high as in Poland.

But Poland will have to close that gap not by moving additional workers into manufacturing – in fact, the percentage of the population employed in manufacturing is already higher in Poland than in Korea – but rather by boosting labor productivity (output per worker). It will have to move up the technology ladder into the production of still more sophisticated products, as Korea has done. And that's where things become challenging.

Take research and development. R&D spending in Poland as a share of GDP is barely a quarter of South Korean levels. Korea is a bit of an outlier, with its high overall level of R&D. But it nonetheless sets the standard of what is needed if a country is serious about moving up the technology ladder. Here there is a need for government-sponsored support for basic research and also more generous tax incentives for companies to boost their applied research. The Polish government's Industry 4.0 platform and associated grants are only a start.

Poland has a reasonably high level of human capital by most measures. But in order to become a high-tech dynamo as South Korea has done, it needs to do more on the higher-education front. Despite being the 20th largest economy in the world by GDP, Poland has no universities in the top 500 worldwide, according to the Times Higher Education rankings. Seoul National University, in contrast, is 54th worldwide, and South Korea has four other institutions in the top 200. Such rankings should be taken with a grain of salt, but they point to a priority for investment. It's telling that Poland, in developing its offshore wind resources in the Baltic, has had to reach out to the Technical University of Denmark (number 185 on Times Higher Education's list) for turbine engineering expertise.

Korea has also gone further in terms of the geographical diversification of its exports. Some 80 percent of Polish exports go to what is essentially one market, the European Union. Fewer than 5 percent are sold to the United States. Only 1 percent go to China. When the EU sneezes economically, Poland is at risk of catching pneumonia. And now, with the EU facing the prospect of even higher energy costs and recession in the wake of Russia's invasion of Ukraine, this risk is real.

South Korea is better diversified: a quarter of its exports are to China, while 15 percent go to the United States and another 5 percent to Japan. Admittedly, the full picture is more complicated, since some of Korea's exports to China are parts assembled there, after which the final product is shipped onward to other markets. But the basic point – that Poland exports mainly to the EU, while Korea exports to markets around the world, remains valid. It is an important hint of what Poland needs to do next, namely expand its sights beyond Europe.

Both Poland and South Korea are challenged demographically, with rapidly ageing populations. This creates headwinds for economic growth, since resources that might be devoted to education, research and infrastructure investment must be diverted toward pensions and healthcare. It makes for a smaller share of the population paying taxes as opposed to collecting benefits. But Poland has been able to ameliorate the resulting problems through immigration and the employment of guest workers from Ukraine, Belarus, and elsewhere. (It has been rather less welcoming, to be sure, of refugees from other "neighborhoods.") South Korea, in contrast, has a low tolerance for immigration, so it is unable to augment its labor force and slow population ageing in this way.

Moreover, immigrants do more than just slow population ageing. Immigrants are risk takers by definition. They are disproportionately a source of new ideas. Where I live, in the environs of Silicon Valley, they contribute both engineering expertise and entrepreneurial spark. A recent book on the so-called Paypal Mafia, the founders of the two start-ups that became PayPal and who went on to participate in the foundation of scores of other successful high-tech firms, reminds the reader that nine of the ten founders, including both Elon Musk and Peter Theil, are immigrants to the United States.

Poland's tolerance of immigration will now be tested by a flood of refugees from Ukraine. Although the initial wave, many of whose members have connections in Poland, have been welcomed, it is not clear that millions more will meet with the same tolerant reception. But their arrival is an opportunity as well as a challenge. The country should make the most of their skills and expertise, rather than shutting its doors, if it wants to keep moving up the economic and technological ladder.

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