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A Changing China: Implications for Developing Countries

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Three decades of rapid growth and structural change have transformed China into an upper-middle-income country and global economic powerhouse. China's transformations over this period wielded increasing influence over the development path of other countries, either directly through bilateral trade and financial flows or indirectly through growth spillovers and terms of trade effects. Looking ahead, as China embarks on a new phase in its development journey—a phase characterized by slower but higher-quality growth—the economic landscape facing the developing world is expected to be redefined yet again. As China changes, so will its interactions with the outside world. China is expected to remain both a market and a competitor, but its changes are likely to lead to new opportunities for many and new challenges for some. Key questions in this respect are: (i) how will the level and composition of China's import demand evolve as its economy slows and rebalances; (ii) to what extent will the presumed out-migration of labor-intensive manufacturing materialize and create new opportunities elsewhere; and (iii) how quickly will China move up the value chain and redefine its competitive advantage in the global marketplace? How these uncertain long-term developments affect individual countries will depend on differences in total supply chain costs, resource availability, and innovation capability. As in the past, China's transformations are expected to put formidable pressure on countries to adapt and reform, requiring both political will and entrepreneurial capacity, in a collective race where success will be measured against a rapidly moving frontier.\(^1\)

A Changing China: Five Decades of Structural Transformation

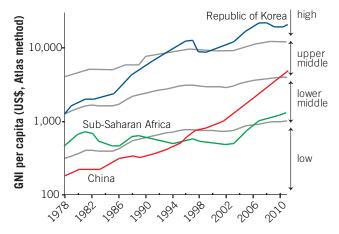
Historical trends over the last three decades

China's economic performance over the last three decades has been nothing short of impressive. Rapid urbanization transformed China from a primarily rural, agricultural economy into an increasingly urban one with a more diversified economic structure. The last three decades also saw a transformation from a command-based economy to a more decentralized and market-based system. These two factors coalesced to

produce large efficiency gains and have facilitated China's emergence as a world-class competitive powerhouse.

China's growth spurt translated into considerable improvements in living standards. China sustained average growth rates of 10 percent over the last three decades, which led to a dramatic rise in per capita income (figure 1). In 1978, the year that marked the beginning of China's remarkable transformation, per capita income was merely one-third of that of Sub-Saharan Africa. Within three decades, China managed to reach upper-middle-income status. In doing so, the country lifted over half a billion people out of poverty.

Figure 1. China Quickly Climbs the Income Ladder

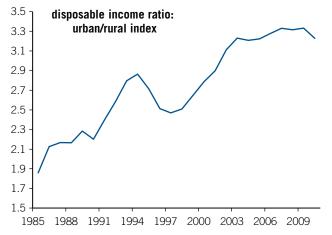


Source: World Development Indicators and World Bank staff calculations.

While serving China well in many respects, the rapid growth and accompanying structural change have also introduced economic imbalances. Spurred by high savings, cheap finance and other inputs, and export-oriented policies, growth has been led by industry and investment. The priority accorded to industry stunted services development—particularly in productivity terms—while the emphasis on physical investment constrained investment in human capital (Bosworth and Collins 2008). With wages lagging productivity growth, the share of wage income in gross domestic product (GDP) declined to 48 percent by 2008, with the consumption share at low levels for a major economy.

These trends also contributed to imbalances in other spheres. Income disparity widened to high levels and social imbalances were exacerbated by unevenness in access to basic public services and by tensions surrounding land acquisition (figure 2). On the back of industry-driven growth and urbanization, China became the world's largest energy user. Fast growth also led to serious environmental pollution. Fi-

Figure 2. Urban-Rural Income Disparity Significantly Rises



Source: National Bureau of Statistics (NBS) of China and World Bank staff

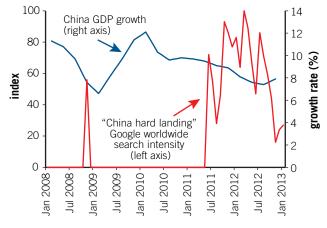
nally, many of the policies that generated China's internal imbalances also contributed to its twin current and capital account surpluses. Along with China's expanding global market share, these fueled protectionist pressures in key foreign markets.

Anticipated transformations over the next two decades

Looking ahead into the next two decades, it appears highly unlikely that the structural trends outlined above can be sustained for that length of time. One concern, which is not the focus of this note, relates to the fragility of the near-term outlook for growth (figure 3). With growth having slowed from a three-decade annual average of 10 percent to 7.8 percent in 2012, recent economic commentary on China has focused predominantly on the possibility of a hard landing. This concern has emerged as a result of persistent domestic and external risks. While the World Bank's baseline outlook for China remains a soft landing—with even a modest recovery expected at 8.3 percent in 2013 and 8.0 percent in 2014-it is clear that the downside risks remain significant and that the realization of a downward scenario would carry significant consequences, not only for China, but also for the rest of the region and the world (World Bank 2013).

A second concern, explored further in this note, relates to China's longer-term structural challenges. Key to this issue is the expectation that fundamental factors are expected to weaken the drivers of growth over time. This growth slow-down will require compensating policy efforts for the country to find new growth engines and in the process redefine its competitive advantage in the global marketplace. In addition, to prevent rising imbalances from reaching pressure points, the patterns of development are likely to undergo fundamental changes as policy makers are expected to respond with a gradual shift of policy emphasis from the rate of economic expansion to the quality of socioeconomic development.

Figure 3. Near-Term Uncertainties Center on Risk of Hard Landing



Source: Google Trends; NBS; World Bank staff calculations.

Transformation #1: China registers a structural slowdown

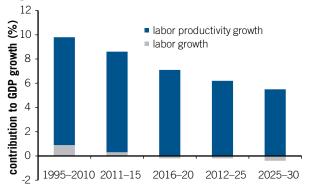
While the traditional driving forces of growth are far from exhausted, many signs suggest that they are likely to gradually weaken over time (Eichengreen, Park, and Shin 2011). First, much of the growth contribution from shifting resources from agriculture to industry has already occurred. Going forward, the continued accumulation of capital, although sizable, will inevitably contribute less to growth as the capital-labor ratio rises, even though further capital accumulation will be needed given that China's current capital stock per worker is estimated at only about a tenth of the U.S. level.

Second, China is also poised to go through major demographic change: the old-age dependency ratio will double in the next two decades, reaching the current level in Norway and the Netherlands by 2030 (between 22 and 23 percent), and the size of China's labor force is projected to start shrinking as soon as 2015, dampening savings. Yet workers will become more productive as the physical and human capital stock per worker continues to rise. These demographic changes should have a sizable impact on the rate of potential growth (Cai and Lu 2013).

Third, total factor productivity growth—a measure of improvements in economic efficiency and technological progress—would also decline, in part because the economy has exhausted gains from first-generation reforms and the absorption of imported technologies that were relatively easy to access, adopt, and adapt. As a result, the distance to the technological frontier has shrunk, and second-generation policy reforms are likely to have a smaller impact on growth.

Illustrative scenarios based on the World Bank and Development Research Center's recent China 2030 report suggest that these structural trends would have a profound impact on the Chinese economy (World Bank and Development Research Center of the State Council 2013). Overall GDP growth is expected to decline gradually from an average near

Figure 4. Prospect of Structural Slowdown Looms over Longer-Term Horizon



Source: World Bank and Development Research Center of the State Council 2013, Overview chapter.

8.5 percent in 2011–15 to around 5 percent by 2030 (figure 4).² It should be noted, however, that given the diversity of China's provinces, the slowdown would be uneven across the country, with the more developed provinces slowing more than those with more catch-up potential left (Malkin and Spiegel 2012).

Transformation #2: China rebalances

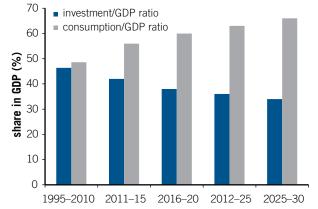
Addressing the imbalances that accompanied rapid earlier growth, as the 12th Five-Year Plan seeks to do, would be expected to fundamentally alter the patterns of development in economic, social, and environmental spheres.

First, as domestic sources of growth are emphasized, the Chinese economy would see a higher share of services and consumption and a lower share of exports, savings, and investment (figure 5). Reforms that encourage urban job creation and greater upward pressure on wages boost the share of wages and household income in GDP, increasing the role of household consumption. Government consumption would rise to meet increasing expenditure demands in the social sector and on operations and maintenance.

Savings and investment as a share of GDP decline over time. Corporate savings decrease as real wages rise and as the economy becomes less capital intensive and less industry based. Government savings fall because of more current and less capital spending. Reforms in health, education, and social security work to reduce household saving. Despite lower investment, the current account surplus gradually declines relative to GDP, easing external imbalances.

Second, income inequality would be expected to flatten and eventually decline as: (i) faster growth in the middle and western regions would continue, reducing the gap with coastal areas; (ii) migrant wages would continue to rise rapidly, reducing the income gap with urban residents; and (iii) even if urbanization continues, rural-urban migration will gradually slow as the structural shift from agriculture to manufacturing eases and the rural-urban wage gap narrows.

Figure 5. Investment as a Share of GDP Falls: Consumption Share Picks Up Slack



Source: World Bank and Development Research Center of the State Council 2013, Overview chapter.

Third, China would be expected to use fewer primary commodities, consume less energy, and produce less pollution. This is because it would have less industry (figure 6) and, within industry, less heavy and dirty industry, largely because of better pricing of energy, commodities, and environmental degradation.

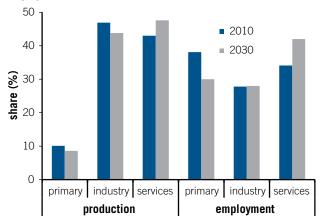
Transformation #3: China moves up the value chain

China's growth success has been mainly the result of rapid productivity growth. The growth of labor productivity—a key indicator of economic efficiency and a fundamental determinant of real wages—was sustained at high levels, particularly in industry. China's performance in industry has been closely tied to its ability to facilitate industrial upgrading, and, during its recent past, China has gone through several such stages. As a result, the structure of production and exports has progressively shifted from resource-intensive raw materials and primary products to labor-intensive manufactures of textile and clothing, and eventually machinery, electronics, and other products supported by more sophisticated production processes.

Looking ahead, for China to sustain relatively rapid growth and maintain its competitiveness in the global market-place, it will need to sustain productivity growth as a driver of growth and remain on the lookout for further upgrading of its economic activities, both in the tradable and nontradable sectors. Essential to success is China's innovation agenda, whereby through technological catch-up and original innovation China could further improve cost efficiency, introduce new organizational forms, and break into new product markets. The source of the country's competitive strength would thus be expected to progressively shift from low cost to high value, supported by innovation.

Against this backdrop, China's 12^{th} Five-Year Plan lays the foundation for the country's aspiration to move further up the value chain. China has already made significant prog-

Figure 6. Rebalancing: Share of Services in Production and Employment Rises



Source: World Bank and Development Research Center of the State Council 2013, Overview chapter.

ress in strengthening its technological capabilities and upgrading the technological sophistication of production and exports (figure 7). These efforts were supported by large investments in physical infrastructure, such as logistics, renewable energy, and communications. In addition, China's expanding education system and large supply of workers with science and engineering skills bode well for the future (Schellekens 2012a).

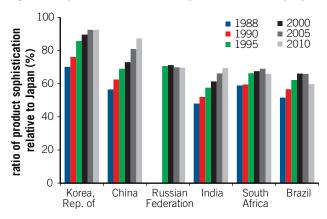
Building on these assets, China is expected to steer its economy up the value chain by reinvigorating its human competencies and technological capabilities. China is expected to further deepen its human capital base and to impart the flexible core competencies that workers of the future will need to remain productive across their working lives in the face of rapid technological change and structural shifts in China's labor market. In addition, China is expected to upgrade its technological capabilities by fostering a learning and research environment that encourages new ideas and lateral thinking and gradually making the pursuit of innovation more sensitive to market signals, with the government playing a more facilitating role (Schellekens 2012a).

Implications for the Developing World: New Opportunities and Challenges

Three decades of rapid growth and structural change have redefined China's position in the global economy. Initially a low-income country with a relatively closed economy, China transformed itself into upper-middle-income country and economic powerhouse with deep links to the global economy. China has become the world's second-largest economy and also the world's largest producer and exporter of manufactured goods.

As China expanded its economic clout, it wielded increasing influence over the development path of other countries. This influence exerted itself in various ways, either directly through bilateral trade and financial flows, or indirectly

Figure 7. Sophistication of China's Exports Has Grown Rapidly



Source: World Bank staff calculations.

Note: Ratio is EXPY relative to Japan, with PRODY averaged over the period 2000–2009. EXPY maps a country's export mix into a per capita income level that represents the level of development at which such goods are typically produced.

in the form of cross-country growth spillovers and impacts on world market prices of commodities and manufactures, and hence the terms of trade of most countries. With China's rise, the developing world saw new opportunities and challenges. The upsurge of commodity prices—partly a result of China's resource-intensive growth—benefited, for example, net producer countries, but hurt the terms of trade of net consumer countries. In turn, access to lower-priced manufacture imports expanded the consumption possibilities of many countries and elevated their middle classes, but at the same time also created tough competitive pressure for domestic manufacturing industries at home and in third markets.

If China's development over the last three decades has helped shape the global economic landscape as it is known today, and along with it significantly shaped the opportunities and challenges facing developing countries, then the importance of structural changes that China takes going forward cannot be overstated. Indeed, given the current size of the Chinese economy and the complex ways in which it connects with the world economy, it would be safe to conjecture that as China changes, so will the rest of the world, and particularly the developing world. However, as has been the case in the past, the impact of a changing China is unlikely to be uniform across countries. While China will likely remain both a market and a competitor, the structural transformations outlined in this note are likely to significantly change the intensity and patterns of China's import demand as well as the nature of competition between nations. These changes should provide opportunities and challenges that will differ across countries and should also give rise to new policy questions, as discussed below.

China as a Maturing Market: Impact on Import Demand?

The broader context in which China is anticipated to slow down and rebalance is one where the world economy is likely to remain multipolar and where the developing world would continue outperforming high-income countries. Over the last decade or so, the emergence of developing countries, and in particular the BRICS (Brazil, Russian Federation, India, China, and South Africa), has provided significant impetus to world economic growth. These trends are expected to carry on assuming certain aspects of the global environment remain supportive—such as openness to cross-border trade and investment and the lowering of total supply chain costs on the back of improvements in logistics and advances in information and communications technologies (ICTs). By some estimates, developing countries would contribute two-thirds of global growth (40 percent when excluding China) and half of global output (30 percent without China) by 2030. This would be accompanied by a global expansion of the middle class, from 1.8 billion people in 2009 to about 5 billion in

2030, with roughly two-thirds residing in Asia. All of the above is expected to lead to a multiplication in the opportunities for countries to connect with each other through trade, investment, and other channels.

In the same vein, China's gradual slowdown and rebalancing would continue to give ample scope for other countries to tap into opportunities in its domestic economy. If indeed, as predicted, China were to gradually halve its growth rate from the 10 percent in recent decades to 5 percent by 2030, it would still be expected to become a high-income economy and outstrip the U.S. economy by then as well. Despite the slowdown, China's national income would rise through this period, and this would add an equivalent of 15 of today's Republic of Korea to the world economy. Of course, due to the size of its massive population, China's per capita income would still remain a fraction of richer high-income economies. But the rise of income that slows from a high base should create tremendous opportunities for trade, because in addition the income elasticity of China's imports is expected to rise as the country becomes richer, providing a further boost to import demand. Thus, even if China slows and rebalances, the intensity of import demand is expected to remain robust.

Yet, the patterns of China's import demand are likely to change. China's recent growth patterns have brought large benefits to exporters of commodities as well as capital goods even if China has also become a significant exporter of capital goods (Eichengreen, Rhee, and Tong 2004). As China rebalances and looks more inwardly, there is hope not only that the competitive pressure exerted by China in third markets would recede somewhat, providing breathing space to exporters in other countries, but that also new opportunities would open up in China's domestic market that could be accessed by such exporters. Such opportunities could be accessed directly through the export of consumption goods or indirectly by inputs into the production networks supplying such goods to China, of which a large share are expected to remain located within China itself. China's efforts to raise domestic consumption are also expected to raise the demand for services. part of which again would be produced domestically, but others could be supplied from overseas.

Zooming in on China's demand for commodities, the impact of the slowdown and rebalancing is likely to be felt differently in different markets. Even if the United States remains a key player in world commodity markets, China has come to occupy a major position as well (Roache 2012). While overall commodity demand should broadly speaking remain strong in light of China's ongoing process of urbanization and given that the capital stock remains only a fraction of the U.S. level, the rebalancing of the growth model would favor commodities more closely related to consumption than investment demand. Among the former, for example, agricultural products

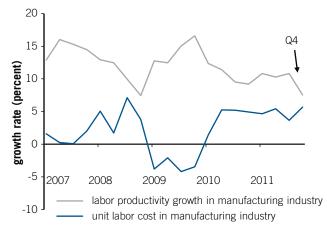
should remain in high demand, particularly given that the rise in the middle class should also lead to a rise in protein demand. Among the latter, metals and minerals might be more significantly affected by the slowdown in investment, even if continued residential construction demand, as well as demand for durable goods such as automobiles, limits some of that slowdown (Yu 2011).

Given that China's demand for commodities is likely to remain relatively robust, commodity-rich countries will continue to face the challenge of ensuring that the pursuit of commodity wealth does not come at the expense of longterm growth. In the absence of suitable institutions and policies, there is a risk that the pattern of specialization into commodities can result in negative side effects (Brahmbhatt and Canuto 2010). These include the prospect of real exchange rate appreciation that may render the manufacturing sector uncompetitive, the risk of becoming trapped in low-value structures that limit the scope for vertical or horizontal links, and the possibility of heightened volatility due to commodity price fluctuations (Chandra, Lin, and Wang 2012; IMF 2011; De Cavalcanti, Mohaddes, and Raissi 2012). The appropriate response to these potential negative effects is not to limit commodity exports or to erect costly import barriers to protect domestic industries, but rather to alleviate demand and supply constraints on productive activity by improving infrastructure, creating a conducive investment climate, and facilitating private sector access to capital, skills, technology, and markets (IMF 2011).

China as a Former Competitor: Whither the Out-Migration of Low-Cost Manufacturing?

While fast productivity growth helped explain and absorb rapid wage growth, there is little doubt that the rise in China's labor costs is gradually undermining the model of lowcost, labor-intensive manufacturing. It is becoming increasingly evident that China has passed the Lewis turning point, where it is no longer possible to tap into a surplus pool of low-wage labor without raising wages (Lewis 1954). Indeed, for several years now, nominal wage growth has been persistently robust, translating into significant increases in real wages. Even if the recent slowdown brought a slight softening of labor market conditions, urban demand-supply ratios remain at historically high levels. Whereas rapid productivity growth has to some extent dampened the impact of these cost pressures somewhat, the rise in manufacturing unit labor costs remains significant (figure 8). These developments, as well as the observation of significant foreign direct investment outflows from China to establish industrial zones in other countries, underpin the concern that China is losing industrial competitiveness in low-cost, labor-intensive manufacturing.

Figure 8. Labor Productivity Growth Helped Contain Rise of Unit Labor Costs

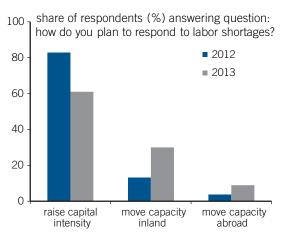


Source: NBS, CEIC, and World Bank staff calculations.

What remains uncertain is the pace at which China's competitive advantage is eroding, and thus the extent to which this will present an opportunity to lower-cost countries. Several factors that might impact potential opportunities are:

- Sectoral characteristics. The opportunities that may present themselves will vary necessarily across sectors depending on the labor intensity of production in each sector, as determined by the share of wages in total costs and the ability to pass on wage cost increases in prices. Competitive industries such as low-value footwear, garments, and toys are therefore more likely candidates of out-migration, and indeed, some of China's production in these sectors has already shifted to countries such as Cambodia, Indonesia, and Vietnam.
- Capital-labor substitution. The rise in wage costs may
 force producers in China to raise capital intensity where
 possible. Recent survey data for the manufacturing-dominated Pearl River Delta suggest that the primary response (61 percent, figure 9) of companies to higher
 wage costs is to invest in capital equipment (Lau, Narayan, and Green 2013).
- Inland migration. China also has the opportunity and incentive to relocate production further inland, a process which is ongoing, even if this is likely to be a temporizing measure as wage pressures are also picking up there. This was considered a second choice (30 percent, figure 9) in the recent survey on the Pearl River Delta.
- Overseas relocation. Relocation overseas is an option considered by some firms (9 percent in the recent survey, figure 9), but depends on an additional set of considerations such as the need of proximity for local suppliers and customers (Berger 2011; Baldwin 2011).
- Total supply chain costs. Another important factor that will determine the extent of relocation of firms currently based in China concerns the ability of other countries to

Figure 9. Wage Pressures Trigger Labor Substitution and Relocation



Source: Lau, Narayan, and Green 2013. Note: Survey of manufacturers operating in Pearl River Delta.

attract them. Success in this competition will depend on total supply chain cost concepts that go well beyond the narrow metric of productivity-adjusted wages.

As illustrated above, there are various reasons why the presumed grand-scale out-migration of low-cost, labor-intensive manufacturing may not happen overnight and may never fully play out. Indeed, the concern among lower-income countries is precisely that, while China moves up the value chain and acquires new comparative advantages, it continues to encapsulate within its borders the wage-sensitive chunks of the cross-border supply chain. Thus, the fear is that China, being a vast country of multiple regions with varying endowments, is not only acquiring new comparative advantages, but also keeping its existing ones, whereby China would straddle the full span of technologies and labor intensities (Yusuf and Nabeshima 2010).

A further complication arises with respect to the collective ability of other countries to absorb the out-migration of manufacturing activities if it were to occur in full force. It may well be that China's specific development path provided the world with a unique and one-off opportunity to productively tap into vast pools of surplus labor (Chandra, Lin, and Wang 2012). Hence, if other developing countries that are set to benefit from China's gradual loss of competitiveness in low-cost, labor-intensive manufacturing are collectively unable to supplant China's production capabilities, then what appears the most likely trend going forward will be a reversal of the "China price" effect and a return to more expensive final and intermediate manufacture goods.

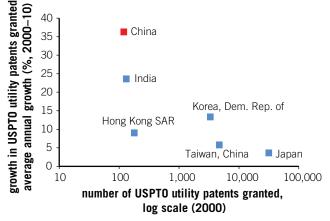
China as a New Competitor: Moving Up the Value Chain Together?

An often-raised concern is that past competitive pressure exerted by China on other countries' manufacturing industries

may have limited the breadth and depth of the industrialization potential of these countries, and even may have led to deindustrialization in certain cases. The slow process of industrialization in Africa is used as an example by Chandra, Lin, and Wang (2012) and the literature is replete with country case studies on the question of whether China has crowded out domestic manufacturing industries through competitive pressure in home and international markets (Eichengreen, Rhee, and Tong 2004; Yusuf and Nabeshima 2009; Arbache 2011). While there appears to be evidence in support of the hypothesis, two caveats apply. First, as in the case of Africa, the effect of increased competition must be disentangled from the effect of resource pull away from manufacturing due to the recent commodity boom—also partly China related. Second, the costs of trade diversion must be evaluated against the benefits of trade creation, bilaterally as well as indirectly through growth spillovers.

Against this backdrop, if past Chinese competition has dampened the possibilities of countries with similar endowment structures, it is fair to conjecture that the same will happen as China repositions itself and moves up the value chain. As a result, a new group of countries characterized by different endowment structures, and therefore different comparative advantages, is likely to face head-to-head competition from a changing China. To some extent, this is already happening as evidenced by the increasing technological sophistication of China's exports and the increasing share of capital good exports from China. Going forward, however, the process is likely to intensify if China succeeds in its efforts to drive growth through innovation (figure 10). As a result, countries that are currently active or aspire to become active in production, investment, or trade of human capital-intensive and technologically sophisticated goods and services would likely face significant competitive challenges (Economist Intelligence Unit 2011).

Figure 10. China's Technological Catch-Up Is Expected to Continue



Source: United States Patent and Trademark Office and World Bank staff calculations.

Rising competition with respect to skill and technology-intensive production is expected to produce various effects. Countries that will face the brunt of China's competition may have more difficulties in expanding their overseas market share and may also experience higher import penetration in markets domestically. The rise in competition may also constrain the efforts of other countries to move up the value chain, dampening the prospects of these countries to generate productivity-led growth and impacting negatively on global economic growth. At the same time, the rise in competitive pressure could trigger proactive and preventative responses from the private sector to boost innovation and aggressively move up the value chain so as to be able to ward off the competition from China. It may also lead to a healthy competition in policy frameworks among similarly endowed economies to ensure that business environments are conducive to and fully support private sector entrepreneurship and innovation (Schellekens 2011; World Bank 2011).

China's move up the value chain is thus expected to produce both winners and losers, depending in large part on whether countries have the entrepreneurial capacity to innovate and the political determination to introduce structural reforms that support innovation. Some countries may fail to aggressively develop or strengthen their innovation capabilities. These countries may have to passively undergo lower rates of trend growth that are primarily led by domestic demand. Other countries will be able to successfully adapt to the challenges posed by a changing China. They will be the ones that are able to sharpen their current comparative advantages and diversify sustainably into specialized niches of highend goods and services.

Conclusion

China's long-term outlook is expected to be shaped by three structural transformations that are key in terms of their potential impact onto the developing world. The first among these is a gradual structural slowdown that China is expected to undergo, as the economy's traditional engines of growth fade in strength. The second transformation concerns a change in China's economic structure, where the patterns of expenditure, production, and employment are all expected to change significantly as China rebalances. The third transformation involves the technological sophistication and human capital intensity of production as China is expected to respond to rising wage pressures by moving up the value chain, and, while doing so, also redefine its competitive advantage in the global marketplace.

The opportunities and challenges arising from these structural transformations will not be uniform across developing economies and will depend on their ability—both individually and collectively—to take advantage of China's changes. Static comparative advantages will be based on cost competitiveness (to attract labor-intensive manufacturing), innovation capability (to mitigate the impact of competition in higher-value products in home and third markets), and resource availability (to benefit from complementary trade). But equally important will be how countries enhance existing comparative advantages and develop new patterns of specialization. In this respect, China's transformations will put formidable pressure on countries to adapt, requiring both political will and entrepreneurial capacity for them to compete in a collective race where success will be increasingly measured against a moving frontier.

About the Author

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Notes

- 1. This note draws on three recent pieces of World Bank work: the China 2030 study (World Bank and Development Research Center of the State Council 2013), the April 2012 China Quarterly Update (Schellekens 2012a) and a presentation on the impact of a changing China to country authorities in Brazil, Cambodia, Malaysia, and Indonesia in May and November 2012 (Schellekens 2012b).
- 2. Note that this is the central scenario considered on page 9 of the Overview chapter of World Bank and Development Research Center of the State Council (2013). Alternative high-and low-growth scenarios are presented in supporting chapter 5 of the same report.

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