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MODERATING GROWTH AND STRUCTURAL CHANGE IN THE PEOPLE'S REPUBLIC OF CHINA: IMPLICATIONS FOR DEVELOPING ASIA AND BEYOND[1]

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KEY MESSAGES

- **A gradual moderation in growth is currently underway in the People's Republic of China (PRC).** This is the result of a combination of factors, including a shrinking working-age population, the natural process of convergence and rising labor costs, and a structural shift toward consumption-led growth partly encouraged by government. It also reflects continued weakness in external demand and the working out of overcapacity in some sectors.
- **The decline in PRC growth is expected to reduce gross domestic product (GDP) growth in the rest of developing Asia by about a third of a percentage point per year over the next 2 years.** It will also reduce Japan's GDP growth by a fifth of a percentage point. These reflect the PRC's strong intraregional trade and production linkages. The impact on the United States (US) and Europe will be negligible, as their relatively small trade exposure to the PRC will be offset by a boost from the lower commodity prices induced by lower PRC growth.
- **The share of the commodity price decline explained by moderating PRC growth varies widely by commodity.** A 1 percentage point reduction in PRC growth lowers the price of coal and metals 7%–22%, and oil and natural gas prices 5%–7%. The fall in PRC growth since 2011 can explain a substantial portion of the decline in coal and metals prices over the period, but only a small portion of the decline in oil and natural gas prices. These price declines act as a terms-of-trade shock for Asia's commodity exporters, which would also be hit by reduced export volumes. But Asia's commodity importers will benefit from lower commodity prices.
- **PRC's growth moderation and structural transformation present both challenges and opportunities.** The effect on individual Asian economies depends on how much they sell to the PRC, how much they sell through the PRC, and how much they compete with the PRC. The stronger the trade and production linkages, the bigger the impact from the growth moderation. But well-positioned Asian economies such as Bangladesh and Viet Nam can also benefit from PRC's shrinking labor force and rising labor costs. PRC's continued shift toward consumption-led growth also presents an opportunity for countries that can cater to PRC's growing consumer demand.

[1] This brief summarizes the findings of the forthcoming report, *Moderating Growth and Structural Change in the People's Republic of China: Implications for Asia and Beyond* (Asian Development Bank, Manila, 2016). The report (i) discusses the nature of the PRC growth moderation and structural change, (ii) quantifies the size of spillovers to the rest of developing Asia and other regions, and (iii) shows how commodities, trade and production linkages, and competition with the PRC all shape its impact on individual economies in developing Asia.

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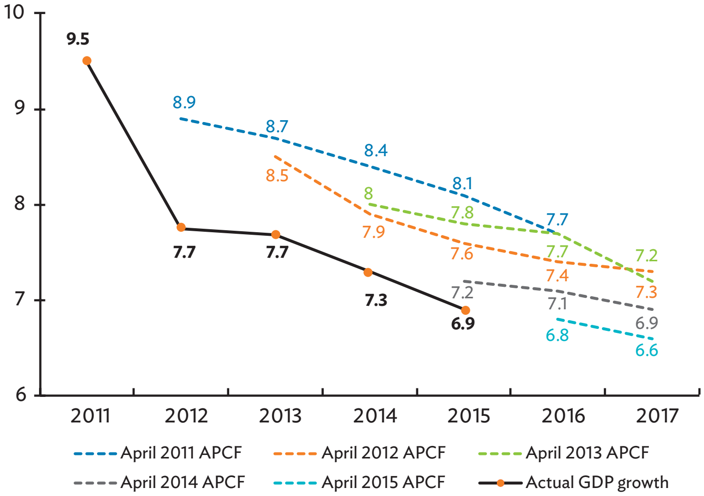
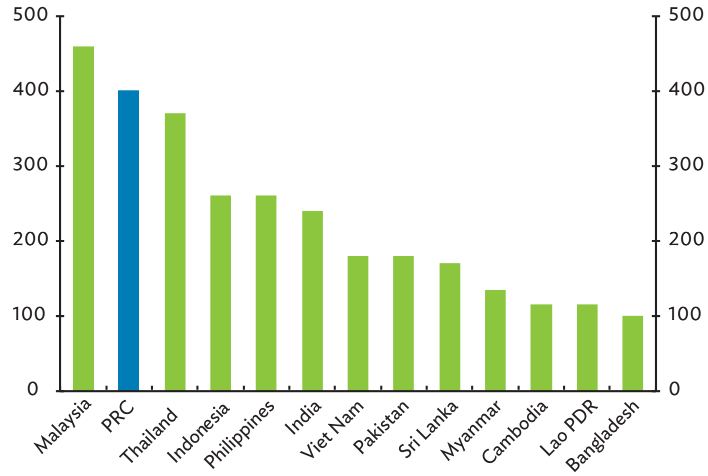
Figure 1: PRC Growth and Consensus Forecasts



APCF=Asia Pacific Consensus Forecast, PRC=People's Republic of China.
Note: Consensus Forecasts are the average forecasts from a poll of forecasters.
Sources: International Monetary Fund, *World Economic Outlook Database*, October 2015; Consensus Economics, *Asia Pacific Consensus Forecast*, various issues.

Figure 2: Average Monthly Wage of a Factory Worker ($, 2014)



Lao PDR=the Lao People's Democratic Republic, PRC=People's Republic of China.
Source: Capital Economics. 2016. Emerging Asia Economics Weekly (8 February).

THE WORLD'S ECONOMIC ENGINE IS SLOWING

Growth in the People's Republic of China (PRC) has been moderating and is expected to continue to slow over the medium term. The PRC grew 6.9% in 2015—almost half a percentage point below 2014, and the first time in a quarter-century that annual growth fell below 7%. The growth moderation is not new, nor is it a surprise. There has been a continuous downward drift in growth, by 2.6 percentage points since 2011. A slowdown was expected, but its extent unforeseen—as seen in the downward revisions to Consensus Forecasts (Figure 1).

Higher-frequency economic indicators—such as industrial production, retail sales, and electricity consumption—suggest the decline in growth could be more pronounced than headline GDP figures suggest. However, survey-based indicators may fail to adequately capture growth in emerging and newly expanding firms and sectors. Also, the shift toward services from industry would be consistent with lower energy intensity.

The growth moderation reflects several factors, both structural and cyclical. First, among deeper structural factors, demographics plays an important role. The growth of the working age population (between ages 15 and 59) turned negative in 2012, while the population between ages 15 and 65 peaked in 2014. The sex ratio also peaked in 2011 and—as with the working-age population—a decline is associated with falling savings and growth rates. Demographics will be an increasing drag on growth in the years to come. Second, there is the ongoing shift in economic structure from industry toward services on the supply side, and from investment to consumption on the demand side. The decline in growth contribution from industry and investment is underway. But services and consumption growth, while reasonably robust, has not offset the decline. As industry and investment tend to be more import-intensive than services and consumption, these sectoral shifts also suggest that spillovers from the current growth moderation could be larger than in the past. Third, the natural process of convergence implies that growth will slow as per capita income rises, as returns to investment diminish. The PRC has indeed converged quickly over the past 25 years, with real per capita GDP rising ninefold since 1990. As labor costs rose rapidly, the PRC lost some of its attraction as a base for low-cost manufacturing. Wage costs are now almost four times those in Bangladesh, the Lao People's Democratic Republic (Lao PDR), Cambodia, and Myanmar, for example (Figure 2).

External factors also play a role. Weaker-than-expected external demand—due to the lackluster recovery in advanced economies since the global financial crisis (GFC), and more recently to weakness in other emerging markets—has been a drag on PRC exports.

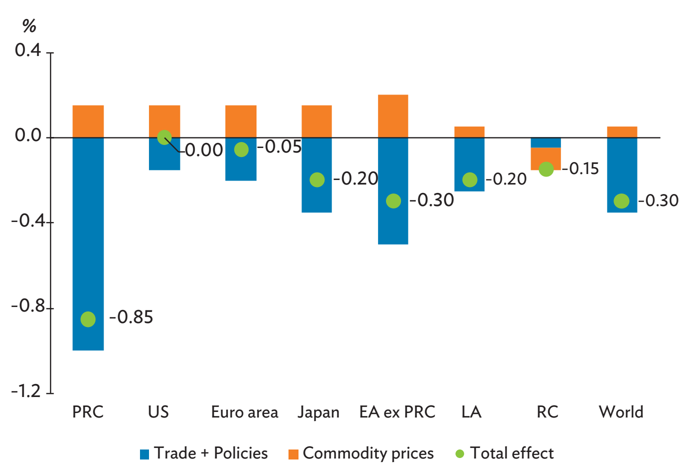
Following the GFC, efforts to maintain high growth contributed to increased imbalances; the growth moderation over the past 2 years partly reflects the

working out of overcapacity in some sectors and authorities' desire to contain vulnerabilities. PRC expansionary policies after the GFC aimed to offset the collapse in external demand. These included increased investment, infrastructure spending and a substantial easing of credit conditions—all of which helped support growth. The result, however, has been a substantial rise in total debt since 2008, with much channeled through the unregulated "shadow banking" sector. Debt helped fuel overinvestment and excess capacity in sectors such as steel and led to sharp increases in some asset markets as well. To stem these vulnerabilities, authorities began paring back investment and tightening credit conditions, contributing to weaker growth.

A GRADUAL PRC GROWTH MODERATION SHAVES A THIRD OF A PERCENTAGE POINT FROM GROWTH IN THE REST OF ASIA

The gradual decline in growth is expected to continue. The continued moderation will lower PRC growth rates this year and next about one percentage point below what Consensus Forecasts had expected in 2013—and a similar magnitude below an extrapolation of ADB forecasts in the September 2014 *Asian Development Outlook Update*, which saw growth declining by only 0.1 percentage point per year.

Figure 3: Effects of a Gradual Growth Moderation in the PRC
(Deviation of GDP growth from baseline, first 2 years)



PRC=People's Republic of China, LA=Latin America, EA=Emerging Asia, RC= remaining countries
Source: ADB estimates.

This gradual moderation has real effects on the rest of Asia, but only modest impact on the United States (US) and Europe. Using the Global Projection Model—a multiregion macroeconomic model with real and financial linkages—ADB staff assess the effects of the current PRC growth moderation, using a "no slowdown" scenario as the counterfactual. Lower PRC growth shaves about a third of a percentage point off developing Asia's growth each year, and reduces Japan's growth by a fifth of a percentage point (Figure 3). This reflects the PRC's strong intraregional trade and production linkages. The effect on commodity-exporting countries such as Australia will also be significant. In contrast, the impact on the US and Europe will be negligible, as their relatively small trade exposure to the PRC will be offset by a boost from the lower oil prices induced by lower PRC growth. Overall, global growth is about a third of a percentage point lower than it would have been had the PRC economy not slowed.

A SHARP DECLINE IN GROWTH IS NOT SEEN AS A HIGH-PROBABILITY RISK; NONETHELESS, IT IS USEFUL TO ASSESS LIKELY CONSEQUENCES

A sharp drop in PRC growth—emanating from a disorderly unwinding of economic imbalances—is not foreseen in the near term, and is not a high-probability risk even over the medium term. Current concerns over a sharp slowdown in the near term are exaggerated, as the Government of the PRC has substantial policy buffers to respond to adverse shocks. and it has already announced some policy actions to support growth, including plans to expand major rail, road, and urban infrastructure projects. Other policies that can help support growth are reforms to state-owned firms, selective tax reductions (e.g., in contributions to social security funds), and increased spending on health and education.

Nonetheless, ADB staff analyze how spillovers might differ in the unlikely event of a sharp growth decline. In historical episodes of credit boom-busts, housing downturns, and financial crises, investment growth tends to slow sharply (Table 1). The typical decline in GDP growth during such disorderly slowdowns is about 2–3 percentage points. With investment a much larger share of GDP in the PRC, a decline in investment and consumption growth similar to past episodes could result in a sharp fall, reducing GDP growth by 4½ percentage points.

The unlikely event of a sharp fall in PRC growth would have larger effects on all regions. The bigger reduction in PRC demand would amplify effects on trade and commodity

Table 1: International Average—Magnitude of Growth Deceleration During Disorderly Slowdowns
(Growth in the first 2 years after the event relative to growth in previous 5 years, % points)

	Real GDP	Government consumption	Investment	Private consumption	Imports	Exports
Credit boom-bust	-3.4	-1.0	-11.7	-2.8	-7.9	-3.1
Banking crisis	-2.0	-1.0	-8.0	-2.0	-6.3	-1.5
Housing downturn	-2.1	-0.2	-7.8	-2.2	-6.4	-3.0

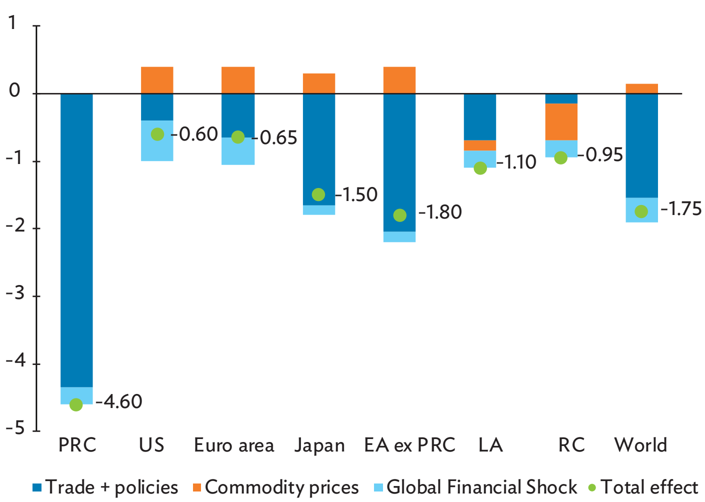
Note: Averages based on 70 credit boom-bust episodes in 61 countries during 1960-2010 (Mendoza and Terrones 2012, Appendix I); 147 banking crises in 116 countries during 1970-2011 (Laeven and Valencia, 2012, Table A1); and 138 housing cycles in 55 countries during 1970-2010 (Igan and Loungani 2010, Table 1).
Source: ADB estimates.

prices. The effects on Asia would be proportionately larger (Figure 4). And an additional negative shock from tightening global financial conditions would contribute to lower growth in the US and Europe.

THE PRC GROWTH MODERATION EXPLAINS VARYING PORTIONS OF THE DECLINE IN COMMODITY PRICES

Changes in PRC economic activity significantly affect commodity prices; but the estimated impact varies across commodities. Econometric analysis by ADB staff finds that a 1 percentage point reduction in the PRC growth lowers prices of coal and metals 7%-22%, and oil and natural gas prices 5%-7% (Figure 5). These suggest that the 2.6 percentage point fall in PRC growth since 2011 can explain a significant portion of the decline in coal and metals prices over the same period, but only a small portion of the decline in oil and natural gas prices. The decline in commodity prices from PRC's growth moderation will act as a terms-of-trade shock for Asia's commodity exporters, but will benefit Asia's commodity importers.

Figure 4: Effects of a Sharp Growth Decline in the PRC
(Deviation of GDP growth from baseline, first 2 years)

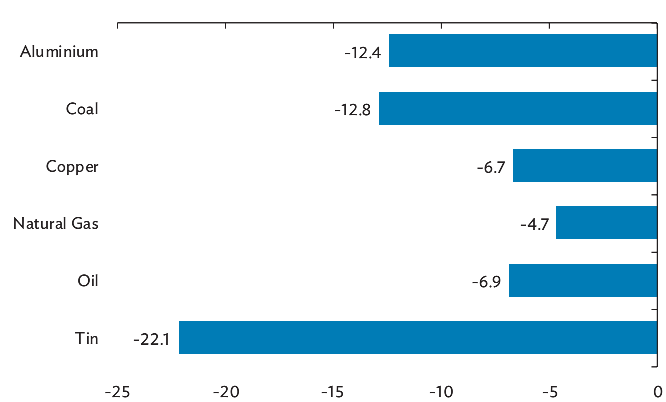


PRC=People's Republic of China, LA=Latin America, EA=Emerging Asia, RC= remaining countries

Source: ADB estimates.

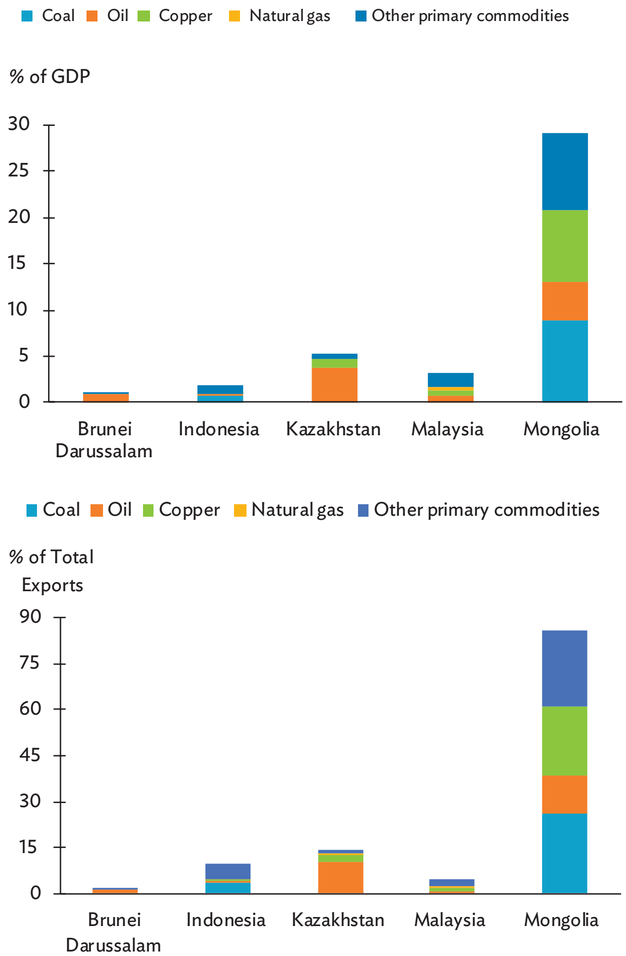
Weaker PRC demand will also hurt Asia's commodity exporters through reduced export volumes. For many Asian commodity exporters, the PRC is a major customer for dominant export commodities such as coal, copper, and oil (Figure 6). Thus, some are already feeling the pinch from reduced PRC demand. ADB staff find that the impact of a PRC growth moderation works indirectly through prices as well as through direct channels—commodity exporters that sell more to the PRC find a significantly larger impact on growth from fluctuations in PRC economic activity (Figure 7). These findings drive home the importance of diversification for Asia's commodity exporters, across products as well as trading partners. It also highlights the need to build fiscal buffers during good times, to help cushion the blow when commodity prices fall.

Figure 5: Impact on Commodity Prices of a 1 Percentage Point Negative Shock to PRC Growth



Source: ADB estimates.

Figure 6: Asia's Commodity Exporters: Commodity Exports to the PRC

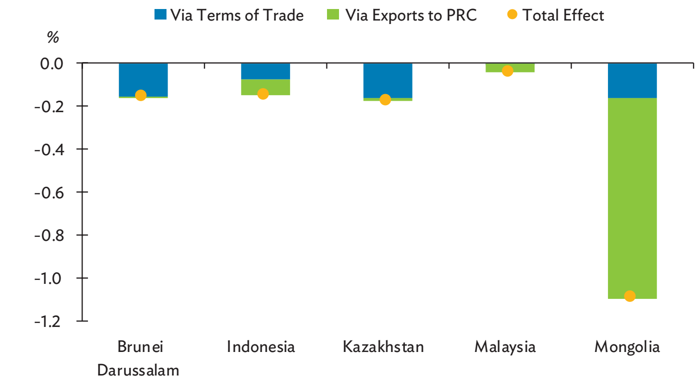


PRC=People's Republic of China
Source: ADB estimates.

TRADE AND PRODUCTION LINKAGES WITH THE PRC MAGNIFY SPILLOVERS FROM A GROWTH MODERATION

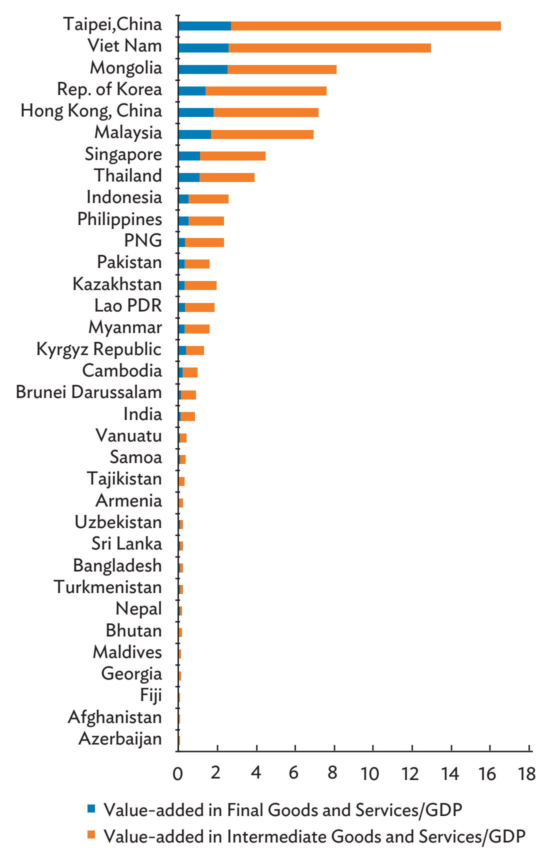
Beyond commodity exporters, other economies that export more to the PRC are more vulnerable to a slowdown in demand. ADB staff find that those with stronger trade linkages with the PRC experience significantly larger spillovers from changes in PRC growth. So economies such as Taipei,China; the Republic of Korea; Hong Kong, China; and Malaysia—whose value-added exports to the PRC in both final and intermediate goods and services are relatively high (Figure 8)—are more likely to feel the effects of the PRC growth moderation.

Figure 7: Effect on Commodity-Exporting DMCs of a 1 Percentage Point Decline in PRC Growth



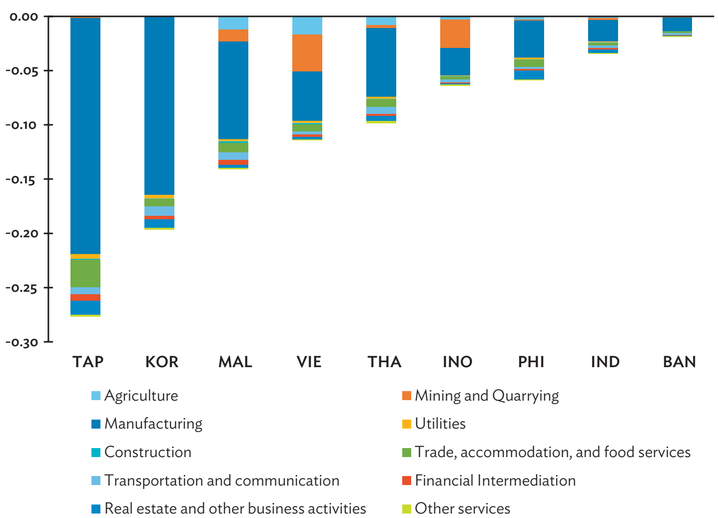
PRC=People's Republic of China.
Source: ADB estimates.

Figure 8: Developing Asia: Value-Added Exports to the PRC (% of GDP)



GDP=Gross Domestic Product, Lao PDR=the Lao People's Democratic Republic, PNG=Papua New Guinea, PRC=People's Republic of China
Note: Value-added in intermediate goods and services pertain to exports of intermediate goods and services processed and then consumed in the PRC.
Source: ADB estimates.

Figure 9: Sectoral Impact of a PRC Slowdown for selected Developing Economies



BAN=Bangladesh; INO=Indonesia; IND=India; KOR=Republic of Korea; MAL=Malaysia; PHI=Philippines; TAP=Taipei,China; THA=Thailand; VIE= Viet Nam

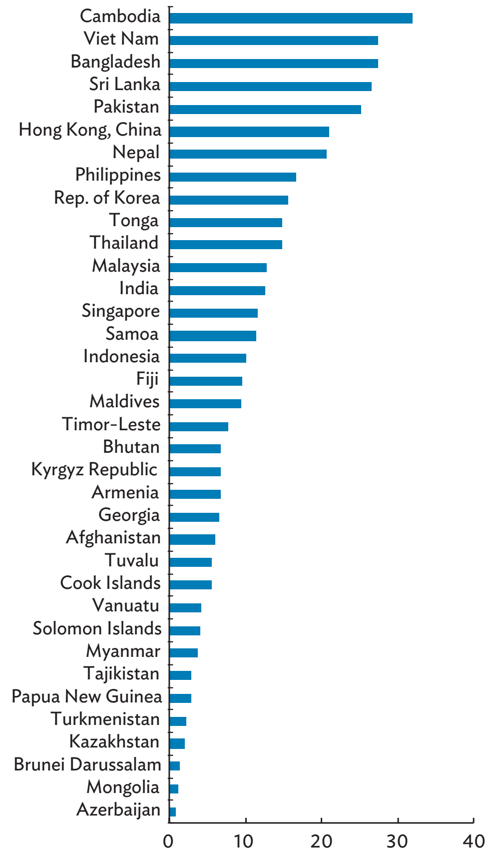
Source: ADB estimates.

By sector, developing Asia's manufacturing is most vulnerable. Analysis using world input-output tables accounts for both trade and production linkages. They also allow tracing effects on both individual economies and specific sectors. Among the 45 economies included in the World Input-Output Database, spillovers through trade and production linkages are largest for several Asian economies (Figure 9). Taipei,China; the Republic of Korea; Malaysia; and Viet Nam are among the economies most affected by moderating PRC growth. For most economies, the impact is primarily in manufacturing. For Viet Nam and Indonesia, part of the impact is through mining and quarrying.

THE PRC GROWTH MODERATION AND STRUCTURAL SHIFT ALSO PRESENTS OPPORTUNITIES FOR DEVELOPING ASIA

Well-positioned developing Asian economies can also benefit from the PRC's shrinking labor force, rising labor costs, and shift to consumption-based growth. There are three main opportunities. The first is for economies that primarily compete with the PRC in third markets (Figure 10). They can increase market share as the PRC withdraws. Bangladesh, for example, is already gaining market share as the PRC withdraws from the low-end segment of garment manufacturing—it is now the world's second-largest garment exporter behind the PRC.

Figure 10: Developing Asia—Index of Competition with the PRC, 2014



Note: The index of competition measures the importance of China in a country's export markets (weighted by product), with 100 indicating total dominance and 0 indicating complete absence.

Latest available data for selected countries are Tajikistan, Turkmenistan: 2000; Tuvalu: 2005; Myanmar: 2010; Cook Islands, Vanuatu: 2011; Bhutan, Papua New Guinea: 2012; Cambodia, the Kyrgyz Republic, Timor-Leste: 2013

Source: ADB estimates.

The second opportunity is for those able to replace the PRC in segments of global production chains. Global demand for products the PRC produces in quantity—ranging from low-cost T-shirts to high-tech smartphones and computers—continues to rise. But with the PRC's rising labor costs, this production will increasingly move to lower cost economies. Viet Nam, for example, has already become a favored location for producing mobile phones and consumer electronics—partly by attracting more foreign direct investment. The opportunities are great for both large countries like India (that aim to become new export giants) and for smaller economies like Cambodia and Myanmar (which have lower labor costs and are starting the process of entering global markets and production chains). Low wages are not sufficient to guarantee success, however. Countries need to invest in the necessary infrastructure and undertake needed policy reforms to become attractive investment destinations.

Finally, the PRC's trading partners can exploit the fact that not all exports will be affected equally. As PRC consumption remains relatively robust and the growth decline is mostly from investment, economies that export to satisfy PRC consumer demand—both goods as well as services such as education and tourism—will be better positioned than those catering to PRC investment demand.

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