A Resurgent East Asia
Navigating a Changing World

Andrew D. Mason
Sudhir Shetty

World Bank East Asia and Pacific Regional Report
World Bank Group
A Resurgent East Asia
WORLD BANK EAST ASIA AND PACIFIC REGIONAL REPORTS

Known for their economic success and dynamism, countries in the East Asia and Pacific region must tackle an increasingly complex set of challenges to continue on a path of sustainable development. Learning from others within the region and beyond can help identify what works, what doesn’t, and why, in the search for practical solutions to these challenges. This regional flagship series presents analyses of issues relevant to the region, drawing on the global knowledge and experience of the World Bank and its partners. The series aims to inform public discussion, policy formulation, and development practitioners’ actions to turn challenges into opportunities.

TITLES IN THE SERIES

A Resurgent East Asia: Navigating a Changing World

Growing Smarter: Learning and Equitable Development in East Asia and Pacific

Riding the Wave: An East Asian Miracle for the 21st Century

Live Long and Prosper: Aging in East Asia and Pacific

East Asia Pacific at Work: Employment, Enterprise, and Well-Being

Toward Gender Equality in East Asia and the Pacific: A Companion to the World Development Report

Putting Higher Education to Work: Skills and Research for Growth in East Asia

All books in this series are available for free at https://openknowledge.worldbank.org/handle/10986/2147.
Overview

A Resurgent East Asia

Navigating a Changing World

Andrew D. Mason
Sudhir Shetty
## Contents

Foreword ..................................................................... vii

Acknowledgments .............................................................. ix

Abbreviations ................................................................. xi

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The East Asian development model has worked</td>
<td>2</td>
</tr>
<tr>
<td>Changing times, rising challenges</td>
<td>4</td>
</tr>
<tr>
<td>Navigating a changing world: directions for policy</td>
<td>16</td>
</tr>
<tr>
<td>Notes</td>
<td>23</td>
</tr>
<tr>
<td>References</td>
<td>24</td>
</tr>
</tbody>
</table>
East Asia continues to be the global exemplar for development success. Over the past half century, a succession of countries across the region has progressed from low-income to middle-income and even to high-income status. This dramatic transformation of the region—termed the “East Asian Miracle”—has been built on a combination of policies that fostered outward-oriented, labor-intensive growth while building basic human capital and providing sound economic governance. This development strategy has delivered rapid and sustained growth, which has moved hundreds of millions of people out of poverty and into economic security.

Yet East Asia’s economic resurgence remains incomplete. More than 90 percent of its people now live in 10 middle-income countries, many of which can realistically aspire to high-income status in the next generation or two. But these countries are still much less affluent and productive than their high-income counterparts. China’s per capita income is still only about one-fifth of the average in high-income economies, while Cambodia’s per capita income is about 3 percent of the high-income average. Significant gaps also exist in labor productivity and human capital levels. When the Republic of Korea achieved high-income status, for instance, its labor productivity was two and a half times higher and its human capital one-third higher than those of China today.

This study—A Resurgent East Asia: Navigating a Changing World—is about how the region’s middle-income countries will need to adapt their development model to support their transition to high-income status in the face of evolving global and country circumstances. Slowing growth in global trade and shifts in its patterns, rapid technological change, and evolving economic circumstances within countries all present challenges to sustaining productivity growth, fostering inclusion, and enhancing state effectiveness.

The study examines the nature of these challenges and delineates how policy makers across developing East Asia will need to address them in the coming decade. While the region’s focus on a combination of outward-oriented growth, human capital development, and sound economic governance—the East Asian development model—still has much to recommend it, this strategy will need to be adjusted to changing times. The study highlights policy reforms under five pillars: boosting economic competitiveness, building skills, promoting inclusion, strengthening state institutions, and financing the transition to high income.

Policy makers in the region will need to address both familiar and novel challenges. This will include focusing on both emerging policy priorities, reforms that require special emphasis as countries transition to high-income status, and foundational policies, reform areas that countries have already been
pursuing and that remain critical to sustaining development.

For boosting economic competitiveness, the emerging priorities include the following: reforming services sectors, deepening trade agreements, broadening innovation policies, and improving the access of small and medium enterprises to finance. To build skills, the focus needs to be on developing higher-order cognitive and socioemotional skills, supporting continuous skills development systems, and enhancing people’s digital and technical capabilities. To promote inclusion, it will be important to strengthen employment services, link unemployment benefit schemes to economic transitions, and enable affordable access to digital technologies. Strengthening state institutions will require a greater emphasis on expanding mechanisms for citizens’ voice and participation, increasing government transparency, and strengthening systems of checks and balances. Financing the transition to high-income status will require measures to increase domestic resource mobilization, including expanding the tax base and limiting tax competition, to sustainably finance the needs and aspirations of increasingly middle-class societies.

_A Resurgent East Asia_ argues that policymakers across the region need to act decisively or risk missing opportunities to sustain the region’s remarkable development performance. Although the precise nature and pace of change are uncertain, their direction is not. This serves only to increase the urgency of reform so that developing East Asia can achieve even greater and more broadly shared prosperity.

Victoria Kwakwa
Regional Vice President
East Asia and Pacific Region
The World Bank
Acknowledgments

This study is a product of the World Bank’s Office of the Chief Economist, East Asia and Pacific Region. It was authored by Andrew D. Mason and Sudhir Shetty, with the guidance of Victoria Kwakwa, Regional Vice President, East Asia and Pacific.

The report builds on and synthesizes the work of a larger team that included Facundo Abraham, Pinyi Chen, Ileana Cristina Constantinescu, Juan Cortina, Francis Darko, Francesca de Nicola, Reno Dewina, Mariana Iootty, Vera Kehayova, Kevin Macdonald, Aaditya Mattoo, Ha Nguyen, Caterina Ruggeri Laderchi, Michele Ruta, Sergio Schmukler, and Judy Yang (all World Bank); Manu Bhaskaran (Centennial Asia Advisors); Edmund Malesky (Duke University); and Mariana Viollaz (CEDLAS-FCE-UNLP). Cecile Wodon provided invaluable administrative and logistical assistance.

The team benefited from valuable suggestions provided, throughout the production process of this report, by colleagues both within and outside the World Bank Group. Particular thanks to Chatib Basri (University of Indonesia), Homi Kharas (Brookings Institution), Danny Leipziger (George Washington University and Growth Dialogue), Bill Maloney (World Bank), and Ana Revenga (Brookings Institution) for serving as peer reviewers, and to Bill Shaw for his advice and guidance throughout the drafting process. Helpful comments and inputs were also received from Shamma Alam, Omar Arias, Jim Brumby, Alejandro Cedeno, Kevin Cruz, Wendy Cunningham, Gabriel Demombynes, Ndiame Diop, Samuel Freije-Rodriguez, Karolina Goraus, Mary Hallward-Driemeier, Bert Hofman, Gabriela Inchauste, Jon Jellema, Theepakorn Jitthikutachai, Bradley Larson, Xueba Luo, Deepak Mishra, Harry Moroz, Michal Myck, Evgenij Najdov, Mateusz Najsztub, Gaurav Nayyar, Philip O’Keefe, Truman Packard, Obert Pimhidzai, Juul Pinnxt, Sharon Faye Piza, Rong Qian, David Rosenblatt, Marcela Sanchez-Bender, Miguel Eduardo Sanchez Martin, Indhira Santos, Mauro Testaverde, Sailesh Tiwari, Kimsun Tong, Matt Wai-Poi, Mara Warwick, Hernan Winkler, and Xiaoqing Yu.

Mary Fisk and Patricia Katayama provided excellent advice and guidance on the publication process. The cover and graphics were designed by Bill Praglusky, Critical Stages. Mary Anderson edited the report.

The team also thanks others who have helped prepare this report and apologizes to any who may have been overlooked inadvertently in these acknowledgments.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>artificial intelligence</td>
</tr>
<tr>
<td>ALMP</td>
<td>active labor market program</td>
</tr>
<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>ASEAN-5</td>
<td>Five major developing ASEAN economies (Indonesia, Malaysia, the Philippines, Thailand, and Vietnam)</td>
</tr>
<tr>
<td>BRICS</td>
<td>Brazil, Russian Federation, India, China, and South Africa</td>
</tr>
<tr>
<td>CPTPP</td>
<td>Comprehensive and Progressive Agreement for Trans-Pacific Partnership</td>
</tr>
<tr>
<td>FDI</td>
<td>foreign direct investment</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GII</td>
<td>Global Innovation Index</td>
</tr>
<tr>
<td>GVC</td>
<td>global value chain</td>
</tr>
<tr>
<td>ICT</td>
<td>information and communication technology</td>
</tr>
<tr>
<td>IT</td>
<td>information technology</td>
</tr>
<tr>
<td>NGO</td>
<td>nongovernmental organization</td>
</tr>
<tr>
<td>NIEs</td>
<td>newly industrializing economies</td>
</tr>
<tr>
<td>NIS</td>
<td>National Innovation System</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OGI</td>
<td>Open Government Initiative (China)</td>
</tr>
<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
</tr>
<tr>
<td>PPP</td>
<td>purchasing power parity</td>
</tr>
<tr>
<td>PTA</td>
<td>preferential trade agreement</td>
</tr>
<tr>
<td>QoG</td>
<td>Quality of Government [Expert Survey]</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>research and development</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SEGs</td>
<td>state-owned economic groups (Vietnam)</td>
</tr>
<tr>
<td>SMEs</td>
<td>small and medium enterprises</td>
</tr>
<tr>
<td>SOEs</td>
<td>state-owned enterprises</td>
</tr>
<tr>
<td>TFP</td>
<td>total factor productivity</td>
</tr>
<tr>
<td>TVET</td>
<td>technical and vocational education and training</td>
</tr>
<tr>
<td>VAT</td>
<td>value added tax</td>
</tr>
<tr>
<td>WGI</td>
<td>Worldwide Governance Indicators</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>

*Note: All dollar amounts are U.S. dollars unless otherwise indicated.*
Introduction

East Asia’s renaissance has continued. A succession of East Asian economies have progressed from low-income to middle-income status in the past half century. Since 2000, the region’s middle-income economies have become more prominent. Part of this shift mirrors the rise of China, which is now the world’s largest (in purchasing power parity [PPP] terms) or second-largest economy (at market prices). But it also reflects the emergence of the five large Association of Southeast Asian Nations (ASEAN) middle-income economies: Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. Incomes in the region have grown rapidly, and poverty has fallen dramatically. The scale of this success has been termed the “East Asian Miracle” because of the sheer pace of the transformation. A half century ago, countries across much of the region faced some of the most difficult development challenges in scale and scope. Most were poor agricultural economies, struggling to overcome legacies of conflict or central planning. Today, however, the region is bustling with economic activity—reflecting a lively mix of high- and middle-income economies that account collectively for nearly one-third of global gross domestic product (GDP).

Yet East Asia’s resurgence remains incomplete. More than 90 percent of its people live in 10 middle-income countries.¹ Although several of these countries can now realistically aspire to high-income status within the next generation or two, they are far from affluent. Despite China’s spectacular growth over the past 40 years, for instance, its per capita income is still only about a fifth of the average for high-income economies. Among the region’s economies at the lower end of the middle-income scale, per capita incomes in Cambodia and Vietnam are about 3 percent and 5 percent, respectively, of the high-income average. These large gaps in standards of living are equally striking when viewed in historical terms: China’s per capita income fell from about 36 percent of the level of the United States in 1820 to 20 percent in 1870, and although it has risen significantly since China’s economic reforms began in the late 1970s, it is still less than a quarter of the U.S. level today.²

Developing East Asia also lags in labor productivity and human capital relative not only to the United States but to Chile and the Republic of Korea when those countries attained high-income status (in 2011 and 2001, respectively).³ For instance, when Chile and Korea achieved high-income status, their

Overview
labor productivity levels were, respectively, almost 2 and 2.5 times that of China in 2015. Human capital levels in Chile and Korea were a quarter and a third higher, respectively. Other middle-income East Asian economies similarly lag behind the human capital and labor productivity levels of Chile and Korea when they first attained high income. Moreover, productivity growth in the region has been slowing, as in other parts of the world.

Despite its recent success, developing East Asia’s continued resurgence will depend on its ability to navigate the currents of a changing world and a changing region. Global trade is growing more slowly, and the patterns of trade are shifting, both within and beyond the region. Technology is changing rapidly and, in so doing, is changing the nature of comparative advantage as well as the structure of demand for labor in the region. And the countries’ economies themselves are changing as they become more prosperous. Indeed, it is these changes that help frame the challenges the region will face—challenges that can be addressed, but only through a combination of forward-looking policy actions and renewed energy for reform.

The East Asian development model has worked

The “growth with equity” model

The success of developing East Asia in sustaining development can be attributed broadly to a set of policies that have come to be known as the “growth with equity” model. Broadly speaking, this strategy consists of three pillars: outward orientation, investment in basic human capital, and sound economic governance. This broad-brush characterization obviously abstracts from many aspects of country-specific development strategies as well as variations in the pace and sequencing of policies across countries. Nevertheless, it captures the essential elements of the approach this set of countries took as well as its contrast to the strategies adopted by low- and middle-income economies elsewhere, particularly in Latin America and South Asia.4

Outward orientation. Recognizing that labor was their most abundant asset in their early stages of development, these economies promoted labor-intensive growth in ways that helped integrate them with the global economy. As they developed their manufacturing sectors early on, they did so without taxing labor heavily or discriminating significantly against agriculture. Support for agricultural productivity growth was key because it helped sustain growth and reduce poverty. Policies to promote trade openness helped expose domestic industries to international competition while facilitating flows of foreign investment and know-how.

Investment in basic human capital. All the successful East Asian economies emphasized the provision of services to build the human capital of their populations. Basic education, health and nutrition, and family planning services were promoted both as a means of raising labor productivity and as a way of enabling the poor to benefit from labor-intensive growth. Educational systems achieved broad access to primary and, increasingly, to secondary schooling. As a result, the generation born in the 1980s had educational attainment almost a third higher than that born in the 1950s. Health care provision focused on diseases that particularly affected the poor, including by providing primary health care and targeting rural areas. Several countries also made improving access to family planning programs a priority.

Sound economic governance. These economies also recognized that for development to be sustained, policies needed effective implementation. This in turn called for credible and capable economic governance. East Asia’s policy makers generally remained committed to maintaining macroeconomic stability (including long-term fiscal discipline) and to relying primarily on markets in allocating resources. When interventions (so-called industrial policies) were used, they were designed to be consistent with market signals and incentives. Good economic governance also relied on the development of at
least small groups of well-trained, competent civil servants who were largely shielded from political interference.

**A record of success**

This development model has resulted in sustained productivity growth, inclusion, and effective economic governance across developing East Asia.

**Income and productivity growth**

Countries in the region have generally grown steadily and consistently over the past quarter century (figure O.1). China’s rapid and consistent growth over this period has obviously been a big part. But the growth story extends beyond China, and as a result, all of the countries that constitute “developing East Asia” have now reached middle-income status, with several of them now in the upper-middle-income ranks. This is a far cry from two decades ago, when the region’s countries were predominantly low- to lower-middle-income.

Developing East Asia’s growth performance has also been striking in its resilience despite two major economic crises over the past two decades. Although the 1997–98 Asian Financial Crisis originated in the region and was a severe shock, its effects on growth were relatively short-lived, even in Indonesia, Malaysia, and Thailand—the countries that were most affected besides Korea. By 1999, growth was positive again across the region, and it continued to rise throughout the first part of the following decade.

The region then weathered the 2008–09 Global Financial Crisis, which began in the high-income economies, much better than did most other low- and middle-income regions. China’s public investment-led stimulus helped sustain its own growth and, through its trade links, supported growth in the rest of developing East Asia as well. For much of the decade since that crisis, East Asia has been the fastest-growing developing region. Since 2010, it has grown by nearly 6.5 percent a year, on average—not much slower than its 2000–07 pace. As a result, developing East Asia’s GDP is now more than three and a half times what it was in 2000. Even leaving aside China, developing East Asian countries have more than doubled their GDP since 2000.

Strong productivity growth was the key to much of developing East Asia’s success in sustaining growth over this prolonged period. Levels of output per worker have been converging to the “productivity frontier”—that of the United States—reflecting to varying extents across countries the roles of capital deepening (more capital per worker), the accumulation of human capital (more educated and healthier workers), and growth in total factor productivity (greater economic efficiency). And in most cases, productivity growth has been faster and more consistent in developing East Asia than in other major low- and middle-income countries.

**Inclusion**

Rapid growth has provided broad-based benefits to East Asia’s population. First, and most significantly, the shares of the extreme and moderate poor in the region’s population have fallen from over half in 2002 to less than an eighth in 2015 (figure O.2). While China has led the way in this reduction—with its
rate of extreme and moderate poverty now below 7 percent (down from about 58 percent in 2002)—the improvements have cut across the region. Malaysia and Thailand have virtually no extreme or moderate poverty by these measures. Indonesia has more than halved the share of its population in these categories since 2002—to about 31 percent in 2016. And Vietnam has reduced its share of poor to just over 8 percent in 2016, down from almost 70 percent in 2002.

Economic governance

The region’s reputation for credible and capable economic management can be seen by looking at “government effectiveness,” which is a composite measure of “the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.”

Much of developing East Asia does well on this indicator relative to other middle-income countries, a significant change from the mid-1990s, when developing East Asia ranked significantly below other lower-middle- and upper-middle-income countries (figure O.3). By 2016, the region’s overall ranking had surpassed that of middle-income country comparators (although specific countries differ in their rankings).

Changing times, rising challenges

Changes in the global economic environment, coupled with shifts in the countries themselves, are raising questions about the continued efficacy of the East Asian “growth with equity” model in underpinning the region’s transition from middle-income to high-income status. Slowing growth in global trade and shifts in its patterns, rapid technological change, and evolving economic circumstances within countries all present challenges to sustaining the past success in spurring productivity growth, fostering inclusion, and enhancing the effectiveness of the state.
Slowing productivity growth

As noted earlier, East Asia’s development model has helped sustain strong productivity growth for decades. Macroeconomic stability enabled countries to attract foreign direct investment (FDI) and remain resilient to shocks over time. Policies that favored export-oriented manufacturing also facilitated structural change, allowing labor to move from relatively low-productivity (mostly subsistence) agriculture to manufacturing. And human capital investments, with their focus on basic education, prepared significant shares of the population to contribute to export-oriented growth. Since the early 2000s, within-sector productivity growth has also been a driving force in East Asian economic growth, owing to increased participation in global and regional value chains as well as to manufacturing innovations supported by FDI inflows and the progressive deepening of the region’s capital markets following the Asian Financial Crisis.

As in much of the world, however, productivity growth appears to have slowed across developing East Asia in the aftermath of the Global Financial Crisis. A key challenge will thus be to reactivate productivity growth in the face of a changing global and regional environment by addressing ongoing weaknesses in trade, innovation, and financial sector policies.

Trade integration is flagging

The slowing of global trade is a major challenge to further integration as a force for productivity growth (figure O.4). Beyond the effects of the Global Financial Crisis, the relationship between trade and income appears to have weakened over time. Several factors have been put forward for the slowing growth in global trade: (a) the maturing of global and regional value chains in the 2000s, partly because of technological change; (b) changes in the composition of GDP, particularly the falling share of investment in GDP; and (c) the slowing pace of trade liberalization and the recent rise of protectionism, including the possibility of trade wars.

Although each of these interrelated factors has played a role in the global trade slowdown, recent analysis indicates that the most significant contributor is the decreased pace of expansion of global value chains in the 2000s, especially since the Global Financial Crisis (Constantinescu, Mattoo, and Ruta 2018).

This challenge is exacerbated by two weaknesses in the trade regimes of many countries in the region. First, the economies of developing East Asia have pursued open trade policies for goods but have been much less willing to open their services sectors to trade and foreign investment flows, even between each other. This asymmetric opening of East Asia’s trade between goods and services is illustrated in figure O.5, which maps countries’ levels of tariff protection on goods imports against a measure of services sector protection. Other than Cambodia and Mongolia, all countries in the region are in the upper-left quadrant of the figure (or close to it), indicating that their levels of tariff protection on goods are at or below the global median, whereas their
levels of services sector protection are above the global median.

Services trade can be a powerful engine for productivity growth, including through its effects on extending value chains and its links with ongoing technological change.9 Services sector reforms in several low- and middle-income countries—such as fewer restrictions on foreign firm entry, ownership, and operations—have led to growth in both domestic and foreign investment. Local manufacturing firms are no longer at the mercy of inefficient (public or private) monopolies and have access to better, newer, more reliable, and more diverse business services and technologies via a wider range of domestic and foreign providers.

The second weakness in these countries’ trade regimes is that, despite their increasing numbers (36 at last count), East Asia’s preferential trade agreements (PTAs) are generally “shallow.”10 For example, even some policy areas covered by World Trade Organization agreements—such as public procurement, subsidies, and state trading companies—are not included in most East Asian PTAs.

This lack of depth in the region’s trade agreements matters for productivity growth because it has reduced the pressures to further lengthen value chains. Signing “deep” PTAs doubles trade in parts and components and increases reexported value added by about 22 percent (Laget et al. 2018). The intuition is that when trade agreements extend to areas such as protection of foreign investment and intellectual property rights and stronger competition policies, they contribute to greater specialization, which in turn is linked to higher productivity.
Innovation is constrained

Reduced potential for manufacturing growth, arising in part from technological change, may limit innovation as a force for productivity growth. The shares of manufacturing value added and employment have been peaking both at lower levels and at lower per capita incomes than in earlier periods. In most of today’s high-income economies, the peak share of manufacturing employment was almost twice as high as in today’s lower-middle-income economies—a pattern seen in East Asia, too. Moreover, the share of manufacturing in GDP has fallen globally and in East Asia, in both high-income and middle-income countries. One reason could be that technological change is leading to professional service inputs making up an increasingly large share of manufactures, which in turn is resulting in some reshoring of manufacturing to more-advanced economies (Hallward-Driemeier and Nayyar 2017). If this “premature deindustrialization” trend is real and persists, it does not augur well for the ability of East Asia’s lower-middle-income countries to emulate their more affluent predecessors’ success in relying on manufacturing exports to propel growth.

Technological change—the spread of information and communications technology (ICT) (termed “Industry 3.0” in reference to the third industrial revolution) as well as the emergence of new physical, biological, and advanced digital technologies (termed “Industry 4.0”)—is also likely to continue. This trend could further solidify the advantages of the high-income economies and China, which remain the dominant exporters across major manufacturing sectors. It could also further weaken the impetus for manufacturing-led productivity growth in the region’s middle-income economies (other than China). In all five of the main manufacturing sector groups (low-skill, labor-intensive tradables; medium-skill global innovators; high-skill global innovators; commodity-based regional processing; and capital-intensive regional processing), most of the top 10 exporters are still high-income economies, along with China (Hallward-Driemeier and Nayyar 2017). Emerging technologies could also lead to the reshoring of production by reducing the importance of wage competitiveness (with robotics and the move to “smart factories”), limiting the potential for scale economies with an emphasis on customization (with 3-D printing), and expanding the role of services in the manufacturing process. Although these technologies are still nascent, their potential could pose a challenge for developing East Asia (other than China) to spur productivity by deepening its manufacturing footprint.

Analysis of the Global Innovation Index (GII) indicates that while much of developing East Asia performs at or above levels corresponding to their income levels, their national innovation systems must be upgraded if innovation is to contribute more significantly to productivity growth. Although investment in research and development is important to fostering innovation, a broader set of enabling factors is needed for an effective national innovation system (Cirera and Maloney 2017). These comprise (a) factors that support the accumulation of knowledge and other forms of capital; (b) firm capabilities and incentives to innovate, including management capabilities and protection of intellectual property; and (c) government capabilities to formulate and implement innovation policies.

Countries in developing East Asia will therefore need to address multiple constraints, albeit in a phased manner, to ensure that innovation continues to contribute to raising firm-level productivity growth. Detailed analysis of the GII highlights which challenges are likely to be binding in each of the seven East Asian countries included in the GII rankings. All except Malaysia rank lower in innovation than the GII’s median country and below the level predicted by their per capita GDP on at least one of the GII’s five “input” pillars: institutions, human capital and research, infrastructure, market sophistication, and business sophistication (table O.1). Cambodia, Indonesia, and Thailand stand out as falling short on most or all of the different pillars. Looking across pillars, most of the seven countries
underperform on institutions and, to a lesser extent, on human capital and business sophistication. Unbundling each of these pillars as defined in the GII shows where the shortfalls are most pronounced. On institutions, for example, shortfalls are most marked with respect to countries’ regulatory and business environments, with indicators in all countries in the region (including Malaysia, on regulation) falling below both the median country’s ranking and the income-predicted benchmarks.14

**Access to finance is limited**

Capital markets in the larger developing East Asian economies have been deepened since the Asian Financial Crisis through growth in issuance activity, increased use of equity and corporate bond issues, and broader use of domestic markets relative to international and intraregional markets. These developments have boosted productivity through better access to capital for large firms. They have also helped to make financial systems more resilient to some of the risks that precipitated the crisis. Despite these important developments, access to capital markets still tends to be restricted to only the largest firms.15

Small and medium enterprises (SMEs) remain important contributors to employment and output in most of the region’s economies, however. In the economies at the lower end of the middle-income spectrum, such as Cambodia, enterprises that employ fewer than 100 persons account for almost 60 percent of total sales and almost three-quarters of total employment in the industrial and services sectors. Even in Indonesia and the Philippines, more than two-thirds of total sales and 37 and 58 percent of total employment, respectively, are accounted for by enterprises with fewer than 100 employees. At the same time, these enterprises are more likely than large firms to cite access to finance as among the most significant constraints they face. Among medium-size firms (those with 20–99 employees), almost a quarter in Indonesia and one-seventh in Vietnam highlight access to finance as a major constraint, compared with 18 percent and 9 percent of large firms in those countries, respectively.16

However, success in improving SME access to finance in developing East Asia, as elsewhere, has been limited. Several East Asian economies, both developing and advanced, have set up SME capital markets, and in some cases, their scope has become large. The experience of China; Hong Kong SAR, China; and Taiwan, China—which have the largest of these markets in East Asia—suggests that despite their focus on SMEs, these markets still tend to serve larger firms.17
Inclusion at risk

The early focus of the region’s policy makers on agricultural development and labor-intensive manufacturing—along with their emphasis on avoiding macroeconomic crises (at least until the years that preceded the Asian Financial Crisis)—ensured that the resulting growth was inclusive. When countries across developing East Asia were mainly low income, their populations were predominantly rural and agricultural. Promoting agricultural development was a critical pathway to achieve growth and poverty reduction.

Export-oriented manufacturing, similarly, helped deliver economic growth and jobs for low-skilled labor. Coupled with rising productivity in agriculture, this export orientation helped propel countries’ structural transformation, creating regular and relatively well-paying employment for low-skilled workers who moved from work in rural areas into urban-based manufacturing. Low-skilled labor also benefited from backward and forward linkages in agriculture and labor-intensive manufacturing.18

With changing economic circumstances, including growing affluence across the region, the East Asian development model seems at risk of delivering less effectively on inclusion. Despite the region’s remarkable success in reducing income poverty, inequality rose through much of the early 2000s and has remained high in several countries. China, Indonesia, and Malaysia all have Gini coefficients over 0.4, considered high by international standards.19 And it is likely that standard measures do not capture the concentration of wealth at the top of the income distribution.

People’s concerns about inequality are also rising. Significant majorities of the region’s population—more than 90 percent in China and more than half in the Philippines—now think that income differences in their own countries are too large (World Bank 2018b). In Indonesia, 89 percent of those surveyed consider it to be quite or very urgent to address inequality (World Bank 2016a). And in Vietnam, disparities in living standards were cited as a concern by a majority of those surveyed, with young people most concerned about income and nonincome inequalities (World Bank 2014). These perceptions are contributing to a sense that opportunities for upward mobility—long a hallmark of East Asia’s development experience—may now be becoming scarcer.

Technological change is accelerating

These worries about rising inequality are being reinforced by the impact of rapid technological change on labor markets. Although the precise pace at which several advanced technologies will spread is hard to predict, ICT is already deeply entrenched. These advances—so-called Industry 3.0—are seen most clearly in the spread of mobile phones and the internet across the region. Despite their diffusion, inequalities in access across and within countries remain a concern. Workers who lack access to digital technology and the ability to use it may find themselves falling further and further behind as technological change proceeds.

More broadly, technological change is raising the demand for more advanced skills in labor markets across developing East Asia, increasing the likelihood that workers with poor education or weak skill sets could be excluded. The advent of the so-called fourth industrial revolution, or Industry 4.0, which comprises physical, biological, and advanced digital technologies, is likely to further raise the premium on skills.20 Cheaper and more user-friendly robots, for example, offer the prospect of productivity increases while substituting for labor, particularly at the lower-skill end of the market. Advances in artificial intelligence and machine learning will change the way knowledge work is organized and reinforce incentives to automate. Similarly, additive manufacturing (such as 3-D printing) will allow for the customization of production closer to consumers, both reducing the importance of scale economies in production and disrupting value chains.
The increasing adoption of all these technologies in labor-scarce high-income economies and in China could lead to reshoring of their production, marking a move away from the offshoring and fragmentation that currently characterizes much of manufacturing. These trends could further reduce the demand for low-skilled labor in middle-income East Asia, which is especially worrying for countries such as Cambodia, Myanmar, and Vietnam.

Evidence on the pace of adoption and impact of Industry 4.0 technologies is still sparse. But the price of these technologies, including advanced robotics, is falling rapidly. Consequently, the stock of industrial robots has risen rapidly in advanced economies, including Japan and Korea. China also has seen a sharp rise in its number of industrial robots, although the density of these robots (relative to the number of manufacturing workers) is still below that of Korea and other advanced economies in the region (figure O.6). China’s pace of automation will be particularly important in determining industrial location, productivity, and labor market outcomes—both within China and across the region. While rising labor costs are increasing incentives for Chinese manufacturers to offshore some activities, thus lengthening regional value chains, continued declines in the price of industrial robots will make reshoring to China more profitable. It is not yet clear which of these competing forces will win out.

Policy makers in developing East Asia, therefore, face three sets of challenges to promoting inclusive growth in the face of technological change: skills; access to digital technologies; and adequate social protection for those unable to make the necessary economic transitions.

**FIGURE O.6 Use of industrial robots in manufacturing is increasingly important in several East Asian economies**

<table>
<thead>
<tr>
<th>Country</th>
<th>a. Number of robots</th>
<th>b. Number of robots per 1,000 employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan, China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: International Federation of Robotics and International Labour Organization databases, as estimated in Mason, A., V. Kehayova, and J. Yang, “Trade, Technology, Skills, and Jobs: Exploring the Road Ahead for Developing East Asia,” background paper for this study (World Bank, Washington, DC, 2018).
Skills development is lagging

Despite the progress developing East Asia has made in increasing access to education, with noteworthy upward mobility in education over the past 40 years (Narayan et al. 2018), many countries still face challenges. Specifically, whereas 40 percent of students in developing East Asia are realizing impressive learning outcomes (achieving at or above Organisation for Economic Co-operation and Development [OECD] levels), the other 60 percent still face significant challenges in building basic foundational skills. Even where students are demonstrating strong learning outcomes, countries face continuing challenges in endowing their populations with the advanced skills—higher-order cognitive skills, socioemotional skills, and digital literacy—needed to be competitive in the 21st-century economy.

Moreover, inequalities in educational opportunities persist across socioeconomic groups in most countries. Although progress has been made in closing gaps in access to education between the poor and the nonpoor—especially in basic education—stark differences in access remain at the secondary level and beyond. Inequalities in educational opportunities are also reflected in gaps in learning outcomes across socioeconomic groups. Students from poorer families consistently demonstrate lower proficiency levels in reading, math, and science than wealthier students (figure O.7). Even when students from poorer backgrounds complete more schooling, they still experience learning and skills deficits relative to their wealthier counterparts. These skills gaps will create challenges for those individuals to participate successfully in their countries’ labor markets as their countries develop.

Access to digital technologies remains uneven

Ensuring broad access to digital technology is still a challenge across much of developing East Asia. Despite the rapid expansion in the use of ICT across the region (with more cellphones than people in several countries), some countries still lag. This digital gap is particularly stark in internet access, as proxied by internet use. For example, internet use in the Lao People’s Democratic Republic, Mongolia, and Myanmar is still only 20–30 percent—far lower than in China, Malaysia, and the Philippines.

There is also a digital divide within countries. Recent estimates indicate that about 1.7 billion people lack access to broadband, about 1.2 billion are without internet, and 400 million do not have mobile phones. Even in China, nearly half the population still lacks access to the internet. Moreover, data from Indonesia, Mongolia, Myanmar, the Philippines, Thailand, and Vietnam show consistently low internet use among poor households—both in absolute terms and compared with middle class or even economically secure households (figure O.8).

Support for making economic transitions is limited

Older workers; poor and economically vulnerable populations; and those from more remote, less-developed regions (that is, those
with lower-quality education) may be particularly vulnerable to the changes that result from technological advances and shifting trade patterns. Putting in place or strengthening systems of support—training and skills upgrading for current workers and safety nets for newly unemployed or redundant workers—to help those who are poorly equipped to make the transition to more skills-based, technology-driven economies will present several challenges for developing East Asian countries:

• **Low social spending.** Overall public spending on social sectors in developing East Asia remains low as a share of GDP compared with that of high-income economies and all other low- and middle-income regions (figure O.9), as is spending on the sorts of social safety nets and employment support programs that support transitions to more skill-intensive occupations.

• **Patchy safety net coverage.** Coverage of safety nets in developing East Asia is also relatively low, at least compared to other middle-income regions.

• **Limited program focus.** The region’s social protection and labor programs focus mainly on structural conditions (such as poverty); on specific groups (such as youth, elderly, and the disabled); and on access to basic services (such as health care) as opposed to economic transitions. Only a small share of active labor market programs address unemployment, for example, while unemployment insurance programs only exist in a subset of countries and cover only a small share of the unemployed (Betcherman and Moroz 2018).

### State effectiveness challenged

Across much of developing East Asia, good economic governance has supported economic stability and basic service delivery and thus has contributed to both growth and inclusion. However, the challenges of enhancing state effectiveness—defined as improving the capacity of government to set objectives and attain them—are now more significant for developing East Asia than they were at earlier stages of development.

The political economy challenges that governments face during the transition from middle-income to high-income status are more complex. Moreover, as countries seek to build increasingly affluent, middle-class societies, they will face increasing demands for the delivery of more and better-quality services, including from a larger and more vocal middle class. These challenges are accentuated by the limitations many countries in the region face in terms of limited voice and accountability, uneven bureaucratic quality, and low public revenues.

### Growing political economy challenges

Three political economy challenges are particularly significant for developing East Asia. First, there is a risk of policy capture. Rapid growth and the associated policies that helped developing East Asian countries achieve
middle-income status have generated winners and losers. The winners—whether business or political elites—often have a strong interest in maintaining the status quo. In developing East Asia, these winners have included both private business interests and state-owned enterprises. To the extent that these groups perceive reforms that could increase productivity or promote inclusion as going against their interests, they may use their power to impede the reforms’ implementation.

Second, it may be more difficult to build the broad-based coalitions required for deeper reforms. In middle-income countries, new political interest groups emerge that were less pronounced when the countries had lower incomes, and these groups may make the formation of reform coalitions more difficult. Increasingly divergent interests arise—for instance, between urban and rural residents, between business and labor (or within labor between formal and informal sector workers), and between a growing middle class and the poor and vulnerable.

Third, as countries get richer and their economies more complex, traditional “deals-based relationships” are no longer an adequate substitute for “rules-based contract enforcement” (World Bank 2017c). In low-income economies, where institutional capacity is low and markets and production networks are relatively small, deals-based relationships may actually enable economic activity. In middle-income settings, however, these relationships can risk impeding competition and productivity while undermining inclusion.

**Rising societal expectations**

Countries’ transition from middle-income to high-income status brings with it more people who are economically secure and middle class and, with them, rising societal expectations about the quantity and quality of public services. As countries develop, these growing economic classes often create coalitions to demand better governance and public services (World Bank 2017c). If governments lack the capacity to deliver such services, these groups—with their growing economic and political clout—may opt out of public service utilization. This already appears to be happening in some developing East Asian countries. This process of opting out can result, in turn, in a retreat of these groups from the policy
space, from paying taxes, and from more generally holding governments accountable.

These challenges of state effectiveness in middle-income countries can be overcome if influence and incentives are balanced through more transparent policy making processes, suitable accountability mechanisms, and robust public agency design. However, most countries in developing East Asia face challenges in these areas as well. Mechanisms for citizen voice and participation generally remain weak, as do government transparency and accountability. And the quality of policy making and implementation varies widely across levels and functions among the region’s governments.

**Voice, transparency, and accountability**

Countries in the region generally rank low on standard measures of voice and accountability compared with other middle-income countries, and these rankings have changed little over time (figure O.10). Measures that capture different dimensions of voice—including people’s ability to have their views represented in country legislatures or to access formal avenues for participation in regulatory decision making—show similar results, as do measures of transparency in government—although with differences across countries.

Data on institutional checks and balances suggest that constraints on executive decision making have increased moderately in developing East Asia over the past two decades (figure O.11). As a result, the region is now roughly on par with all lower-middle-income countries on average, although governments in the region still face fewer constraints on decision making than do governments in upper-middle-income countries globally. There is, thus, considerable scope for countries in developing East Asia to strengthen voice, make information on policy more available and actionable, and enhance checks and balances.

Promoting greater voice and transparency in policy processes and strengthening accountability can contribute to more effective, sustainable policy making. As noted in the *World Development Report 2017: Governance and the Law*, “A more
A contestable policy arena tends to be associated with higher levels of legitimacy and cooperation. When procedures for selecting and implementing policies are more contestable, those policies tend to be perceived as ‘fair’ and to induce cooperation more effectively” (World Bank 2017c).

Indeed, evidence from the region indicates that greater citizen participation has contributed to greater buy-in for policies as well as better outcomes. Villagers in Indonesia reported significantly higher satisfaction, increased knowledge, and higher willingness to contribute to projects when they were allowed to cast votes directly in plebiscites than when traditional decision-making processes, in meetings run by representatives, were implemented (Olken 2010). Evaluations of elections in rural Chinese villages similarly found that these served to increase public goods provision, reduce corruption, and reduce income inequality (Martinez-Bravo et al. 2011; Martinez-Bravo, Miquel, and Qian 2012).

**Bureaucratic quality**

Meritocratic hiring and promotion of staff are important inputs into the quality of policy making and implementation—what *World Development Report 2017: Governance and the Law* calls “robust public agency design” (World Bank 2017c). These inputs can play a particularly valuable role in mitigating policy capture and increasing government responsiveness if combined with appropriate accountability mechanisms and commitment to rules-based contracts (World Bank 2017c).

Data on meritocratic hiring and promotion in developing East Asia paint a mixed picture, however (figure O.12). On the one hand, most countries in the region do well with respect to having meritocratic and competitive selection processes (countries in the upper-right quadrant of figure O.12, panel a). On the other hand, political and personal connections still appear to play important roles in civil service recruitment (countries in the upper-right quadrant of figure O.12, panel b). Based on these measures, connections are particularly important in Cambodia, Lao PDR, Mongolia, and Vietnam, indicating that meritocracy in their civil services is still tempered by personalism.

![Figure O.12 Meritocratic hiring of civil servants is still tempered by personalism in developing East Asia](image)

Source: Quality of Government Expert Survey data (Dahlström et al. 2015), as used in Malesky, E., “Institutions and Governance in Asia’s Middle-Income Countries,” background paper for this study (World Bank, Washington, DC, 2018).

Note: “Developing East Asia” includes the following: Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Thailand, and Vietnam (with each represented by a light blue dot). The dashed lines show the global averages for each indicator.
The transition to high-income status
As average incomes and societal expectations grow, financing higher-income, increasingly middle-class agendas will be a key challenge. This includes raising resources to increase the availability and quality of basic services for the middle class and the aspiring middle class and to finance investments to promote inclusive growth, including through better learning outcomes and enhanced skills, improved access to digital technologies, and more effective social protection systems. Governments in developing East Asia will need not only to raise more revenue but also to spend that revenue more effectively.

Revenue mobilization is low in developing East Asia relative to both high-income and middle-income economies in other regions (figure O.13). The region’s low revenue mobilization is driven by low tax collection, reflecting complex tax codes (which, among other things, include numerous exemptions); weak tax administration; narrow tax bases; and the high costs of tax compliance. Many countries in developing East Asia also continue to rely extensively on indirect taxation, including value added taxes (VAT), excise taxes, trade taxes, and in a few cases, nontax, resource-related revenues (IMF 2017; World Bank 2017a), which tend to be more regressive than direct taxes. However, direct taxes—and personal income taxes in particular—tend to make up only a small share of revenues, particularly relative to high-income economies.

Navigating a changing world: directions for policy
Policy makers in developing East Asia will confront familiar as well as new challenges as they navigate their economies through the coming decade. In the face of these challenges, what has come to be known as the East Asian development model—a combination of outward-oriented growth, human capital development, and sound economic governance—still has much to recommend it, both to the countries at the lower end of the middle-income scale as well as to those that are closer to high-income status. But, irrespective of countries’ levels of income and development, this strategy that has worked so well to date must be adjusted if countries are to sustain high growth, ensure that development remains inclusive, and deliver on the rising expectations of their
increasingly middle-class societies. The pace at which global and regional forces are evolving, particularly those affecting trade and technology, only raises the urgency for action.

Although maintaining the outward orientation of their economies will remain central to the region’s prospects, changes in trade patterns and technology are shifting the basis for economic competitiveness and comparative advantage. Human capital investments will continue to be critical, but the nature of the skills needed for countries to succeed in the 21st century is changing, with rising demand for workers with higher-order cognitive, socioemotional, and technical skills. Designing and implementing sound economic policies, while still essential, will have to be complemented in ways that meet the needs and expectations of aspiring high-income and increasingly middle-class societies, whether through better service delivery or greater accountability. Wherever countries currently are in the middle-income spectrum, these challenges must be addressed if East Asia is to continue its success in raising its people’s living standards into another decade.

As always, action is needed on many fronts. And while priorities will necessarily have country-specific elements, several directions for policy are especially pertinent to the challenges identified in this report and apply broadly across the region. These directions fall under five pillars:

1. Boosting economic competitiveness
2. Building skills
3. Promoting inclusion
4. Strengthening state institutions
5. Financing the transition to high income.

Moreover, these reform priorities are of two types: (a) emerging policy priorities: reform areas that will require special emphasis as countries strive to move from middle-income to high-income status and (b) foundational policies: reform areas that countries have been pursuing for some time and that remain critical to providing a sound basis for growth and development. The key elements of this policy agenda are summarized in table O.2.

Pillar 1: Boosting economic competitiveness

Reversing the slowdown in productivity in many of East Asia’s developing economies requires that they redouble their efforts to become more competitive, an imperative heightened by ongoing changes in global trade and technology. The emerging policy priorities to boost economic competitiveness include:

- Reforming services sectors
- Deepening trade agreements
- Broadening innovation policies
- Improving SME access to finance.

Maintaining open trade policies remains a priority for the region, with two areas now emerging as particularly important. The first is services reform, on which the region has lagged relative to goods trade as well as compared to what other developing regions have achieved. Yet trade in services offers significant new opportunities, including in relation to technological developments. While the specifics of the reform agenda will depend on country circumstances, reducing entry barriers and fostering competition should be their main aim. Regional approaches, including through the ASEAN Economic Community, offer promise in finding the right regulatory balance between promoting service exports and promoting domestic access to services.

Second, it will be important to expand the scope of regional trade agreements to achieve such goals as better protection of foreign investment and intellectual property rights, a more competitive environment through competition policy and the regulation of state-owned enterprises, and easier movement of people and capital across borders. These and other “deep” provisions embedded in trade agreements can contribute to the further development of global value chains. They are even more relevant as developing East Asia not only seeks to specialize in low value-added tasks like product assembly but also participates increasingly in the production of more sophisticated goods and services. The “open regionalism” embodied
in the Asia-Pacific Economic Cooperation (APEC) illustrates a sound approach. Deeper regional integration also offers a potential way of counteracting the current global economic forces that are pushing toward greater protectionism.

Another emerging priority is for countries to broaden their view of innovation policies, looking beyond the supply side (that is, science, technology, and research and development policies) to build effective national innovation systems. An important part of this shift in perspective, given the rapidly changing technological environment, will involve promoting faster diffusion of digital (Industry 3.0) technologies. Ensuring wider diffusion of broadband technology across the population, and to businesses in particular, will require sectoral measures that help to provide higher-quality and competitively priced broadband access, including appropriate regulatory reforms. Upgrading managerial practices also deserves special attention in supporting innovation in the region, both because of the importance of management quality in determining the efficacy of innovation investment and because of its pervasive weakness in the region.

Priority must also be given to developing innovative measures to address the informational constraints that limit SMEs’ access to finance. Digital technologies and platforms

---

**TABLE O.2 Policy directions for a resurgent East Asia**

<table>
<thead>
<tr>
<th>Policy priority type</th>
<th>Boosting economic competitiveness</th>
<th>Building skills</th>
<th>Promoting inclusion</th>
<th>Strengthening institutions</th>
<th>Financing the transition to high income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging policy priorities</td>
<td>• Reform services sector policies</td>
<td>• Develop higher-order cognitive and socioemotional skills, including through technology-enabled learning</td>
<td>• Expand employment services, including job search assistance and labor market information</td>
<td>• Expand mechanisms for citizen voice and participation</td>
<td>• Expand the tax base by introducing or expanding</td>
</tr>
<tr>
<td></td>
<td>• Deepen trade agreements</td>
<td>• Build continuous skills development systems, including TVET and lifelong learning programs, with close links to private sector employers</td>
<td>• Broaden unemployment benefits</td>
<td>• Increase government transparency</td>
<td>- direct taxes, including personal income taxes, property taxes, and/or wealth taxes</td>
</tr>
<tr>
<td></td>
<td>• Increase competition and lower entry barriers for provision of broadband</td>
<td>• Enhance technical capacities and digital literacy</td>
<td>• Integrate social protection systems linked to employment transitions</td>
<td>• Strengthen accountability in policy making processes, including through internal checks and balances and regional and international agreements</td>
<td>- taxes that reduce negative externalities</td>
</tr>
<tr>
<td></td>
<td>• Attract private capital to expand broadband provision</td>
<td></td>
<td>• Expand access to digital technologies and make them more affordable</td>
<td></td>
<td>• Reduce tax competition, including through regional cooperation</td>
</tr>
<tr>
<td></td>
<td>• Upgrade managerial capabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Expand the scope of credit registries, including with online platforms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reform secured transactions systems</td>
<td>• Strengthen learning outcomes in primary and secondary schools, including for lagging groups and regions</td>
<td>• Reform generalized subsidies, such as those on food and fuel</td>
<td>• Strengthen bureaucratic quality through meritocratic hiring and enhanced performance management, including via digital platforms</td>
<td>• Simplify tax codes, including for corporate taxes and VAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Work progressively to universalize primary and secondary education, where relevant</td>
<td>• Expand social assistance programs targeted to the poor and vulnerable</td>
<td>• Strengthen tax administration</td>
<td>• Strengthen tax administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Broaden access to university education</td>
<td>• Reorient public spending to better promote inclusive growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: TVET = technical and vocational education and training; VAT = value added tax.*
can help in enhancing these approaches. Two schemes hold particular promise: (a) expanding information-sharing mechanisms such as credit registries and bureaus, and (b) modernizing secured transactions systems so that assets such as accounts receivable can be used as collateral by SMEs.

While focusing on these emerging priorities, it will be important that countries not lose sight of the foundational policies that underpin their economic competitiveness. Indeed, ongoing efforts to improve countries’ overall business climates, reform their regulatory environments, and strengthen their financial sector infrastructure will all continue to be critical to strengthening their positions in relation to deepening trade integration, spurring innovation, and improving SMEs’ access to finance.

**Pillar 2: Building skills**

Successfully navigating the changing economic environment will require that countries’ populations be increasingly prepared to meet the rising demand for more-advanced skills. The nature of work is already shifting and will likely do so at an increasingly rapid pace as technology changes. Emerging policy priorities in this area thus include:

- Developing higher-order cognitive and socioemotional skills among current and future workers
- Building continuous skills development systems to enable lifelong learning and skills upgrading
- Enhancing people’s digital and technical capabilities.

Building higher-order cognitive and socioemotional skills will be increasingly important to ensure that workers are productive and competitive in rapidly changing economies. Development of these skills needs to start early, implying that efforts to broaden access to early childhood development will remain important. The foundations for more-advanced skills can then be further developed and nurtured over the learning life cycle. In recognition of evolving skills needs, a growing number of countries, including Korea and Singapore, are placing greater emphasis on developing problem solving, creative thinking, socioemotional, and other higher-order skills. Given the likely speed of change, it will also be important for countries in the region to explore innovative approaches to skills development, including through technology-enabled learning platforms.

As technology and employers’ demands for skills continue to change, it will be important for countries to build skills development systems to enable learning and skills upgrading over people’s entire working lives. Technical and vocational education and training (TVET) programs can play a part of countries’ broader skills development strategies, as can other programs that support lifelong learning. To be effective, such programs must have greater market relevance and closer links to private sector employers than has generally been the case in the past. Building public-private partnerships that foster enterprise leadership in curricular design and program delivery will thus be critical. Governments have a key oversight role, however, that includes monitoring program quality, encouraging firm accountability, and ensuring a results orientation in public financing.

As technologies change and workplace demands become more sophisticated, ensuring that workers can develop the necessary digital and technical capabilities will also be important. While there will be a growing need for people with technical expertise in the design, operation, and maintenance of digital technologies, a priority will be to promote digital literacy, especially among groups whose economic prospects are currently limited by lack of access to the digital economy.

For most countries in the region, building advanced skills among their populations will require a continued focus on foundational measures to develop basic skills, because learning outcomes among students are often inadequate, particularly among those from poor and vulnerable families and in remote areas. Lessons from high-performing education systems in East Asia and elsewhere suggest that improving
A Resurgent East Asia

learning outcomes will require an emphasis on the following (World Bank 2018a):

- Aligning institutions to ensure that the basic conditions for learning, such as curricula and teaching materials, are in place
- Strengthening teacher selection and preparation
- Ensuring adequate and effective public spending on basic education, including in remote settings and among disadvantaged groups
- Emphasizing support to early childhood education, health, and nutrition
- Instituting regular assessments to diagnose and address challenges.

Continued efforts to achieve universal primary and secondary education and to broaden access to—and improve the quality of—university education will also be important to building the skills needed for the 21st-century economy.

Pillar 3: Promoting inclusion

Social policies will also need to take account of how technological change is altering the demand for skills. In particular, governments in the region will need to put in place stronger and more nimble systems to support workers who have difficulty adjusting to rapidly changing economic circumstances. Three emerging priority areas are especially important to promoting inclusion in this context:

- Strengthening employment support services to assist workers displaced by technological change
- Broadening unemployment benefit schemes by linking them to economic transitions
- Enabling affordable access to digital technologies for those currently excluded.

Employment services are among the active labor market programs (ALMPs) that link beneficiaries with income-generating opportunities. Expanding their scope can complement the traditional personal and family network-based process of job search and matching, which can disadvantage poor and vulnerable workers. Their relevance is likely to be greater in economies with higher shares of wage earners and greater administrative capacity; such economies can consider providing “extended” services by linking employment support to training and skills development programs and to unemployment assistance or insurance. Nonetheless, even countries with lower capacity can focus on providing “core” employment services, including information on overall job market conditions and vacancies, basic job search assistance, and job placement services.

Unemployment insurance is relatively new in developing East Asia, with severance programs being the usual approach to dealing with unemployment. Nevertheless, countries should consider developing or expanding unemployment insurance systems, including by progressively broadening coverage to include self-employed workers, as has been done in Korea. Unemployment insurance programs could be linked not only to ALMPs to support workers’ reemployment but also to expanded and strengthened systems of social assistance to help prevent those who cannot make the skills transition from falling into poverty. Development of such integrated and “adaptive” social protection systems can be enabled using digital technologies—in some cases, by building on existing social registry platforms.

Increasing access to affordable digital technologies to those who currently lack it will also be important to fostering inclusion—helping them obtain real-time weather and price information, access markets, purchase consumer goods, engage in mobile banking, and, when needed, receive social benefits. Two sets of actions would enhance affordable access to digital technology. First, promoting market competition, private investment, and independent regulation has generally been effective in extending coverage and making digital technology access affordable. Second, where markets do not work well enough in extending digital infrastructure (as in rural and remote locations), mechanisms such as targeted subsidies to operators or licensing
of mobile and internet service providers with specific network rollout obligations are worth considering (World Bank 2016b).

In addition, continued attention to foundational policy reforms is required to make public spending a more effective force for inclusion. First, there is a need to reform inefficient and poorly targeted generalized subsidy programs, such as those for fuel and food, that keep consumer prices artificially low. While typically justified on the grounds that they support redistributional objectives, these subsidies commonly benefit better-off households rather than the poor and vulnerable.

Second, there is a need to expand and strengthen countries’ systems of social assistance to better protect the remaining poor and vulnerable. Although widespread income poverty is no longer the primary concern in developing East Asia, there is still a strong case for countries to have adequate and effective safety net programs.

Third, it will be important to reorient spending toward expanding public services, such as basic education and primary health care, that help promote equality of opportunity among the poor and vulnerable. Such spending has contributed to inclusion in Indonesia and Vietnam, and there is scope for it to make a difference elsewhere in the region, provided greater spending can contribute as well to higher-quality services. Part of this additional spending could be financed from reduced spending on generalized subsidies so as not to exacerbate fiscal pressures.

**Pillar 4: Strengthening state institutions**

To address the political economy challenges faced by middle-income countries and meet the demands of their increasingly middle-class societies, it will be important to increase the effectiveness of state institutions, particularly by enhancing government accountability. Three emerging priorities in this regard are as follows:

- Expanding mechanisms to promote citizens’ voice and participation
- Increasing government transparency
- Strengthening the systems of checks and balances.

With respect to voice, it will be important for governments to find ways to allow citizens to convey their views and contribute to policy-making processes through a range of institutional mechanisms. Several countries in the region have already put in place, or are implementing, measures aimed at increasing citizen voice, including public consultation, administrative measures, and voluntary compliance. The idea behind introducing such mechanisms is to enable citizens’ feedback to be integrated into policy-making processes. They also enable policy makers to gain valuable insights into people’s views and preferences. Moreover, evidence suggests that such measures have helped to reduce corruption and increase sustainability of reforms by improving stakeholders’ perceptions of enacted measures.

For mechanisms that enhance voice and participation to be effective, it is also necessary that accurate, accessible, and actionable information be provided, including through public access to government documents on existing or proposed laws and regulations and on government budgets. Indeed, people’s ability to participate constructively and effectively in policy-making processes depends on the timely availability of accurate information. As with mechanisms to enhance voice, several governments in the region have initiated measures to increase government transparency, including through passage of Freedom of Information legislation. And, as with voice, there remains considerable scope for increasing government transparency.

Strengthening checks and balances will be important to ensure that greater voice and transparency will lead to greater accountability on the part of the state. Multiple mechanisms can achieve greater accountability, and the precise choice of measures will depend on country circumstances. While electoral systems as well as judicial and legislative checks on the executive are the most direct mechanisms for promoting accountability, there are also other means. Broad business coalitions can play a significant role
in demanding government accountability (World Bank 2017c). International agreements and institutions can also contribute to greater accountability. Indeed, regional or multilateral agreements—for example, those made through ASEAN or through deep trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)—can serve as valuable (if imperfect) commitment mechanisms for governments.

Measures to increase voice, transparency, and accountability will need to be complemented by continued efforts to upgrade bureaucratic quality. These efforts include measures to increase merit-based selection and promotion of civil servants (instead of selection through political or personal connections and influence) and to improve public sector performance management. Several recent initiatives highlight how digital platforms can be used to enhance recruitment processes for civil servants, providing effective tools for implementing and monitoring the business of the state, thereby improving public sector performance.

**Pillar 5: Financing the transition to high income**

To succeed in transitioning to high-income status, countries in the region must mobilize additional fiscal resources to sustainably finance the needs of their increasingly middle-class societies. Emerging policy priorities for increasing revenues include measures to expand the tax base and to limit tax competition.

By expanding the tax base, there is potential both to better use existing taxes and to introduce new, less distortionary taxes. For example, many countries in the region could more extensively use direct taxes such as personal income taxes, property taxes, and wealth taxes—instruments that are used widely in high-income countries. Taxes that address negative externalities (such as those on tobacco, unhealthy foods, and pollutants) could also be used more, as they have the dual benefits of raising revenues while curbing activities that reduce people’s welfare.

Limiting tax competition—whereby countries offer increasingly generous tax incentives to attract or retain foreign investment—is likely to be most effectively achieved through coordinated action across countries, given the region’s economic integration. The ASEAN Economic Community, along with regional trade agreements, offer promising avenues for increased cooperation in this regard.

Measures to increase the tax base and reduce tax competition will need to be accompanied by continued attention to foundational measures to simplify countries’ tax systems and improve their tax administrations. Reducing exemptions (especially for VAT, where it is used), simplifying corporate income taxes, and increasing the ease of tax payment all represent promising approaches to tax system simplification. Such measures would contribute to reducing the costs of tax compliance and would likely raise revenue intake even if some tax rates were reduced. The efficiency and effectiveness of tax administration could also be enhanced by strengthening administrative systems and improving the enforcement of compliance. Again, digital technology platforms, coupled with countries’ efforts to raise bureaucratic quality, could help in these efforts.

Governments across the region will need to balance the inevitable trade-offs between promoting growth, fostering inclusion, and raising adequate revenues. Managing these trade-offs will reinforce the need for a new social contract, in which governments provide more and better public services in return for greater participation in and compliance with the tax system. Such a social contract would establish greater accountability on the part of governments for the quality of their spending decisions, thereby giving their citizens more of a stake in paying taxes and, more broadly, a greater sense of ownership in the ongoing transition of these countries from middle income to high income.

Developing East Asia’s economic success has been built on a combination of policies that fostered outward-oriented labor-intensive growth, strengthened people’s basic human
capital, and maintained sound economic governance. The East Asian “growth with equity” model has delivered rapid and sustained growth, raising countries in the region to middle-income status while lifting hundreds of millions out of poverty and into economic security. Changes in global and local economic forces, including shifts in trade and rapid technological change, are causing the region’s policy makers to reflect on how best to build on this progress. To successfully navigate these changes, they will have to confront both familiar and novel challenges—to boost countries’ competitiveness, build people’s skills, foster inclusion, and strengthen the institutions of the state. Although the precise nature and pace of change are uncertain, their direction is not, serving only to increase the urgency of reform. Policy makers across the region must act decisively or risk missing opportunities to sustain East Asia’s remarkable development performance.

Notes

1. In what follows, and unless otherwise specified in this report, East Asia and developing East Asia refer to these 10 middle-income countries: Cambodia, China, Indonesia, the Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, Thailand, and Vietnam.

2. Historical statistics are from the Maddison Project Database, version 2018 (Bolt et al. 2018). For more information, see the Maddison Project: https://www.rug.nl/ggdc/historicaldevelopment/maddison/.

3. All references to income classifications of low, lower-middle, upper-middle, and high-income economies use the World Bank Atlas method, adjusted over time. In 2016, these gross national income (GNI) per capita cutoffs were US$1,005 (low income); US$1,006–US$3,955 (lower-middle income); US$3,956–US$12,235 (upper-middle income); and US$12,236 (high income).

4. The main elements of this development model and its achievements were spelled out in Birdsall et al. (1993) for the so-called high-performing Asian economies. These economies consisted of the so-called newly industrializing economies (Hong Kong SAR, China; Korea; Singapore; and Taiwan, China) as well as Indonesia, Malaysia, and Thailand.

5. The “extreme poor” are those whose per capita consumption is below the international poverty line (US$1.90 per day at 2011 PPP), while the “moderate poor” are those whose per capita consumption is between US$1.90 per day and US$3.20 per day at 2011 PPP (also referred to as the “lower-middle-income class poverty line”).

6. “Government effectiveness” is defined according to the Worldwide Governance Indicators (WGI) database 2017 (http://www.govindicators.org). Measuring governance is difficult, and no single measure or indicator is perfect. For some purposes, it is useful to combine different data sources into an aggregate measure such as the WGI, while for other purposes the disaggregated underlying data are more useful. The World Bank has a range of tools to assess the quality of governance, including the Doing Business indicators (http://www.doingbusiness.org/), which benchmark the regulatory environment, cross-country enterprise surveys to assess the investment climate, and the Public Expenditure and Financial Accountability (PEFA) indicators to measure the performance of fiscal institutions. A number of nongovernmental organizations (NGOs) also measures various dimensions of governance in other ways. This report uses the WGI to inform discussion and analysis of governance-related issues and complements them with other indicators to provide a more comprehensive view. For a collection of the most important governance indicators, see https://govdata360.worldbank.org/.


9. Constantinescu, Mattoo, and Ruta, “Trade in Developing East Asia.”

10. Constantinescu, Mattoo, and Ruta, “Trade in Developing East Asia.”

11. “Smart factories” work by using technologies—such as artificial intelligence
(AI), advanced robotics, analytics, big data, and the internet of things (IoT)—and can run largely autonomously.

12. The GII annually ranks 127 countries by their capacity for, and their success in, innovation. Published by Cornell University, the European Institute of Business Administration (INSEAD), and the World Intellectual Property Organization in partnership with others, it uses both subjective and objective data from sources such as the World Bank, the World Economic Forum, and the International Telecommunication Union. The GII is computed by taking a simple average of the scores in two sub-indexes (the Innovation Input Index and Innovation Output Index) comprising a total of 80 indicators. For more information, see the GII website: https://www.globalinnovationindex.org/gii-2017-report.

13. The GII does not include three of the East Asian countries covered in this volume: Lao PDR, Mongolia, and Myanmar.

14. M. Iootty, “Assessing Innovation Patterns and Constraints in East Asia Region: An Introductory Analysis,” background paper for this study (World Bank, Washington, DC, 2018). As with all composite indexes, country ratings from the GII need to be interpreted with caution and combined with other information. For instance, the apparent inconsistency between the low ranking of these East Asian countries on the regulatory and business environment part of the GII’s institutions pillar and their relatively high ranking on government effectiveness in the WGI (see figure O.3 and accompanying discussion) arises from the differing components in each index. Moreover, as the example of institutions also highlights, a country’s ranking above the value of the median country and the predicted value based on its per capita GDP on a specific pillar does not necessarily mean it does well on each subcomponent of that pillar.

15. Abraham, Cortina, and Schmukler, “Corporate Financing in East Asia.”


17. Abraham, Cortina, and Schmukler, “Corporate Financing in East Asia.”

18. Findings on the benefits to low-skilled labor from World Bank (2013) and Mason, A., V. Kehayova, and J. Yang, “Trade, Technology, Skills, and Jobs: Exploring the Road Ahead for Developing East Asia,” background paper for this study (World Bank, Washington, DC 2018).

19. The Gini coefficient is the most commonly used measure of the inequality of the distribution of income (or consumption) in an economy. A Gini value of 0.0 indicates perfect equality, and a value of 1.0 indicates perfect inequality.

20. Changes in physical technologies emerging from advances in molecular-level engineering and high-tech manufacturing include advanced materials, advanced manufacturing (including advanced robotics), and additive manufacturing (or 3-D printing). New biological technologies are allowing for the manipulation of genes and DNA sequences to influence medical outcomes and correct genetic defects. Advanced digital technological change includes transformations in such fields as finance (fintech), the internet of things, and artificial intelligence. For details, see Bhaskaran, M., “Selected Global and Regional Megatrends and Implications for Developing East Asia,” background paper for this study (World Bank, Washington, DC, 2017).


References


The World Bank Group is committed to reducing its environmental footprint. In support of this commitment, we leverage electronic publishing options and print-on-demand technology, which is located in regional hubs worldwide. Together, these initiatives enable print runs to be lowered and shipping distances decreased, resulting in reduced paper consumption, chemical use, greenhouse gas emissions, and waste.

We follow the recommended standards for paper use set by the Green Press Initiative. The majority of our books are printed on Forest Stewardship Council (FSC)-certified paper, with nearly all containing 50–100 percent recycled content. The recycled fiber in our book paper is either unbleached or bleached using totally chlorine-free (TCF), processed chlorine-free (PCF), or enhanced elemental chlorine-free (EECF) processes.

More information about the Bank’s environmental philosophy can be found at http://www.worldbank.org/corporateresponsibility.
East Asia has been a paragon of global development success. The dramatic transformation of the region over the past half century—with a succession of countries having progressed from low-income to middle-income and even to high-income status—has been built on what has come to be known as the “East Asian development model.” A combination of policies that fostered outward-oriented, labor-intensive growth while strengthening basic human capital and providing sound economic governance has been instrumental in moving hundreds of millions of people out of poverty and into economic security.

Yet East Asia’s economic resurgence remains incomplete. More than 90 percent of its people now live in 10 middle-income countries, many of which can realistically aspire to high-income status in the next generation or two. But these countries are still much less affluent and productive than their high-income counterparts. Even as the region’s middle-income countries attempt to move up to high-income status, they confront a rapidly changing global and regional economic environment. Slowing growth in global trade and shifts in its patterns, rapid technological change, and evolving country circumstances all present challenges to sustaining productivity growth, fostering inclusion, and enhancing state effectiveness.

A Resurgent East Asia: Navigating a Changing World is about how policy makers across developing East Asia will need to adapt their development model to effectively address these challenges in the coming decade and sustain the region’s remarkable development performance.

“The world is changing. How do East Asia’s developing economies navigate this change? This is a commendable book on this topic—a must-read for policy makers, academia, and students who are interested in East Asia.”

— Chatib Basri, Former Minister of Finance, Government of Indonesia

“A Resurgent East Asia is a vital publication for the most successful region as it looks to the future and the expectations of its citizens. This study helps to identify the new areas of risk and to suggest ways to ameliorate them. In so doing, it is an invaluable resource for governments. Based on first-rate analysis, it is a must-read for policy makers and everyone interested in East Asia’s development prospects!”

— Danny Leipziger, Managing Director, The Growth Dialogue, and Professor of International Business, George Washington University

“This report delivers a careful and rigorous analysis of the strengths of East Asia’s ‘growth with equity’ development strategy. While noting the model’s success in lifting millions out of poverty, the report also warns of the looming challenge of maintaining growth with inclusion, and it highlights the need for countries to improve their social protection systems and ensure that opportunities are fair and available to all. A must-read for policy makers and development practitioners alike.”

— Ana Revenga, Senior Fellow, Brookings Institution