

BOX 2.1.1 Investment developments and outlook: East Asia and Pacific

Investment growth in the East Asia and Pacific (EAP) region has been stronger than in the average EMDE but has declined steadily over the past decade. Following a decline in 2010-14, investment growth in the East Asia and Pacific (EAP) region has since stabilized. To a large extent, the deceleration represents an necessary adjustment from previously elevated growth rates, which were temporarily boosted by the post-crisis government stimulus. In China, this process has involved economic rebalancing towards domestic consumption and the services sectors. In other economies, adjustment to lower commodity prices has been a factor. Investment needs remain sizable across the region, reflecting significant demographic and income shifts, and rapid urbanization.

During 2010-15, East Asia and Pacific accounted for almost one-half of the growth in global investment, and one-quarter of the global level. Investment growth has steadily declined from 12.1 percent in 2010 to 6.5 percent on average in 2015-16—well below the double-digit rates of 2003-2008. The slowdown has been broad based and reflected decelerating public as well as private investment. This box discusses the following questions.

- How has investment growth in the region evolved?
- What are the remaining investment needs?
- Which policies can help address investment needs?

The slowdown in investment growth in the EAP region was concentrated in China and commodity exporters. To some extent, the deceleration represents a necessary adjustment from high pre-crisis growth rates and the post-crisis policy stimulus. The process has involved economic rebalancing, from manufacturing industry to services, and from investment (in excess of 40 percent of GDP) and exports to domestic consumption. In other economies, the cycle in commodity markets, from a decade of high prices to recent weakness, has been a factor. Despite several decades of rapid investment growth, requirements in the areas of transport, health and education, and environmental protection, remain sizable across the region.

How has investment growth in the region evolved?

Investment growth in East Asia and Pacific has steadily declined—from 12.1 percent in 2010 to 6.5 percent on average in 2015-16. This is well below the region's double-digit growth rates of 2001-2008, but higher than in other EMDE regions. The slowdown was particularly pronounced in China (Figure 2.1.1.1). It reflected a deceleration in the public as well as the private sector, as the coordinated fiscal stimulus following the global financial crisis was unwound (especially in China).

In *China*, investment growth slowed sharply from a 22.8 percent peak in 2009 to 6.5 percent on average in 2015-

16. The deceleration reflected a rebalancing towards more sustainable growth. The rebalancing of the economy has involved a shift from capital accumulation (in excess of 40 percent of GDP) and exports to domestic consumption, and from manufacturing industry to services. By 2015-16, the drivers of investment growth have changed (Box 3.3). Large debt stocks resulting from record-high credit growth in 2010-13 continue to weigh on investment growth. Nevertheless, China's investment rate remains elevated at 43 percent of GDP in 2016.

Until 2015, *commodity importers other than China* faced investment headwinds from tight monetary, fiscal, and prudential policies that were designed to contain rapid credit growth. Also, the uncertainty due to political problems in Thailand and delays in investment project approvals in the Philippines held back investment in these countries.

In *commodity exporters* in the region, investment growth slowed sharply during 2012-14. In large commodity-exporting economies (Indonesia and Malaysia), this slowdown mainly reflected policy tightening in response to financial market stress during the 2013 Taper Tantrum, and to weaker terms-of-trade as a result of declines in commodity prices (especially raw materials, fertilizers, metals and minerals) from their early-2011 peaks. In smaller, more heavily commodity-dependent economies, investment contracted as foreign direct investment for mining sector projects declined, and as domestic policies tightened sharply in response to balance of payments stress (World Bank 2015b).

Since 2015, investment growth has begun to recover in the EAP region, with the exception of China, where it stabilized at around 6.5 percent. This has reflected a number of developments: stabilizing commodity prices; more accommodative policies amid low inflation and benign global financial conditions; and buoyant foreign direct investment inflows (FDI). Various factors contributed to the increased FDI: a reduction of political turbulence in Thailand; improved prospects for electronics manufacturing under WTO membership for Vietnam; and the opening up in Myanmar that began in 2011. In China, the composition of FDI has shifted from manufacturing—

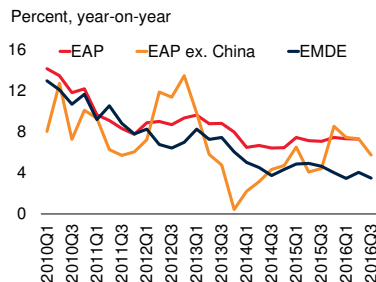
Note: This box was prepared by Ekaterine Vashakmadze. Research assistance was provided by Liwei Liu.

BOX 2.1.1 Investment developments and outlook: East Asia and Pacific (continued)

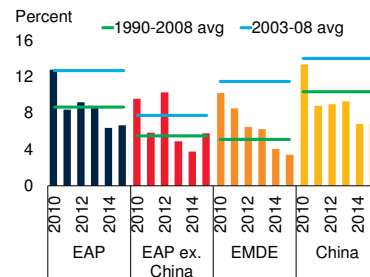
FIGURE 2.1.1.1 Investment growth

Investment growth in the EAP region has stabilized at moderate levels in 2015-16 following a gradual decline in 2010-13. This decline reflected a steady slowdown in China and a sharp deceleration of investment growth in commodity exporters through end-2013. Since early-2014, investment growth has begun to recover in major commodity exporters as their terms-of-trade bottomed out and major central banks embarked on easing cycles. Foreign direct investment (FDI) to the EAP region remained buoyant and supported investment growth.

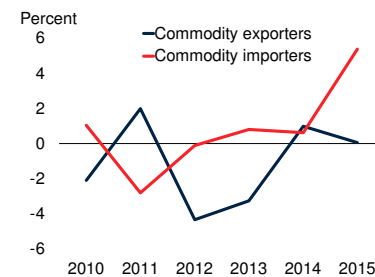
A. Investment growth



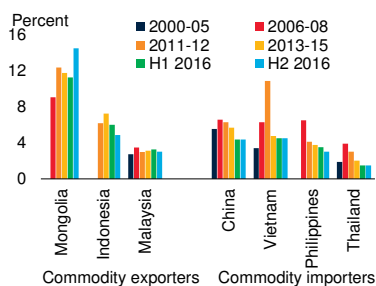
B. Investment growth



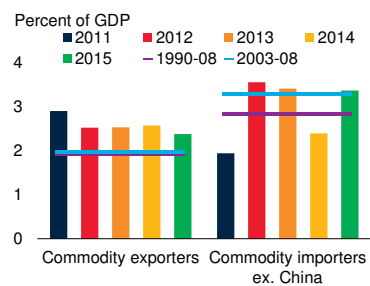
C. Terms of trade change



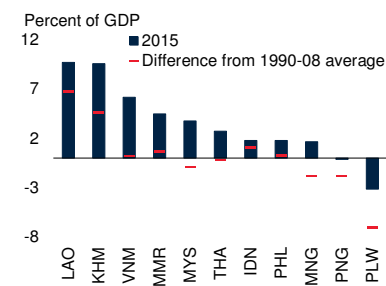
D. Monetary policy rates



E. FDI: Groups



F. FDI: Countries



Sources: Haver Analytics; International Monetary Fund; United Nations Conference on Trade and Development; World Bank; World Development Indicators, World Bank.
 A. GDP-weighted averages.
 C. Investment-weighted averages. Commodity exporters include Indonesia, Malaysia, Myanmar, and Papua New Guinea. Commodity importers include Cambodia, the Philippines, Thailand, and Vietnam. An increase denotes an improvement in terms-of-trade.
 D. Policy rates are the average of end-of-period data.
 E. FDI inflows. Weighted averages.
 F. For difference from 1990-14 average, positive values indicate improvement of FDI inflows. LAO = Lao, PDR, KHM = Cambodia, VNM = Vietnam, MMR = Myanmar, MYS = Malaysia, THA = Thailand, IDN = Indonesia, PHL = Philippines, MNG = Mongolia, PNG = Papua New Guinea, PLW = Palau.

held back by rising wages and production costs, especially in coastal regions—towards services, and from lower value-added products towards higher value-added products such as cars (UNCTAD 2016).

What are the remaining investment needs?

Infrastructure needs and priorities. Income and demographic shifts, and rapid urbanization are the three main forces driving investment needs in the region (World Bank 2015c, 2016f). Rapid urbanization, large-scale migration, and population aging place heavy strains on urban infrastructure for housing, transportation, healthcare, and education. Meeting the growing demands requires choosing a balance between economic growth and

environmental protection (ESCAP 2015).¹ Estimates of costs vary widely (Inderst 2016; Bhattacharyay 2012; McKinsey 2014; HSBC 2013). The largest costs involve road construction and upgrading, energy infrastructure, and real estate development (HSBC 2013; McKinsey 2014; Deutsche Bank 2016). The region shows a significant disparity in density and quality of transport networks, electricity provision and housing, with greater gaps in China, Indonesia, and lower-income ASEAN economies (primarily because of large landmass and population size). There is substantial demand for

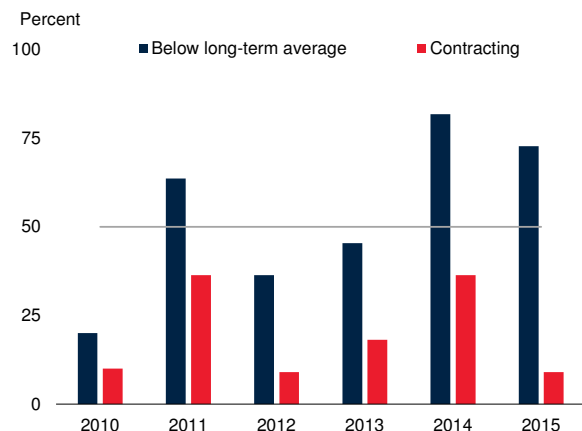
¹For example, in addition to 170 cities in China with populations exceeding 1 million, China is expected to gain 292 million city-dwellers by 2050 (World Economic Forum 2015).

BOX 2.1.1 Investment developments and outlook: East Asia and Pacific (continued)

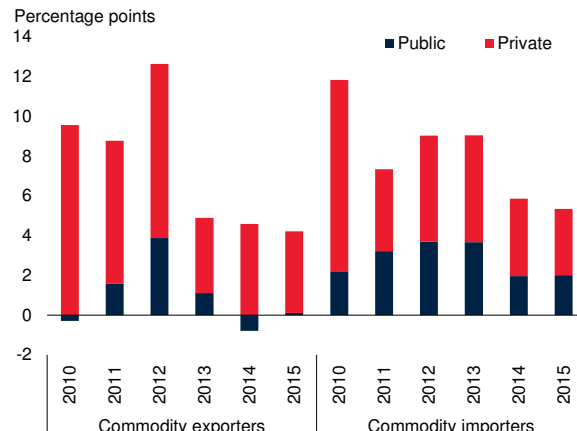
FIGURE 2.1.1.2 Investment growth slowdown and investment needs

In 2014, virtually all EAP economies recorded investment growth below their long-term average, mainly reflecting weak private investment. A rebound of investment in 2015 helped, but investment growth remains below its long-term average in more than half of EAP economies. Long-term forecasts suggest continued weakness in investment growth, while sizable investment needs remain in infrastructure.

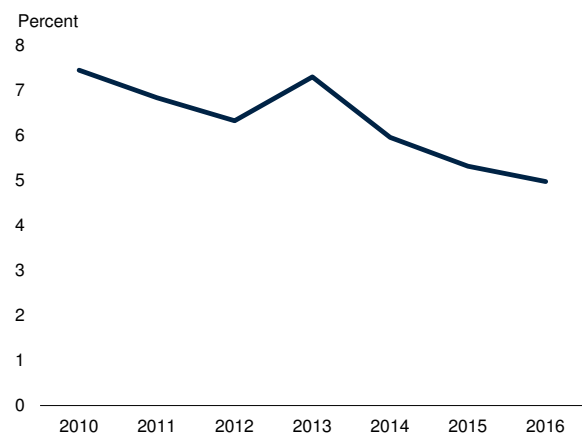
A. Share of countries with weak investment growth



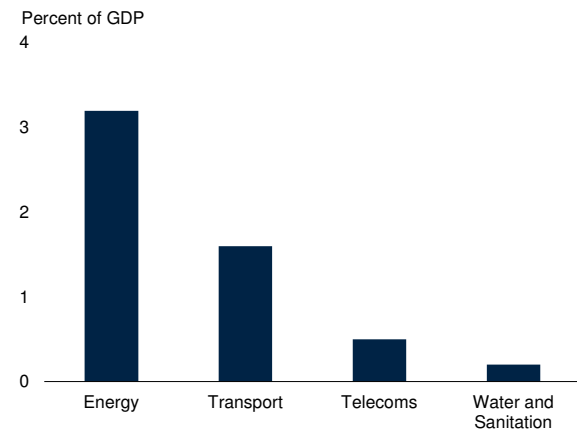
B. Contributions to investment growth



C. Long-term investment growth expectations



D. Infrastructure investment needs, East and Southeast Asia



Sources: Battacharya (2012), China Economic and Industry Data Database (CEIC), Consensus Economics, General Statistics Office of Vietnam, Haver Analytics, Inderst (2016), Investment and Capital Stock database, International Monetary Fund, World Bank.

A. Share of countries in EAP region with investment growth below the long-term (1990-2008) average or negative investment growth ("Contracting").

B. Weighted averages of gross fixed capital formation growth rates in the public and private sectors, respectively, in constant 2005 U.S. dollars. The sample includes nine EAP economies.

C. Five-year ahead consensus forecasts made in the year denoted. Weighted average.

upgrading and maintenance of infrastructure in other regional economies, including Malaysia, the Philippines, and Thailand.

Infrastructure upgrades and challenges. Despite some remarkable successes, providing adequate transport

networks, power, water, and other facilities remains a challenge across much of the region (Figure 2.1.1.2).

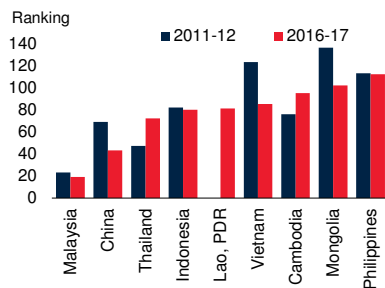
Infrastructure projects underway. Extensive construction activities are underway in the region (BMI 2016). Transport, especially rail, accounts for the largest share.

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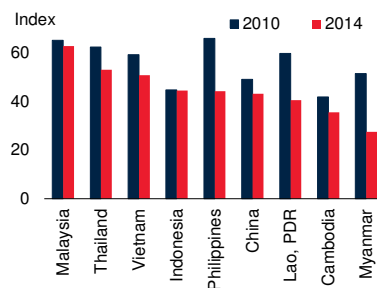
FIGURE 2.1.1.3 Infrastructure indicators

Despite significant progress, in general, providing adequate transport networks, power, water and other facilities remains a challenge across much of the region. EAP regional economies are confronted by environmental problems that threaten to undermine future growth and regional stability.

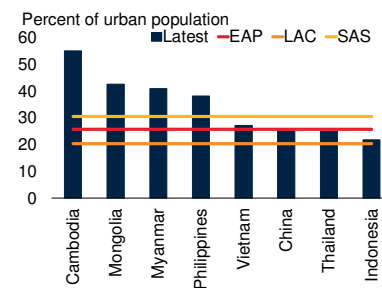
A. Ranking of overall infrastructure



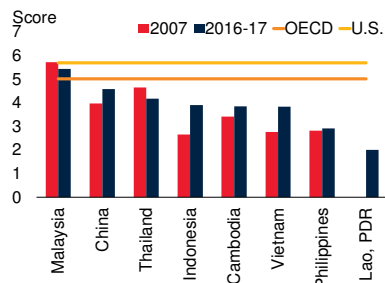
B. Environmental performance



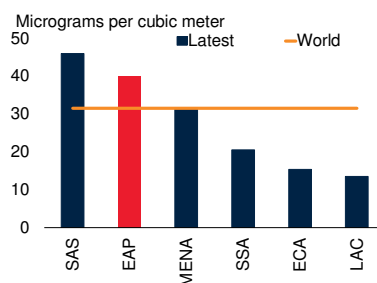
C. Population living in slums



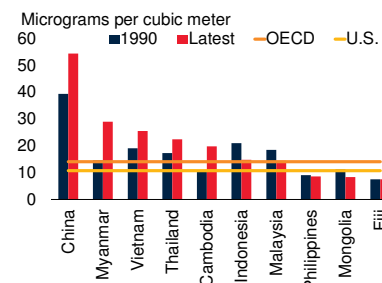
D. Quality of port infrastructure



E. Air pollution, mean annual exposure: regions



F. Air pollution, mean annual exposure: countries



Sources: Environmental Performance Index; World Economic Forum; World Development Indicators, World Bank.

A. Ranking of 140 countries according to the quality of their infrastructure. 1= the best, 140 = the worst.

B. The Environmental Performance Index (EPI) is constructed through the calculation and aggregation of 20 indicators reflecting national-level environmental data, including child mortality, wastewater treatment, access to drinking water, access to sanitation, and air pollution average exposure to PM2.5. These indicators use a "proximity-to-target" methodology, which assesses how close a particular country is to an identified policy target. Scores are then converted to a scale of 0 to 100, with 0 being the farthest from the target (worst observed value) and 100 being closest to the target (best observed value).

C. Latest data are as of 2014.

D. 1= extremely underdeveloped to 7= well developed and efficient by international standards.

E.F. This measures the average level of exposure of a nation's population to concentrations of suspended particles measuring less than 2.5 microns in aerodynamic diameter, which are capable of penetrating deep into the respiratory tract and causing severe health damage. Exposure is calculated by weighting mean annual concentrations of PM2.5 by population in both urban and rural areas. Latest data are as of 2013.

E. SAS is South Asia region; EAP is East Asia & Pacific region; MENA is Middle East & North Africa region; SSA is Sub-Saharan Africa region, ECA is Europe & Central Asia region, LAC is Latin America & Caribbean region.

The aim is to integrate the region's transport networks, and to accommodate rapid urbanization.² These projects are supported by government initiatives such as the China's One Belt One Road.

- *China's* highway network more than doubled in size between 2004 and 2014, and the share of high-speed railways was boosted from 33 percent to 50 percent of total railway kilometers. Yet, transport density still

²Planning is underway for high-speed rail across the region, including a major network expansion in China, projects in Thailand, Indonesia, Singapore/Malaysia, Lao PDR, and Vietnam.

falls far short of that in advanced economies. Infrastructure needs vary considerably across Chinese regions, and range from high-profile projects (such as high-speed railways) to installing basic municipal infrastructure and pollution-reducing or -reversing technologies (World Bank 2013a, World Bank and DRC 2014).

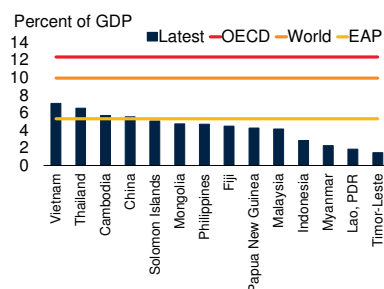
- Lack of adequate infrastructure are the main cause of *Indonesia's* high logistics costs (around 17 percent of companies' total expenditure). Transport costs are high. About one-quarter of the population of Indonesia remains without electricity.

BOX 2.1.1 Investment developments and outlook: East Asia and Pacific (continued)

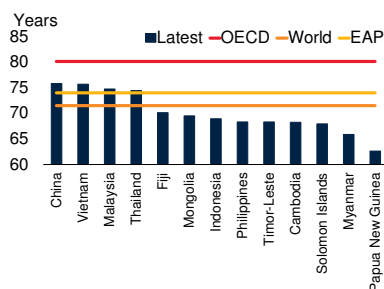
FIGURE 2.1.1.4 Health and education

East Asia and the Pacific made great progress towards education and human development outcomes, including child survival, nutrition and education outcomes. Despite the evident progress in the region, some countries still face significant challenges and serious education and human-resource shortfalls.

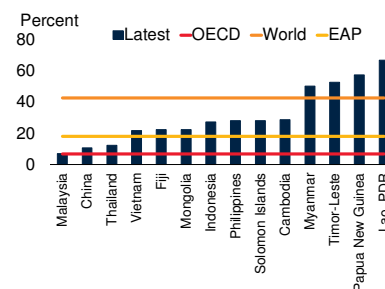
A. Health expenditure



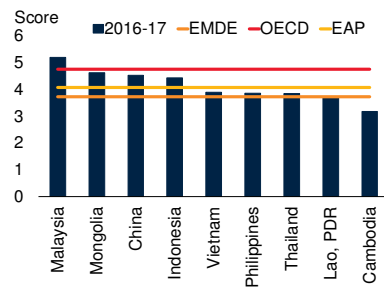
B. Life expectancy, by country



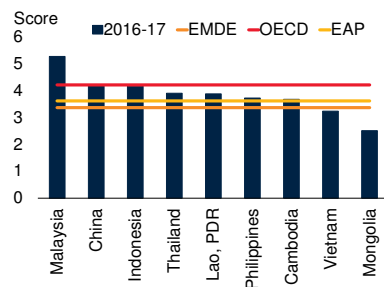
C. Mortality rate, under-5



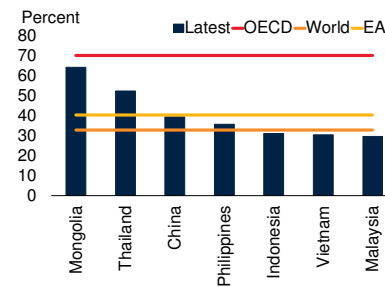
D. Quality of math and science education



E. Country capacity to retain or attract talent



F. Gross enrollment ratio, tertiary



Sources: Haver Analytics; World Development Indicators, World Bank; World Economic Forum. A.B.F. Latest data are as of 2014.

C. Probability of dying between birth and exactly five years of age expressed per 1000 live birth. Latest data are as of 2015.

D.E. The score is from 1 to 7. Higher value means the country is in a good performance. The OECD and EMDE average is the simple average of all the countries in the subgroupings.

- In *Lao PDR*, *Cambodia*, and *Vietnam*, investment in basic road infrastructure is a priority (World Bank and Vietnam Ministry of Planning 2016).
- In *Malaysia*, high-profile projects like the expansion of the public transport system in Kuala Lumpur, and airport and port upgrades, are anticipated to proceed through 2020. Middle-income ASEAN countries in general, such as *Malaysia and Thailand*, are still investing heavily in the rail and public transport systems.
- The *Philippines* is particularly weak with regard to transport and trade-related infrastructure. It continues to rank above 100 globally in the overall state of its infrastructure (World Economic Forum 2015), with particularly low rankings for the quality of its seaports

and airports. About one-quarter of the population remains without electricity.

- In many East Asian countries, about a third of the population lives in substandard housing (Figure 2.1.1.3).

Education and health care. The region has made great progress in human development outcomes, including child survival, nutrition, and education. Despite this progress, the region still faces serious education and human-resource shortfalls (Figure 2.1.1.4).

- *Health care.* EMDEs in the EAP region have reduced child mortality rates by an average of two-thirds between 1990 and 2015. However, child mortality rates in *Lao PDR*, *Myanmar*, and *Papua New Guinea*, and *Timor-Leste* are still well above global averages.

BOX 2.1.1 Investment developments and outlook: East Asia and Pacific (*continued*)

In addition, the region has historically faced a high burden of disease from infectious diseases, some of which have potential global reach (e.g., SARS and pandemic influenza). Within a generation, rates of non-communicable diseases (NCDs) are expected to rise, and infectious diseases are expected to remain a risk associated with high population mobility and environmental degradation (Anbumozhi and Ponciano 2015). Adjusting to these long-run trends will require public investment in basic infrastructure, education, health and environmental protection.

- *Education.* Although enrollment in primary education in the region is almost universal, there are deficiencies in student retention (Cambodia, Lao PDR, Myanmar), quality of education (Thailand, Malaysia, Vietnam, Cambodia, Lao PDR), and knowledge gained as measured by literacy rates (Papua New Guinea, Timor-Leste, Lao PDR, Cambodia).

Environmental challenges. Many countries in the region are confronted by environmental problems that threaten to undermine future growth and stability. The main challenges include water management, deforestation and land degradation, air pollution, and climate change (Lee and Pang 2015). In several major cities in China, air and water pollution presents a growing health risk. Pollution levels have also risen in Myanmar, Vietnam, Thailand, and Cambodia since 2010.

Which policies can help address investment needs?

Greater spending efficiency will help increase the benefits of public investment. Private sector participation can help improve efficiency, and at the same time provide funding. Several reforms can help realize the potential benefits of public-private-partnerships. Governments can centralize agencies that coordinate national infrastructure, in cooperation with the private sector and multilateral agencies. Multilateral Development Banks can work with the private sector to provide quality and governance assurances. Standardization and a global “code of conduct” can enhance confidence in the private sector as a good partner. This could include a regulatory framework, transparency principles, and a system for dispute resolution (McKinsey 2013).

Confidence in the business environment is central to encouraging private investment. Measures to improve the environment include cutting red tape, clarifying laws and regulations, allowing greater market access to foreign

companies, opening more investment areas to private enterprise (especially in services sectors), and cutting financing costs. Reforms to deepen capital markets and to strengthen banking systems (e.g., through faster and more effective insolvency procedures) can encourage private financing.

In education, policy priorities include a focus on developing skills that are a high priority in labor markets, keeping in mind that requirements differ across country and sector. Primary and secondary education must focus on quality and on learning outcomes, and on building effective educational systems based on autonomy and accountability. The relevance of higher education, vocational education, and training can be improved by giving institutions the capacity and incentives to meet labor market demand, and by providing information to improve the matching between job openings and the skills of prospective workers (World Bank 2014a). In health, ensuring access to good quality services, without imposing financial hardship, will entail reforms to the insurance regime, and a shift of focus from hospitals toward high-quality primary care.

For environmental sustainability, the complexity of challenges underlines that there are no easy or universal solutions to environmental problems across the region. However, a number of initiatives would be appropriate. These include a focus on common benefits; an emphasis on stakeholder participation; a commitment to scientific and technological research; an emphasis on long-term planning; reforms to align resource and utilities pricing with cost, including externalities; improvements in governance and general institutional capacity; and a strengthening of regionally coordinated approaches and international support (Anbumozhi and Ponciano 2015).

Investment growth in EAP is unlikely to revert to the high rates of the previous decade. Demands for capital formation in the region will nevertheless remain relatively high, and governments and multilateral agencies will remain important providers of funding. The establishment of the Asia Infrastructure Investment Bank provides a new source of funding. In March 2016, the Japan International Cooperation Agency signed an agreement with the Asian Development Bank to establish a new \$1.5 billion fund to support private infrastructure investments across the Asia-Pacific region. In order to have the desired impact, it is important that investments go to economically viable projects. Close coordination of regional and global initiatives will help reduce duplication and inconsistencies in public investment projects (BMI 2016).