

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia

Investment growth in the region declined from 10.2 percent in 2011 to 0.4 percent in 2015. The slowdown was initially concentrated in Central Europe and reflected mainly the spillovers from the Euro Area's debt crisis of 2011-12. A recovery of investment growth in Central and South-Eastern Europe started in 2014, but this was more than offset by investment contractions in Russia and other oil-exporting economies. Policy uncertainties and weak banking systems will likely limit regional investment growth in the near-term. The investment slowdown has come at a time when investment needs are sizable. In many commodity-importing economies, years of underinvestment have left substantial infrastructure deficits. Investment is key to boosting productivity and creating hospitable conditions for new growth sectors. However, efforts to address under-investment are likely to be constrained by the need for sustainable financing.

Europe and Central Asia (ECA) accounted for 5 percent of global investment during 2010-15. Investment growth in the region decreased sharply, from a 10.2 percent in 2010 to 0.4 percent in 2015. Partial data for 2016 suggest that investment is bottoming out in 2016, led by easing investment contractions in Russia and Ukraine. However, regional investment growth remains well below its long-term (1995-2008) average of 6.5 percent a year.

This box discusses the following questions.

- How has investment growth in the region evolved?
- What are the region's current and prospective investment needs?
- Which policies can help meet these needs?

The slowdown in investment growth in the ECA region was initially concentrated in the Central Europe in the aftermath of the Euro Area's debt crisis of 2011-12 and associated recession. The post-crisis recovery in Central Europe was weak, reflecting impaired banking systems and corporate sectors in the aftermath of the Euro Area crisis. Lingering concerns about armed conflict and related geopolitical tensions (Russia, Ukraine), policy uncertainty in several major regional economies, and adjustment to the terms-of-trade shock in energy exporters (Russia, Azerbaijan, Kazakhstan) have weighed on regional investment growth.

Meanwhile, current and prospective investment needs are sizable. Investment and major reforms are needed to increase productivity and set the stage for a sustained growth recovery. However, efforts to address under-investment are likely to be constrained by the need for sustainable financing.

Note: This section was prepared by Yoki Okawa and Ekaterine Vashakmadze. Research assistance was provided by Shituo Sun, Trang Thi Thuy Nguyen, and Liwei Liu.

How has investment growth in the region evolved?

The recent investment growth slowdown was sharp and broad based. In 2015, investment growth remained below its long-term averages in three-quarters of the countries in the region, and was negative in one-quarter of them, including Belarus, Russia, and Ukraine (Figure 2.2.1.1). Between 2010 and 2015, investment growth trends differed markedly between commodity importers, which are located in Central, Eastern, and Southeastern Europe, and commodity exporters, mainly Russia and the economies of Central Asia.

The overall slowdown was partly a correction from historically high investment growth prior to the global financial crisis. Pre-crisis, large capital inflows and credit booms fueled investment growth in the western part of the region as financial systems became more integrated with those in the Euro Area. Proximity to, and rapid convergence with, the Euro Area appeared to promise bright growth prospects as regional labor and product markets became increasingly intertwined (World Bank 2010). In the eastern part of the region, pre-crisis investment growth was buoyed by resource development encouraged by high global commodity prices.

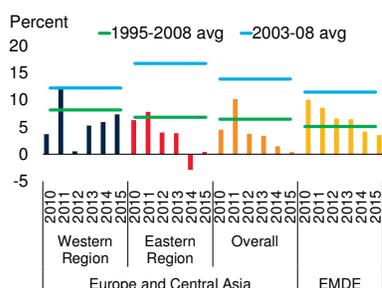
In general, in *commodity-importing EMDEs*, investment financing became difficult to obtain from domestic banking sectors that were still healing from the crisis and pre-crisis credit booms (Hungary, Moldova, Serbia). The 2012-13 debt crisis and subsequent weak growth prospects in the Euro Area weighed on investor sentiment (Chapter 3). Weak trade growth and lower capital inflows reduced prospects for strong investment returns and increased financing costs. Net capital inflows exceeded 10 percent of GDP before the crisis but have been negative since 2013 in the Central and Southeastern Europe. Large foreign currency-denominated debt amplified the damage to the banking sector (EBRD 2015a). In some countries, this was compounded by policy uncertainty and lack of public

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

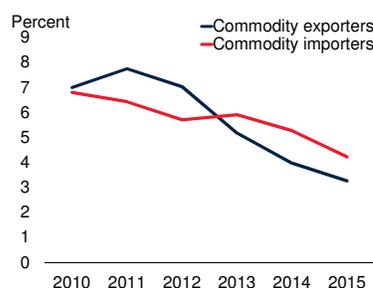
FIGURE 2.2.1.1 Investment growth slowdown in Europe and Central Asia, 2010-15

Regional investment growth declined from 10.2 percent in 2011 to 0.4 percent in 2015. Initially, the decline was concentrated in the western part of the region and reflected spillovers from the Euro Area crisis. The recovery of investment growth in the western parts of the region in 2014-15 was outweighed by a contraction in oil-exporting economies in the eastern parts of the region, which suffered a major terms-of-trade shock as a result of the oil price drop. Recession in Russia was exacerbated by international sanctions.

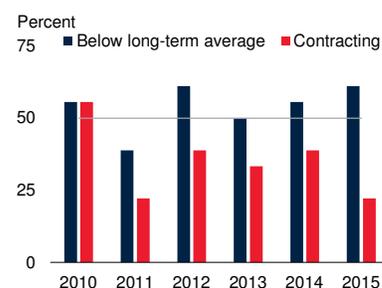
A. Investment growth by region



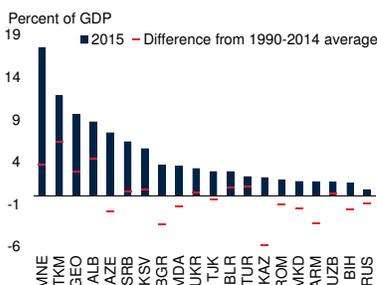
B. Five-year-ahead investment growth expectations



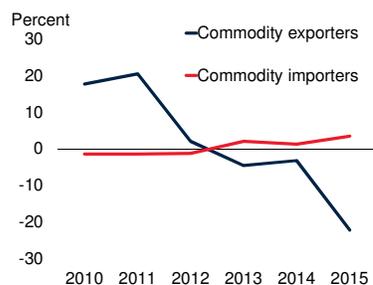
C. Share of ECA economies with weak investment growth



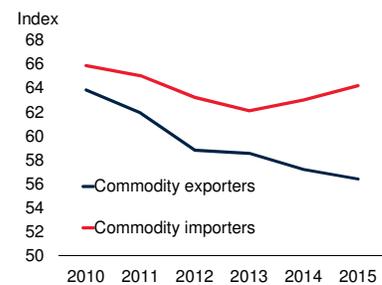
D. Foreign direct investment inflows



E. Terms of trade change



F. ICRG index of political stability



Sources: Consensus Forecasts, EBRD (2015a), Eurostat, Haver Analytics, World Bank.

A.C. Investment growth rates are weighted averages of gross fixed capital formation growth rates in the public and private sectors, respectively, in constant 2005 U.S. dollars.

A. The eastern part of the region comprises Eastern Europe (Belarus, Moldova, and Ukraine), South Caucasus (Armenia, Azerbaijan and Georgia), Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) and Russia. The western part of the region includes Central Europe (Bulgaria, Croatia, Hungary, Poland and Romania) and the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, and Serbia), and Turkey.

B. Five-year ahead Consensus Forecasts as of the latest available month in the year denoted.

C. Share of ECA economies with investment growth below its long-term average or negative.

D. MNE = Montenegro, TKM = Turkmenistan, GEO = Georgia, ALB = Albania, AZE = Azerbaijan, SRB = Serbia, KSV = Kosovo, BGR = Bulgaria, MDA = Moldova, Republic of, UKR = Ukraine, TJK = Tajikistan, BLR = Belarus, TUR = Turkey, KAZ = Kazakhstan, ROM = Romania, MKD = FYR Macedonia, ARM = Armenia, UZB = Uzbekistan, BIH = Bosnia and Herzegovina, RUS = Russia.

E. Investment-weighted average. A decline denotes a terms of trade deterioration.

F. ICRG is the International Country Risk Guide, an investment-weighted average of political stability produced by the PRS Group. A higher index denotes greater political stability.

investment (Figure 2.2.1.2). Recovery has been gradual since 2013, despite support from accommodative monetary and fiscal policies in some countries, and sharply lower oil prices that lifted business confidence and real incomes.

In *commodity-exporting EMDEs*, the global financial crisis-related fiscal stimulus supported double-digit investment growth in 2010. Investment growth remained robust until 2013, but slowed sharply once oil prices started sliding in

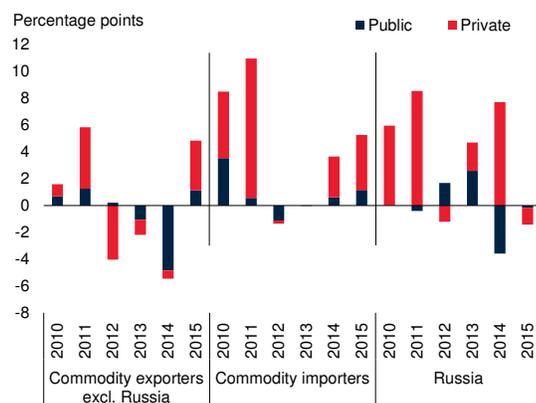
2014. Since mid-2014, investment has contracted year-on-year in every quarter, weighed down by the following factors: the unfolding conflict in Ukraine, intermittent border tensions in the Caucasus, international sanctions that heavily restricted access to finance in Russia, a severe terms-of-trade shock that hit energy exporters (Azerbaijan, Kazakhstan, Russia), and contracting public sector investment. Neighboring countries suffered from spillover effects, including weaker trade, remittances, and foreign direct investment (World Bank 2016h).

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

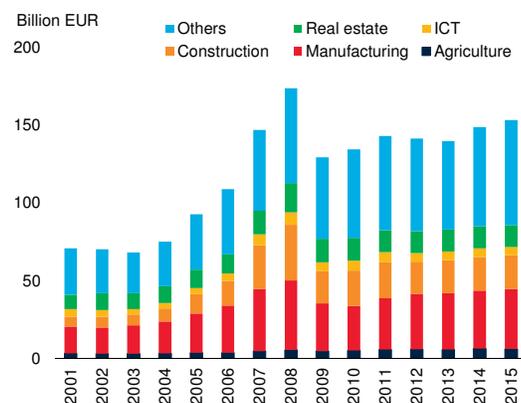
FIGURE 2.2.1.2 Investment decomposition, 2010-15

After the global financial crisis, public investment growth slowed or turned negative across the region. In Central Europe, the slowdown in investment was driven mainly by weak manufacturing sector investment.

A. Contributions to investment growth



B. Contribution to investment in Central Europe



Sources: Haver Analytics, International Monetary Fund, World Bank.
 A. Investment growth rates are growth rates of subgroup aggregated gross fixed capital formation in constant 2010 U.S. dollars.
 B. EU4 (Bulgaria, Hungary, Poland, Romania). Sectorial allocation of investment is not available for other countries.

What are current and prospective investment needs?

Infrastructure needs are sizable across the ECA region. The additional investment needed to reach the investment levels of economies at similar stages of development has been estimated at 1.3 percent of GDP per year, on average

(EBRD 2015a; Figure 2.2.1.3).¹ Investment priorities vary widely across the region.

- *Russia* has implemented important upgrades in certain types of infrastructure, especially railways, mobile-cellular telephone networks, and airlines. However, the overall quality of infrastructure lags many EMDEs at similar levels of development. Roads, port and air transport infrastructure, and electricity supply all need considerable upgrading. The energy extraction sector requires an estimated \$1.9-\$3.3 trillion in investment between 2014 and 2035, while the power generation sector requires \$600 billion (International Energy Agency 2014; Russian Investment Agency 2015).
- Infrastructure in *Turkey* exceeds average EMDE quality, but it has come under pressure as strife in neighboring countries has brought waves of immigrants: Turkey currently accommodates about 56 percent of all registered Syrian refugees. Annual energy investments of \$12 billion are required to meet the country's development goals, to diversify the sector, and to help narrow Turkey's current account deficit by reducing energy imports (Winrow 2015; Republic of Turkey, Ministry of Energy and Natural Resources 2014). Turkey plans to increase renewable sources of energy, including nuclear, and improve energy efficiency (EBRD 2015b). From 2014 to 2018, total infrastructure investment needs are estimated at \$350 billion (EBRD 2015b).
- For landlocked *Central Asia*, developing and upgrading infrastructure are critical for connectivity and reducing dependence on extractive industries. Investment in the energy sector will help to improve electricity access, a major concern for business (ADB 2016). Waste water systems in rural areas are also underfunded.
- In *other countries* in the ECA region, port, road, and railway infrastructure needs improvement, and logistics infrastructure needs to be upgraded to foster trade and investment (Bosnia and Herzegovina, Bulgaria). Border bottlenecks should be addressed and customs infrastructure improved. Upgrading water supply and irrigation systems will enhance productivity in agriculture and reduce environmental degradation (Azerbaijan, Bosnia and Herzegovina, Serbia, Uzbekistan).

¹In addition to 24 countries in ECA region, the estimate includes the Arab Republic of Egypt, Estonia, Jordan, Latvia, Lithuania, Mongolia, Morocco, the Slovak Republic, Slovenia, and Tunisia.

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

Initiatives are already underway to improve infrastructure in the region:

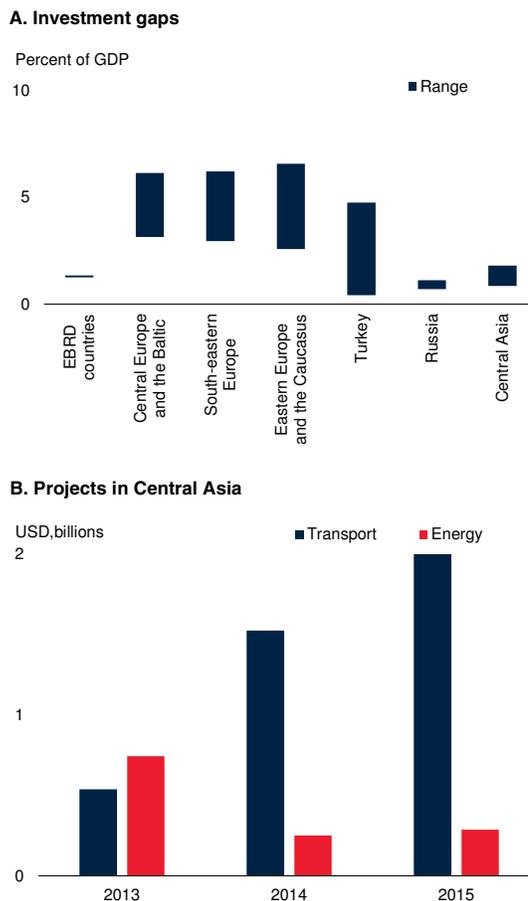
- In *Russia*, for example, several hundred infrastructure projects were announced in the past five years, with more than half scheduled for completion by 2020. These projects are mostly in more densely populated western Russia. The largest allocations are for transport infrastructure (especially high-speed rail, and road and bridge construction). But there are also a large number of projects to improve the supply of utilities (electric power, gas, and water).
- *Turkey* has initiated several public-private partnership (PPP) projects, including the Caspian and Middle Eastern oil and gas pipeline and the \$10.2 billion Istanbul Grand Airport. *Countries in Central Asia*—aspiring to become an overland transit and energy hub linking Chinese and European markets—has initiated investment projects in energy and transport sectors. In the energy sector, major projects include a pipeline from Turkmenistan to India, gas sector development in Uzbekistan, and hydroelectric power in Tajikistan. In the transport sector, key projects include highways in Kazakhstan, railroads linking Tajikistan and Kyrgyz Republic to China and the Islamic Republic of Iran, ports in Turkmenistan and Kazakhstan, and an airport in Kyrgyz Republic.
- In *Central and South Eastern Europe*, the investment pipeline largely reflects EU funding to further integrate the EU member states of the region with Western European countries.

Climate adaptation and energy efficiency. ECA is an energy-intensive region that relies heavily on non-renewable energy (Figure 2.2.1.4). Belarus, Bosnia and Herzegovina, and Turkey are implementing policy reforms (such as cost-based energy pricing) and investments in both public infrastructure and private industry, including renewable energy and energy efficiency, in partnership with the World Bank. Efforts to adapt to climate change include improved water resource management (flood protection, water loss reduction, irrigation efficiency) in Kazakhstan; climate-smart agriculture (switching to more resilient crops) in Tajikistan; and better weather forecasting and climate change monitoring in Russia.

Education and health. The region has made significant advances in the area of human development, including reductions in child mortality rates. Many countries in the region have achieved universal primary enrollment and gender parity in both primary and secondary education,

FIGURE 2.2.1.3 Investment gaps and projects

Amid sizable investment gaps across the region, large-scale infrastructure investment projects are underway.



Sources: Central Asia Regional Economic Cooperation (CAREC), European Investment Bank.
 A. Range of different investment gap estimates for each region from EBRD (2015a). EBRD countries includes Estonia, Latvia, Lithuania, the Slovak Republic, Slovenia Mongolia, Egypt, Jordan, Morocco, Tunisia in addition to 24 countries in ECA region. Financing gap for Central Asia and the Caucasus includes all infrastructure financing requirements that are not covered by national governments. For Central Asia, the range is GDP weighted average for Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan.
 B. Total value of approved CAREC related projects in Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan and Uzbekistan.

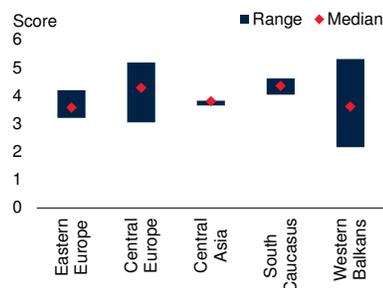
and literacy rates are high. On average, the ECA region scores above average among EMDE regions in several education and health indicators. Nevertheless, shortcomings remain. Levels of learning achievement are low in several countries, and socio-economic and ethnic disparities in education persist. Among the basic education indicators, regional gaps are most apparent for math and

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

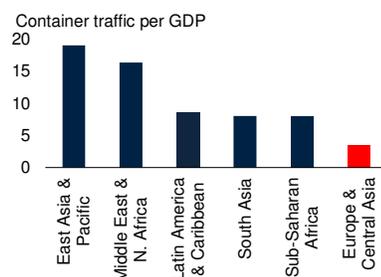
FIGURE 2.2.1.4 Infrastructure indicator

The quality of infrastructure in the most of the region is substantially below OECD average. Investment gaps remain large in transportation and energy. Port container traffic is limited, highlighting the region's reliance on road, air, and rail transport. The quality of air and road transport infrastructure remains well below OECD averages in most of the region. The region is energy intensive and heavily reliant on non-renewable energy.

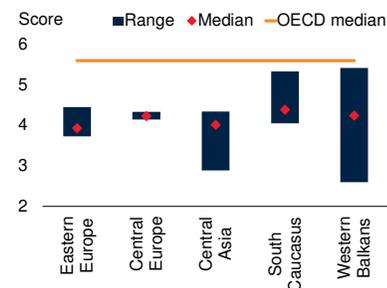
A. Overall infrastructure quality



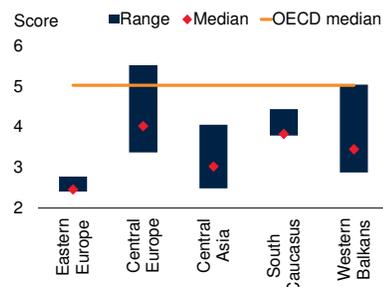
B. Port container traffic



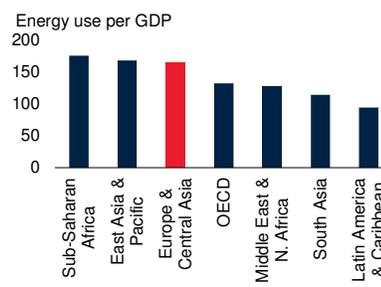
C. Quality of air transport



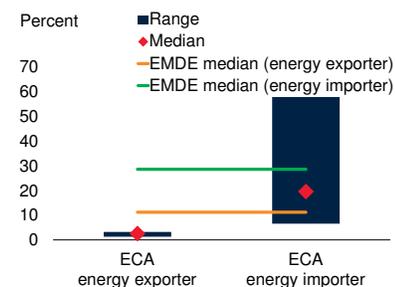
D. Quality of roads



E. Energy use intensity



F. Share of renewable energy



Sources: EBRD (2015a), Haver Analytics, World Bank, World Economic Forum.

A. The score is overall quality of infrastructure. The score from 1 to 7 (best). Investment is the share of fixed capital formation as a percent of GDP. OECD average is the average investment share of OECD countries from 1990 to latest.

B. Regional sum of container port traffic (TEU: 20 foot equivalent) per current USD GDP in millions in 2014.

C,D. The score is from 1 to 7 (best). The OECD and EMDE average are the simple average of all the countries in the respective subgroupings.

E. Regional aggregated number. Data are in 2014 or latest available data. GDP data are in constant 2011 "international dollars."

F. Share of renewable energy consumption as percent of total final energy consumption in 2012. EMDE averages are the simple average of all the countries in the respective subgroupings.

science education. The region scores well below the EMDE average on attracting and retaining talent (Figure 2.2.1.5). Building a highly skilled workforce will require improving the quality of education, investing in on-the-job training, and using talent more effectively.

Which policies can help address investment needs?

Unmet investment needs limit growth in the region, along with governance, financial, and labor market obstacles (World Bank 2015e-h; World Bank and Vietnam 2016; World Bank 2016h; EBRD 2015a). While policy priorities depend on country circumstances, appropriate cyclical and

structural policies are needed in all cases to raise investment growth (Chapter 3). Fiscal policy could help most directly by expanding public investment while monetary policy could boost activity by lowering financing costs. Structural reforms could address factors holding back private investment, including by boosting productivity and aggregate growth prospects and improving the business climate.

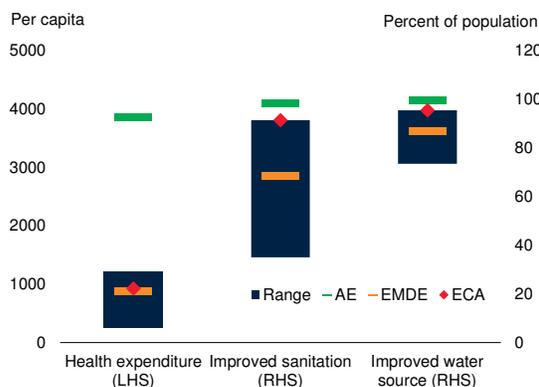
Many EMDEs in the ECA region remain under pressure to consolidate their fiscal positions to reduce high debt-to-GDP ratios and ensure long-term fiscal sustainability (Georgia, Hungary, Chapter 2). This constrains their ability to finance public investment and places a premium

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

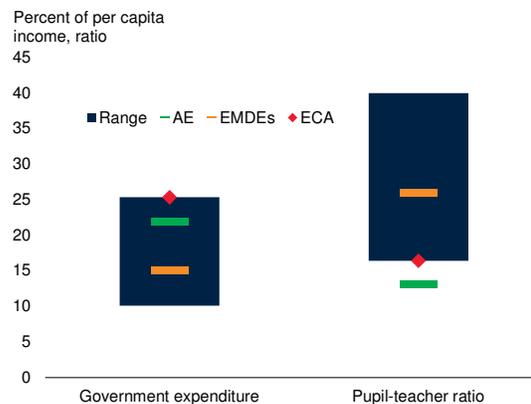
FIGURE 2.2.1.5 Human development indicators

Health and educational expenditure is highest among EMDE region and close to the OECD average. The region made significant advances in the area of human development. Nevertheless, important shortcomings remain. Among the basic education indicators, the region scores below the OECD average in math and science outcomes. The region also lags behind both the OECD and the EMDE average in attracting and retaining talent.

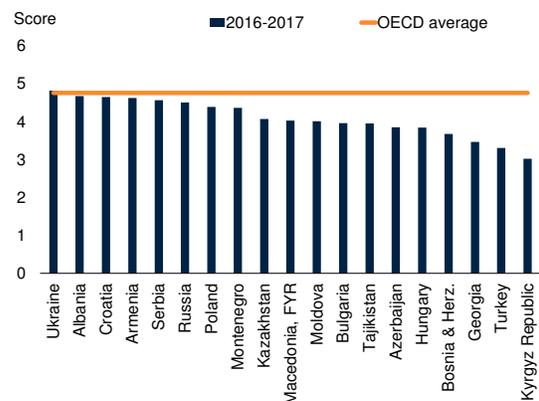
A. Selected health care indicators



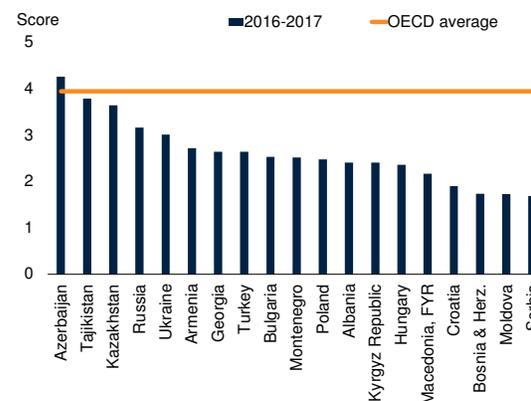
B. Selected education indicators



C. Math and science outcomes



D. Attracting and retaining talent



Sources: Haver Analytics, World Bank, World Economic Forum.
 A. Blue bars denote range of unweighted regional averages across EMDE regions. Health expenditure per capita in purchasing power parity terms, unweighted averages of 199 EMDEs, 34 AEs, and 19 ECA economies. Access to improved sanitation facilities (in percent of population), unweighted averages for 150 EMDEs, 33 AEs, and 22 ECA economies. Access to improved water sources (in percent of population), unweighted averages for 148 EMDEs, 34 AEs, and 22 ECA economies. Latest available data available during 2011-15.
 B. Blue bars denote range of unweighted regional averages across EMDE regions. Government expenditure per primary student (in percent of per capita income), unweighted averages of 87 EMDEs, 32 AEs, and 10 ECA economies. Pupil-teacher ratio in primary education (headcount basis), unweighted averages for 165 EMDEs, 31 AEs, and 20 ECA economies. Latest available data available during 2011-15.
 C.D. The score is from 1 to 7 (best). The OECD and EMDE average are the simple averages of all the countries in the respective subgroupings.

on reforms that encourage private investment. Only a few regional economies can tap debt markets to finance infrastructure, while weak domestic banking systems and underdeveloped capital markets restrict the ability of governments to borrow domestically.

With weak growth, limited fiscal resources, and net capital outflows, the gap between infrastructure needs and the

ability of governments to meet those needs may widen. This places a premium on measures to improve investment efficiency and to obtain funding from multilateral sources or the private sector.

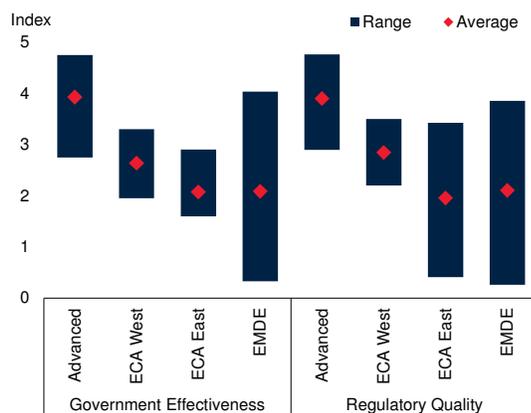
Investment efficiency. Effective public investments can meet needs with less cost (Dabla-Norris et. al. 2012), but regional institutional capacities fall behind the standards in

BOX 2.2.1 Recent investment slowdown: Europe and Central Asia (continued)

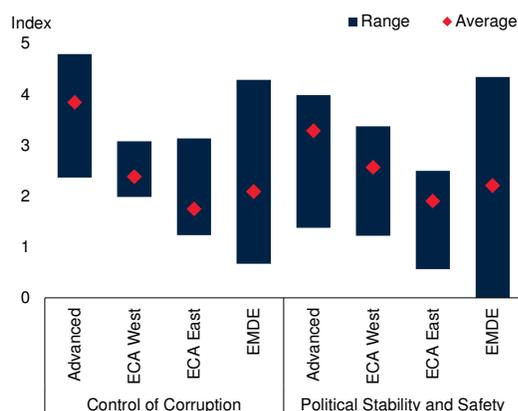
FIGURE 2.2.1.6 Institutional quality

Various measures of institutional efficiency in the ECA region are below the advanced-economy average. The western part of the region performs better than the eastern part on every measure. Governance and stability indicators in the eastern part of the region are often worse than the EMDE average.

A. Government and policy efficiency



B. Governance and stability



Source: World Bank.

A.B. The blue bars mark the range. EMDE is Emerging Market and Developing Economies. ECA stands for the Europe and Central Asia. The eastern part of the region comprises Eastern Europe (Belarus, Moldova, and Ukraine), South Caucasus (Armenia, Azerbaijan and Georgia), Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) and Russia. The western part of the region includes Central Europe (Bulgaria, Croatia, Hungary, Poland and Romania) and the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, and Serbia), and Turkey. Scores range from 0 (not efficient) to 5 (efficient). Data from 2015 or latest available data.

advanced economies in this area (Figure 2.2.1.6). The eastern part of the ECA region ranks particularly low in relevant measures, including social stability, government effectiveness, and corruption. The efficiency of investments can be enhanced through a strategic, rigorous and transparent project selection mechanism and through strong institutions able to fund, manage, execute and monitor project implementation (Chapter 3).

Private funding. Policy efforts can be geared toward developing private funding sources for investment. Many countries still lack adequate frameworks for effective public-private partnerships (PPP), which can improve the effectiveness of public investment (Engel, Fischer, and Galetovic 2014). Capital market reforms can help channel domestic savings towards private investment (EBRD 2015a).

Multilateral funding sources. The region, especially the South Caucasus and Central Asia, will continue to depend on financial support from multilateral development institutions like the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB), and the World Bank. Countries in Central Asia will likely be the largest beneficiaries of China's "One Belt, One Road" (OBOR) initiative, due to their locations and natural resource abundance. EU structural funds will continue to play an important role in closing investment gaps in Central and South Eastern Europe.