European Bank
for Reconstruction and Development

REGIONAL ECONOMIC PROSPECTS

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COVID-19:
FROM SHOCK TO RECOVERY

European Bank
for Reconstruction and Development

Regional Economic Prospects in the EBRD Regions

April 2020

Covid-19: From shock to recovery

Growth in the EBRD regions averaged 2.6 per cent in 2019, down from 3.4 per cent in 2018 and 3.8 per cent in 2017, mirroring the ongoing slowdown in global growth and global trade growth.

The Covid-19 pandemic hit on top of this deceleration and is expected to result in a substantial output contraction, at least in the near term. Numerous countries in the EBRD regions and across the world have closed their borders to people, closed schools, universities, restaurants and shops, a growing number of countries have implemented lockdowns and curfews. These measures severely affect domestic demand (as a major part of aggregate consumption involves public gatherings) and domestic supply (as workers stay at home) likely resulting in the greatest disruption to global economic activity since the Second World War.

The economic impact of domestic containment measures is compounded by several related external shocks, whereby economies in the EBRD regions face much lower commodity prices, lower demand for exports across the board and disruptions to value chain linkages, as well as a collapse in tourism and business travel. Tourist spending exceeds 20 per cent of GDP in a number of economies in the region including Albania, Croatia, Cyprus, Georgia, Greece and Montenegro.

The vulnerability of economies depends on many factors, including the structure of production, the share of workers on permanent contracts and in the informal economy, and governments' ability to provide relief. Many governments have provided additional liquidity to the financial system and provided guidelines on forbearance to enable restructuring and extension of loans and introduction of temporary holidays when it comes to repayment of loans. Many governments have also pledged large-scale fiscal support to individuals and firms experiencing loss of income with the view to avoid mass layoffs and facilitate a speedy recovery once consumption restrictions are lifted. Fiscal space to implement such policy measures varies by country.

Assuming domestic containment measures remain in place for a few months followed by a gradual relaxation and return to normality during the second half of the year, output in the EBRD regions is likely to contract in 2020 (individual country forecasts will be released on 13 May 2020). Once the outbreak is contained, a swift recovery is possible provided mass layoffs during the containment phase can be avoided. This scenario assumes

a modest impact of the crisis on the long-term trajectory of output. However, there may in fact be significant longer term economic, political and likely social impacts. If lockdowns remain in place for much longer, the economic impact will be significantly deeper.

In the longer term, the Covid-19 crisis may also lead to reassessment of concentration risks in global manufacturing, perhaps leading to a new emphasis on diversification and reshoring. This could open new business opportunities for companies in the EBRD regions.

Table 1.Resilience to the Covid-19 shock in the EBRD regions

		Resilience of health care system		*Resilience to domestic disruption*		*Resilience to external shocks*				*Policy space*		
		Public sector health expenditure as a share of GDP	**Physicians per 100,000 people**	**Retail service shocks**	**Labour market shocks**	**Commodity prices**	**Global value chains**	**Tourism**	**Remittances**	**Fiscal policy space**	**External resilience**	**Strength of financial system**
Central Asia	Kazakhstan	moderate	high	high	moderate	low	high	high	high	high	high	high
	Kyrgyz Republic	moderate	moderate	high	moderate	moderate	high	high	low	moderate	moderate	high
	Mongolia	moderate	high	high	high	low	high	moderate	high	low	low	moderate
	Tajikistan	low	moderate	high	low	low	high	high	low	low	moderate	low
	Turkmenistan	low	moderate	high	low	low	high	high	high	moderate	high	high
	Uzbekistan	moderate	moderate	high	high	moderate	high	high	high	moderate	high	high
Central Europe and Baltic States	Croatia	high	high	moderate	moderate	high	high	low	high	moderate	high	high
	Estonia	high	high	moderate	high	high	low	moderate	high	high	high	high
	Hungary	high	high	high	high	high	low	high	high	moderate	high	high
	Latvia	moderate	high	moderate	high	high	moderate	high	high	high	high	high
	Lithuania	high	high	low	high	high	low	high	high	high	high	high
	Poland	high	moderate	low	high	high	moderate	high	high	high	high	high
	Slovak Republic	high	moderate	high	high	high	low	high	high	high	high	high
	Slovenia	high	high	moderate	high	high	low	moderate	high	moderate	high	high
Eastern Europe and the Caucasus	Armenia	low	high	high	moderate	moderate	high	moderate	moderate	moderate	moderate	high
	Azerbaijan	low	high	high	low	low	high	moderate	high	moderate	high	moderate
	Belarus	moderate	high	high	high	high	high	high	high	moderate	low	high
	Georgia	low	high	high	low	high	high	low	moderate	moderate	low	high
	Moldova	high	high	high	high	high	low	high	moderate	low	low	high
	Ukraine	moderate	high	high	moderate	high	low	high	moderate	low	moderate	low
	Russia	moderate	high	moderate	high	low	high	high	high	high	high	moderate
South-eastern Europe	Bulgaria	high	high	moderate	high	high	moderate	moderate	high	high	high	moderate
South-eastern EU	Cyprus	moderate	moderate	low	moderate	high	high	low	high	low	high	low
	Greece	high	high	moderate	low	high	high	low	high	low	high	low
	Romania	high	moderate	high	high	high	moderate	high	high	moderate	low	high
Western Balkans	Albania	moderate	low	high	moderate	high	high	low	high	moderate	moderate	high
	Bosnia and Herzegovina	high	high	moderate	moderate	high	high	high	moderate	high	high	high
	Kosovo	moderate	low	high	moderate	high	high	high	moderate	high	low	high
	Montenegro	moderate	moderate	low	moderate	high	high	low	moderate	low	moderate	high
	North Macedonia	high	high	moderate	high	high	moderate	high	high	high	moderate	high
	Serbia	high	high	moderate	moderate	high	moderate	high	high	moderate	high	high
Southern and Eastern Mediterranean	Egypt	low	low	moderate	low	high	high	moderate	high	low	high	high
	Jordan	moderate	low	high	low	high	high	moderate	moderate	moderate	low	high
	Lebanon	high	moderate	high	low	high	high	moderate	moderate	low	high	moderate
	Morocco	moderate	low	high	low	high	high	moderate	high	moderate	moderate	high
	Tunisia	moderate	low	moderate	low	high	moderate	moderate	high	moderate	low	moderate
	Turkey	high	moderate	low	moderate	high	high	moderate	high	moderate	low	high
		Low if public sector health expenditure below 2 per cent of GDP in the latest available year (2014-2017); moderate if between 2 and 4 per cent.	Low if fewer than 150 beds per 100,000 in the latest available year (2014-2017); moderate if between 150 and 250.	Low if retail services exceed 25 per cent of GDP in 2018; moderate if they are between 20 and 25 per cent.	Low if less than 50 per cent of those employed in the last year had permanent written contracts in 2016, moderate if between 50 and 75 per cent.	Low if the net trade balance in gas and oil or coal and ores exceeds 5 per cent of GDP in 2018; moderate if between 1 and 5 per cent.	Low if GVC linkages exceed 30 per cent of GDP in 2018; moderate if between 15 and 30 per cent.	Low if tourism accounts for over 20 per cent of GDP in 2018; moderate if between 10 and 20 per cent.	Low if remittances exceed 25 per cent of GDP in 2019; moderate if between 10 and 25 per cent.	Low if government debt exceeds 100 per cent of GDP in 2018 or net borrowing exceeds 5 per cent of GDP or government bond yields exceed 10 per cent; moderate if debt between 50 and 100 per cent or borrowing between 3 and 5 per cent or yields between 5 and 10 per cent.	Low if short-term reserve coverage below one year of external financing needs (short-term debt plus current account deficit) in 2018/2019; moderate if between 1 and 2 years.	Low if non-performing loans exceed 20 per cent of total loans in March 2020; moderate if between 10 and 20 per cent.

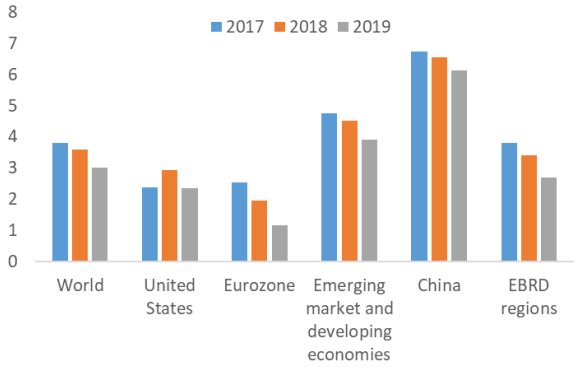
Growth in the EBRD regions slowed to 2.6 per cent in 2019

Growth in the EBRD regions averaged 2.6 per cent in 2019, down from 3.4 per cent in 2018 and 3.8 per cent in 2017 (see Chart 1).[1]

This reflected continued weakness in Turkey (where the economy grew by 0.9 per cent in 2019), a slowdown in Russia (from 2.3 per cent in 2018 to 1.3 per cent in 2019) and weaker export growth across the region, mirroring the slowdown in global trade. The deceleration was in line with global growth slowing since 2017, especially in the Eurozone and China (see Chart 1).

Global growth was already slowing before the Covid-19 pandemic

Chart 1. Real GDP growth (per cent)



Sources: EBRD, IMF and authors' calculations.

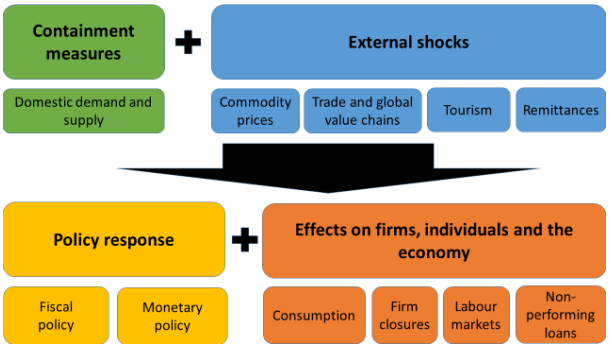
The Covid-19 pandemic is expected to result in sharply lower growth

The Covid-19 pandemic hit on top of this deceleration and is expected to result in sharply slower growth, at least in the near term. Numerous countries in the EBRD regions and across the world have closed their borders to people, closed schools, universities, restaurants and shops, a growing number of countries have implemented lockdowns and curfews. These measures severely affect domestic demand (as a major part of aggregate consumption involves public gatherings) and domestic supply (as workers stay at home) likely resulting in the greatest disruption to global economic activity since the Second World War. This affects not only investor and business confidence but also the fabric of markets as many governments suspend payments of rent, mortgages and utility bills to enable individuals and firms to cope with the loss of revenue.

The economic impact of domestic containment measures is compounded by several related external shocks (Chart 2), whereby economies in the EBRD regions face much lower commodity prices (with the exception of gold prices), lower demand for exports across the board and disruptions to value chain linkages, as well as a collapse in tourism and business travel.

Impact of Covid-19 on supply and demand

Chart 2. Channels through which the Covid-19 crisis affects the EBRD regions



Sources: Authors.

Spread of Covid-19

The first cases of the novel coronavirus, Covid-19, were confirmed in Wuhan, Hubei province of China, on 7 January 2020. In late January, the Chinese authorities imposed the biggest quarantine in history, effectively stopping inbound

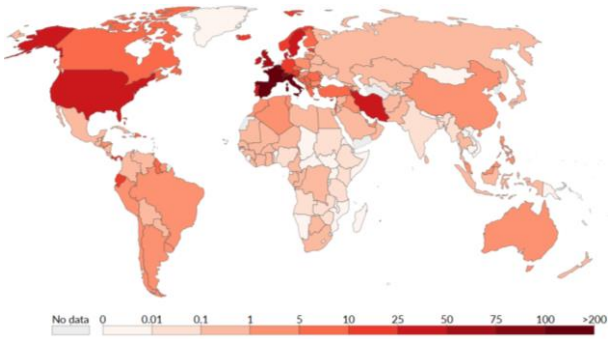
[1] Averages are weighted using the values of countries' gross domestic product (GDP) at purchasing power parity (PPP).

and outbound travel of 60 million people in the Hubei province.

By mid-March 2020, the outbreak spread across the globe (see Chart 3). The World Health Organisation declared a pandemic on 11 March. The epicentre of the epidemic shifted to Europe, by then reporting more cases on a daily basis than China.

The Covid-19 pandemic spread across the globe

Chart 3.Total confirmed deaths per million people, April 6 2020



Sources: European Centre for Disease Prevention and Control (ECDC).

Governments around the world shut borders, advised workers to switch to working from home, closed schools and universities, and imposed restrictions on public events, entertainment, restaurants and hotels. In many cases, shops other than groceries and pharmacies have been ordered to close. A number of economies from France to Jordan introduced curfews or similar arrangements in an effort to slow down the spread of the virus.

Policy response

Governments have started deploying monetary and fiscal policy measures on an unprecedented scale with the view to mitigate the economic impact of the containment measures.

These included drastic cuts in the policy rates in China, the UK, the US and other economies, liquidity injections, and large fiscal packages to pay for measures ranging from paid sick leave to blanket sovereign guarantees on borrowing by small and medium-sized enterprises. Several countries have announced selective holidays with respect to payments of mortgages, utility bills and rents as well as financial aid to help companies deal with delayed deliveries of inputs and the temporary loss of revenue.

The support measures are primarily aimed at preventing the collapse of businesses with viable long-term business models that face a loss of revenues, as well as helping individuals that may temporarily lose part, or all, of their pay. However, these measures may have only a limited impact on economic growth, given the widespread restrictions on consumption and movement of people, and they may result in higher inflation on account on upward pressures on prices of widely-sought staples (see also Goodhart and Pradhan, 2020).

The following sections examine various aspects of the economic impact of Covid-19 on the EBRD regions, looking first at domestic containment measures and monetary and fiscal policy responses, before turning to external shocks. Countries' resilience in these regards vary and are schematically presented in a heat map in Table 1.[2]

Economic impact of domestic containment measures in the EBRD regions

Numerous countries in the EBRD regions have shut down their borders to people and closed schools, universities, restaurants and shops (Chart 4). Some countries have seen significant disruptions beyond the services sectors. For instance, all major car factories closed or are expected to close in Hungary, Serbia and the Slovak Republic.

Such containment measures, designed to help health systems cope with the virus (see Box 1), weigh on domestic demand (as people stay at

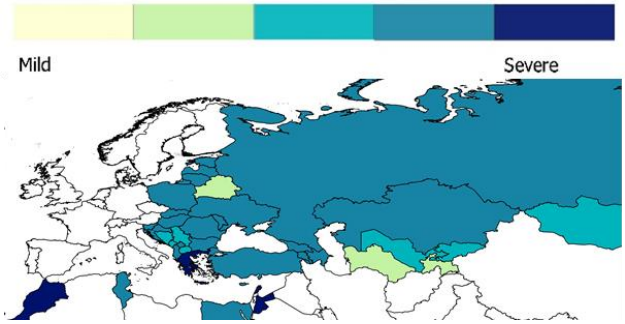
[2] The measures used are discussed in detail in Annex Table 1.

home and spend less) and domestic supply (as fewer people are working). The effects of widespread disruptions are even visible in lower greenhouse gas emissions (see Box 2).

In advanced economies, dining out accounts for about 5 per cent of consumer spending, and estimates suggest that up to 40 per cent of consumer spending is vulnerable to people avoiding gatherings.[3]

Countries vary widely in the extent of domestic containment measures used

Chart 4.Containment measures in the EBRD regions, end-March 2020



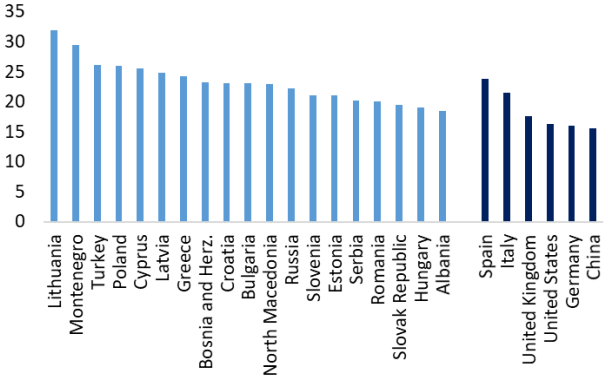
Sources: Authors' calculations.

Note: Containment measures are cumulated and range from no restrictions (mildest) through border closures, school closures, bans on large gatherings, restrictions on retail, industry closures to lockdowns/curfews (most severe).

Demand-side effects are likely to be larger in countries where retail services account for a larger share of GDP, such as Lithuania or Montenegro (see Chart 5).

Retail services account for a large share of GDP in some EBRD economies

Chart 5. Wholesale and retail trade, transport, accommodation and food service activities as a share of GDP, 2018 (per cent)



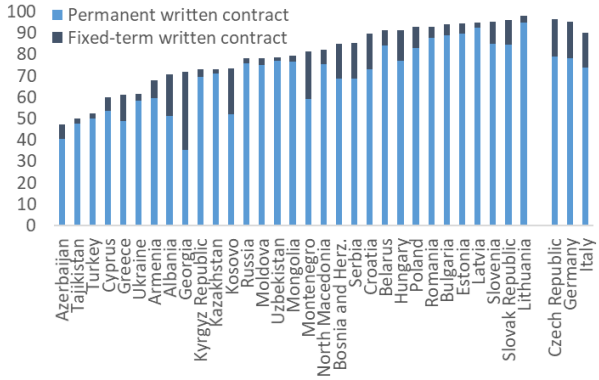
Sources: Eurostat, OECD and authors' calculations.

Effects are also likely to be larger where temporary restrictions on work result in significant income losses. This could be the case for instance, if only a small share of those employed are on permanent contracts (as in Central Asia, Eastern and South-eastern Europe; see Chart 6), making job losses more common. It could also be the case if large shares are self-employed (or working for small enterprises that may be difficult to reach through policy stimulus; see Chart 7), are paid per hour or do not have access to paid sick leave.

[3] *The Economist*, 14 March 2020.

Most people do not have permanent contracts in Central Asia, Eastern and South-eastern Europe

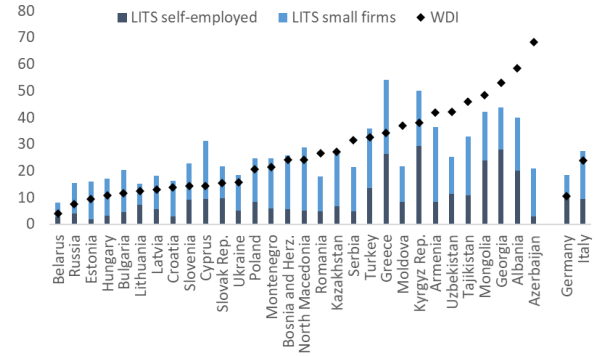
Chart 6. Share of employed by contract type, 2016 (per cent)



Sources: Life in Transition Survey 2016 and authors' calculations.

Most people do not have permanent contracts in Central Asia, Eastern and South-eastern Europe

Chart 7. Self-employed as share of employed, 2016 (per cent)



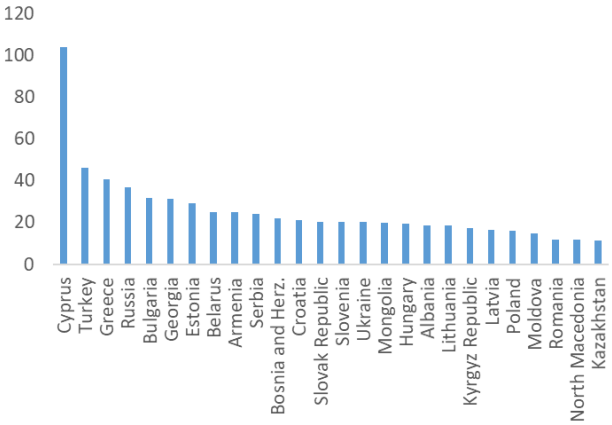
Sources: Life in Transition Survey 2016, World Development Indicators and authors' calculations.

Notes: According to the World Development Indicators definition self-employed include self-employed workers with employees (employers), self-employed workers without employees (own-account workers), members of producers' cooperatives and contributing family workers (also known as unpaid family workers). ILO modelled estimates. Small firms are defined as those with less than 5 people in the Life in Transition Survey.

Vulnerabilities are greater where many firms have high levels of debt, and more broadly, where private sectors are highly leveraged (see Chart 8) given the need for additional debt financing for firms affected by the crisis.

Vulnerabilities are greater where private sector debt is high

Chart 8. Corporate domestic debt as a share of GDP, 2019 (per cent)



Sources: IMF and authors' calculations.

Higher-risk borrowers in emerging markets have already been facing rising costs of funds as investors fled to the perceived safety of advanced economies, despite policy rates having been lowered in many economies (see Chart 9).

Financing conditions have tightened for high-risk borrowers in emerging markets

Chart 9. Yields (per cent)

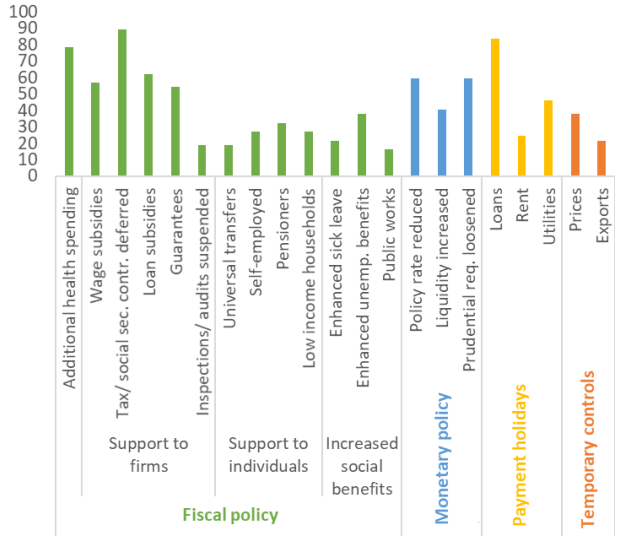
Sources: Bloomberg.

Fiscal and monetary policy response

In order to mitigate these effects, limit insolvencies and shore up individuals' incomes, governments across the EBRD regions have turned to various policy measures, including fiscal and monetary instruments, payment holidays and temporary price controls and export bans (see Chart 10).

Countries vary widely in the extent of domestic stimulus measures used

Chart 10.Share of countries that implemented the following measures in the EBRD regions, early April 2020 (per cent)



Sources: Authors' calculations.

Most countries provided some form of support to vulnerable employers, in particularly in hard-hit sectors such as tourism (for instance, in Russia and Turkey), or for small and medium sized enterprises across the board (for instance, in Egypt, Georgia and Ukraine). The majority of countries in the EBRD regions allowed for payment of some taxes or social security contributions to be deferred.

Over half of the economies in the EBRD regions proposed some form of wage subsidies (for instance targeting a percentage of payroll of the affected firms, as in Bulgaria and Latvia). Such measures can help maintain continuity of employment and could be explicitly conditional on keeping workers employed. They would be most beneficial if implemented quickly, in a way that workers with limited savings could be paid without delay. To the extent that companies are signed up for regular electronic payments of value added tax, for instance, such support could be easier to administer. Indirectly, wage subsidies could reach many workers in the formal sector who otherwise could not be paid. Such measures could prevent excessive layoffs during the epidemic and thus speed up subsequent recovery once virus containment measures are lifted. Some countries also pledged to provide subsidized, often interest-free, loans to help tide businesses over.

Reaching out to those not on employers' payrolls, in particular the self-employed and workers in the informal sector, presents a challenge, especially in countries where informal employment accounts for a large share of total employment. As of early April 2020, only around a quarter of countries in the EBRD regions proposed income support specifically targeting self-employed.

Broad emergency payment schemes are being considered by a number of governments. These may be unconditional (akin to universal basic income, as proposed in Serbia) or conditional on employment (for instance, Greece has announced payment of a fixed amount to workers and self-employed). Administering such payments under lockdowns may present additional challenges in the absence of a government database of bank accounts linked to individual IDs. In the longer term, this crisis could present an opportunity to raise formality in the economy and show the insurance benefits of being part of the formal sector. This could be supported by the development of centralized payment networks that could link bank accounts to personal identifiers issued to residents.

Over a third of countries in the EBRD regions have enhanced unemployment benefits; around 22 per cent introduced enhanced sick leave provisions.

Many economies lowered policy rates and extended various programmes channelling liquidity to the banking system. In many cases, these measures were coupled with forbearance or government-mandated holidays on repayment of loans and leases. Access to low-cost liquidity enables banks to facilitate implementation of such policies that, in turn, ease the burden on companies and individuals facing temporary loss of revenue. In some instances, holidays on payments

of utility bills or rents have also been announced.[4] Their intention is similar. However, if exemptions from paying bills have to be maintained for a prolonged period of time, they will not only weigh on the operation of utility companies, but may undermine the culture of paying bills on time, a fundamental institution underpinning the smooth running of markets.

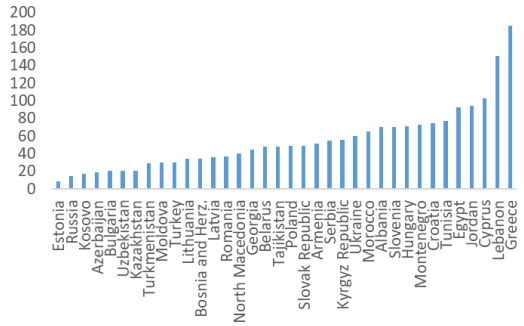
Temporary price controls on basic goods, and export bans on some agricultural goods have also been implemented in some countries (in addition to the restrictions on the exports of medical goods, imposed in around two thirds of economies in the EBRD regions).

Fiscal space

Countries' ability to implement such fiscal measures to support vulnerable individuals and companies will depend on the fiscal space available – the levels of debt, the extent of market access to lenders and the cost of servicing debt.

Already-high government debt will severely constrain fiscal policy in some EBRD economies

Chart 11. General government gross debt as share of GDP, 2019 (per cent)



Sources: IMF estimates.

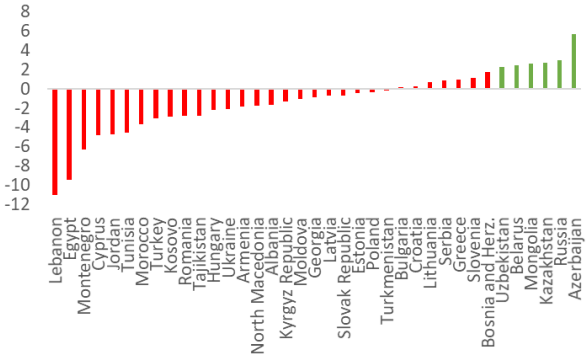
The amounts involved may be potentially large, for instance, where tourism-dependent economies miss out on a quarter or two of tourism revenues.

Government debt is already very high in some countries: it exceeds 100 per cent of GDP in Greece and Lebanon (see Chart 11).

In some countries, such as Egypt, high levels of debt were compounded by high fiscal deficits even before the Covid-19 crisis (see Chart 12). Lebanon did not repay government bond which matured on 9 March 2020.

Government deficits also already large in most EBRD economies

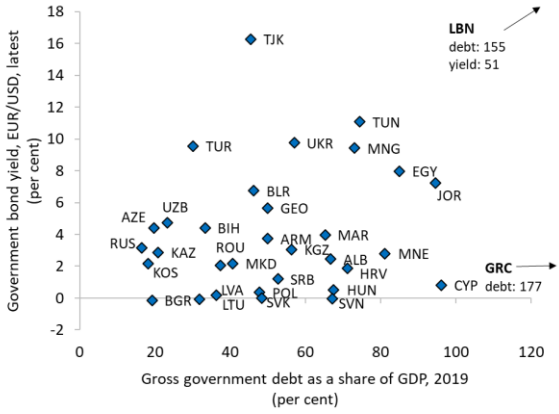
Chart 12. General government net lending/ borrowing as share of GDP, 2019 (per cent)



Sources: IMF estimates.

The cost of market access is high for some economies with moderate public debt levels

Chart 13. Government debt as share of GDP and latest cost of market access



Sources: Bloomberg, IMF, and authors' calculations.

[4] Utility payments account for over 10 per cent of household income for the median household in the EBRD regions, typically higher for lower-income households. Rent payments average around a quarter of household income, though home ownership rates tend to be high across the EBRD regions, exceeding 85 per cent on average, according to the 2016 Life in Transition Survey, a representative household survey conducted by the EBRD and the World Bank.

Some economies with moderate levels of debt, such as Tajikistan, Turkey or Ukraine, nonetheless face relatively high costs of borrowing in the market owing to perceived vulnerabilities of their economies (see Chart 13).

External financing needs (proxied using outstanding short-term debt plus the current account deficit) are already high relative to reserves in several economies.

In the case of countries with binding fiscal space constraints, an internationally coordinated solution may be needed to facilitate an effective fiscal package accompanying virus containment measures.

Financial systems may come under greater pressure in countries where the share of non-performing loans was already high before the Covid-19 crisis.

External shocks

External shocks affecting the EBRD regions include a sharp drop in commodity prices, disruption to global value chains, a collapse in tourism and a likely drop in remittances.

Stock market indices plunged across the world and market volatility has risen to its highest level since records began in 1990 (Charts 14 and 15).[5]

The US dollar strengthened against many emerging-market and advanced-economy currencies, in line with trends observed during previous episodes of high volatility in financial markets.

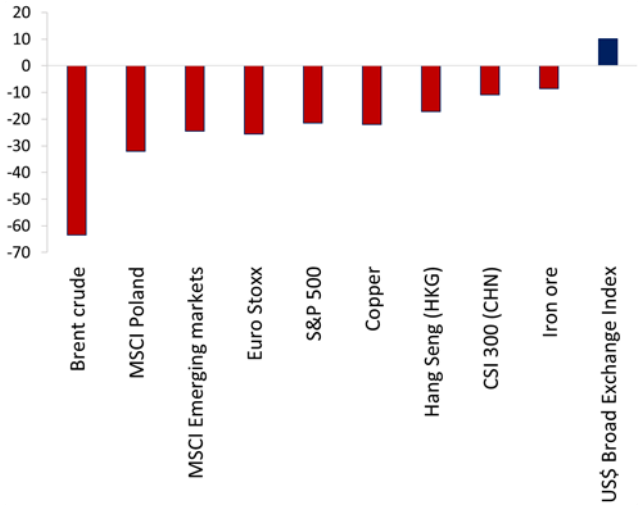
The Baltic Dry Index, reflecting dry bulk shipping stocks, declined by more than 20 per cent (see Chart 16).

Sharp drop in commodity prices

Between early January and end-March, prices of copper, iron ore and oil declined by up to 65 per cent (see Chart 14).

Commodity and stock prices dropped sharply

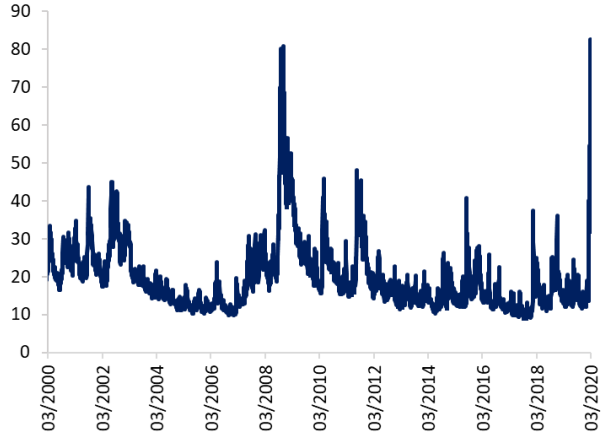
Chart 14. Change in indicators, early January-end March (per cent)



Sources: Thomson Reuters and authors' calculations.
Note: The US$ Broad Exchange Index is a trade-weighted measure of the value of the US dollar relative to other currencies.

Global volatility spiked

Chart 15. Volatility Index (VIX)

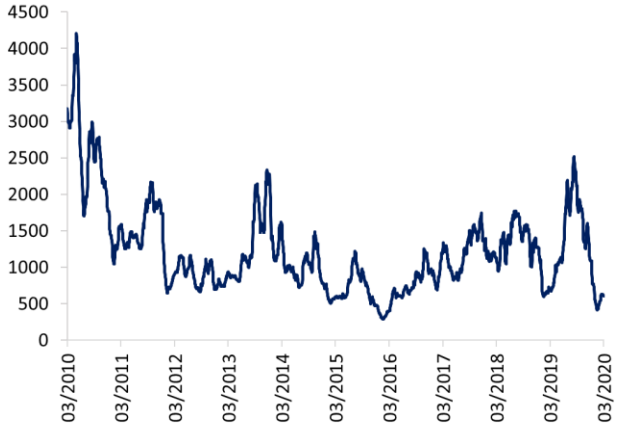


Sources: Thomson Reuters and authors' calculations.

[5] For detailed financial indicators for the EBRD regions as of end-March see Annex Table 2.

The shipping industry also weakened

Chart 16. Baltic Exchange Dry Index



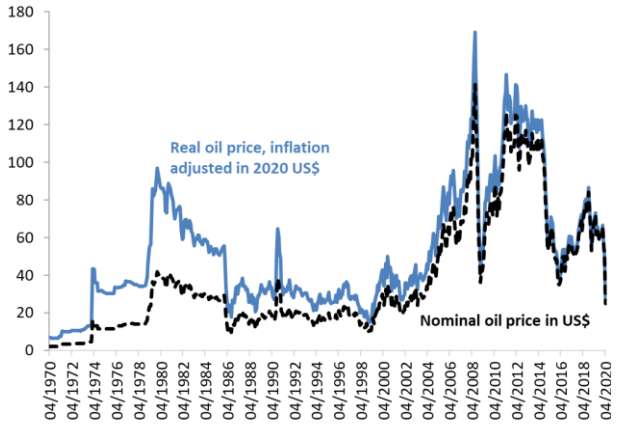
Sources: Thomson Reuters and authors' calculations.
Note: The Baltic Exchange Dry Index is a composite of the Capesize, Panamax and Supramax Timecharter Averages. It is a proxy for dry bulk shipping stocks as well as a general shipping market bellwether

Oil prices fell from an average of US$ 63 per barrel of Brent in the fourth quarter of 2020 to US$ 23 per barrel in late March 2020 (see Chart 17). Adjusted for US inflation, oil last traded this low in 1999 (the historical low of 1998 corresponds to US$ 18 per barrel of Brent in today's prices).

Prices fell as Russia refused to agree production cuts with the Organisation of Petroleum Exporting Countries (OPEC) to counteract falling demand. As talks collapsed, Saudi Arabia raised production sharply and announced major discounts in key markets.

Oil prices dropped to the level of the late 1990s

Chart 17. Nominal and real oil prices



Sources: Thomson Reuters and authors' calculations.

Lower demand for commodities will weigh on commodity exporters in the EBRD regions, notably Azerbaijan, Kazakhstan, Mongolia, Russia and Turkmenistan. Lower oil prices also weigh on economies in Central Asia, Eastern Europe and the Caucasus with strong trade (and remittance) ties with Russia.

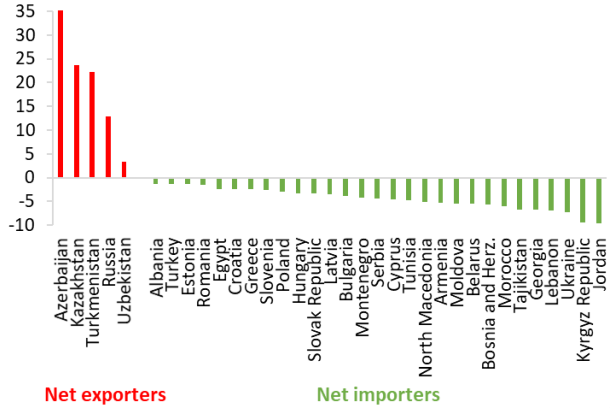
In the short term, Russia appears to be in a relatively good position to deal with low oil prices (see Box 3). Russia's variable costs of production (excluding the cost of investment) are estimated to be around US$ 15-20 per barrel, with extraction remaining profitable above these levels. The fiscal rule is designed to replenish the reserves whenever the oil price exceeds US$ 40 per barrel. The National Welfare Fund could be tapped into to finance the necessary imports to continue implementing the National Projects – twelve large-scale investment initiatives.

While lower oil prices present challenges for the region's oil exporters, flexible exchange rates can help absorb the shock. During the recent drops in commodity prices (in 2014-15 and in 2016), currencies in Azerbaijan, Kazakhstan and Russia tended to depreciate in line with oil prices (Azerbaijan being the last to shift to a more flexible exchange rate regime).

Most countries in the EBRD regions are net importers of oil and stand to benefit from lower energy prices as their import bills are reduced and some governments, notably in the Southern and Eastern Mediterranean, spend less on fuel subsidies. However, while gains from lower prices are shared widely and tend to be modest, the negative impact is concentrated in a smaller number of major oil exporters (Chart 18). In addition, extra disposable income of consumers may have low, if any, impact on demand in the presence of domestic measures to contain the spread of the virus.

Lower commodity prices will weigh on the economies of commodity exporters

Chart 18. Net balance of trade in gas and oil as a share of GDP, 2018 (per cent)



Sources: International Trade Centre, UN Comtrade and authors' calculations.

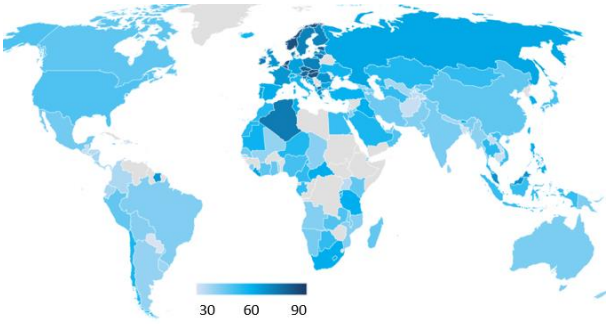
Disruption to global value chains

The pandemic also brought the complexity of global supply chains into the spotlight. China's province of Hubei, the origin of the epidemic, is a high-tech manufacturing hub, home to local and foreign firms highly integrated in global supply chains in the automotive, electronics and pharmaceuticals industries (300 of the world's top 500 companies have facilities in Wuhan). A survey by the Shanghai Japanese Commerce and Industry Club found that supply chains of 54 per cent of companies were affected by the initial disruption in Hubei alone, with only 23 per cent of respondents indicating they had alternative procurement plans. Several car plants around the world, including in Serbia, had to halt production early due to missing parts.

Economies in the EBRD regions are among the most integrated in global value chains (see Chart 19). In Central Europe, around 45 per cent of exports by value added are first imported in the form of inputs and components (Chart 20).

The EBRD regions are highly integrated in global value chains

Chart 19. Global value chain participation as a share of exports, 2018 (per cent)

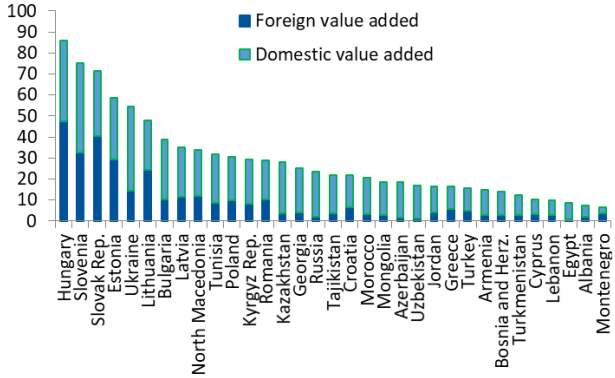


Sources: EBRD SEMED Global Value Chains diagnostics, UNCTAD-EORA (2019).

Notes: Global value chain participation refers to the share of a country's exports that is part of a multi-stage trade process, measured here as the sum of backward and forward linkages over exports. The larger the ratio, the greater is the intensity of involvement of a particular country in global value chains.

Foreign inputs represent a major share of exports

Chart 20. Domestic and foreign value added in exports as a share of GDP, 2018 (per cent)



Sources: EBRD SEMED Global Value Chains diagnostics, IMF (2019), UNCTAD-EORA (2019).

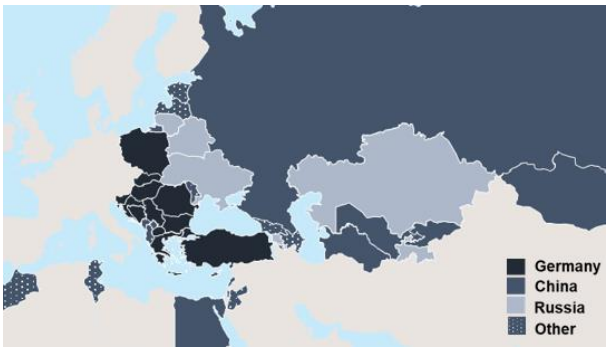
However, trade links with China are strongest in Central Asia, while economies of central and south-eastern Europe are strongly integrated with Germany's; and economies of eastern Europe remain strongly interlinked with Russia's (Chart 21).

In the short term, the region's deep integration in supply chains is a source of vulnerability in the face of wide-spread disruptions to supply chains. Knock-

on effects may be large as companies often do not know the details of the suppliers of their suppliers.

Trade links with China are strongest in Central Asia; emerging Europe trades most with Germany, Russia

Chart 21. Most important trading partner for EBRD economies, 2018/2019



Sources: International Trade Center and author's calculations.
Note: Based on exports plus imports.

Longer term: diversification of supply chains

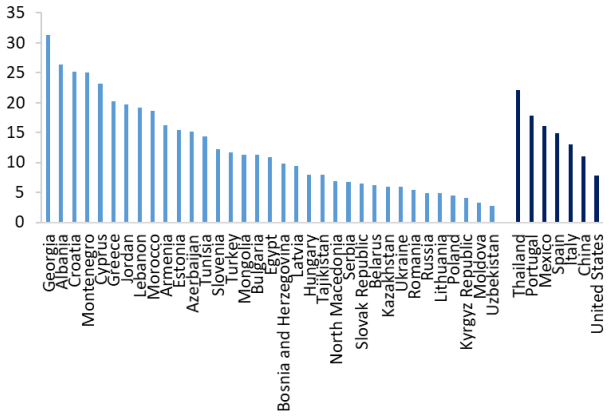
In the longer term, the Covid-19 crisis will likely lead to greater scrutiny of supply chains, with greater focus on diversification and resilience. The EBRD regions' integration in supply chains may offer opportunities to scale up exports of certain products as companies worldwide reassess the risks of high concentration in supply chains (see Box 4).

Collapse in tourism

Several economies in the EBRD regions are highly vulnerable to broad disruptions in global tourism (see Chart 22)**.** Tourism revenues exceed 20 per cent of GDP in Georgia, Albania, Croatia, Montenegro, Cyprus and Greece.

Many economies in the EBRD regions are very vulnerable to a collapse in tourism

Chart 2.20. Tourism receipts as a share of GDP, 2018 (per cent)



Sources: World Bank, World Travel and Tourism Council and authors' calculations.

Remittances

Some countries in the EBRD regions are highly dependent on remittances. Remittances are concentrated in terms of source countries (Russia, the Gulf Cooperation Council, France, Germany and Italy), making recipient countries vulnerable to large shocks hitting the sending economies. For instance, remittances from Italy exceed 3 per cent of GDP in Albania and Moldova, and 1 per cent in Kosovo and Tunisia.

Remittances tend to be relatively stable sources of income. They often increase in the aftermath of natural disasters and economic and political shocks. The remitted amounts tend to be fixed in the sending country's currency. A depreciation of the Russian rouble, for instance, reduces the US dollar equivalent amount received in a country like Armenia or the Kyrgyz Republic. However, where recipient countries' exchange rates regimes are flexible, the currencies tend to co-move with those of the sender countries, in a way that remittances maintain their value in local currency terms (see Box 5).

Overall, external factors by themselves, such as lower global demand, a drop in commodity prices and a drop in global manufacturing activity, could

reduce the average growth in the EBRD regions in 2020 by a further 2.5 percentage points relative to the level of growth that could be expected based on domestic containment measures alone.[6]

Outlook

In a central scenario**,** restrictions on cross-border and domestic activity are assumed to last for a few months, with a gradual relaxation and return to normality during the second half of the year. During the period of restrictions, fiscal and monetary policy packages will be deployed across the region's economies to limit layoffs and insolvencies while shoring up individuals' incomes.

During this period, GDP may contract substantially, based on the early data from China for January-February 2020 and data on various major disruptions to economic activity experienced in the past. For instance, damages from a one-day blackout in Italy (28 September 2003) are estimated at close to 0.1 percentage point of annual GDP (Schmidthaler and Reichel 2016; estimates for other countries are of a similar magnitude). Serbia's GDP dropped by 12 per cent in 1999 during the NATO bombing and associated curfews.

Under this central scenario, output in the EBRD regions is likely to contract in 2020, with growth resuming after lockdowns are eased. A small fraction of consumption could be shifted into the future (in the form of delayed holidays or car purchases) rather than foregone further facilitating recovery.

Risks to the outlook

If the containment phase is relatively short, the outbreak may not have a major impact on the long-term trajectory of output, as long-term growth is primarily driven by technological change and demographics.

However, prolonged quarantines and closures of schools and businesses may result in substantial loss of production capacity and negatively impact the potential rate of growth in the medium term – on account of mass layoffs, business closures, loss of skills or erosion of fundamental institutions such as the culture of paying bills on time.

Protracted lockdowns may result in deep structural damage to consumer service industries (from airlines to cinemas to restaurants), although some other services (such as food deliveries) may benefit.[7] The lockdowns would also impose a large fiscal cost and result in sharp increases in public debt, as many workers may rely on benefits akin to universal basic income. The new levels of public debt may remain affordable for many economies due to very low real interest rates (akin to the pattern during reconstruction after the Second World War), but some economies will face binding fiscal constraints. A global recession featuring in such a prolonged-lockdowns scenario has to date been a rare occurrence (see Box 6).

[6] This estimate is based on a comparative statics analysis, using a principal components nowcasting framework that links quarterly growth in each economy to a number of "principal components" that are, in turn, calculated using a large number of domestic and global variables available at high frequencies.

[7] On 16 March 2020, Amazon announced plans to hire an additional 100,000 warehouse and delivery workers in the US as demand for online deliveries increased at an unprecedented pace.

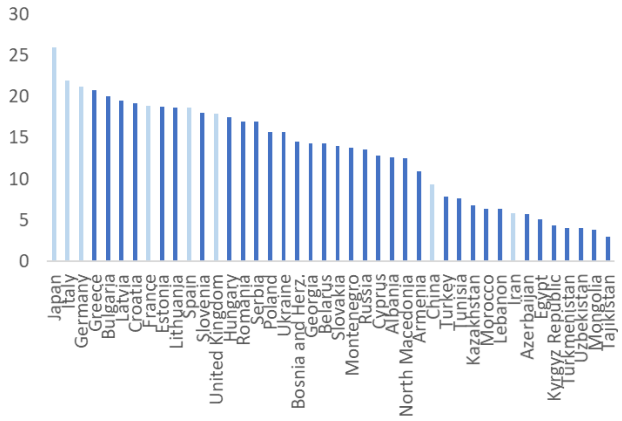
Box 1. Health care systems in the EBRD regions

The Covid-19 pandemic is placing countries' health care systems under unprecedented strain. Emerging Europe's demographics are similar to those of advanced European economies. Public health care spending in the EBRD regions is, however, far below that in advanced Europe, with fewer doctors per population, though economies in the EBRD regions compare favourably in terms of the number of hospital beds.

Emerging Europe's demographics are similar to those of advanced European economies. Over 20 per cent of the population is over the age of 65 in countries like Bulgaria and Greece – a dependency ratio similar to that of advanced European countries (see Chart 1.1).

Emerging Europe's demographics are similar to those of advanced European countries

Chart 1.1. Share of population over the age of 65 (per cent)



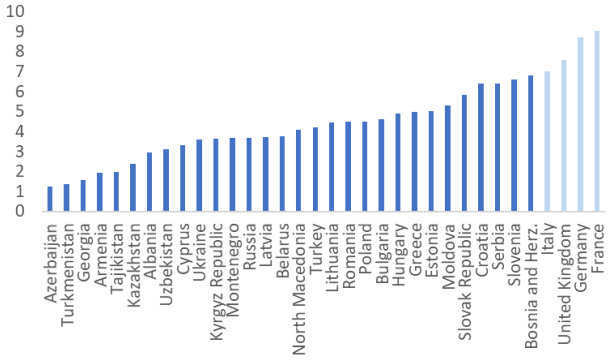
Sources: World Health Organization and authors' calculations.
Notes: Latest available, 2014-2017.

The Covid-19 crisis is placing countries' health care systems under unprecedented strain. Even in Lombardy, Italy's richest region, demand has far exceeded capacity. Governments across Europe have intensified their search for ventilators, oxygen and other medical supplies as doctors and hospitals prepared for a surge in Covid-19 patients.

Public health care spending in the EBRD regions is far below that in advanced Europe. Health care expenditures as a share of GDP are typically between one-third and two-thirds of the level of Germany (see Chart 1.2). On average, the EBRD regions also have fewer physicians per population (see Chart 1.3), though compare somewhat more favourably to advanced European countries on the number of hospital beds (see Chart 1.4).

Health care spending in Emerging Europe is far below that in advanced European economies

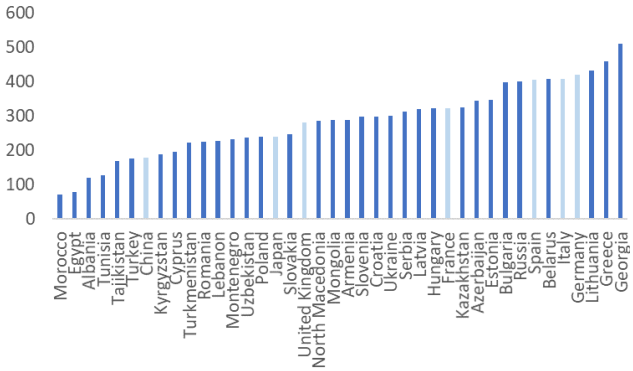
Chart 1.2. Public health care expenditure as a share of GDP (per cent)



Sources: World Health Organization and authors' calculations.
Notes: Latest available, 2014-2017.

Emerging Europe has fewer doctors per population than advanced European countries

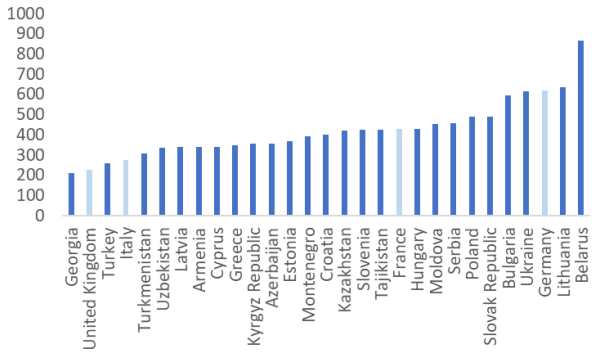
Chart 1.3. Total number of practising physicians, per 100,000 inhabitants



Sources: World Health Organization and authors' calculations.
Notes: Latest available, 2014-2017.

Emerging Europe compares more favourably to advanced European countries on the number of hospital beds

Chart 1.4. Number of acute care hospital beds per 100,000 inhabitants



Sources: World Health Organization and authors' calculations.
Notes: Latest available, 2014-2017.

Box 2. The Covid-19 pandemic and the green economy

The Covid-19 pandemic resulted in temporary extra reductions in greenhouse gas emissions, but its longer-term effect on the environment will depend on government policies.

The Covid-19 pandemic has forced entire countries into lockdown mode, resulted in major disruptions to economic activity and triggered a financial market meltdown. One of its unintended outcomes may be extra reductions in greenhouse gas emissions. Indeed, satellite imagery from the European Space Agency (ESA) shows that air pollution levels have been temporarily slashed air pollution levels around the world.[8] Readings from ESA's Sentinel-5P satellite show that over the past six weeks, levels of nitrogen dioxide (NO_2) over cities and industrial clusters in Asia and Europe were markedly lower than in the same period last year.

Moreover, the International Energy Agency (IEA) has reported the first quarterly decline in a decade in terms of oil demand. Compared to the same period last year, global oil demand is expected to drop by 435,000 barrels in the first three months of 2020.

Will the reduction in greenhouse gas emissions last? Experience during and after the 2008-9 financial crisis suggests that this depends on the government policies. Then, as now, global greenhouse gas emissions initially dropped. But they quickly rebounded in 2010 and have been rising steadily since, partly because the chance was missed to use the vast amounts of public money to set the world on a green path. Environmental standards and law enforcement have been deprioritised, clean energy investments deferred and infrastructure and resource development poorly planned.[9]

There is no doubt that the Covid-19 pandemic requires a forceful, immediate response. It has shown that transformational changes can happen and have occurred literally overnight. But in managing the crisis, governments – while protecting their citizens medically and economically in the short term - must also look to the long term; they should not be seduced into supporting fossil fuel use due to the currently low oil prices.

There have been calls in some countries in eastern Europe, such as the Czech Republic and Poland, to ignore climate concerns and pour stimulus money into existing high-carbon businesses and fossil fuels. But this would be a lost opportunity.

Climate change, biodiversity loss, and financial collapses share some similarities with Covid-19: they do not observe national or even physical borders and they can be managed only through collective action that starts long before they become full-blown crises. Moreover, deforestation, biodiversity loss, and climate change make pandemics more likely. Likewise, the Intergovernmental Panel on Climate Change warns that global warming will likely accelerate the emergence of new viruses.

Firms are not likely to change the way they work of their own volition. Data from the latest EBRD-EIB-WB Enterprise Surveys show that firms in the EBRD countries of operation are not very climate change aware – more than half monitoring their energy consumption, but few have conducted external audits of their energy consumption or monitored their CO_2 emissions. More than 7 in 10 firms have not adopted any energy efficiency measures in the last three years. Moreover, 60 per cent of them do

[8] *The Guardian*, 23 March 2020

[9] See Pacca and others (2020).

not think that such investments are a priority relative to other investments.

However, evidence also suggests that firms that face customer pressure to improve their green credentials or that have experienced losses due to extreme weather events are more aware of their impact on the environment and try to reduce their environmental footprint (EBRD 2019). In return for public money, they should commit to reduce their environmental footprints. More broadly, governments should put climate action and resilience at the core of economic stimulus packages and prioritise support towards green firms. This will ensure that public spending helps address both the current economic crisis and the ongoing climate crisis.

Box 3. How vulnerable is Russia's economy to lower oil prices?

Russia remains heavily dependent on oil for both budget revenues and growth, though recent reforms have improved the resilience of the economy to falling oil prices. Russia is well-positioned to withstand temporary drops in oil prices as the flexible exchange rate mitigates budgetary implications and the National Welfare Fund is well-capitalised. However, if oil prices remain low for a sustained period, a tension will arise between maintaining the buffer currently provided by low levels of debt and boosting growth.

Russia remains heavily dependent on oil for both its budget revenues and growth. Despite efforts to diversify the economy, oil and gas account for over 50 per cent of exports, almost 40 per cent of budget revenues and 30 per cent of GDP.

Recent reforms have, however, improved Russia's resilience to falling oil prices. When oil prices halved in 2014 (as Saudi Arabia ramped up oil production to curtail the development of the US shale industry and Russia was hit by sanctions), Russia's GDP contracted by 2.3 per cent, the rouble halved in value and general government deficit reached 7.6 per cent of GDP in 2015. In response, a series of reforms were introduced, including, most importantly, exchange rate flexibility. This was complemented by fiscal reforms and the tapping of new sources of income, notably a 2 percentage point increase in the value added tax rate and an increase in the retirement age. A budget rule was also introduced, with revenues being sterilized and transferred to the National Welfare Fund (NWF) whenever the oil price is above the budget breakeven price, and reserves being sold to support the currency when it is below.

These reforms supported macroeconomic stability, though have taken a toll on growth. The oil price at which budget is balanced has fallen to US$ 42 from US$ 115 in 2008, and the budget recorded a surplus in 2018. The NWF reached US$ 150 billion, equivalent to 9 per cent of GDP, and international reserves stood at US$ 570 billion in early 2020, more than covering external debt. Growth, however, has remained sluggish (1.3 per cent in 2019), resulting in stagnating real incomes.

Russia is well-positioned to withstand temporary drops in oil prices as the flexible exchange rate mitigates budgetary implications and the NWF is well-capitalised. As the oil price falls and the rouble weakens, revenues in rouble terms are preserved even as they fall in US dollar terms.

However, if oil prices were to remain low for a sustained period, a tension would arise between supporting growth and maintaining the buffer currently provided by low debt and comfortable reserves. When oil prices are below the breakeven level, the NWF starts to become depleted as transfers are made to cover the budget deficit. For example, if oil prices remain at current levels of around US$ 30 per barrel, this would result in a deficit of around 1 per cent of GDP, which corresponds to around 10 per cent of the NWF assets. Given strict rules surrounding the use of the NWF[10], this would quickly start to limit the spending available for activities that are intended to provide the foundation for Russia's growth in the coming years, including the 12 National Projects (such as upgrading road infrastructure or building a 5G telecommunications network). These projects aim at modernizing and revitalizing Russian society at a cost of almost US$ 400 billion,

[10] An amount corresponding to 7 per cent of GDP must be kept as liquid assets, which guarantee fulfillment of state obligations and preserves macroeconomic and financial stability, only funds in excess of this can be used for investment. If budget deficits start to deplete the NWF to below 7 per cent of GDP, this will restrict financing available for various projects.

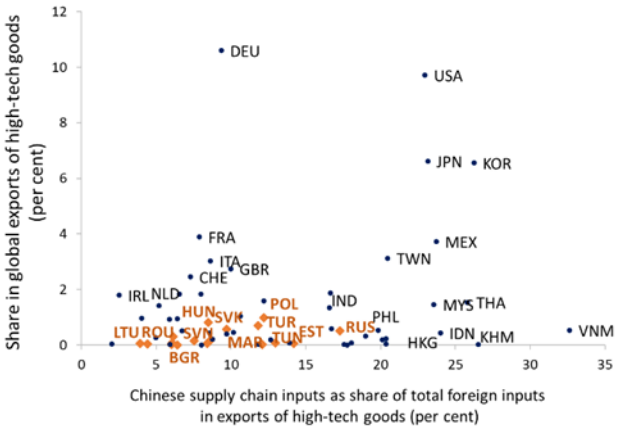
alongside the recently announced package of social security measures, which will cost 2.1 trillion roubles (US$ 26 billion) over 3 years. Partly reflecting these concerns, yields on Russia's debt in recent weeks have been higher than what could be expected based on Russia's low levels of public and external debt.

Box 4. Export opportunities if companies were to seek to minimise concentration risks in supply chains

In the longer-term, the Covid-19 crisis may lead to greater scrutiny of supply chains across a multitude of sectors, with greater focus on diversification and resilience. In many sectors, China is a dominant supplier globally – in some of these sectors EBRD regions' economies already have a comparative advantage and high export volumes, with a potential to scale up their exports. These sectors include textiles, metals, chemicals and pharmaceuticals, agriculture and machinery. In particular, car exporting economies in central and south-eastern Europe and textile producers in the southern and eastern Mediterranean could benefit.

With low labour costs and a large labour pool, China has become one of the main hubs in global value chains, particularly in high-tech industries (Chart 4.1).

Chart 4.1. China's value added as a share of total foreign value added in exports, 2015 (per cent)

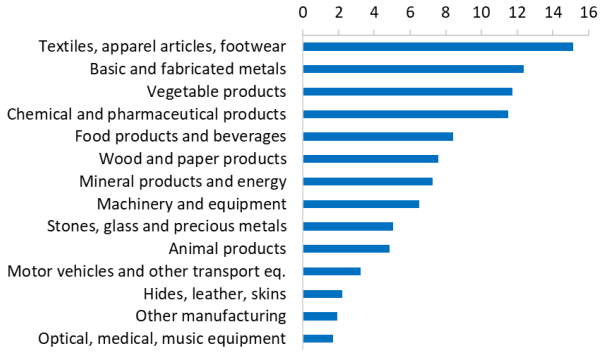


Sources: OECD TiVa Database and authors' calculations.
Notes: High-tech goods include pharmaceuticals and chemicals, computers, electronic and electrical equipment, machinery, motor vehicles and other transport equipment.

The Covid-19 pandemic has brought attention to high concentration risks in global supply chains. This may lead to greater focus on diversification and resilience in the longer term. The following analysis examines potential substitution opportunities for exporters in the EBRD regions in this context.

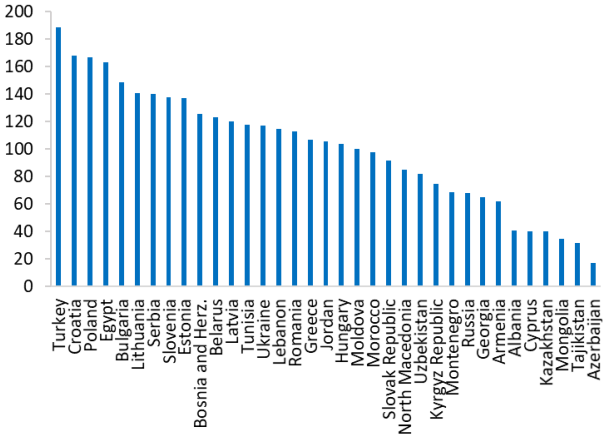
The EBRD regions appear to have high revealed comparative advantage in textiles, metals, chemicals and pharmaceuticals, agriculture and machinery (see Chart 4.2). Revealed comparative advantage is measured as the ratio of a product's share in a country's total exports (at the 4-digit HS level) and the share of that product in global trade. If this ratio exceeds one, a country specialises in exports of that good relative to the world's average economy.

Chart 4.2. 4-digit product lines with revealed comparative advantage (RCA≥3) by sector, share in per cent



Sources: International Trade Centre and authors' calculations.
Notes: Based on 4-digit HS product codes.

Chart 4.3. Number of product groups with revealed comparative advantage (RCA≥3), 2018



Sources: International Trade Centre and authors' calculations.
Notes: Based on 4-digit HS codes.

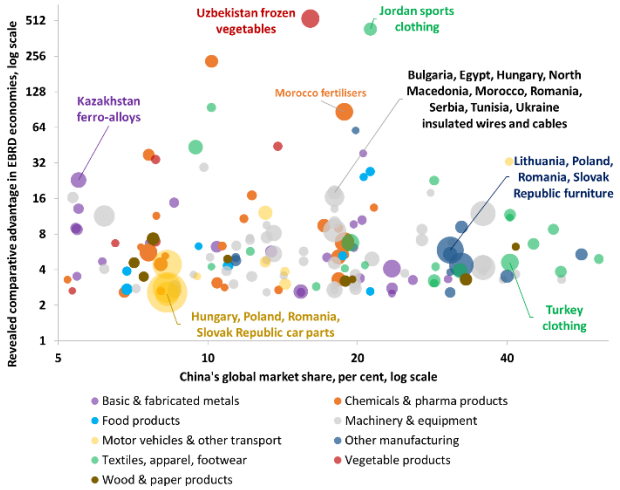
Economies in central Europe and the Baltics, south-eastern Europe and Turkey have the most diverse

set of sectors with a comparative advantage. Turkey, for instance, has a revealed comparative advantage greater than 3 in 189 product groups at the four-digit Harmonised System classification (see Chart 4.3).

Some of these lines, while showing comparative advantage, may still be too small in terms of export volumes, or show little overlap with China's current exports.

Zooming in on product groups where China is a major exporter globally and where economies in the EBRD regions export at least US$ 500 million and have strong comparative advantage (RCA≥3), product groups with potential to benefit from a shift towards diversification include motor vehicles, machinery, textiles, metals and chemical products (see Chart 4.4).

Chart 4.4 China's share in global exports and products exported with significant comparative advantage in the EBRD regions, 2018



Sources: International Trade Centre and authors' calculations.
Note: Based on 4-digit HS codes. Bubble size indicates the absolute export volume in US$ millions. Restricted to lines with RCA≥3 and export volume of more than US$ 500 million.

Hungary, Poland, Romania and the Slovak Republic have revealed comparative advantage in motor vehicles and machinery as well as significant production capacities and may thus benefit from diversification away from China. Jordan, Morocco, Tunisia and Turkey have revealed comparative advantage in the exports of apparel and textiles. Though their export volumes are smaller, they could gain from economies of scale in the light of diversification away from China.

Furthermore, there could also be opportunities in expanding to products *closely related to* those that EBRD countries are currently exporting. The analysis above only looks at direct overlaps at the 4-digit product classification; it does not yet allow for opportunities in related products across 4-digit groups.

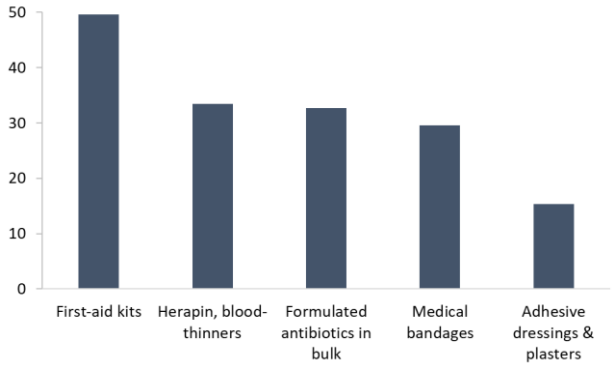
Countries' ability to diversify their export bases is enhanced if their areas of comparative advantage are "similar" to many other products in terms of capabilities required across products: the set of human and physical capital, institutions and infrastructure.[11] For instance, agricultural products and commodities tend to have weak connections to other sectors, making it difficult for countries specialising in commodities to diversify into other products. In contrast, countries exporting industrial products such as machinery or other capital-intensive goods tend to find it easier to shift to exporting new goods.

In other words, a country's ability to diversify its exports is likely to be determined by the composition of its current export basket. For instance, in the pharmaceutical sector, China's share of total G7 imports is high for pharmaceutical components and medical equipment, such as blood thinners and formulated antibiotics in bulk (see Chart 4.5). While EBRD countries still produce relatively little in these exact products (where China strongly dominates the global market), a number of EBRD economies do have important export bases in the broader pharmaceutical sector (on account of exporters such as Krka in Slovenia or Gedeon Richter in Hungary), from which they could

[11] For an in-depth discussion see Hausmann and Klinger (2006, 2007) and EBRD (2008).

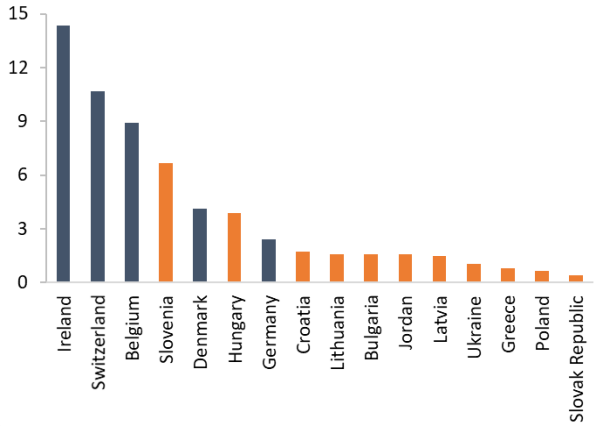
grow and diversify their exports further (see Chart 4.6).

Chart 4.5. China's share in G7 total imports of selected medical supplies, 2018 (per cent)



Sources: International Trade Centre and authors' calculations.
Notes: Imports are for the following HS codes: 300650, 300190, 300320, 300590, 300570.

Chart 4.6. Pharmaceutical exports as a share of GDP, 2018 (per cent)



Sources: ITC and authors' calculations.
Notes: Exports are for all pharmaceutical 4-digit HS codes.

Box 5. Remittances in the EBRD regions

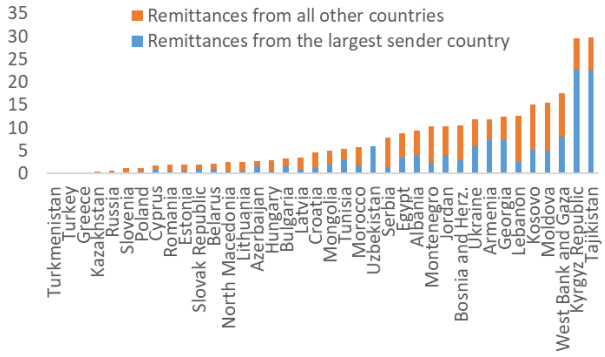
Some countries in the EBRD regions are highly dependent on remittances. Remittances are also concentrated in terms of source countries, making recipient economies vulnerable to large shocks hitting the sending countries. However, remittances tend to be stable sources of income. In the past, they increased in the aftermath of natural disasters and economic and political shocks. The remitted amounts are typically fixed in the sending country's currency, a depreciation of this currency thus reducing the amount received at home. However, where exchange rates are flexible, receiving countries' currencies often co-move with those of the sender countries, thus resulting in maintained inflows of remittances in local currency terms.

Some countries in the EBRD regions are highly dependent on remittances. Remittances on average are higher than in countries at comparable levels of development. They account for almost 30 per cent of GDP in Tajikistan and the Kyrgyz Republic and exceed 10 per cent of GDP in many other countries in Central Asia, Eastern Europe and the Western Balkans.

Remittances are highly concentrated in terms of source countries. In about half of economies in the EBRD regions, the single largest sending country accounts for at least 40 per cent of total remittance receipts (Chart 5.1).

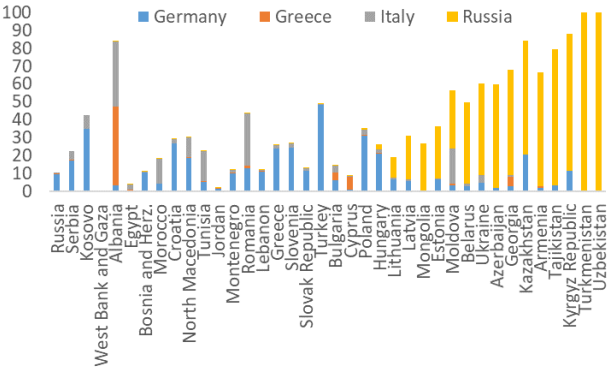
Russia remains the dominant source country for Central Asia, Eastern Europe and the Caucasus (Chart 5.2); Morocco and Tunisia depend on remittances from France; Lebanon and Jordan, on those from Saudi Arabia. Germany remains the most important source for much of south-eastern Europe and Turkey, but within-regional remittances (including from cross-border or seasonal work) are also important (for example, from Croatia to Bosnia and Herzegovina).

Chart 5.1. Remittances received as a share of GDP (per cent)



Sources: World Bank and authors' calculations.
Note: Remittances as a share of GDP refer to 2019; bilateral information is from 2017.

Chart 5.2. Share of remittances received by source country, 2017 (per cent of total inflows)



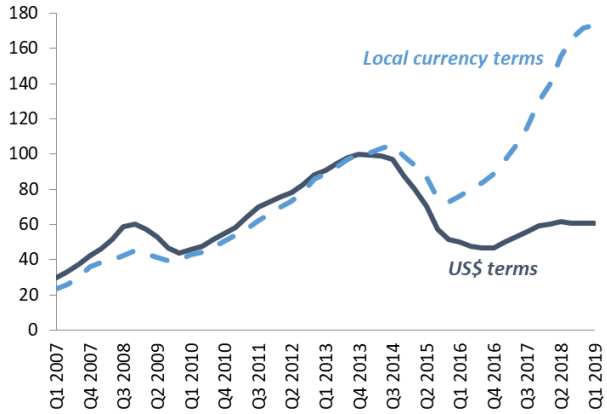
Sources: World Bank and authors' calculations.

Remittances tend to be stable sources of income. They are the least volatile component of balance-of-payments flows: they co-move less with GDP than foreign portfolio investment or foreign direct investment. They are typically insensitive to the cost of remitting. They tend to increase in the aftermath of natural disasters and economic and political shocks, supporting incomes in remittance-receiving countries at times of crisis.[12] Their amounts are typically fixed in the sending country's currency (for example, in Russian roubles in case of remittances to the Kyrgyz Republic). A depreciation

[12] See e.g. Weiss Fagen and Bump (2005) or World Bank (2006).

of this currency (the Russian rouble) would thus reduce the amount received at home. However, where exchange rates are flexible, receiving countries' currencies often co-move with those of the sender countries, thus offsetting most of fluctuations in purchasing power. So far, remittances from Russia to Central Asia and Eastern Europe have continued to increase in local currency terms, despite stagnating in US dollar terms (Chart 5.3).

Chart 5.3. Remittances from Russia to Central Asia and Eastern Europe, local currency and US dollars



Sources: World Bank and authors' calculations.

Note: Remittances from Russia to Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Mongolia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. GDP-weighted average; inflation-adjusted, moving average index, 2013Q4=100.

Box 6. Global recessions

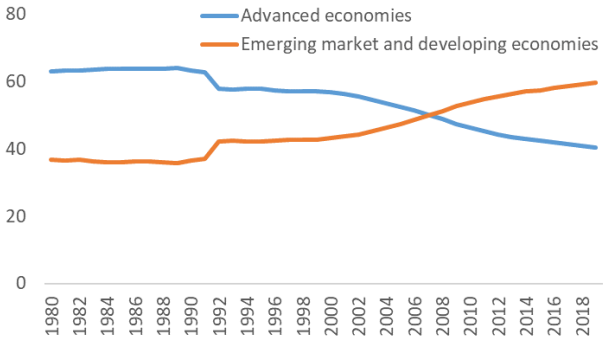
Recessions are typically defined as declines in GDP over two successive quarters. Defining a global recession is much more difficult, due to additional choices of how to aggregate country-level growth rates, a need to take into account very different population growth rates across advanced and emerging economies and the lack of quarterly data at the global level. Global recessions are few and far between: global annual real GDP growth, at PPP weights, only fell below zero three times in the last 40 years: in 1981-82, 1992 and 2009.

Recessions are typically defined as declines in GDP over two successive quarters. Alternatively, they can be identified using algorithms, which date peaks and troughs of business cycles, such as those used by the National Bureau of Economic Research (NBER) for the United States and the Center for Economic Policy Research (CEPR) for the eurozone.

Defining a global recession is more difficult, as the results may depend on whether country growth rates are aggregated at market exchange rates (emphasizing growth in advanced economies) or at purchasing power parity (PPP, emphasizing growth in emerging markets), the way different population growth rates across advanced and emerging economies are taken into account (emerging and developing economies tend to have faster GDP growth than industrialized economies, but they also have more rapid population growth), and the lack of quarterly data for some economies today and for many economies in the past.

The choice of country weights has become more important over time, as emerging markets' share of global output increased. In the 1980s, global fluctuations could be identified by looking at cyclical fluctuations in advanced economies, the United States in particular. Advanced economies accounted for more than 60 per cent of world output at PPP. Furthermore, cyclical activity in much of the rest of the world was largely dependent on conditions in advanced economies. Today, advanced economies only account for about 40 per cent of world output at PPP (see Chart 6.1).

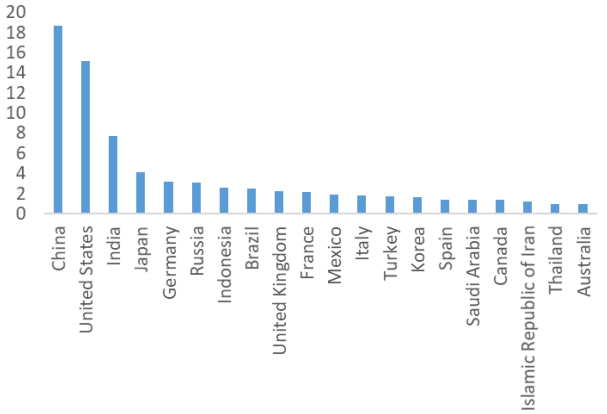
Chart 6.1. Share of global GDP, based on PPP weights (per cent)



Sources: IMF and authors' calculations.
Notes: Country groups defined based on IMF definitions.

Large emerging markets, such as Brazil, China, India, Indonesia and Russia now play a much more important role in the global economy (see Chart 6.2). And business cycles across advanced economies and emerging markets have become more alike and more synchronised (as discussed for instance in the November 2019 *Regional Economic Prospects*).

Chart 6.2. Share of global GDP, based on PPP weights, 20 largest economies, 2017 (per cent)



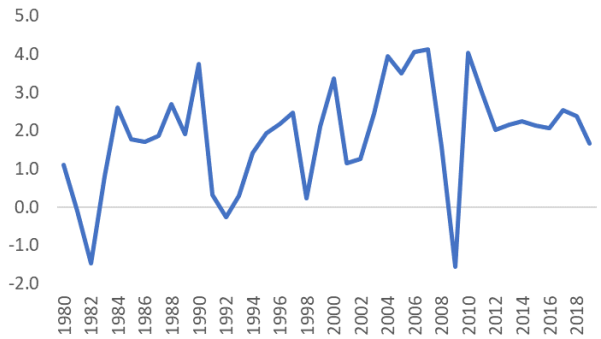
Sources: IMF and authors' calculations.

Global annual *per capita* real GDP growth, at PPP weights, turned negative only three times in the last 40 years: in 1981-82, exacerbated by attempts to supress high inflation in advanced economies, in

1992, and in 2009, in the aftermath of the global financial crisis (see Chart 6.3).[13]

The International Monetary Fund applied statistical methods similar to those typically used to identify troughs and peaks in the business cycles of individual countries at the global level and identified the same three episodes (see IMF 2009).[14] Notably, 1998 and 2001 were not identified as troughs. In 1997-98 many emerging economies, particularly in Asia, had sharp declines in economic activity, but growth in advanced economies held up. In 2001, conversely, many advanced economies had mild recessions, but growth in major emerging markets such as China and India remained robust.

Chart 6.3 Real per capita GDP growth, based on PPP weights (per cent)



Sources: IMF and authors' calculations.

The use of market exchange rates rather than PPP-adjusted ones shifts focus toward advanced economies. This affects one of the identified global recessions: when the market weights are used, the trough of the 1992 episode shifts to 1993 because of the downturns in many European countries during the European exchange rate mechanism crisis of 1992–93.

[13] Real GDP growth (in aggregate rather than per capita terms) was negative only once over this period, in 2009, whether at PPP or market exchange rates. A 'democratic' measure of world GDP growth—using population weights rather than weights based on the size of economies—did not fall below zero at all over this period.

[14] The method determines peaks and troughs in the level of economic activity (measured using annual data on world real GDP per capita on the basis of PPP weights) by searching for changes over a given period of time. It requires a minimum two-year duration of a cycle and a minimum one-year duration of each of the cyclical phases. A complete cycle goes from one peak to the next peak with its two phases, the recession phase (from peak to trough) and the expansion phase (from trough to peak). For details see Claessens, Kose, and Terrones (2008) and IMF (2009).

Annex

Annex Table 1. Variable sources and definitions

Measure	Definition	Sources
Public sector health expenditure as a share of GDP	Low if public sector health expenditure below 2 per cent of GDP in the latest available year (2014-2017); moderate if between 2 and 4 per cent.	World Bank, World Health Organization
Physicians per 100,000 people	Low if fewer than 150 beds per 100,000 in the latest available year (2014-2017); moderate if between 150 and 250.	World Health Organization
Retail service shocks	Low if retail services exceed 25 per cent of GDP in 2018; moderate if they are between 20 and 25 per cent.	Eurostat, OECD, national authorities
Labour market shocks	Low if less than 50 per cent of those employed in the last year had permanent written contracts in 2016, moderate if between 50 and 75 per cent.	Life in Transition Survey III
Commodity prices	Low if the net trade balance in gas and oil or coal and ores exceeds 5 per cent of GDP in 2018; moderate if between 1 and 5 per cent.	International Trade Centre, UN Comtrade
Global value chains	Low if GVC linkages exceed 30 per cent of GDP in 2018; moderate if between 15 and 30 per cent.	UNCTAD EORA
Tourism	Low if tourism accounts for over 20 per cent of GDP in 2018; moderate if between 10 and 20 per cent.	World Travel and Tourism Council
Remittances	Low if remittances exceed 25 per cent of GDP in 2019; moderate if between 10 and 25 per cent.	World Bank
Fiscal policy space	Low if gross general government debt exceeds 100 per cent of GDP in 2018 or net borrowing exceeds 5 per cent of GDP or government bond yields exceed 10 per cent; moderate if debt between 50 and 100 per cent or net borrowing between 3 and 5 per cent or government bond yields between 5 and 10 per cent (EUR/USD).	Bloomberg, International Monetary Fund
External resilience	Low if short-term reserve coverage below one year of external financing needs (short-term debt plus current account deficit) in 2018/2019; moderate if between 1 and 2 years.	CEIC, International Monetary Fund, World Bank
Strength of financial system	Low if non-performing loans exceed 20 per cent of total loans in March 2020; moderate if between 10 and 20 per cent.	CEIC, national authorities

Note: Some countries missing for some measures, here values of comparable economies are used.

Annex Table 2. Financial indicators in the EBRD regions

Euro per 1 local currency

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Albania	0.770	0.818	0.0%	-4.5%	-5.8%	-3.6%
Croatia	0.131	0.135	0.0%	-0.2%	-2.5%	-2.5%
Hungary	0.279	0.302	0.1%	-1.0%	-7.6%	-10.3%
Macedonia	0.020	0.020	0.0%	0.0%	0.0%	0.0%
Poland	0.220	0.235	-0.1%	1.3%	-6.3%	-5.5%
Romania	0.207	0.209	0.1%	0.3%	-0.8%	-1.3%
Serbia	0.009	0.009	0.7%	1.1%	0.6%	0.8%

Main equity index

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Bosnia and Herz.	598.3	618.3	0.6%	0.9%	-3.2%	-15.1%
Bulgaria	420.7	568.1	0.2%	0.4%	-25.9%	-27.6%
Croatia	1475.5	2017.4	1.8%	5.1%	-26.9%	-17.5%
Cyprus	47.8	65.1	0.1%	0.3%	-26.5%	-26.7%
Estonia	1017.4	1279.7	1.1%	-2.0%	-20.5%	-18.0%
Greece	580.2	916.7	3.8%	5.0%	-36.7%	-21.7%
Hungary	33516.1	46082.8	4.8%	2.8%	-27.3%	-20.3%
Latvia	903.7	1036.2	0.8%	3.1%	-12.8%	-7.7%
Lithuania	604.3	712.1	0.3%	0.7%	-15.1%	-7.8%
Macedonia	3602.5	4648.9	6.4%	1.9%	-22.5%	-1.7%
Poland	41554.1	57832.9	1.8%	3.2%	-28.1%	-31.1%
Romania	7632.6	9977.3	2.0%	2.1%	-23.5%	-6.3%
Serbia	1433.8	1726.8	0.0%	1.0%	-17.0%	-10.2%
Slovakia	330.2	351.1	0.0%	4.6%	-6.0%	-6.9%
Slovenia	746.8	926.1	3.3%	5.7%	-19.4%	-13.7%

Average 7day turnover of main equity index
(average amount traded in the index's currency)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Bosnia and Herz.	41	47	-	84.9%	-13.2%	59.1%
Bulgaria	332	487	-	-42.0%	-31.8%	47.4%
Croatia	14,569	6,979	-	-27.0%	108.7%	145.6%
Cyprus	165	125	-	165.9%	31.8%	-59.2%
Estonia	1,309	500	-	-44.9%	161.8%	263.3%
Greece	65,926	41,957	-	-15.5%	57.1%	8.6%
Hungary	13,442,289	6,474,506	-	-42.4%	107.6%	14.9%
Latvia	57	22	-	-21.3%	160.6%	82.1%
Lithuania	595	342	-	-39.8%	73.8%	82.0%
Macedonia	43,839	25,881	-	-51.1%	69.4%	679.6%
Poland	771,086	423,803	-	-48.9%	81.9%	5.8%
Romania	36,009	27,095	-	-32.2%	32.9%	24.5%
Serbia	6,845	13,009	-	-46.4%	-47.4%	-49.2%
Slovakia	8	20	-	-36.8%	-59.6%	-51.8%
Slovenia	1,773	2,007	-	-43.8%	-11.7%	95.2%

Government bond spread (bps)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Albania	295.5	221.3	0.5	28.4	74.3	-7.7
Bosnia and Herz.	515.1	507.6	0.0	0.0	7.5	5.3
Bulgaria	86.5	37.9	-3.9	11.8	48.5	N/A
Croatia	244.3	85.9	-1.0	36.5	158.5	118.0
Cyprus	127.0	64.2	0.0	-20.1	62.8	N/A
Greece	190.3	100.5	0.0	-49.7	89.8	-107.9
Hungary	117.3	57.4	0.0	16.7	59.9	14.8
Kosovo	273.6	N/A	-2.2	19.9	N/A	N/A
Latvia	56.4	27.4	-1.2	17.8	29.0	-8.0
Lithuania	58.1	34.9	-1.2	7.8	23.2	3.6
Macedonia	290.7	274.2	0.0	11.2	16.5	-42.7
Montenegro	342.1	244.5	-1.4	28.3	97.6	14.3
Poland	97.4	N/A	0.0	21.9	N/A	N/A
Romania	264.3	85.4	-0.4	12.2	178.9	105.9
Serbia	187.2	175.6	-0.4	12.5	11.6	N/A
Slovakia	58.4	43.9	5.1	-0.1	14.5	0.5
Slovenia	37.2	22.3	0.6	14.1	14.9	3.2

Note: Spreads are for ~ 5 yr (or closest available) EUR bonds. Bloomberg calculated mid yield spread to worst to the benchmark bond.

CDS spread (5y, bps)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Bulgaria	55.6	54.7	0.0	-13.8	0.9	-25.2
Croatia	76.2	63.2	0.0	-14.0	13.0	-16.2
Cyprus	103.7	96.7	0.0	-10.8	7.0	-1.0
Estonia	60.8	53.3	0.0	-20.3	7.6	2.7
Greece	195.9	111.9	0.0	-20.6	84.0	-180.9
Hungary	79.6	70.9	0.0	-6.6	8.7	-5.9
Latvia	69.1	62.4	0.0	-3.5	6.6	3.9
Lithuania	63.0	59.0	0.0	-3.1	4.0	-2.6
Poland	65.6	58.0	0.0	-7.4	7.7	-2.7
Romania	108.4	72.5	0.0	-24.4	35.9	-7.8
Serbia	110.3	81.2	0.0	0.8	29.1	0.8
Slovakia	50.2	34.7	0.0	-2.1	15.4	4.4
Slovenia	71.3	65.3	0.0	-14.5	6.1	-9.1

World indices

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
J.P. Morgan EMBI Global Spread (bps)	590.7	277.4	0.0	-39.3	313.3	226.8
MSCI EM	832.0	1114.6	0.0%	3.8%	-25.4%	-22.2%
S&P 500 INDEX	2626.7	3230.8	0.0%	7.3%	-18.7%	-8.4%
HANG SENG INDEX	23603.5	28189.8	1.8%	4.1%	-16.3%	-20.2%
MSCI EM Currency	1561.7	1665.4	0.0%	0.2%	-6.2%	-5.2%

USD per 1 local currency

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Armenia	0.198	0.209	-1.4%	-2.1%	-5.1%	-3.6%
Azerbaijan	0.588	0.588	0.0%	0.0%	0.0%	-0.2%
Belarus	0.039	0.048	0.5%	1.8%	-18.5%	-17.3%
Egypt	0.064	0.063	0.2%	0.0%	1.4%	10.1%
Georgia	0.304	0.350	-0.1%	5.5%	-13.2%	-18.3%
Jordan	1.409	1.410	0.0%	-0.1%	-0.1%	-0.1%
Kazakhstan	0.002	0.003	0.0%	4.5%	-11.5%	-11.5%
Kyrgizstan	0.012	0.014	0.0%	-9.5%	-13.3%	N/A
Lebanon	0.001	0.001	-0.5%	-0.6%	0.0%	-0.6%
Moldova	5.477	5.814	-0.3%	-1.6%	-5.8%	-5.1%
Mongolia	0.360	0.366	-0.1%	-0.2%	-1.6%	-5.2%
Morocco	0.099	0.105	-0.4%	-2.4%	-5.2%	-4.2%
Russia	0.013	0.016	1.4%	-0.1%	-20.3%	-16.8%
Tajikistan	0.098	0.103	0.0%	0.0%	-5.0%	-7.5%
Tunisia	0.348	0.353	-0.2%	0.2%	-1.5%	4.7%
Turkey	0.152	0.168	-0.2%	-2.6%	-9.7%	-16.7%
Ukraine	0.036	0.042	0.8%	0.3%	-14.0%	-1.6%
Uzbekistan	0.011	0.011	0.0%	0.0%	0.0%	-11.8%

Main equity index

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Egypt	895.5	1282.8	1.3%	0.3%	-30.2%	-38.0%
Jordan	1668.2	1815.2	0.0%	0.0%	-8.1%	-12.8%
Kazakhstan	2224.2	2363.8	2.2%	3.5%	-5.9%	-8.2%
Lebanon	593.2	785.6	0.0%	-0.6%	-24.5%	-38.7%
Morocco	9739.3	12171.9	0.1%	-4.2%	-20.0%	-11.4%
Russia	2519.2	3045.9	3.5%	4.3%	-17.3%	-0.1%
Tunisia	6487.5	7122.1	0.8%	2.7%	-8.9%	-5.5%
Turkey	89931.7	114425.0	2.1%	0.7%	-21.4%	-4.4%
Ukraine	511.2	509.7	0.0%	-0.6%	0.3%	-9.2%
West Bank and Gaza	498.9	526.0	0.0%	0.0%	-5.1%	-6.6%

Average 7day turnover of main equity index
(average amount traded in the index's currency)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Egypt	418039.5	305066.4	-	-45.0%	37.0%	-27.3%
Jordan	3299.3	3777.7	-	0.0%	-12.7%	-21.2%
Kazakhstan	117322.5	763084.1	-	-10.8%	-84.6%	-53.8%
Lebanon	213.1	551.2	-	-22.6%	-61.3%	-61.9%
Morocco	247329.3	448772.2	-	28.3%	-44.9%	80.3%
Russia	104662830.1	35128156.7	-	-32.7%	197.9%	155.9%
Tunisia	1101.5	4738.3	-	-57.7%	-76.8%	-59.5%
Turkey	10511711.5	8875050.4	-	35.4%	18.4%	20.0%
Ukraine	159.9	38.9	-	68.3%	310.7%	-98.4%
West Bank and Gaza	420.2	725.3	-	-13.0%	-42.1%	-69.5%

Government bond spread (bps)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Armenia	371.8	103.3	-3.5	-38.6	268.6	222.3
Azerbaijan	525.0	123.5	-12.5	-146.9	401.5	363.9
Belarus	736.5	280.3	-6.4	-121.1	456.2	429.0
Egypt	782.2	277.8	-13.9	-66.8	504.3	426.4
Georgia	611.6	87.5	8.3	-33.4	524.1	459.3
Jordan	760.5	281.7	-14.8	-44.0	478.8	418.1
Kazakhstan	313.0	52.9	0.0	-29.3	260.0	215.5
Kyrgizstan	291.5	28.1	6.7	-16.8	263.4	198.9
Lebanon	5251.5	2377.1	-255.9	-567.2	2874.3	4473.0
Mongolia	1026.9	328.4	0.0	-205.3	698.5	681.1
Morocco	428.5	65.8	3.1	19.4	362.7	297.6
Russia	317.5	83.7	-15.2	-27.0	233.8	141.4
Turkey	759.9	321.2	-3.8	-30.8	438.7	313.4
Ukraine	961.3	402.4	-119.7	-276.5	558.9	337.8
Uzbekistan	476.9	137.0	-7.0	-154.3	339.9	227.4

Note: Spreads are for ~ 5 yr (or closest available) USD bonds. Bloomberg calculated mid yield spread to worst to the benchmark bond.

CDS spread (5y, bps)

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
Egypt	588.5	277.4	0.0	-73.3	311.1	258.1
Kazakhstan	145.1	56.2	0.0	-3.8	88.9	69.6
Lebanon	14716.8	2418.6	0.0	0.0	12298.2	13894.5
Morocco	197.1	92.4	0.0	41.5	104.6	95.1
Russia	220.0	55.4	0.0	-38.1	164.6	86.0
Turkey	561.0	288.9	0.0	26.5	272.1	165.2
Ukraine	794.9	383.0	0.0	-378.7	411.9	153.6

World indices

	31/03/2020	01/01/2020	1d	1w	YTD	YOY
J.P. Morgan EMBI Global Spread (bps)	590.7	277.4	0.0	-39.3	313.3	226.8
MSCI EM	832.0	1114.6	0.0%	3.8%	-25.4%	-22.2%
S&P 500 INDEX	2626.7	3230.8	0.0%	7.3%	-18.7%	-8.4%
HANG SENG INDEX	23603.5	28189.8	1.8%	4.1%	-16.3%	-20.2%
MSCI EM Currency	1561.7	1665.4	0.0%	0.2%	-6.2%	-5.2%

Source: Bloomberg.

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About this report

The *Regional Economic Prospects* are published twice a year. The report is prepared by the Office of the Chief Economist and the Department of Economics, Policy and Governance and contains a summary of regional economic developments and outlook, alongside the EBRD's growth forecasts for the economies where it invests.

For more comprehensive coverage of economic policies and structural changes, see the EBRD's country strategies and updates, as well as the *Transition Report 2019-20*, which are all available on the Bank's website at www.ebrd.com.

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European Bank for Reconstruction and Development
One Exchange Square
London
EC2A 2JN
United Kingdom

Tel: +44 20 7338 6000

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