

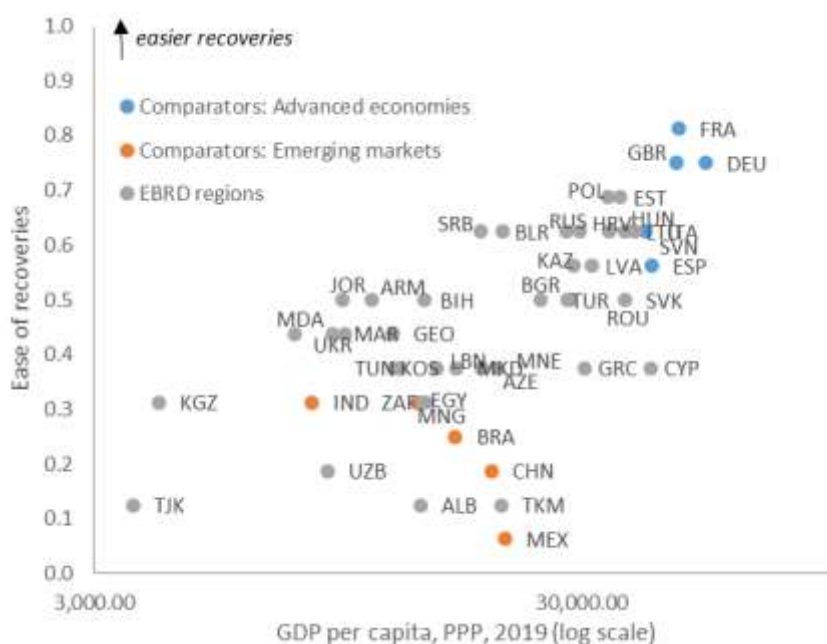
## Ease of exiting social distancing and achieving economic recovery in the EBRD regions<sup>1</sup>

This note puts together various indicators associated with greater ease of exiting social distancing and achieving economic recovery in the context of Covid-19. Based on the severity of the Covid-19 outbreaks, demographic structures, economic geography, the structure of the labour markets and the magnitude of the pledged fiscal response, many economies in the EBRD regions are better positioned to exit social distancing than emerging-market and advanced-economy comparators. Individual country circumstances vary significantly (see accompanying data in Excel database).

Social distancing aimed at slowing the spread of Covid-19 has been associated with sharp declines in economic activity as people avoided public gatherings (weighing on domestic demand) and workers stayed at home (reducing domestic supply).

The ease of exiting social distancing and achieving economic recovery could, in turn, vary substantially across countries depending not just on the severity of the outbreaks and lockdowns, but also on where people live and work as well as the extent of displacement of workers in the labour market. These considerations are discussed in turn below and are summarised in Table 1 (see also data in Excel database). Variable definitions and sources are listed in Annex Table 1. A composite index on the ease of recoveries is presented below.

*Ease of recoveries in the EBRD regions and comparators (index)*



Sources: European Centre for Disease Prevention and Control; European Commission and Columbia University, EBRD (2018), Economic Research Forum. Google, ILO, IMF, Life in Transition Survey, The Economist, UNCTAD, United Nations, WITS, World Bank and authors' calculations.

Notes: Overall index based on equal weighting of the last 8 indicators in Table 1 (2 points assigned to green cells, 1 to yellow, 0 to red, then renormalized).

<sup>1</sup> Questions about this note can be addressed to Zsoka Koczan (koczan@ebrd.com), Philipp Paetzold (paetzold@ebrd.com) and Alexander Plekhanov (plekhana@ebrd.com). The note reflects information available as of early June 2020.

Table 1. Ease of exiting social distancing and achieving economic recovery in the EBRD regions and comparators

		Outbreak and distancing						Ease of recoveries							
		Severity of outbreak and lockdown			Constraints on social distancing			Labour market conditions and government response				Structure of economy			
		Severity of outbreak	Demographic vulnerability	Severity of lockdown	Localised population density	Number of cities over 1 million	Share of pop. in cities over 300,000	Prevalence of non-perm. contracts	Employment in MSMEs	Self-employment	Fiscal stimulus	Public sector employment	Employment in most vulnerable sectors	Dependence on few sectors	Dependence on few trading partners
Comparators: Advanced economies	France	high	high	high	moderate	high	moderate	low	moderate	low	high	moderate	moderate	low	low
	Germany	high	high	moderate	low	moderate	moderate	low	moderate	low	high	low	moderate	low	low
	Italy	high	high	high	moderate	moderate	high	low	high	moderate	high	low	moderate	low	low
	Spain	high	high	high	moderate	moderate	moderate	low	moderate	moderate	high	low	high	low	moderate
	United Kingdom	high	high	moderate	moderate	high	high	low	low	moderate	high	moderate	moderate	moderate	low
Comparators: Emerging markets	Brazil	high	moderate	moderate	moderate	high	high	high	moderate	low	moderate	high	moderate	moderate	moderate
	China	low	moderate	moderate	moderate	high	high	high	low	low	low	low	moderate	moderate	low
	India	low	low	high	high	high	high	high	low	high	low	low	moderate	moderate	high
	Mexico	low	low	moderate	moderate	high	high	high	low	low	low	high	moderate	high	moderate
	South Africa	low	low	moderate	moderate	high	high	high	moderate	moderate	low	low	high	moderate	moderate
Central Asia	Kazakhstan	low	low	moderate	moderate	moderate	high	low	moderate	moderate	high	moderate	moderate	high	moderate
	Kyrgyz Republic	low	low	moderate	moderate	moderate	moderate	high	moderate	moderate	moderate	high	high	moderate	moderate
	Mongolia	low	low	low	moderate	moderate	high	moderate	high	low	high	moderate	high	high	moderate
	Tajikistan	low	low	low	moderate	low	moderate	high	moderate	high	low	low	high	moderate	high
	Turkmenistan	low	low	low	moderate	low	moderate	high	moderate	moderate	low	low	high	high	high
Uzbekistan	low	low	moderate	high	moderate	moderate	low	moderate	high	low	low	high	high	high	
Central Europe and Baltic States	Croatia	low	high	moderate	low	low	moderate	low	moderate	low	moderate	moderate	high	low	moderate
	Estonia	moderate	high	moderate	low	low	moderate	low	moderate	low	high	moderate	moderate	low	moderate
	Hungary	moderate	high	moderate	moderate	moderate	moderate	low	high	low	moderate	high	moderate	moderate	moderate
	Latvia	low	high	moderate	moderate	low	moderate	low	high	low	moderate	moderate	high	low	moderate
	Lithuania	low	high	moderate	moderate	low	moderate	low	high	low	high	moderate	high	moderate	low
	Poland	low	high	moderate	low	moderate	moderate	low	moderate	moderate	high	moderate	moderate	low	moderate
	Slovak Republic	low	moderate	high	low	low	low	low	moderate	moderate	moderate	moderate	moderate	moderate	moderate
	Slovenia	moderate	high	high	low	low	low	low	high	low	high	moderate	moderate	moderate	moderate
Eastern Europe and the Caucasus	Armenia	low	moderate	moderate	moderate	moderate	high	moderate	low	high	low	moderate	low	moderate	moderate
	Azerbaijan	low	low	moderate	moderate	moderate	high	moderate	moderate	moderate	moderate	moderate	high	moderate	moderate
	Belarus	low	moderate	low	moderate	moderate	high	low	low	low	low	moderate	moderate	high	moderate
	Georgia	low	high	moderate	moderate	moderate	moderate	high	moderate	moderate	moderate	low	moderate	moderate	moderate
	Moldova	moderate	moderate	moderate	low	low	moderate	moderate	moderate	high	low	moderate	moderate	moderate	moderate
	Ukraine	low	high	moderate	moderate	moderate	moderate	moderate	moderate	moderate	low	moderate	high	moderate	low
	Russia	low	moderate	moderate	moderate	high	high	low	low	low	high	high	high	high	low
South-eastern Europe	South-eastern EU	Bulgaria	low	high	moderate	low	moderate	low	low	low	low	moderate	high	low	moderate
		Cyprus	low	moderate	high	low	low	low	moderate	low	moderate	low	high	high	low
		Greece	low	high	high	moderate	moderate	moderate	high	high	high	moderate	high	moderate	low
		Romania	high	high	moderate	moderate	moderate	moderate	low	moderate	moderate	low	moderate	moderate	moderate
		Albania	low	moderate	moderate	moderate	low	moderate	moderate	high	high	low	high	moderate	moderate
	Western Balkans	Bosnia and Herzegovina	moderate	high	moderate	low	low	low	moderate	low	moderate	low	moderate	moderate	moderate
		Kosovo	low	moderate	moderate	low	low	low	moderate	moderate	moderate	low	high	moderate	high
		Montenegro	low	moderate	moderate	low	low	low	moderate	high	moderate	low	high	moderate	moderate
		North Macedonia	moderate	moderate	moderate	low	low	moderate	low	high	moderate	low	moderate	moderate	high
		Serbia	moderate	high	moderate	moderate	moderate	moderate	moderate	moderate	high	high	moderate	moderate	low
Southern and Eastern Mediterranean	Egypt	low	low	moderate	high	moderate	high	high	high	high	low	moderate	moderate	moderate	low
	Jordan	low	low	moderate	high	moderate	low	high	low	high	low	high	moderate	moderate	moderate
	Lebanon	low	moderate	moderate	high	moderate	moderate	high	moderate	high	low	high	moderate	moderate	moderate
	Morocco	low	low	moderate	high	high	high	high	low	low	low	low	moderate	moderate	moderate
	Tunisia	low	moderate	moderate	moderate	moderate	moderate	moderate	high	moderate	low	moderate	low	moderate	high
	Turkey	moderate	moderate	moderate	high	high	high	moderate	moderate	high	moderate	low	moderate	low	low

Sources: European Centre for Disease Prevention and Control; European Commission and Columbia University, EBRD (2018), Economic Research Forum. Google, ILO, IMF, Life in Transition Survey, The Economist, UNCTAD, United Nations, WITS, World Bank and authors' calculations.

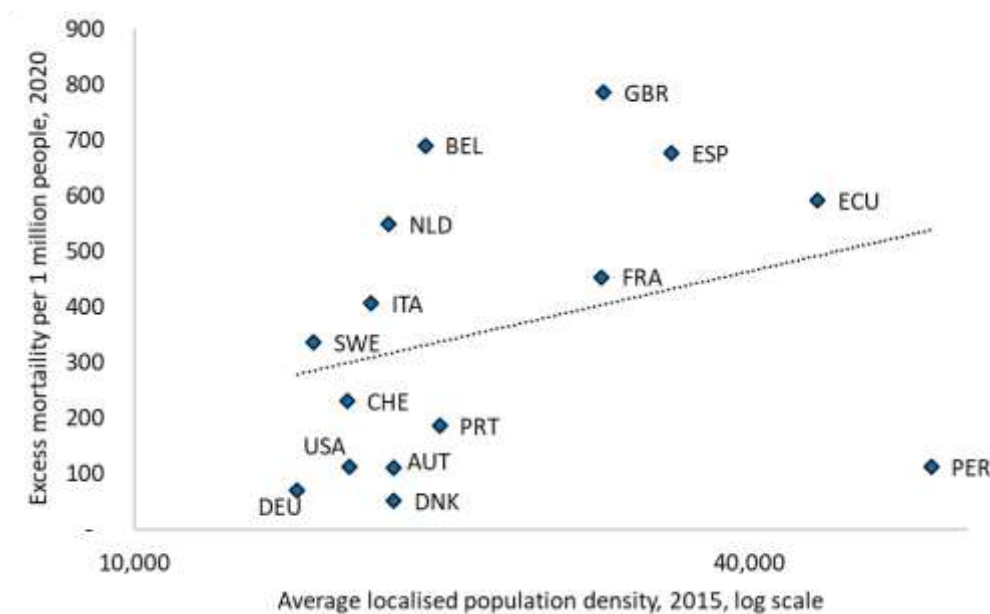
### Severity of Covid-19 outbreaks and population density

In most economies in the EBRD regions, the outbreaks of Covid-19, as reported in the official data, appear to have been less severe than in advanced Europe, the United States and some emerging markets (such as Brazil). In part, this may be due to lower population density.

Although empirical evidence on the link between epidemics and population density is somewhat mixed, recent work highlighted the importance of measuring density meaningfully. In particular, to reflect the density measure, the population must be distributed as uniformly as possible. If population of a large area is concentrated in large cities, its average density becomes meaningless. Taking this into account, the spread of epidemics is indeed closely connected with population density (see Li, Richmond and Roehner, 2018).

For the countries where data on total excess deaths (relative to long-term seasonal patterns) is available, such excess mortality appears to be significantly lower in less densely populated countries such as Germany and Sweden (Chart 1). Density here is measured as perceived by a typical resident: the average number of people living in a 5 km radius of each individual (discounted by distance). This measure provides a more nuanced view of the distribution of populations. For instance, while Mongolia has very low population density, more than half of its population is concentrated in Ulaanbaatar, so the population density as experienced by the average person (and as affecting transmission of the virus) is actually substantially higher.

Chart 1. Excess mortality and average localised population density

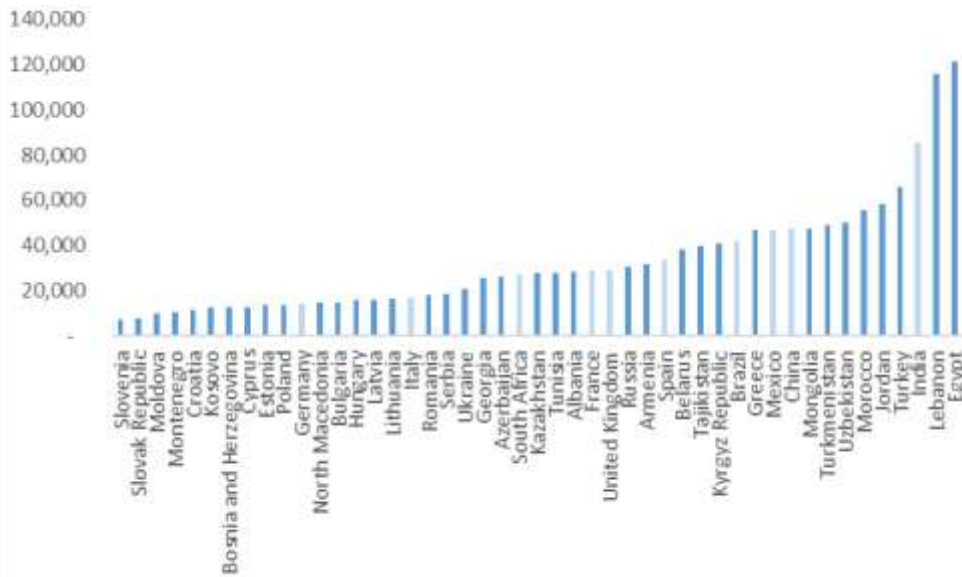


Sources: European Commission (Joint Research Centre) and Columbia University (Center for International Earth Science Information Network). 2015. GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015), EBRD (2018), New York Times, The Economist, United Nations and authors' calculations.

Notes: Excess mortality data are estimates that include deaths from Covid-19 and other causes as of April/May 2020. This is unfortunately only available for a limited number of countries. Average localised population density takes into account the number of people in each individual's 5km radius and then averages across all individuals.

Low population density may be more conducive to earlier and faster easing of social distancing restrictions (in large cities public transport systems may be incompatible with social distancing). While localised population density is relatively low in Central Europe, the Baltics and South-eastern Europe (Chart 2), the Southern and Eastern Mediterranean, like many other emerging markets, is densely populated, with a larger number of megacities and higher share of its populations living in medium-sized and large cities (Chart 3).

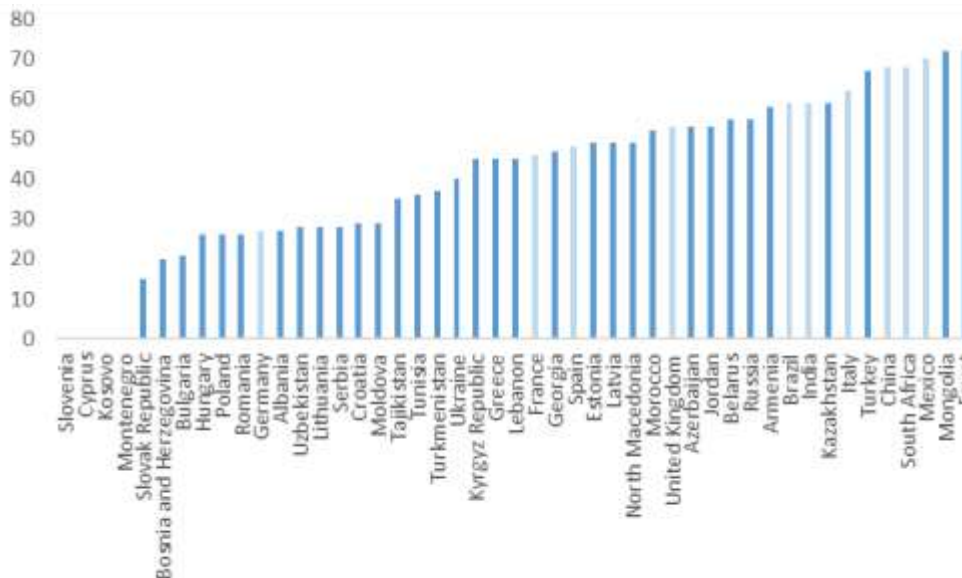
Chart 2. Average localised population density, 2015



Sources: European Commission (Joint Research Centre) and Columbia University (Center for International Earth Science Information Network). 2015. GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015) and EBRD (2018).

Notes: Average localised population density takes into account the number of people in each individual's 5km radius and then averages across all individuals. Comparator advanced economies and emerging markets are shown in lighter blue in all charts.

Chart 3. Share of population living in cities over 300,000, 2020 (per cent)

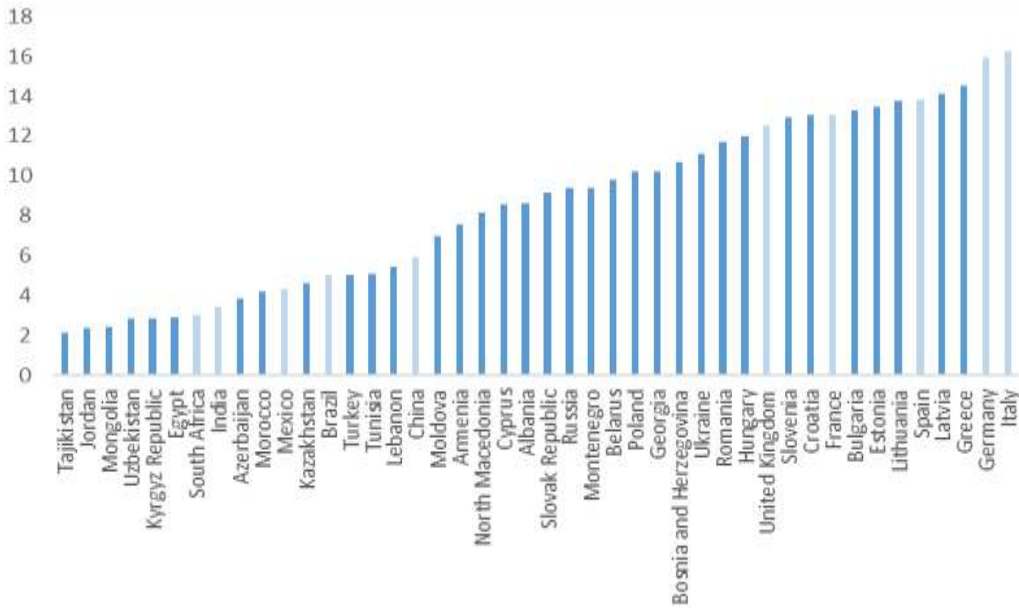


Sources: United Nations.

## Demographics

Covid-19 appears to have more severe symptoms in older people, implying that older people may be inclined to practice social distancing for longer and reduce frequency of travel or meals out, for example. In this regard, demographic structures in Central Europe, the Baltics and South-eastern Europe are broadly similar to those in advanced Europe (Chart 4) – although older generations in advanced economies tend to have greater wealth and purchasing power relative to younger generations than in most middle-income economies.

Chart 4. Share of population over the age of 70, 2017 (per cent)

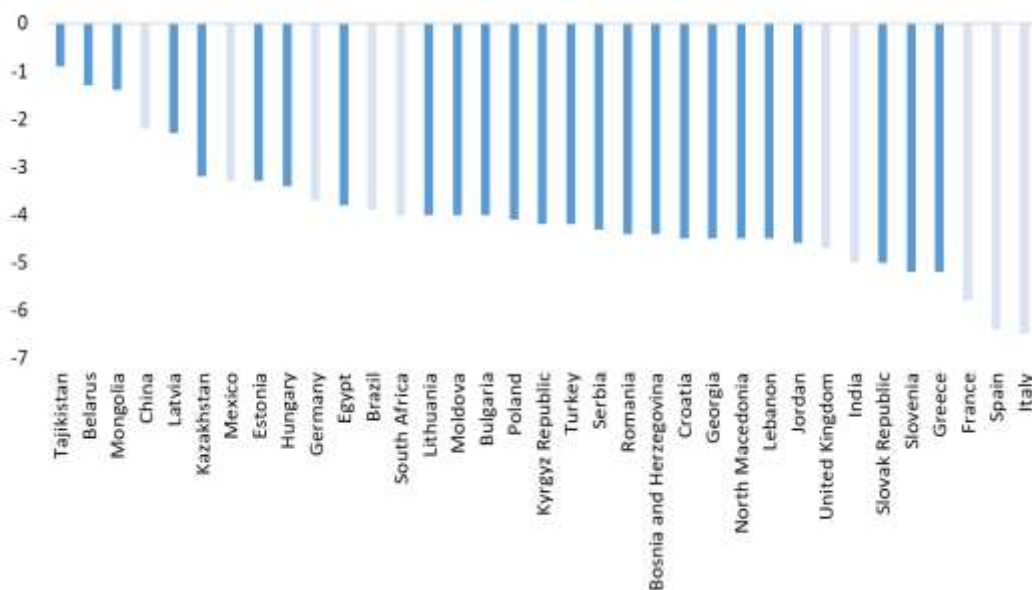


Sources: United Nations.

## The extent of social distancing

During lockdowns, the extent of social distancing in the EBRD regions appears to have been somewhat lower than in advanced economies, based on Google mobility data which records trips to locations such as shops, places of work or mass transit stations. Person-week losses in trips to restaurants, retail and other recreation facilities—capturing a combination of the length and depth of lockdowns—were smallest in Tajikistan, Belarus and Mongolia, and largest in Italy, Spain and France (Chart 5). The measure reported in the chart adds up weekly declines in mobility to retail and recreation during a nine-week period. For instance, a decline of 40 per cent in week 1 and 60 per cent in week 2 amounts to one person-week of lost demand for recreation activities.

Chart 5. Person-week losses in mobility to retail and recreation activities in March and April 2020



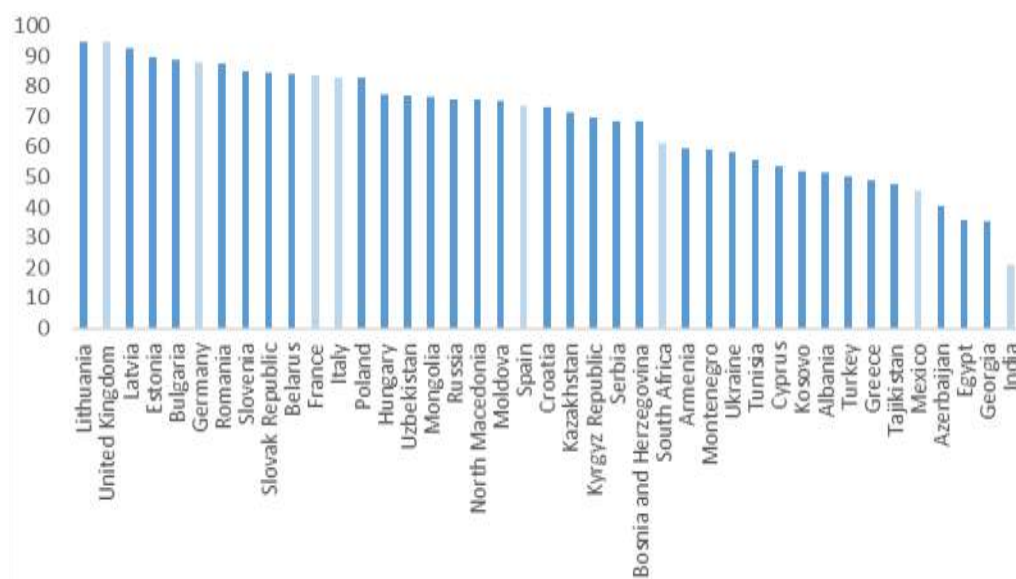
Sources: Google mobility trends and authors' calculations.

Notes: The measure adds up weekly declines in mobility to retail and recreation during a nine-week period. For instance, a decline of 40 per cent in week 1 and 60 per cent in week 2 amounts to one person-week of lost demand for recreation activities.

#### Labour market conditions and government responses

Provided social distancing proves sufficiently short-lived, recoveries are likely to be slower where temporary restrictions on work result in more job losses: for instance, if only a small share of those employed were on permanent contracts, as in the Caucasus, Central Asia and the Southern and Eastern Mediterranean (Chart 6).

Chart 6. Share of employed on permanent contracts (per cent)

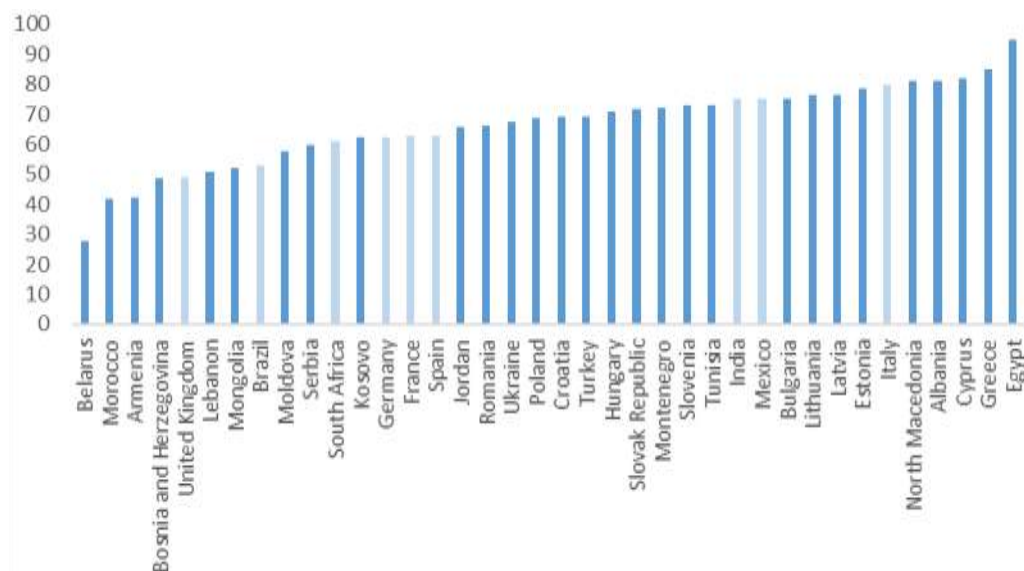


Sources: ILO, Life in Transition Survey 2016.

Notes: Comparators, Egypt and Tunisia from ILO 2018/19 or latest, other EBRD countries of operation from the Life in Transition Survey 2016.

Lasting damage to individuals’ purchasing power and production capacity is also likely to be greater and hence recoveries slower where fiscal packages had difficulties reaching affected businesses and individuals – for instance, where micro, small and medium-sized enterprises were more prevalent, or a larger share of the population was self-employed (Charts 7 and 8).

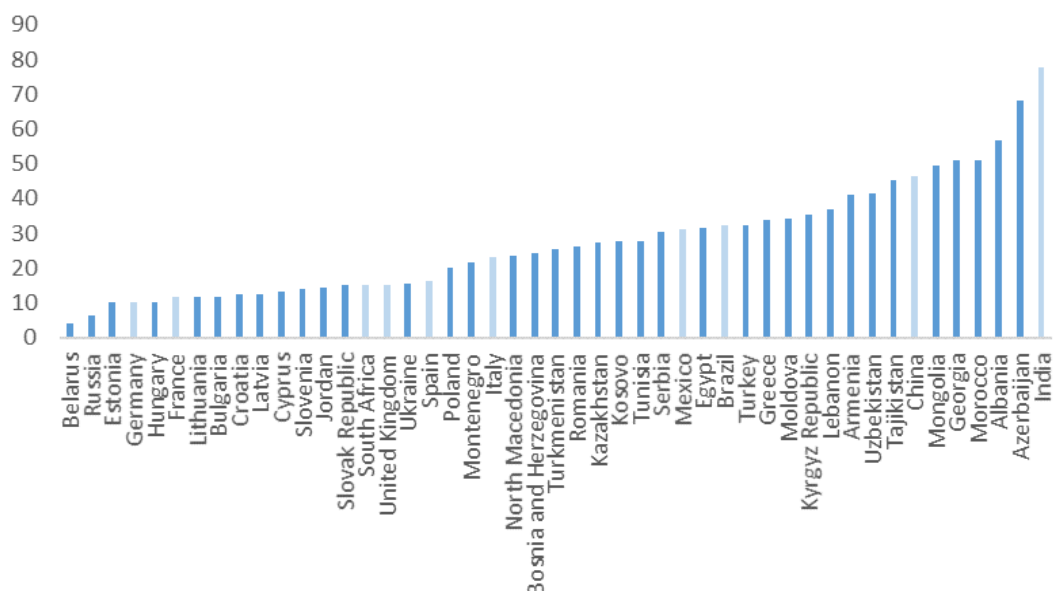
Chart 7. Share of employment in micro, small and medium sized enterprises (per cent)



Sources: World Bank.

Notes: Latest year available (2004-2013).

Chart 8. Share of self-employment, 2020 (per cent)

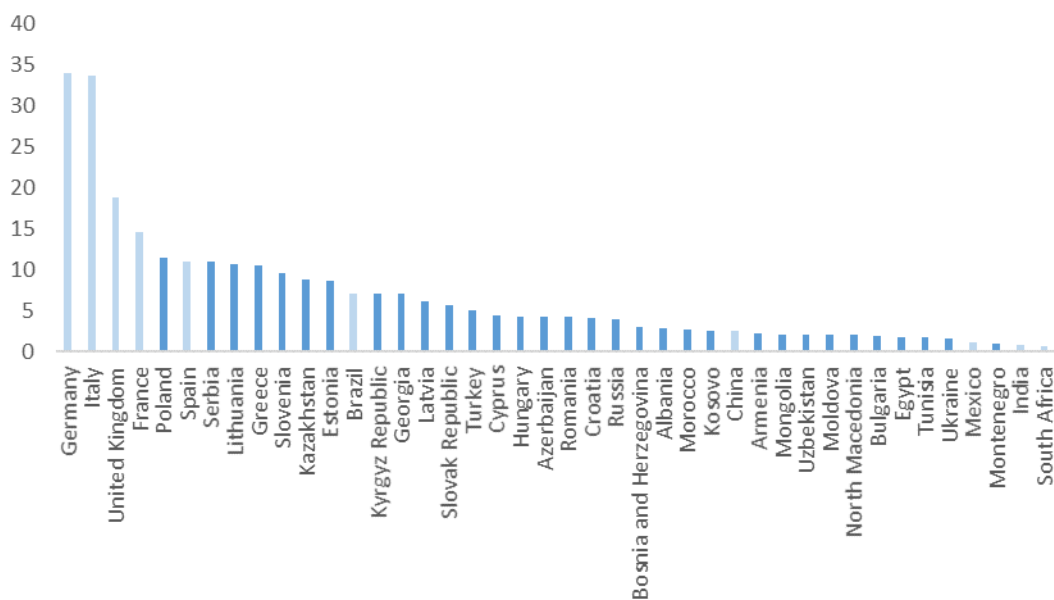


Sources: World Bank.

In contrast, more extensive fiscal stimulus packages, for instance in advanced economies and emerging Europe may have helped preserve jobs and avoid bankruptcies, facilitating recoveries (Chart 9). Similarly, public sector

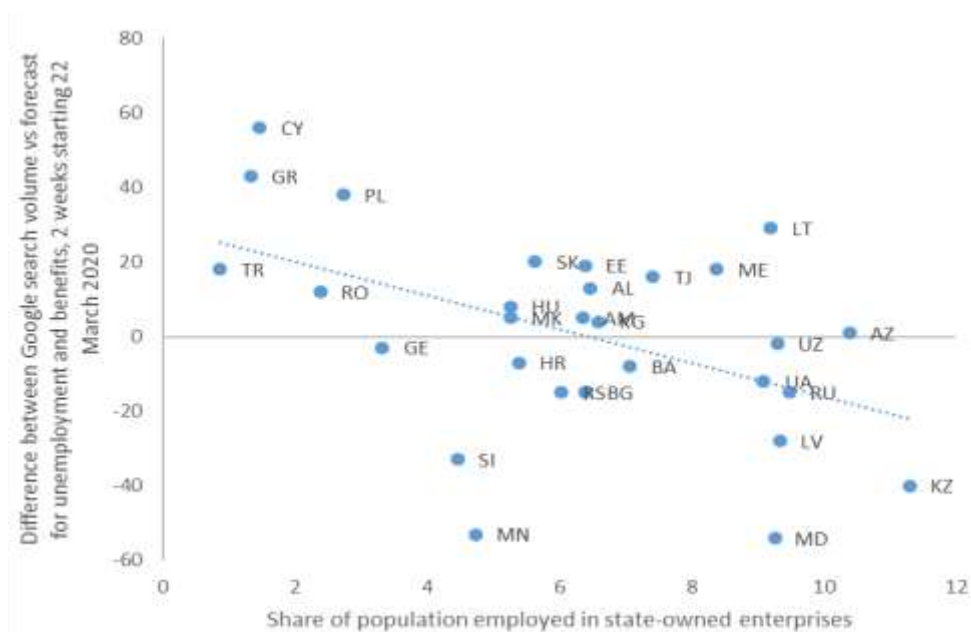
employees, accounting for a higher share of employment in the EBRD regions than in advanced economies or other emerging markets, may have been better shielded from the financial hardship associated with the crisis. Indeed, searches for unemployment and welfare increased significantly less in economies with state-dominated employment than in economies with private-sector dominated employment (Chart 10).

Chart 9. Fiscal stimulus as a share of GDP (per cent)



Sources: EBRD staff estimates as of mid-May 2020 and IMF (2020).

Chart 10. Google searches related to unemployment and benefits and employment share of state-owned enterprises



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

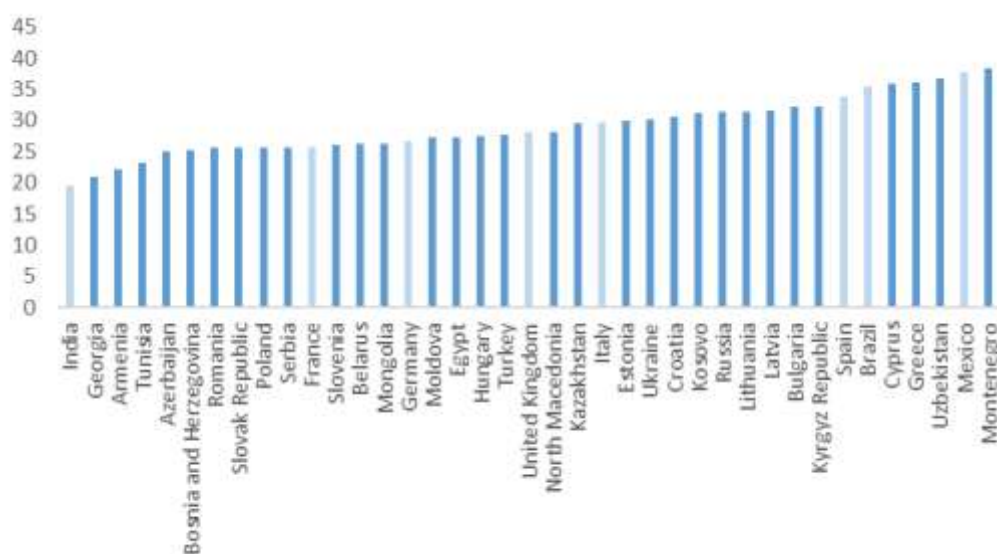
Notes: Google trends change is for 2 weeks starting 22 March 2020 relative to forecast based on prior trends.



## Structure of the economy

Recoveries in the longer term will depend on the extent of permanent damage from the crisis and, more generally, economic diversification. Sectors such as retail, transportation and storage, accommodation and food services and arts and recreation and other services are most severely affected by the crisis and may face permanent damage (Chart 11). This could weigh on growth prospects in tourism-dependent economies such as Cyprus, Greece or Montenegro.

Chart 11. Employment share of retail, transportation and storage, accommodation and food services and arts and recreation and other services, 2018/19 (per cent)



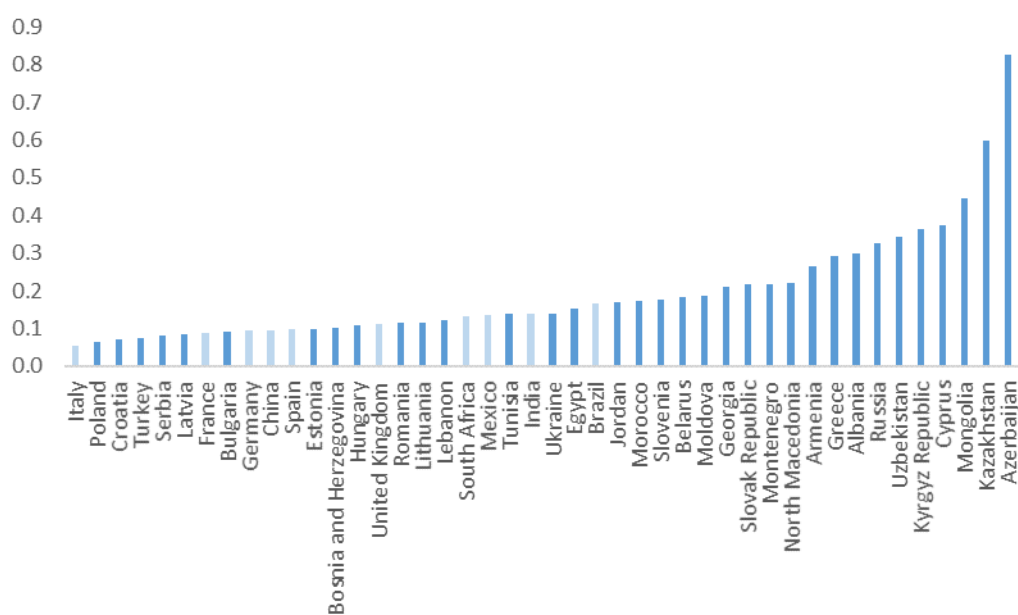
Sources: ILO.

Notes: 2017 for Kazakhstan and Ukraine.

Risks to recoveries may be greater in countries that are more dependent on a few export products (such as commodities, or the car industry) or export to only a few trading partners. The Hirschman Herfindahl indices measure the extent of diversification of a country's exports across different sectors and different markets (with concentrated exports yielding index values closer to one). Advanced economies' exports tend to be more diversified both in terms of sectors and geographically (Charts 12 and 13). In contrast, commodity exporters tend to be highly concentrated in terms of their export baskets and countries such as Mongolia, Mexico or Belarus have highly concentrated destination markets.

On balance, many economies in the EBRD regions are better positioned to exit social distancing than emerging-market and advanced-economy comparators. At the same time, individual country circumstances vary significantly. Some economies are vulnerable to slow recovery in international travel while others rely strongly on specific export markets.

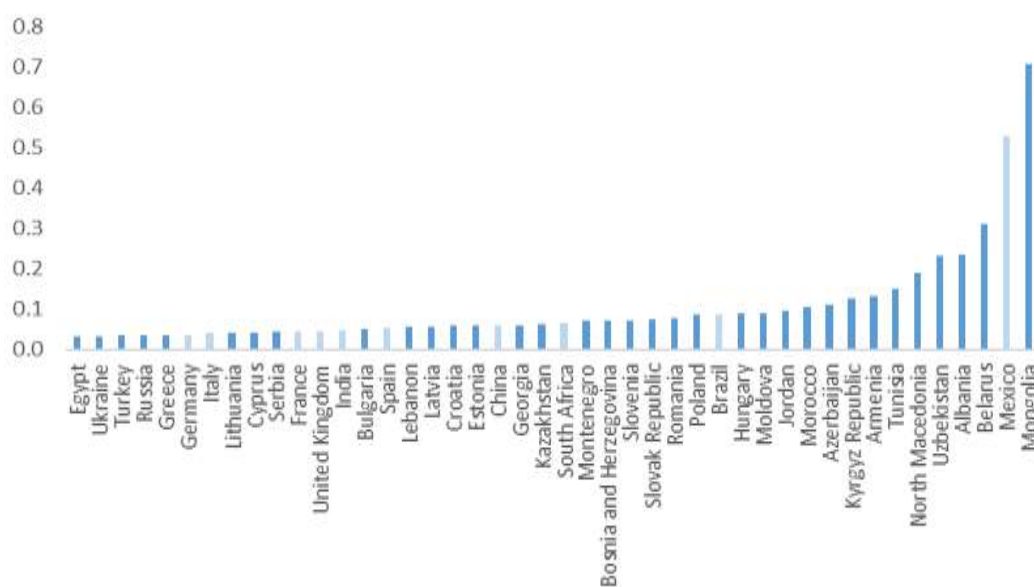
Chart 12. Dependence on few export sectors, 2017 (0: diversified – 1: concentrated)



Sources: UNCTAD.

Notes: Hirschman Herfindahl product concentration index

Chart 13. Dependence on few export markets 2017 (0: diversified – 1: concentrated)



Sources: WITS and authors' calculations.

Notes: Hirschman Herfindahl market concentration index.

## References

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## Annex 1. Data sources and definitions of various indicators

Annex Table 1. Variable sources and definitions

Measure	Definition	Description	Rating	Sources
<b>Severity of outbreak and lockdown</b>	Severity of outbreak	Covid-19 deaths per 1 million population	High if Covid-19 deaths per 1 million exceed 50; moderate if between 30 and 50 as of mid-May 2020.	European Centre for Disease Prevention and Control
	Demographic vulnerability	Share of population age 70 and older	High if share exceeds 10 per cent; moderate if between 5 and 10 per cent in 2017.	United Nations
	Severity of lockdown	The measure adds up weekly declines in mobility to retail and recreation during a nine-week period in March and April 2020. For instance, a decline of 40 per cent in week 1 and 60 per cent in week 2 amounts to one person-week of lost demand for recreation activities.	High if person-week losses exceed 5 weeks between March and May 2020; moderate if between 2 and 5 weeks.	Google
<b>Constraints on social distancing</b>	Localised population density	Average localised population density takes into account the number of people in each individual's 5km radius and then averages across all individuals (see EBRD, 2018).	High if density exceeds 50,000 people per 5 square km, moderate if between 15,000 and 50,000 in 2015.	European Commission, Joint Research Centre and Columbia University, Center for International Earth Science Information Network (2015) and EBRD (2018)
	Number of cities over 1 million	Cities with a population over 1 million	High if 5 or more cities with a population exceeding 1 million; moderate if between 1 and 5 in 2020.	United Nations
	Share of pop. in cities over 300,000	Share of population living in cities with more than 300,000 inhabitants	High if share exceeds 50 per cent; moderate if between 25 and 50 per cent in 2020.	United Nations
<b>Labour market conditions and government response</b>	Prevalence of non-perm. contracts	Share of employed population without permanent written contracts	High if less than 30 per cent of contracts are permanent; moderate if between 30 and 50 per cent (comparators, Egypt and Tunisia from ILO 2018/19 or latest, other EBRD countries of operation from the Life in Transition Survey 2016).	International Labour Organisation World Employment and Social Outlook, Life in Transition Survey
	Employment in MSMEs	Employment in micro, small and medium sized enterprises as a share of total employment	High if share exceeds 70 per cent; moderate if between 50 and 70 per cent in the latest year available (2004-2013).	World Bank
	Self-employment	Self-employed as a share of total employment	High if share exceeds 30 per cent; moderate if between 15 and 30 per cent in 2019.	International Labour Organisation
	Fiscal stimulus	Fiscal stimulus measures including guarantees	High if fiscal stimulus measures exceed 8 per cent of GDP, moderate if between 4 and 8 per cent.	EBRD staff estimates as of mid-May 2020, IMF (2020)
	Public sector employment	Public sector employment as a share of total employment	High if share exceeds 30 per cent, moderate if between 20 and 30 per cent in 2018 or latest.	Economic Research Forum, International Labour Organisation, International Monetary Fund, The Economist, World Bank
<b>Structure of economy</b>	Employment in most vulnerable sectors	Employment share of retail, transportation and storage, accommodation and food services, arts and recreation, other services	High if share exceeds 30 per cent, moderate if between 25 and 30 per cent in the latest available year (2017-2019).	International Labour Organisation
	Dependence on few sectors	Herfindahl-Hirschmann concentration index is a measure of the degree of product concentration. A country with exports concentrated in a few products will have an index value close to one. A country with more diversified exports will have a value close to zero.	High if index exceeds 0.3, moderate if between 0.1 and 0.3 in 2018.	UNCTAD
	Dependence on few trading partners	Hirschman-Herschindahl index is a measure of the dispersion of trade value across an exporter's partners. A country with trade that is concentrated in very few markets will have an index value close to one. A country with a diversified trade portfolio will have an index close to zero.	High if index exceeds 0.15, moderate if between 0.05 and 0.15 in 2017.	World Bank WITS

Source: Authors.

Notes: Where data points are missing, these are interpolated based on data for similar economies.