

1 HOW BIG IS THE STATE?

Covid-19 has highlighted citizens' growing expectations regarding the role of the state and increased demand for the socialisation of risks. The state's ability to meet those expectations will depend on its fiscal space and administrative capacity and may manifest itself in increased government spending and/or higher state employment. Government spending and state employment have varied over time and across countries, reflecting citizens' preferences. In post-communist economies, the state's





share of employment declined from around 45 per cent in the mid-1990s to 24 per cent in the mid-2010s, but remains around 7 percentage points higher than in comparator economies. The government spending of post-communist economies, meanwhile, is consistent with their peers at around 35 per cent of GDP. Women, older people, highly educated individuals and people who are less tolerant of risks are all more likely to work for the state.



Introduction

When the EBRD published its first *Transition Report* back in 1994, the prevailing consensus was that lower levels of state ownership helped to create more dynamic and prosperous economies. This belief, sometimes referred to as the “Washington Consensus”, was supported by the positive impact that liberalisation and the privatisation of large state companies had had in Europe in the 1980s, as well as the fact that central planning had such a poor economic track record.

Today, there is a sense that the state is striking back. And that was true even before the arrival of Covid-19. In advanced economies, more firms were nationalised than privatised in the early years of the 21st century, while economies where state ownership is widespread, such as China and Singapore, have experienced exceptional rates of economic growth.¹ Household surveys reveal significant and rising support for the expansion of state ownership, perhaps as a reflection of rising inequality and the scars of the global financial crisis of 2008-09.

Against that background, this chapter looks at a novel dataset measuring the size of public-sector employment across economies and over time and tracks the size of the state, both on the demand side of the economy (where the state pays for certain goods and services and redistributes income) and on the supply side (where the state provides certain services directly and employs workers in government agencies or state-owned enterprises). This chapter also builds on household surveys such as the Life in Transition Survey (LiTS) and the World Values Survey, as well as various country-level economic and social indicators.

Summary of the key findings of this chapter

This chapter starts by looking at the growth that has been seen in the state’s role in the economy over the longer term. On the demand side of the economy, that growth has taken the form of increased government spending on goods and services and income redistribution. On the supply side, meanwhile, the state has become an increasingly important employer and provider of goods and services. At the same time, patterns in terms of the expansion of the state in response to major crises have differed both over time and across economies.

In a well-functioning market economy, the size of the state may vary in response to citizens’ preferences. Since the middle of the 19th century, government spending has risen as a share of gross domestic product (GDP), reflecting the increasing importance of education, rising life expectancy, the growing cost of providing education and healthcare, and demand for stronger social safety nets and redistribution on account of technological change.

State employment has also grown over the longer term, peaking in the 1980s. It has since declined somewhat in advanced economies and emerging markets alike on account of privatisation and automation, despite government spending continuing to rise or remaining high. In post-communist economies, the public sector’s share of employment declined from around 45 per cent in the mid 1990s to 24 per cent in the mid-2010s. However, state employment in those economies remains around 7 percentage points higher than the levels seen in similar economies with no legacy of central planning. Their government spending, meanwhile, is in line with that of their peers at around 35 per cent of GDP. The state’s footprint tends to be larger in older societies, reflecting higher levels of public healthcare, long-term care and state pensions. Public spending also tends to be higher in economies with higher-quality economic institutions.

Even as the public sector’s share of employment has declined in recent decades, public support for state ownership has grown. Surveys in post-communist economies suggest that 45 per cent of people favour an increase in public ownership, with views on public ownership tending to be more favourable among individuals with lower levels of education and income. Analysis also shows that women, older people, highly educated individuals and people who are less willing or able to take risks are all more likely to work in the public sector.

As the size of the state increases, it becomes ever more important to ensure that the state represents the broader interests of all citizens. At the same time, many groups (notably the young) appear to be becoming increasingly disillusioned with the way that democracy works, while at the same time being absent at the ballot box – a vicious circle that needs to be broken.

This chapter then looks at the role of the state in the context of the response to the Covid-19 crisis. The response to Covid-19 has been different from the pandemic responses seen in 1918 and 1957, highlighting high levels of demand for the socialisation of the risks faced by individuals (from health

¹ See Megginson (2017).

IN POST-COMMUNIST ECONOMIES, THE PUBLIC SECTOR'S SHARE OF EMPLOYMENT DECLINED FROM AROUND

45%
IN THE MID-1990s TO
24%
IN THE MID-2010s

risks to the risk of becoming unemployed), even if that entails a significant fiscal cost. It has also revealed citizens' growing expectations with regard to the services that the state should provide. That increased demand for the socialisation of risks can, in part, be seen as a response to the fact that economic risks have increasingly been shifted onto those least able to tolerate them – particularly individuals with lower levels of education and income.

The ability of the state to deliver on citizens' expectations, both in response to Covid-19 and in the longer term, will depend on its fiscal space and administrative capacity. Most governments have seen increases in their fiscal space on account of higher revenues and lower interest rates, while administrative capacity varies considerably across countries.

Will public ownership increase? The answer to that will depend on people's preferences (with support for public ownership likely to rise further on the back of Covid-19), the objectives of state ownership and whether the private sector could potentially achieve those objectives more efficiently. This discussion is then picked up in subsequent chapters, which look at state-owned enterprises, state-owned banks and the use of industrial policy to foster a green economy.

THE PUBLIC SECTOR'S SHARE OF EMPLOYMENT IN POST-COMMUNIST ECONOMIES REMAINS AROUND

7
PERCENTAGE POINTS
HIGHER THAN IN OTHER COUNTRIES WITH SIMILAR ECONOMIES

Government spending: a long-term view

The state footprint: demand side versus supply side

In a well-functioning market economy, the size of the state may vary, reflecting the preferences of its citizens. The state plays an important role in the provision of certain goods and services (such as defence or, in many economies, healthcare), as well as adopting regulations underpinning economic activity in the private sector, such as the protection of property rights. In contrast, the private sector tends to have an advantage when it comes to boosting the efficiency of production and innovating.² In part, this is because public-sector firms often have soft budget constraints, driven by the state's willingness to provide additional assistance as a shareholder in times of difficulty.³ In addition, when institutions are weak, the public sector can suffer from high levels of corruption, as well as a high degree of tolerance for underperforming firms.⁴

A larger state footprint in the economy may manifest itself on the demand side, on the supply side, or both. When governments decide to pay new benefits (such as wage subsidies during the Covid-19 crisis), finance the construction of a new bridge or increase payments to defence contractors, they act on the demand side of the economy – to the extent that the goods and services that are purchased using the transferred funds are supplied predominantly by the private sector.

The state may also become an increasingly important direct provider of services and employment – for instance, in education, healthcare, finance or transport, or as a result of state bailouts and partial nationalisations in other sectors (see, for example, Box 1.1 on flag carriers in the airline industry).

Historically, patterns in terms of state expansion have differed across economies. In the United States of America, for example, the state significantly increased spending on healthcare and education in the aftermath of the Second World War, but the private sector remained the primary provider of those services. In Europe, on the other hand, education and healthcare are largely provided by the public sector.

This reflects differing preferences as regards the public or private provision of services such as healthcare and education. Preferences in respect of the magnitude of defence spending or international aid or the desired degree of income redistribution also vary from country to country. Meanwhile, population ageing may lead to an increase in the size of the public sector where the state has primary responsibility for healthcare, pensions, mid-career retraining and other aspects of countries' social safety nets.⁵ In addition, the public sector tends to be a more stable source of employment (as discussed in Chapter 2), and preferences regarding the trade-off between stability of employment and income may vary over time, affecting the preferred size of the state.

² See Shleifer (1998).

³ See Kornai (1979).

⁴ See Guriev (2017).

⁵ See the discussion in EBRD (2018).

Furthermore, the boundaries between the state and the private sector can sometimes become blurred, reflecting mixed ownership of enterprises and active use of industrial policy tools (as discussed later in this chapter, as well as in Chapter 4). The following sections examine changes in the size of the state over time, starting with the demand side of the economy and moving on to state employment.

Government spending has been increasing

Government spending has been on an upward trend in most economies, both over the longer term (see Chart 1.1) and more recently. In the second half of the 19th century, the Swedish, UK and US governments spent, on average, between 6 and 10 per cent of their GDP per year. The ratio of government spending to GDP then rose gradually in the course of the 20th century, averaging more than 40 per cent by the early 1990s. More recently, government spending has been broadly stable in advanced economies and the EBRD regions, whereas it has been rising (while remaining lower overall) in other emerging markets and low-income economies (see Chart 1.2).

In the United Kingdom and the United States of America, both the First and Second World Wars led to major increases in public spending that were only partially reversed subsequently. In Sweden, meanwhile, the welfare state gradually expanded in the 1970s and 1980s, and a major increase in public spending followed the banking and economic crisis of the early 1990s.

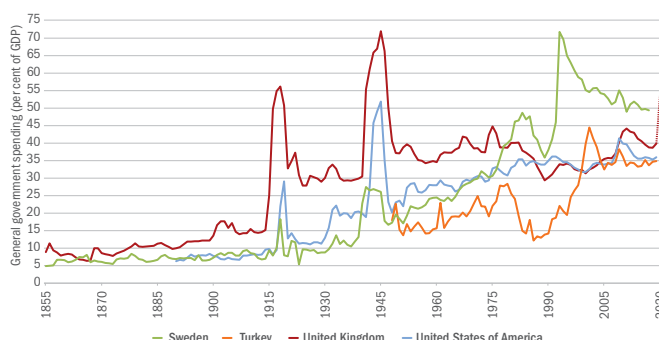
To some extent, that secular increase in public spending reflects the rising importance of the accumulation of skills – and thus education. Increases in life expectancy have also led to higher levels of spending on healthcare and pensions. Moreover, healthcare spending is likely to rise further following the outbreak of Covid-19. At the same time, services such as education and healthcare have become relatively more expensive, owing to the fact that productivity tends to rise more slowly in the “non tradeable” service sectors than it does in tradeable sectors (such as manufacturing and agriculture), while wages are largely determined by productivity in goods that are traded across borders (manufacturing). In fact, in non-tradeable sectors, differences between advanced economies and low-income economies in terms of productivity levels tend to be small relative to the corresponding differences in manufacturing, mining or agriculture.⁶ Thus, as manufactured goods have become cheaper, services typically provided by governments (such as education and healthcare) have become relatively more expensive.

In addition, the range of market failures and externalities that government policies seek to address has become wider. Last year’s *Transition Report*, for instance, found that in the absence of active government policies, managers of firms were unlikely to pay attention to green issues.⁷

With modern technology polarising employment (as evidenced by the rising numbers of high-skilled and low-skilled jobs) and medium-skilled jobs being particularly vulnerable to automation, the need for income redistribution and stronger social safety nets has risen.⁸ Meanwhile, those same types of technology require

CHART 1.1.

There has been a secular increase in government spending since the middle of the 19th century

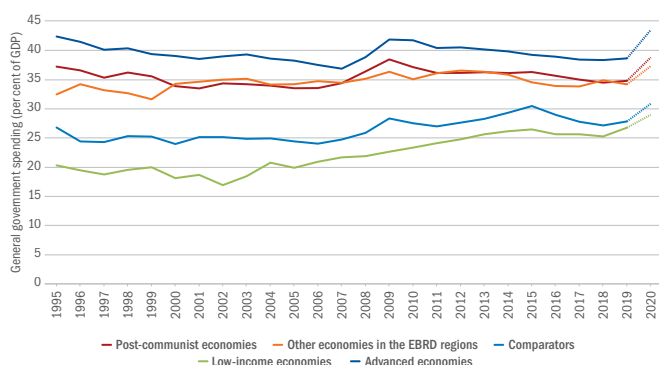


Source: National authorities and authors’ calculations.

Note: See Box 1.2 for details of data sources. The 2020 forecast for UK government spending is as of July 2020.

CHART 1.2.

Government spending as a share of GDP has been increasing in emerging markets and low-income economies



Source: National authorities, International Monetary Fund (IMF) and authors’ calculations.

Note: These data represent unweighted averages. The 2020 forecasts for government spending are based on the IMF’s April 2020 *World Economic Outlook*. The “comparators” are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

IN THE SECOND HALF OF THE 19TH CENTURY, THE SWEDISH, UK AND US GOVERNMENTS SPENT, ON AVERAGE,

6-10% OF GDP PER YEAR

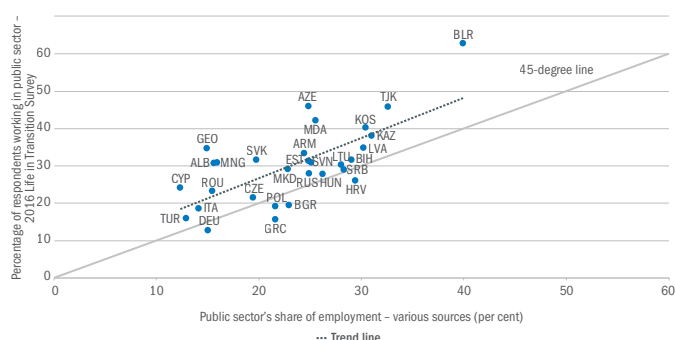
⁶ See, for instance, Herrendorf and Valentinyi (2012).

⁷ See EBRD (2019) and Chapter 4 of this report.

⁸ See EBRD (2018).

CHART 1.3.

Official estimates of state employment are closely aligned with those derived from the Life in Transition Survey



Source: National authorities, ILO, Life in Transition Survey, other representative household surveys and authors' calculations.

Note: Data relate to 2016 or the closest available year.

more complex regulations in order to underpin modern markets, with governments footing the bill for creating and enforcing such regulations.

The next section looks at the other side of the coin, examining the state's role in the production of added value on the supply side of the economy.

The state as an employer

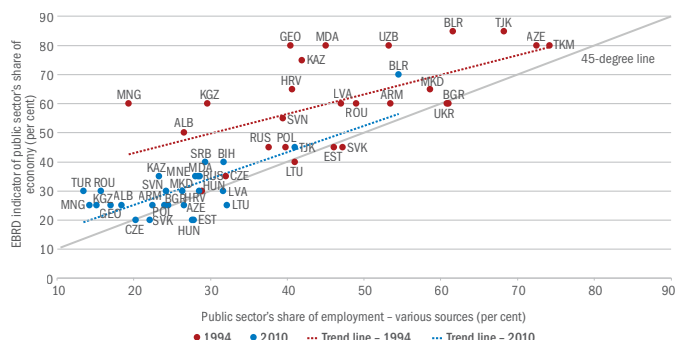
A novel dataset on public-sector jobs

State-owned agencies and enterprises are important providers of jobs in many economies, both in areas such as public administration, education or healthcare and at state-owned enterprises and banks. While data on government spending are widely available and have been analysed extensively,⁹ systematic data on state employment across economies are relatively scarce. The analysis in this chapter builds on a newly assembled dataset described in Box 1.2.

Data on state employment have been obtained from national authorities, the International Labour Organization (ILO), labour force surveys, reports published by the IMF and the World Bank, and various other sources. Inevitably, however, sources and definitions vary. Efforts have been made to account for employment in small enterprises and rural employment in economies such as China and Russia. As a result, estimates of the public sector's share of employment in Russia (around a quarter of total employment) are lower than alternative estimates derived from official data on employment in large and medium sized enterprises and entities.¹⁰

CHART 1.4.

There is a close relationship between official estimates of state employment and the EBRD indicator of the public sector's share of the economy



Source: National authorities, ILO, EBRD, representative household surveys and authors' calculations.

Note: Employment data relate to the year shown or the closest available year.

Reassuringly, those data are fairly closely aligned with estimates derived from the three rounds of the Life in Transition Survey, a representative household survey that was conducted by the EBRD and the World Bank in 37 economies in 2006, 2010 and 2016 (see Chart 1.3). In each economy, at least 1,000 individuals were randomly selected to participate in the survey. Among other things, survey respondents indicated whether they were employed by the private sector, worked for a state-owned enterprise, had some other kind of government-paid job (in education, healthcare or public administration, for instance) or were not in employment.¹¹ In the case of Russia, for example, the Life in Transition Survey suggests that the public sector accounts for 28 per cent of total employment.

State employment and the EBRD's indicator of public-sector output

The data are also reasonably closely aligned with a rough EBRD estimate of the percentage of value added that is produced by the state (see Chart 1.4).¹² As centrally planned economies were dominated by state ownership, that EBRD indicator, which was published from 1994 to 2010 and was based on expert judgement, is regarded as a useful measure tracking the transition from central planning to market economics.¹³ When the EBRD stopped publishing those estimates in 2010, the relationship between that indicator and the official estimates of state employment was a fairly close one.

⁹ See, for instance, Barro (1991).

¹⁰ See World Bank (2019).

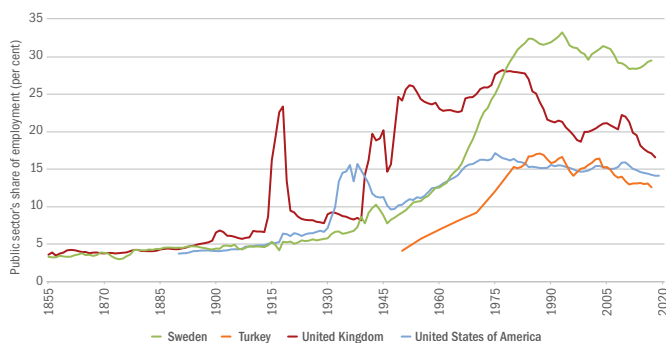
¹¹ A small number of respondents employed by banks have been excluded from these calculations on the basis that it is unclear whether their employers are privately or publicly owned.

¹² See EBRD (1994).

¹³ See Brada (1996).

CHART 1.5.

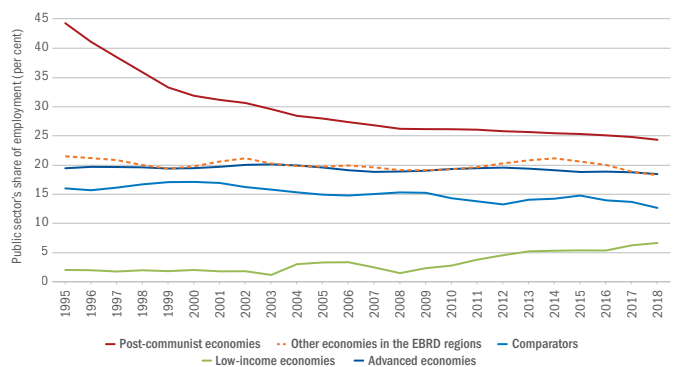
The public sector's share of employment peaked in the early 1980s



Source: National authorities and authors' calculations.
 Note: See Box 1.2 for details of data sources.

CHART 1.6.

State employment has declined in the EBRD regions



Source: National authorities, ILO, EBRD, representative household surveys and authors' calculations.
 Note: These data represent unweighted three-year moving averages. The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

Rising state employment over the longer term

State employment has risen overall over the longer term, much like public spending (see Chart 1.5). This reflects growth in education, healthcare services and regulation, as well as the increasing presence of state-owned enterprises in infrastructure sectors such as energy, transport and telecommunications (with more than four-fifths of the world's infrastructure projects in the transport, energy, water supply and telecommunication sectors being run by state-owned entities or enterprises).¹⁴

In the second half of the 19th century, the state employed around 4 per cent of people in Sweden, the United Kingdom and the United States of America. Those shares peaked at an average of around 25 per cent in the early 1980s, before privatisation reduced the public sector's share of employment somewhat. Similar trends were observed in many other advanced economies.

State employment has tended to rise somewhat after major upheavals (notably the First and Second World Wars) and major recessions, partially reflecting state bailouts of private companies and banks, as well as lay-offs in the private sector. The 2008-09 financial crisis was no exception in that regard. Most of those increases have since been partially reversed.

Declining state employment in the EBRD regions

In post-communist economies in the EBRD regions, the public sector's share of employment declined from around 45 per cent in the mid-1990s to 24 per cent in the mid-2010s. This trend reflects both privatisation and the growth of entrepreneurship, particularly in the services sector (see Chart 1.6). Similarly, the public sector's share of employment has also been declining in advanced economies and other emerging markets recently. However, in many low-income economies, state employment

PUBLIC-SECTOR EMPLOYMENT IN THE UNITED STATES OF AMERICA, THE UNITED KINGDOM AND SWEDEN PEAKED AT AN AVERAGE OF 25% IN THE EARLY 1980s

has been expanding in the wake of the 2008-09 global financial crisis, albeit from a low base.

In relative terms, state employment remains higher in the EBRD regions than it is in other emerging markets. (Analysis later in this chapter looks at the extent to which this could be explained by various country-level characteristics.) Indeed, the decline in the public sector's share of employment weakened in the EBRD regions in the mid-2010s. What is more, in around a third of all economies in the EBRD regions, the public sector's share of employment was actually higher in 2018 (the latest available reading) than it had been three years earlier, with notable increases being observed in countries such as Armenia, Georgia, Kazakhstan and Mongolia.

¹⁴ See World Bank (2017).

The state as an increasingly important owner of assets

Notwithstanding the public sector's declining share of employment, the state has become an increasingly important owner of assets. Increasingly, state-owned firms feature among the world's largest listed companies, and nationalisations have outnumbered privatisations since the early 2000s.¹⁵ The rise of state ownership among large firms is partly a reflection of the rapid economic development of countries such as China and Singapore, where the state plays a prominent role in the economic model.¹⁶

In part, this is also a product of the growing economic heft of sovereign wealth funds – particularly in commodity-rich economies, where such funds provide a cushion against the volatility of commodity prices and save wealth for future generations.¹⁷ Related to that is the fact that commodity prices have risen strongly since the late 1990s, leading to much higher valuations for national oil companies and other state-owned commodity exporters (see Chapter 2). At the same time, many large state-owned firms operate in capital-intensive sectors that are also exposed to rapid automation.¹⁸ As a result, the fact that state-owned multinationals are increasingly featuring among the world's largest firms is not inconsistent with the public sector's share of employment remaining stable or declining.

Economies vary in terms of government spending and public employment

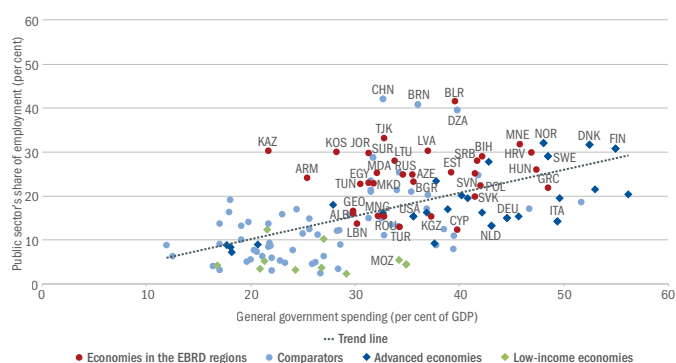
While economies with higher government spending tend to also have higher levels of state employment, this relationship is not perfect (see Chart 1.7). The relationship between the public sector's share of employment and state-owned banks' share of total bank assets is weaker still (see Chart 1.8).

In other words, decisions about the degree of redistribution in the economy and the magnitude of public spending on social services such as education and healthcare are, to a significant extent, independent of decisions about the state's role in actually supplying goods and services (which is discussed in Chapter 2). Moreover, both of them are, in turn, largely independent of decisions about the state's role in allocating finance in the economy (which is discussed in Chapter 3).

In Finland, Norway and other Nordic economies, both government spending and state employment are relatively high. However, in other advanced economies in Europe, including Italy, Germany and the Netherlands, the state plays a major role as a source of demand and a mechanism for redistributing income, but a more limited role on the supply side of the economy. A similar pattern can be observed in some low-income economies, including Mozambique and Liberia, where high levels of government spending have been facilitated by large-scale external borrowing and inflows of aid.

CHART 1.7.

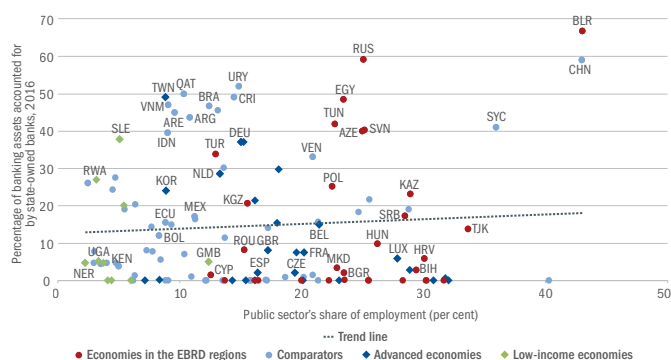
The relationship between government spending and the public sector's share of employment is far from strong



Source: IMF, ILO, national authorities, representative household surveys and authors' calculations.
Note: The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

CHART 1.8.

There is a weak relationship between the state's role in bank finance and its role in the real economy



Source: World Bank, IMF, ILO, national authorities, representative household surveys and authors' calculations.
Note: The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

¹⁵ See Megginson (2017), and Aminadav and Papaioannou (2020).

¹⁶ See Ramirez and Tan (2004) for a discussion of the case of Singapore.

¹⁷ See Megginson and Fotak (2015).

¹⁸ See EBRD (2018) for a discussion of job polarisation.

In contrast, there are other economies (such as Armenia, Brunei, China, Kazakhstan and Suriname) where the state plays a major role on the supply side, but the ratio of government spending to GDP is relatively modest in comparison. In post-communist economies, the public sector's share of employment generally tends to be relatively large, while government spending tends to be broadly in line with that of their peers, something that is corroborated by regression analysis taking account of countries' income per capita and other characteristics. To some extent, the combination of high state employment and relatively modest government spending may reflect the limitations of the data collection exercise. While employment by state-owned enterprises is included in total public employment, their spending on goods and services (procurement) can be sizeable, but is not included in the indicator of the state's role on the demand side of the economy owing to the limited data available.¹⁹

Lastly, in much of Latin America and sub-Saharan Africa the role of the state is limited on both the supply side and the demand side.

The state expands as populations age

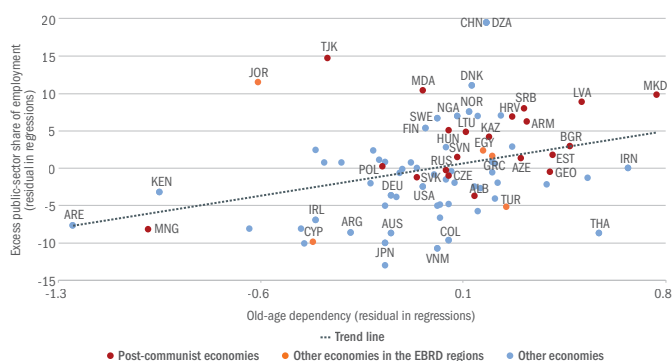
This section asks whether the higher levels of government spending in post-communist economies relative to other emerging markets (see Chart 1.2) and their higher levels of state employment (see Chart 1.6) can be explained by differences in demographics, the nature of their economic institutions or other characteristics of those economies. This analysis uncovers country-level characteristics that are systematically associated with higher levels of state employment and government spending in a sample of 117 economies over the period 1995-2018.

The state tends to be larger, in terms of both public spending and state employment, in ageing economies (those where the ratio of people aged 65 and over to people aged 15 to 64 is higher). In older societies, the provision of public services such as healthcare, disability care and long-term care tends to be more labour-intensive and more expensive (see Chart 1.9). Doubling the old-age dependency ratio (going, for example, from the level seen in Moldova to that observed in Bulgaria) is associated with a 5 percentage point increase in the public sector's share of employment. This holds when other characteristics of the economy (such as income per capita) are taken into account.

The relationship between the size of the state and ageing can also be explored within countries over time. This analysis explains the average level of government spending or state employment over a four-year period using the country's average values for the preceding period (given a high degree of persistence in state employment and government expenditure), as well as various country-level characteristics. In this dynamic panel setting, income per capita, economic and political institutions, openness to trade and the ratio of natural resource rents to output can all be instrumented using their values in previous periods using a version of the Arellano-Bond generalised method of moments (GMM) estimator.²⁰ This helps to account for the possibility that government spending or state employment could itself affect income per capita or the quality of economic institutions.

CHART 1.9.

Ageing economies employ more workers in the public sector



Source: National authorities and authors' calculations.

Note: These data are based on analysis of 117 economies in 2017. The measure of ageing is the residual derived from regressing the logarithm of the old-age dependency ratio on a large number of country-level characteristics. The measure of the excess public-sector share of employment is the residual derived from regressing the public sector's share of employment on those same variables.

**IF THE OLD-AGE
DEPENDENCY RATIO
DOUBLES, THE PUBLIC
SECTOR'S SHARE
OF EMPLOYMENT IS
ESTIMATED TO
INCREASE BY
5
PERCENTAGE
POINTS**

The results of this analysis suggest that the public sector's share of employment does indeed tend to rise as the population ages (see Table 1.1). Moreover, it also tends to rise as population growth accelerates, since that drives up demand for education. That second correlation may also reflect the difficulty of creating jobs in the private sector in economies where the labour force expands rapidly.

Government spending rises when economic institutions are stronger, but state employment does not

Another finding that emerges from both cross-sectional and time series analysis is the strongly positive correlation between government spending and the quality of economic institutions (measured as the average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness).²¹ This relationship holds when taking into account the level of income per capita, human capital, the quality of democratic institutions and other

¹⁹ See OECD (2015).

²⁰ See Arellano and Bond (1991).

²¹ See Kaufmann et al. (2009) for a discussion of Worldwide Governance Indicators.

TABLE 1.1.

Determinants of the size of the state

Dependent variable Estimation method	(1)	(2)	(3)	(4)	(5)	(6)
	State employment (% of total)			Government expenditure (% of GDP)		
	Between-effects	GMM	GMM	Between-effects	GMM	GMM
Dependent variable, lag		0.661*** (0.125)	0.647*** (0.116)		0.786*** (0.126)	0.719*** (0.120)
Old-age dependency (log)	5.312** (2.330)	6.575** (2.915)	6.138** (2.990)	6.086** (2.395)	-1.879 (4.572)	1.545 (4.541)
Economic institutions (Worldwide Governance Indicators)	0.816 (1.677)	4.888 (6.451)	3.505 (3.520)	3.937** (1.724)	20.43* (12.21)	17.98** (8.195)
GDP per capita (log, 2011 US\$)	4.508** (1.747)	-2.207 (2.549)	-0.807 (2.016)	1.938 (1.796)	-10.64* (5.884)	-11.96** (5.458)
Democratic institutions (Polity 2)	-0.628*** (0.203)		-0.279 (0.377)	-0.415* (0.209)		0.432 (0.644)
Trade openness (ratio of exports plus imports to GDP, log)	2.298 (2.165)		2.321 (2.189)	2.591 (2.225)		0.346 (4.950)
Natural resource rents (log)	-0.180 (0.638)		-0.280 (0.983)	-0.477 (0.656)		-3.687** (1.752)
Population density (log)	-1.694** (0.715)	13.50** (5.880)	15.90** (6.968)	-1.572** (0.735)	0.611 (4.871)	0.848 (5.309)
Urban population (% of total)	-0.0428 (0.0658)	-0.147* (0.0840)	-0.159 (0.106)	0.0274 (0.0676)	-0.217 (0.199)	-0.107 (0.220)
Constant	-41.58** (16.37)	148.4** (69.15)	164.8** (73.00)	7.059 (16.82)	128.7** (53.21)	132.8*** (47.21)
R ²	0.62			0.64		
Number of observations	1,185	219	219	1,185	391	391
Number of economies	117	83	83	117	144	144
Test for no second-order autocorrelation (p-value)		0.937	0.687		0.771	0.681

Source: National authorities, IMF, ILO, World Bank and authors' calculations.

Note: These data are based on between-effects regressions for 117 economies over the period 2004-18 and dynamic panel GMM estimations for 83 economies over the period 1995-2018, using four-year averages for all variables. The lagged dependent variable, economic institutions, democratic institutions, natural resource rents, openness to trade and income per capita are all treated as endogenous in GMM regressions. Regressions include interactions between post-communist and year dummies and additional control variables. Robust standard errors are reported in parentheses, and *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

characteristics that tend to be closely correlated with institutional development. It reflects the role that administrative capacity plays in enabling governments to raise revenue and deliver high quality services demanded by citizens, as discussed earlier in the chapter. In contrast, there is no evidence of a correlation between the quality of economic institutions and the public sector's share of employment.

More state employment in post-communist economies

Even taking into account their rapidly ageing populations and other characteristics, post-communist economies tend to have higher levels of state employment (as shown, for example, by the fact that their dots tend to lie above the trend line in Chart 1.9). Regression analysis indicates that their public-sector employment levels exceeded those of their peers by an average of 7 percentage points in the period 2014-18, down from 15 percentage points in the period 1995-2004.

In contrast, it appears that there are no longer any systematic differences between post-communist economies and their peers in terms of government spending. In the period 1995-2004, post-communist economies spent, on average, 9 percentage points of GDP more than their peers. Since then, government spending has risen in many emerging markets. Average government spending in post-communist economies (which stood at 35 per cent of GDP in 2019 and is projected to rise towards 40 per cent in 2020) is now in line with the levels seen in other economies once various relevant characteristics are taken into account – notably the rapid population ageing seen in many economies in emerging Europe.

Growing support for state ownership

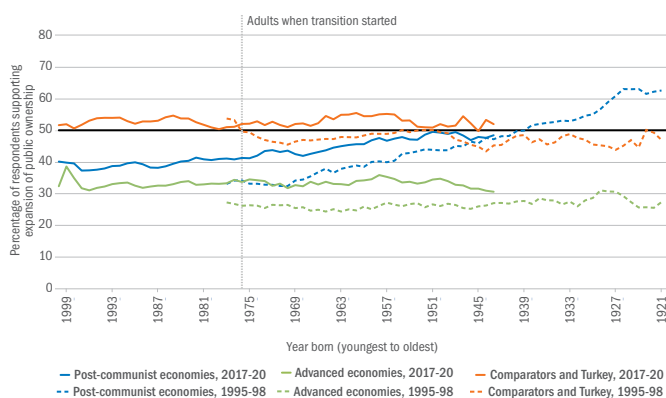
Although the public sector’s share of total employment has declined in recent decades, popular support for public ownership has been rising in advanced economies and emerging markets alike. This probably reflects growing inequality within countries and increased demand for the redistribution of income, whether via taxation or by means of state ownership.²²

On average, 33 per cent of the respondents who were surveyed in advanced economies between 2017 and 2020 favoured the expansion of public ownership, up from 27 per cent two decades earlier. In post-communist economies, meanwhile, 45 per cent of respondents were in favour of increasing public ownership (see Chart 1.10; all quoted differences are statistically significant at the 1 per cent level). Support for public ownership in post-communist economies has been broadly stable over time – rising slightly, if anything (having stood at 43 per cent in the mid-1990s).

These findings are derived from the World Values Survey, various rounds of which have been conducted worldwide since 1995²³ (with the Life in Transition Surveys conducted in the EBRD regions and a number of comparator economies giving a similar result). In both surveys, respondents are asked to express their views on the ownership of business and industry on a scale of 1 (“completely agree with the statement that private ownership should be increased”) to 10 (“completely agree with the statement that government ownership should be increased”). People who give a response of 5 or lower are deemed, on balance, to support private ownership, and those who give a response of 6 or higher are deemed to support public ownership.

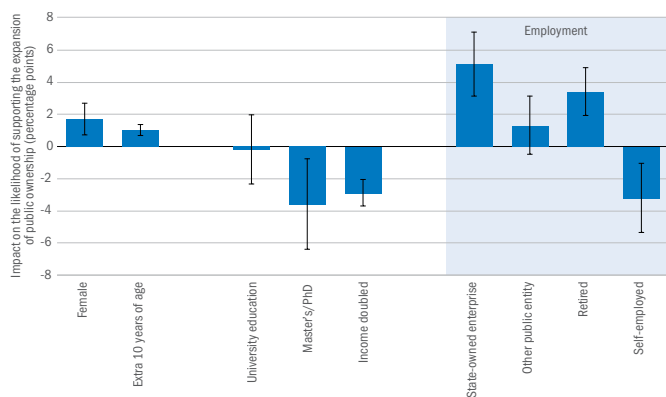
Among individuals who reached adulthood after the start of the transition from central planning to market economics (that is to say, those born in the mid-1970s or later), support for state ownership does not depend strongly on the individual’s age, a pattern similar to that observed in advanced economies and other emerging markets. Among older individuals, however, support for public ownership is stronger among those who were older at the time of market reforms, possibly reflecting the strong increase in inequality that was seen in the early years of the transition process. Given this pattern, support for public

CHART 1.10.
Support for state ownership has risen



Source: World Values Survey and authors’ calculations.
Note: Five-year moving averages have been calculated for each year of birth. The figures shown represent the percentage of survey respondents who agreed (that is to say, gave a response of 6 or higher on a scale of 1 to 10) that there should be more state ownership. The data for both time periods are based on the same 45 economies, 20 of which are in the EBRD regions. The “comparators” are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

CHART 1.11.
There is greater support for state ownership among the less educated and those working in the public sector



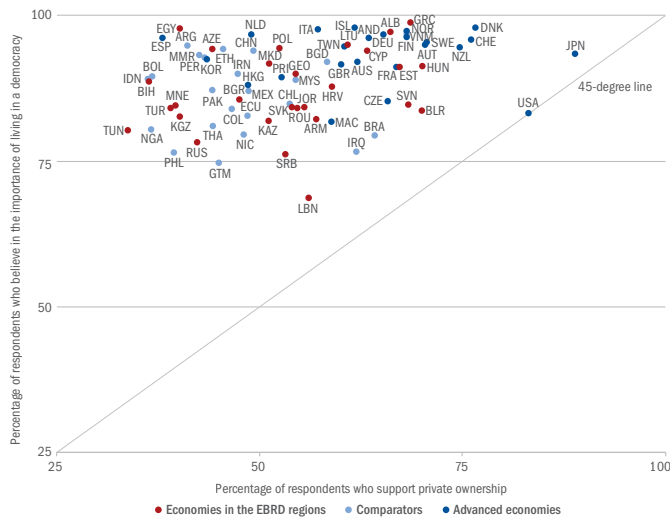
Source: Life in Transition Survey 2016 and authors’ calculations.
Note: These estimates are based on linear probability model regressions that control for country effects and various individual characteristics (such as the size of the household and the respondent’s mother tongue). The 90 per cent confidence intervals shown are based on robust standard errors.

**GOVERNMENT SPENDING
IN POST-COMMUNIST
ECONOMIES IS, AT AROUND**
35%
OF GDP,
**IN LINE WITH THAT OF
COMPARATOR COUNTRIES**

²² See Stiglitz (2015) for a discussion of trends in inequality and politics.
²³ See Inglehart et al. (2014).

CHART 1.12.

Support for democracy exceeds support for the expansion of private ownership



Source: World Values Survey and authors' calculations.
Note: These results are based on data for the period 2017-20 and show the percentage of respondents who agreed (that is to say, gave a response of 6 or higher on a scale of 1 to 10) that it is important to live in a democratically governed country and the percentage who agreed that there should be more private ownership. The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

ownership could be expected to decline over time as people born after the mid-1970s gradually account for a growing percentage of the population. At the same time, however, average support for state ownership among people born in a given year has risen by an average of 6 percentage points, resulting in a slight increase in overall support for the expansion of public ownership.

In comparator economies, support for public ownership as expressed in World Values Surveys increased from 48 per cent in the 1990s to 53 per cent in the late 2010s.

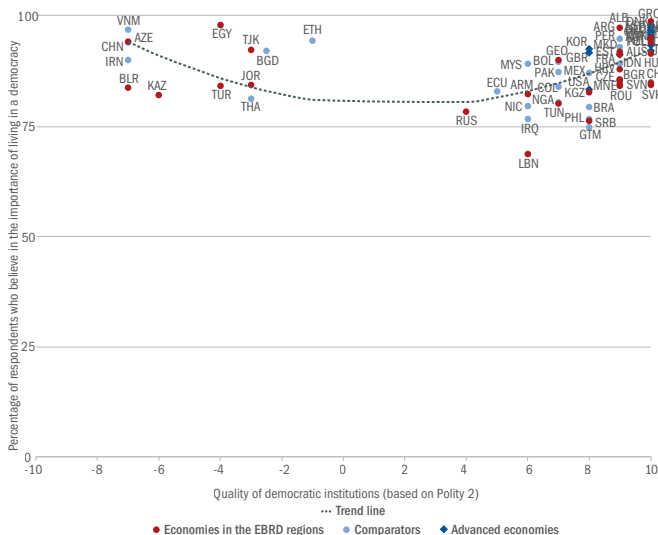
Greater support for state ownership among less educated individuals and public-sector employees

Regression analysis based on the 2016 round of the Life in Transition Survey indicates that support for the expansion of state ownership tends to be stronger among women and among people with lower incomes and fewer years of education (see Chart 1.11). This analysis takes account of respondents' countries of residence, as well as various individual characteristics (such as their mother tongues and their parents' backgrounds), as well as the size of their households. Data derived from the World Values Survey produce similar results.

People who are employed in the public sector or are otherwise reliant on the state for their income (including pensioners) are also more likely to be in favour of expanding state ownership. In contrast, the self-employed are far more likely to favour the expansion of private ownership.

CHART 1.13.

Support for democracy is strong even where democratic institutions are relatively weak



Source: World Values Survey, Polity IV and authors' calculations.
Note: These results are based on data for the period 2017-20 and show the percentage of respondents who agreed (that is to say, gave a response of 6 or higher on a scale of 1 to 10) that it is important to live in a democratically governed country. The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

Support for democracy exceeds support for private ownership

Where people support the expansion of the state, they want to have a say in how that larger state is run. As part of the World Values Survey, respondents are also asked whether they agree that democracy is good for their country on a scale of 1 ("strongly disagree") to 10 ("strongly agree").

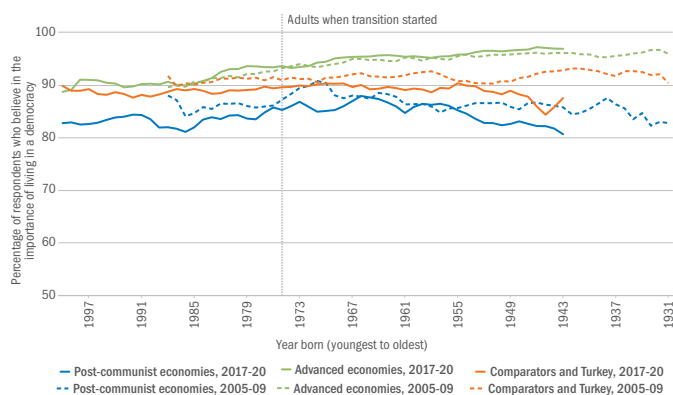
Average support for democracy (calculated as the percentage of people who give a response of 6 or higher) exceeds average support for the expansion of private ownership across all economies (with only the United States of America and Japan coming close to the 45-degree line in Chart 1.12). The same questions are asked in the Life in Transition Survey, with similar results.

Support for democracy is strong even where democratic institutions are relatively weak

Unlike support for the expansion of private ownership, support for democracy always exceeds 70 per cent of the population. Moreover, support for democratic institutions tends to be strong even in countries where existing political institutions are regarded as being relatively weak (for example, on the basis of the Polity 2 measure of democratic institutions; see Chart 1.13).

CHART 1.14.

Among those who reached adulthood after the start of the transition process, support for democracy rises with age



Source: World Values Survey and authors' calculations.
Note: Five-year moving averages have been calculated for each year of birth. The figures shown represent the percentage of survey respondents who agreed (that is to say, gave a response of 6 or higher on a scale of 1 to 10) that democracy is good for their country. The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

As in the case of support for private ownership, support for democracy in post-communist economies exhibits a complex pattern based on age. Among those who reached adulthood after the start of the transition process, support for democracy rises with age, similar to the trends observed in advanced economies. In contrast, support for democracy declines with age among the older generation in post-communist economies (see Chart 1.14).

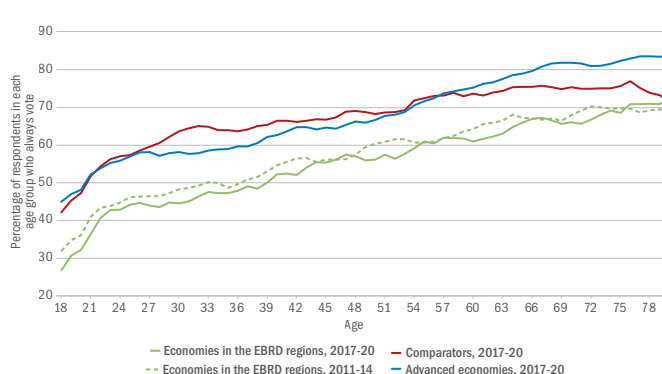
Who does the larger state represent?

Given the universally strong support for democracy, regardless of people's views about the merits of public or private ownership, it is important to ensure that the state, in playing an ever greater role in the economy, represents the broad interests of the entire population. Such broad representation is not necessarily a given. For instance, younger people (who have been affected particularly badly by the Covid-19 crisis) tend to vote less frequently (see Chart 1.15). They are also, on average, more disillusioned with the way in which democracy represents their views.

All countries have large gaps between the electoral participation rates of the young and the old (see Box 1.3). In the EBRD regions, this gap has widened further in recent years (see Chart 1.15). This makes it all the more important to break the vicious circle whereby young people and other groups do not participate in elections and feel that the state does not represent their interests. One option, as discussed in Box 1.3, is to reward younger voters financially for taking part in elections.

CHART 1.15.

Younger people are much less likely to vote



Source: World Values Survey and authors' calculations.
Note: Five-year moving averages have been calculated for each age cohort. The "comparators" are economies outside the EBRD regions that are not classified as advanced economies by the IMF and had GDP per capita in 2019 (at market exchange rates) which was in excess of that of Tajikistan.

Who works for the state?

Women, more educated people and older individuals are all more likely to work in the public sector

Using the Life in Transition Survey, this section looks at whether people decide to work in the public or the private sector. Around one-third of survey respondents are employed in the public sector, and half of those work for a state-owned enterprise.

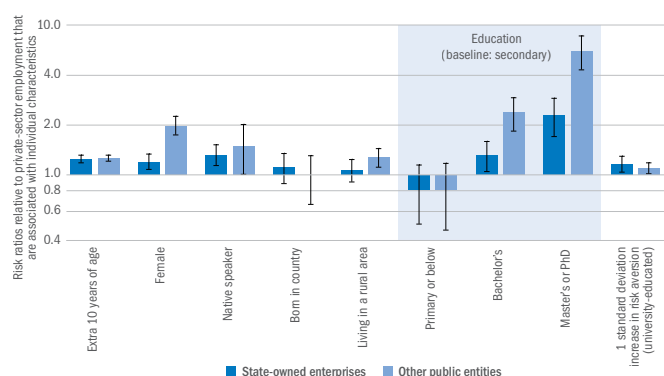
Overall, women, older people and those with university qualifications (particularly postgraduate qualifications such as a Master's degree or a PhD) are more likely to work in the

THE ASIAN FLU EPIDEMIC THAT CLAIMED AN ESTIMATED 2 MILLION LIVES IN 1957 (A SHARE OF THE WORLD'S POPULATION THAT WOULD BE EQUIVALENT TO 6 MILLION PEOPLE TODAY) MAY HAVE REDUCED THE GROWTH RATES OF MAJOR ECONOMIES BY AROUND

3 PERCENTAGE POINTS IN THAT YEAR

CHART 1.16.

Women, older individuals, highly educated people, more risk-averse individuals and people living in rural areas are all more likely to work in the public sector



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

Note: These estimates are based on multinomial logit regressions of the likelihood of being employed by a state-owned enterprise or another public entity in the EBRD regions with country fixed effects and country clustered standard errors. Risk ratios larger than 1 suggest that a unit increase in the explanatory variable increases the likelihood of being employed in the public sector relative to being employed in the private sector. 90 per cent confidence intervals are shown.

public sector (see Chart 1.16 and Box 1.4). This may, to some extent, reflect the nature of public-sector jobs, since teachers, medics and civil servants require more years of education than the occupants of many private-sector jobs (although holders of postgraduate qualifications are also twice as likely to work for a state-owned enterprise as they are for a private-sector firm).

More public-sector jobs in rural areas

In addition, people living in rural areas are also more likely to work in the public sector. This may reflect a lack of private-sector job opportunities in more remote areas. Parents' education, in contrast, has no significant impact on people's prospects of being employed by the state.

More risk-averse individuals favour public-sector jobs

The Life in Transition Survey also asks people to indicate their willingness to take risks on a scale of 1 (maximum risk aversion) to 10 (maximum tolerance of risk). Analysis shows that individuals who are less willing to take risks are significantly more likely to work in the public sector. This effect is driven by people with university qualifications. In that group, a 1 standard deviation decline in the willingness to take risks (three times the difference between the average attitudes to risk recorded in the Kyrgyz Republic and Croatia) is associated with a 6 percentage point increase in the likelihood of working in the public sector. Overall, these results are consistent with the notion that public sector employment tends to be regarded as being more stable.

Changing expectations as a result of the Covid-19 pandemic

The economics of pandemics past and present

In 1918, Spanish flu swept around the world, claiming the lives of an estimated 2 to 4 per cent of the world's population (more than the First World War, which ended in that year).²⁴ While some cities in the United States of America, where the pandemic originated, closed retail shops and restricted mass gatherings, others (including Philadelphia) went ahead with major public events such as the Liberty Loan Parade.²⁵

More recently, the Asian flu epidemic that claimed an estimated 2 million lives in 1957 (a share of the world's population that would be equivalent to 6 million people today) may have reduced the growth rates of major economies by around 3 percentage points in that year.²⁶ In the United Kingdom, some factories and mines closed, but those closures were fairly limited.²⁷ On the basis of those events, pre-2020 studies looking at the likely economic impact of a future pandemic mostly restricted themselves to the impact on tourism and trade, concluding, for example, that "although a pandemic would take a huge toll in human suffering, it would most likely not be a severe threat to the European macroeconomy".²⁸ Pandemic scenarios with a death toll of close to 15 million were assumed to be compatible with positive economic growth in Europe and the United States of America.²⁹ Those studies did not factor in widespread social distancing.

When Covid-19 struck, the world had great expectations in terms of the state's ability to minimise the risks posed to individuals' lives, despite the economic costs. Hundreds of thousands of restaurants, retail shops, beauty salons and other businesses, small and large, were ordered to close. The resulting disruption to global economic activity in the medium term is projected to be the largest since the Great Depression and the Second World War.

The contrast with earlier pandemics underscores the extent to which views about the state's role in society have changed. That change has been observed in virtually every corner of the globe, regardless of the political and economic systems in place, and reflects increased demand for the socialisation of risks, even if that may entail weaker average growth.

A different view of the state: socialisation of risks

At the very heart of the private sector-led market economy lies the idea of entrepreneurship – individuals taking calculated risks. From China to Brazil, and from Norway to the United States of America, the Covid-19 crisis has highlighted people's increasing desire for the state to socialise the risks faced by individuals. To some extent, this trend is a response to the fact that uncertainty about future incomes has increasingly been pushed

²⁴ See Kilbourne (2006).

²⁵ See Correia et al. (2020).

²⁶ See McKibbin and Sidorenko (2006).

²⁷ See Jackson (2009).

²⁸ See Jonung and Roeger (2006); see also James and Sargent (2006).

²⁹ See McKibbin and Sidorenko (2006).

onto individuals in the gig economy through self employment, zero-hours contracts and the disappearance of defined benefit pensions.³⁰

Indeed, younger individuals and low-income households are likely to be disproportionately affected by the Covid-19 crisis. Recent studies show that the self-employed and workers whose hours vary at their employers' discretion under zero-hours contracts are more likely to have been negatively affected by the downturn.³¹ This is because poorer workers are likely to be concentrated in the occupations and sectors that have been most affected by closures (such as retail services) and are least likely to be able to work from home. A recent study estimates that only around a third of US jobs can be performed from home and that those jobs pay an average of around 55 per cent more than others.³² Thus, the Covid-19 pandemic risks further exacerbating inequality.

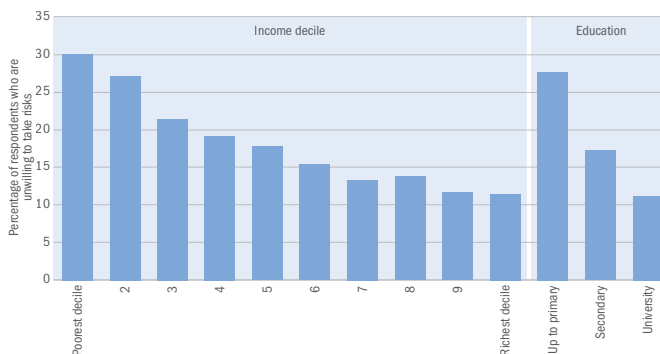
Even before the Covid-19 crisis, economic risks had already been pushed onto the very people who tend to dislike them most – those with lower levels of education and income. That trend comes across strongly in the results of the third round of the Life in Transition Survey, where respondents indicated their willingness to take risks on a scale of 1 (maximum risk aversion) to 10 (maximum tolerance of risk).

The results of that survey indicate that individuals on lower incomes and those with fewer years of education are significantly less willing or able to tolerate risks (see Chart 1.17). That may reflect low levels of savings among individuals on lower incomes or a multitude of other factors (since higher incomes may, for example, come as a result of risky choices in the past). The differences in risk aversion across income deciles and by level of education are even more pronounced in the EBRD regions than they are in the advanced economies covered by the survey (Germany and Italy). One way or another, people who are less able to tolerate risks have seen a significant amount of economic risk being shifted onto them.

What is more, periods of major economic upheaval and conflict have, historically, tended to reduce people's appetite for risk, often leading to greater demand for state intervention. For example, after the Great Depression of the 1930s the state emerged as a major investor (with the New Deal in the United States of America providing for major public investment in transport infrastructure, for instance). Similarly, the Second World War gave rise to the welfare state and a significant expansion in public education and healthcare (with the United Kingdom's National Health Service being established in 1948). Early survey evidence suggests that the Covid-19 pandemic is having a similar effect.³³

CHART 1.17.

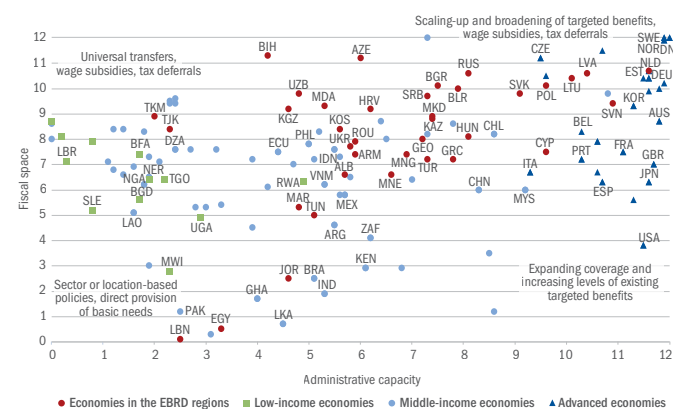
People with lower levels of income and education are less willing or able to tolerate risks



Source: Life in Transition Survey 2016 and authors' calculations.
Note: The data in this chart represent averages across 35 economies.

CHART 1.18.

There is significant variation across countries in terms of governments' fiscal space and administrative capacity



Source: Global Findex Database, IMF, United Nations Department of Economic and Social Affairs (UN DESA), World Bank, national authorities and authors' calculations.
Note: See Box 1.5 for details.

**AROUND
A THIRD
OF US JOBS CAN
BE PERFORMED
FROM HOME AND
THOSE JOBS PAY AN
AVERAGE OF AROUND
55%
MORE THAN OTHERS**

³⁰ See Hacker (2008).
³¹ See Adams-Prassl et al. (2020).
³² See Dingel and Neiman (2020).
³³ See Bu et al. (2020), who report a significant increase in risk aversion among international students in Wuhan, China, as a result of the Covid-19 pandemic.

How can the state respond?

The extent to which governments are able to support their economies during the Covid-19 crisis is largely shaped by two factors: (i) their ability to pay for the various measures required (the fiscal space available); and (ii) their ability to implement those measures quickly in a targeted fashion (their administrative capacity). Chart 1.18 draws on the discussion in IMF (2020), summarising countries' fiscal space and administrative capacity in two indices (see Box 1.5 for details). The same two factors also shape the state's ability to expand and deliver on citizens' expectations in the longer term.

The fiscal space used in this report takes account of the level of government debt and net government lending/borrowing as a percentage of GDP, the cost of borrowing, and governments' ability to raise revenue as measured by the ratio of government revenue to GDP. The administrative capacity index takes account of a measure of e-government (which looks at the scope and quality of online services, the development of telecommunication infrastructure and inherent human capital),³⁴ a Worldwide Governance Indicator measuring the effectiveness of government, a Doing Business indicator assessing the distance to the frontier and an indicator measuring the routine use of bank accounts by the country's population.

Increasing fiscal space

While advanced economies enjoy relatively high levels of administrative capacity, their fiscal space varies – largely on account of the high levels of debt and large fiscal deficits that many economies had accumulated before the onset of the Covid-19 crisis. Many middle-income economies (both in the EBRD regions and elsewhere) also have a reasonable amount of fiscal space, as do many low-income countries.

In many countries, the amount of fiscal space has increased over the last two decades (albeit there are a number of notable exceptions, such as Lebanon). This is particularly true of countries where it used to be very limited, with many countries seeing increases in revenue and declines in the cost of servicing public debt, despite higher debt levels.

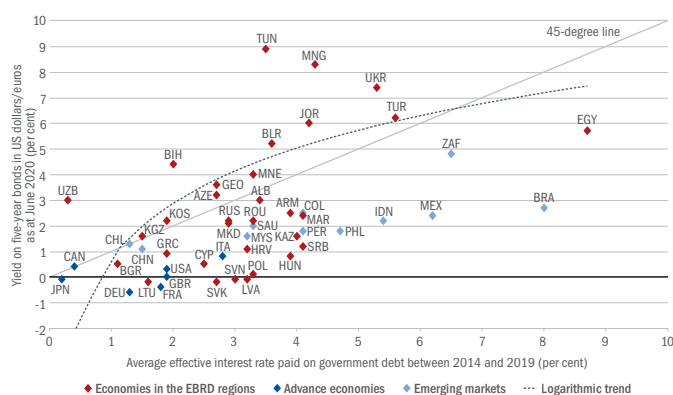
In contrast with many previous economic crises, the cost of financing has remained low for many economies in 2020. In early June 2020, the yields on the debt of many middle-income economies (including most countries in the EBRD regions) were, if anything, below the average cost of servicing those economies' debt over the period 2014-19 (as obtained by dividing government interest expenditure by the stock of debt; see Chart 1.19).

A low-risk, low-return scenario

Ratios of public debt to GDP are widely expected to increase following the Covid-19 crisis, but they can be sustained provided that interest rates remain low. This scenario effectively relies on low levels of investment, as in the long term interest rates reflect a balance between investment and savings. Subdued investment, in turn, implies weak growth – a scenario that

CHART 1.19.

Borrowing costs did not increase in the early months of the Covid-19 crisis



Source: Bloomberg, IMF, national authorities and authors' calculations.
Note: See Box 1.5 for details.

could be characterised as a low-risk, low-return economy with a rising state footprint. Were global investment and interest rates to pick up, high levels of debt would present a major source of vulnerability.

Constraints on administrative capacity are more binding

While governments have a considerable ability to increase spending and purchase assets, providing rapid targeted support to vulnerable firms and individuals in a crisis is often a challenge. In many economies, the same is true when it comes to delivering on citizens' expectations of high-quality public services and lower economic risks. During the early months of the Covid-19 crisis, a key precondition for governments' ability to roll out large-scale targeted assistance schemes (such as the wage subsidy scheme that was established in the United Kingdom in response to the pandemic) was their ability to make digital payments to all eligible adults.³⁵

Indeed, greater use of digital payments facilitates the targeted and timely administration of public support for individuals and small businesses.

With that in mind, it is worth noting that financial inclusion (as measured by the Findex survey) increased significantly across emerging markets between 2014 (when the survey first included

³⁴ See UN DESA (2020).

³⁵ See also Gelb et al. (2020).

the relevant question) and 2017 (see Chart 1.20).³⁶ In 2014, only around 44 per cent of residents of the EBRD regions aged 15 or over had a bank account and used it to make or receive digital payments at least once a year. By 2017, this had increased to around 57 per cent, although “functional” account penetration rates were still only around one-third in parts of Central Asia, the Caucasus and the southern and eastern Mediterranean. In advanced European economies, more than 90 per cent of the population make or receive regular digital payments (with EU Directive 2014/92/EU giving all legal residents – including refugees and people without a fixed address – the right to hold a bank account).

Large-scale government assistance programmes can, in turn, significantly raise functional financial inclusion, albeit with a lag of a few months or years. Mongolia, for instance, has introduced universal cash handouts based on future copper royalties, with payments being made into individuals’ bank accounts. As a result, almost 90 per cent of the Mongolian population now use bank accounts, broadly on a par with the levels seen in Latvia and Estonia.

Policy options dependent on fiscal space and administrative capacity

Countries’ policy options, both in the context of the Covid-19 crisis and in the longer term, are largely shaped by their fiscal and administrative constraints. Countries with ample fiscal space and a relatively strong administrative capacity (such as the Baltic states, Poland and Slovenia) have a wider range of options, including the broadening of existing targeted social security schemes, the introduction of wage subsidies or the deferral of tax payments.³⁷

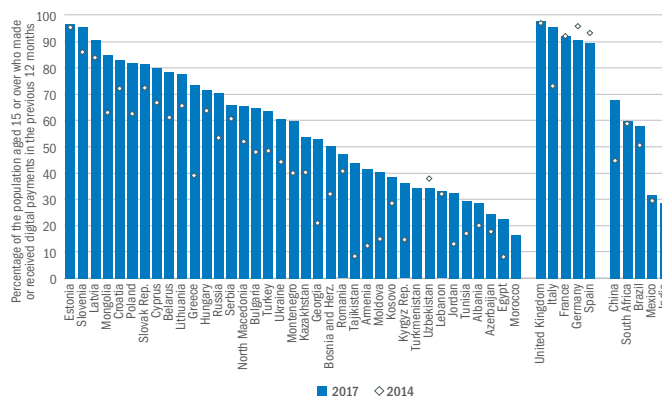
Countries with ample fiscal space but more limited administrative capacity (as is the case, for instance, in parts of the Western Balkans and Central Asia) may need to rely more on one-off universal transfers (as seen, for example, in Kazakhstan, the Kyrgyz Republic, Mongolia, Serbia and Uzbekistan).

Countries with more limited fiscal space but a relatively strong administrative capacity could expand coverage and increase benefit levels under existing targeted support programmes. For instance, Cyprus, Greece and Montenegro have all increased the coverage of existing unemployment benefits and/or enhanced sick leave. Pension increases were one of the most common measures in the early weeks of the Covid-19 crisis in the EBRD regions (being seen in around one-third of those economies), not because pensioners were particularly badly affected by the crisis, but because pension increases could easily be administered at speed.³⁸

Lastly, countries with more limited fiscal space and a relatively weak administrative capacity, such as Lebanon or Tajikistan, may need to rely on policies targeting specific sectors or locations and ensure the direct provision of goods and services to satisfy the basic needs of their populations.

CHART 1.20.

Use of digital payments remains far from universal



Source: Global Findex Database.

ONLY AROUND

57%
OF RESIDENTS OF THE EBRD REGIONS AGED 15 OR OVER HAD A BANK ACCOUNT IN 2017 AND USED IT TO MAKE OR RECEIVE DIGITAL PAYMENTS AT LEAST ONCE A YEAR

Should state involvement in the economy increase?

Support for public ownership typically rises in response to a pandemic

Given these trends, will the public sector’s share of the economy increase? If history is any guide, support for public ownership may well rise further on the back of the Covid-19 pandemic and the accompanying global recession. Previous pandemics made a large dent in people’s trust in the economic and political institutions that underpin the market economy and democracy, while individuals who reach adulthood during major recessions tend to have more positive views on public ownership and the redistribution of income. Moreover, risk aversion in financial markets tends to be higher among individuals who grew up during periods with poor stock market returns.³⁹

As Box 1.6 shows, individuals who reach adulthood during a pandemic are also around 2 to 4 percentage points more likely to

³⁶ See Demirgüç-Kunt et al. (2018) for a discussion of the Findex survey.

³⁷ See Sanfey et al. (2020) for a summary of the policies that were implemented in the EBRD regions in the early months of the Covid-19 crisis.

³⁸ See Bircan et al. (2020).

³⁹ See Aksoy et al. (2020), Giuliano and Spilimbergo (2014), and Malmendier and Nagel (2011).

support the expansion of state ownership. A shift of this magnitude in average support for state ownership could result in support for the expansion of private ownership changing from a majority view to a minority view in many economies. Indeed, in a quarter of the economies that participated in the most recent round of the World Values Survey, support for the expansion of state ownership averaged between 45 and 55 per cent of survey respondents.

Will the public sector's share of the economy increase?

Whether state ownership will increase also depends on the policy objectives underpinning the objectives of public ownership, as discussed in greater detail in subsequent chapters. In addition, policymakers will need to look at whether the private sector could deliver on those objectives in a more efficient manner.

For instance, state ownership may seek to facilitate the redistribution of income from natural resources or other sources of economic rents, both between individuals and across generations. In that case, the state could be limited to a minority stake. It could also be aimed at securing foreign assets in order to achieve greater diversification. Limiting state investment to minority stakes could also be an effective way of encouraging risk-taking and innovation in specific industries or accumulating state assets in order to fund future liabilities (such as liabilities relating to pension benefits or healthcare in a rapidly ageing economy).

When it comes to addressing job displacement in specific regions or industries as a result of technological change, alternatives to state ownership may involve subsidising employment in the private sector, possibly through income tax credits. Such subsidies could also be directed towards specific groups, such as older individuals. The cost of such assistance could be weighed against the cost of inefficiencies at state-owned enterprises or state agencies. If state bailouts are deployed to see major employers through temporary difficulties, structures could be put in place to facilitate the unwinding of state ownership in the future (see Box 1.7).

Private-sector solutions often require support to be provided through targeted policies and state interventions – referred to as “industrial policy” (see Box 1.8). Those measures could, for example, take the form of regulation and monitoring (in the area of the green economy, for instance, as discussed in Chapter 4), the provision of finance to riskier borrowers (as discussed in Chapter 3), the upgrading of infrastructure, efforts to foster exports and investment, or the establishment of vocational training programmes.

If, after weighing up the various policy options, the state opts for majority state ownership, arrangements need to be put in place to strengthen governance at state-owned enterprises, as discussed further in Chapter 2.

Conclusion

The Covid-19 crisis has highlighted citizens' growing expectations regarding the role of the state and the increased demand for the socialisation of risks. The state's ability to deliver on those expectations – both in response to Covid-19 and in the longer term – will depend on its fiscal space and administrative capacity, with the latter appearing to be a more binding constraint at present.

The economic footprint of the state has grown significantly since the mid-19th century, but trends in terms of rising public spending and state employment have varied across countries and over time. That variation reflects differences in citizens' preferences across market economies. The state footprint tends, for example, to be larger in ageing societies, and higher-quality economic institutions are also associated with higher levels of government spending. As the analysis in this chapter shows, women, older people and highly educated individuals are all more likely to work in the public sector, as are the more risk-averse.

State employment has declined in advanced economies and emerging markets alike in recent decades, with more rapid declines being observed in the EBRD regions – at least until the mid-2010s, when state employment started rising again in some economies. At the same time, public support for state ownership has been growing across economies. In post-communist economies and emerging market comparators, close to half of the population favour an increase in public ownership.

This brings us to the question of whether public ownership should keep rising. The answer to that depends on the objectives of state ownership and whether the private sector could deliver on those objectives more efficiently. This discussion is continued in subsequent chapters. Chapter 2 looks at the objectives, operations and governance of state-owned enterprises. Chapter 3 examines the role of state-owned banks, looking at their advantages and inefficiencies. And Chapter 4 revisits the subject of industrial policy in the context of efforts to foster a green economy.

**ALMOST
90%
OF THE MONGOLIAN
POPULATION NOW
USE BANK ACCOUNTS,
BROADLY ON A PAR WITH
THE LEVELS SEEN IN
LATVIA AND ESTONIA**

BOX 1.1.

Bailouts in the time of Covid-19: a case study looking at Europe’s airlines

Historically, many governments have established state-owned “flag carriers” on account of the high capital cost of setting up airlines and their importance for the economic connectivity of more remote areas. However, the past two decades have seen significant liberalisation of air transport, including the signing of the Open Skies Agreement between the European Union and the United States of America and the privatisation of numerous airlines.

A large percentage of the major airlines in the EBRD regions remain at least partly state-owned. Formal ownership structures vary, with airlines being owned by government ministries (such as the Romanian Ministry of Transport or the Croatian Ministry of State Property), a sovereign wealth fund (Kazakhstan) and a central bank (Lebanon), with some minority stakes being held by airports (Croatia and Romania).

A number of flag carriers have gone bankrupt as a result of the reduction of state support, sometimes after rounds of failed privatisations and re-nationalisations. Examples include Malev in Hungary (which is now largely served by the privately owned Wizz Air) and Cyprus Airways. In both of those cases, bankruptcy was preceded by the European Commission issuing a ruling against the use of state aid. Other examples include Air Armenia, B&H Airlines, Estonian Air, FlyLAL in Lithuania, Slovak Airlines and, as recently as 2019, Adria Airways in Slovenia.

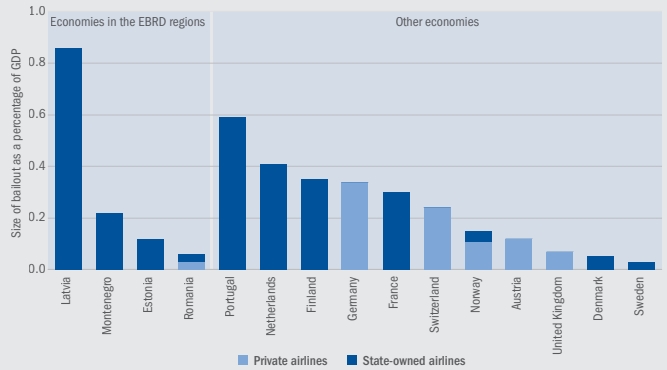
Other carriers, including Air Moldova and Ukraine International Airlines, have been successfully privatised. In Greece, Aegean Airlines bought the previously state-owned Olympic Airlines. Several flag carriers have also turned to foreign partners to help sustain their operations. For instance, Turkish Airlines now owns 49 per cent of Air Albania, while Etihad owns 49 per cent of Air Serbia. Meanwhile, Air Baltic, which has its main hub in Riga, has established secondary hubs in Vilnius and Tallinn, leveraging economies of scale across several relatively small markets.

The airline industry is one of the sectors that have been hit hardest by the pandemic, with demand for air travel falling by around 60 per cent in the first half of 2020 relative to the first half of 2019, according to estimates by the International Air Transport Association (IATA). As a result, many airlines (including privately owned carriers) have sought bailouts totalling between 0.1 and 1 per cent of GDP (see Chart 1.1.1), often accompanied by an increase in state ownership.

State aid has taken various different forms, such as loans with favourable terms, the purchase of minority or majority stakes by the state, and the provision of state guarantees. For instance, the German

CHART 1.1.1.

Airlines have received large amounts of state aid during the Covid-19 crisis



Source: Bailout Tracker (as at end-June 2020), Ex-YU Aviation, SEE News and authors’ calculations.
Note: The estimate for Germany includes a loan to TUI Group, which also has operations outside the aviation sector. The estimate for the United Kingdom includes a bailout for Wizz Air, which is headquartered in Hungary but has a UK-based operating subsidiary. State-owned airlines are defined as companies where the state holds a stake of more than 25 per cent. Air France-KLM is included in the figures for both France and the Netherlands.

government has taken a 20 per cent stake in Lufthansa (complete with two seats on the airline’s supervisory board), the Italian government has decided to acquire full ownership of Alitalia, and the Latvian government has decided to increase its stake in Air Baltic from 80 to 91 per cent. The Romanian government, meanwhile, has promised state aid to both the state-owned Tarom and the privately owned low-cost carrier Blue Air. More bailouts may be on the way, given the highly uncertain future of air travel as of mid-2020.

In a couple of cases, bailouts have been accompanied by environmental conditions. Air France-KLM, for example, is now committed to increasing its use of alternative fuels from 0 per cent to 2 per cent by 2025. Similarly, Austrian Airlines is required to reduce its total emissions to less than 70 per cent of the 2005 level and end all flights that are competing with a train journey of under three hours.⁴⁰

⁴⁰ See Bannon (2020).

BOX 1.2.**Estimating the public sector's share of employment**

This box constructs a measure of state employment. The numerator in the ratio is the total number of employees that work for the state, either in public services (teachers, doctors or civil servants) or at enterprises and banks that are ultimately controlled by the state. The denominator is total employment in the economy.

The data come from (i) national sources (as in the case of Albania (1995-2018), Armenia (1998-2018) and Jordan (2000-17)), (ii) an ILO database (as with Belarus (1997-99), North Macedonia (2000-05) and Lithuania (1995-2018)), (iii) labour force surveys compiled by the ILO (as in the case of Bosnia and Herzegovina (2006-19), Tunisia (2005-15) and Egypt (2005-18)), and (iv) country reports produced by the ILO (as with Russia (1995) and Serbia (2001-10)), the IMF (as in the case of Uzbekistan (1992-99), Ukraine (1994-98) and Tajikistan (1990-96)), the Organisation for Economic Co-operation and Development (OECD) (as with Slovenia (1992-96), Turkey (2008) and the Slovak Republic (2008)) and the World Bank (as in the case of Poland (1994)). Those estimates have been cross-checked against the results of representative international household surveys, notably the Life in Transition Surveys conducted by the World Bank and the EBRD in 2006, 2010 and 2016 and the OECD's Programme for the International Assessment of Adult Competencies (PIAAC).

The estimates in those sources often vary owing to differences in the way that state employment is defined and the way that data are collected. Nonetheless, the correlation between the various available estimates of the public sector's share of employment tends to be high – between 0.7 and 0.9 across economies and over time. Where different sources have been used for different time periods for the same economy, those estimates have been spliced together using official estimates from national authorities where available and applying changes in levels of state employment derived from other sources. Decisions on the use of individual sources were guided by LiTS and PIAAC data.

In addition to IMF data and national sources such as the US Census Bureau, the long-term data on public employment and government expenditure that are used in this chapter also draw on Edvinsson (2005) for Sweden, Thomas and Dimsdale (2017) and Mitchell (2011) for the United Kingdom, Carter et al. (2006) for the United States of America, and Tansel (2001) for Turkey.

BOX 1.3.

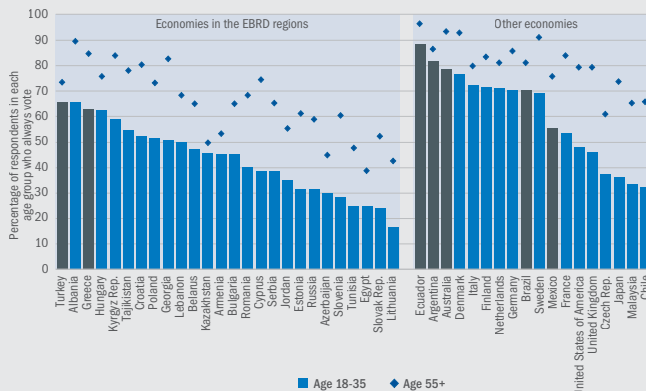
Should the young be paid to vote?

As highlighted in this chapter, the young are universally less likely to vote than their older peers (see Chart 1.3.1). In part, their lack of electoral engagement reflects disillusionment with politics. In a survey in the United Kingdom, for example, 61 per cent of young respondents felt that they had little or no influence on the decisions that were made on their behalf by politicians.⁴¹ The resulting dominance of older voters at the polls further biases decision-making in their favour (assuming, of course, that politicians represent the interests of those who vote for them), leading to a vicious circle whereby younger voters ignore democracy and are, in turn, ignored by it.

What could be done to raise electoral participation among younger voters in rapidly ageing economies? This kind of voting gap can be observed in almost all economies, including countries with high levels of overall voter turnout (such as the Nordic economies), suggesting a lack of easy solutions.

CHART 1.3.1.

The voting gap between the young and the old



Source: World Values Surveys 2017-20 and authors' calculations.
 Note: Darker bars denote countries with compulsory voting.

Enforcing compulsory voting raises turnout among marginalised groups

One option is to make voting compulsory and enforce it. In Australia, Belgium and Luxembourg, for example, where compulsory voting is enforced with fines, turnout levels are higher. When six Australian states introduced compulsory voting (at different times), their participation rates jumped up. Conversely, when the Netherlands abandoned compulsory voting in 1970, turnout declined sharply. Meanwhile, in five Latin American countries with compulsory voting, the rules are not enforced for senior citizens, and turnout rates in those countries tend to drop once turnout is no longer required.⁴² Ultimately, however, one potential issue with the enforcement of compulsory voting is that it may be seen by disillusioned voters as yet another attempt to tax them.

Rewarding voting by the young

An alternative to punishing non-voters is to reward voters – for instance, by giving a refundable tax credit (or a prepaid debit card) to young adults who vote twice before the age of 30.⁴³ In fact, at the beginning of the fourth century BC, Athens introduced payments for attending public fora, thereby making it possible for those on lower incomes to forgo their daily wage and participate in democratic institutions.⁴⁴

Several experiments have shown that such incentives can change voting behaviour. In one such experiment in California, for example, voters were chosen at random and given either a reminder to vote or the chance to receive a financial reward for voting. An incentive payment of US\$ 25 raised turnout by 5 per cent in municipal elections.⁴⁵ Moreover, it has been shown that people who vote in a single election are substantially more likely to vote again.⁴⁶ Another option would be to lower the voting age, for instance to 16, as Austria did in 2007.

⁴¹ See Henn and Foard (2012).

⁴² See Birch (2009).

⁴³ See Pozen and Mele (2019).

⁴⁴ See Staveley (1972).

⁴⁵ See Panagopoulos (2013).

⁴⁶ See Gerber et al. (2003).

BOX 1.4.**Women in the public sector: evidence from a survey of Kazakhstan's energy firms**

Survey evidence suggests that women are more likely to work for the public sector than men. This box shows that that trend is not universal, within occupations, drawing on a detailed survey looking at employment across 37 private and state-owned energy companies in Kazakhstan, which employ a total of 55,000 people.⁴⁷

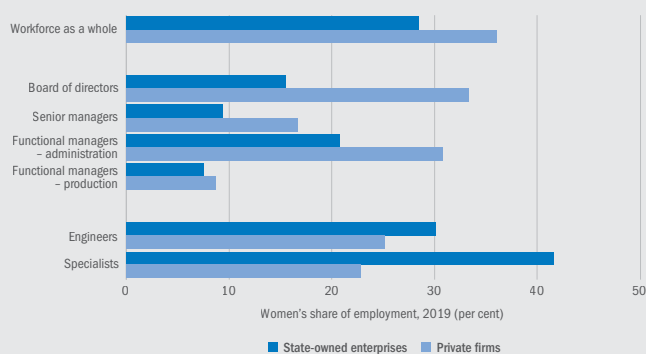
Within Kazakhstan's male-dominated energy sector, state-owned enterprises appear to employ fewer women than private firms – not only overall, but also at management level and at board level (see Chart 1.4.1). Indeed, among workers with a technical or vocational education, the largest group of employees, women's share of employment is around 20 percentage points lower in state-owned enterprises than it is in private firms.

Among engineers and specialists, on the other hand, women's employment shares are higher in state-owned firms, averaging more than 40 per cent for specialists. When it comes to policies on maternity and paternity entitlements, flexible working arrangements or support for care-related responsibilities, no significant differences are observed between the survey responses of public and private-sector firms. State-owned enterprises are, however, less likely to have human resources policies on sexual harassment and gender-based violence.

Overall, the findings of the survey suggest that there is scope for further cooperation between state-owned enterprises and vocational institutes with a view to changing perceptions about the types of job that are suitable for women. Change is happening, though. Kazakhstan's Gender Action Plan for 2020–22 aims to continue removing regulatory restrictions on women's employment in specific occupations, including in the energy sector. And building on EBRD assistance, Samruk Energy, the state-owned national power company, has signed up to the UN Women's Empowerment Principles, including the tracking of sex-disaggregated data and the achievement of the GRI-G4 international standard on gender reporting.

CHART 1.4.1.

Compared with private energy firms, women are more likely to be engineers and specialists in state-owned enterprises, but less likely to hold managerial positions



Source: KazEnergy (2020) and authors' calculations.

BOX 1.5.**Indicators of fiscal space and administrative capacity**

The indicators of fiscal space and administrative capacity that are used in this chapter range between 0 and 12 and are constructed by adding together four underlying indicators (each of which ranges between 0 and 3), as explained below. Higher values for those indicators correspond to greater fiscal space and better administrative capacity.

Fiscal space index

- Gross general government debt as a share of GDP in 2019 (based on the IMF's World Economic Outlook): 0 if above 100 per cent; 3 if below 30 per cent; rescaled linearly when between 30 and 100 per cent
- Net general government borrowing as a share of GDP in 2019 (based on the IMF's World Economic Outlook): 0 if above 7 per cent; 3 if below 0 per cent; rescaled linearly when between 0 and 7 per cent
- Net interest payments as a share of GDP in 2019 (based on the IMF's World Economic Outlook and national authorities): 0 if above 6 per cent; 3 if below 1 per cent; rescaled linearly if between 1 and 6 per cent
- General government revenue as a share of GDP in 2019 (based on the IMF's World Economic Outlook): 0 if below 20 per cent; 3 if above 50 per cent; rescaled linearly if between 20 and 50 per cent

Administrative capacity index

- e-Government Development Index in UN DESA (2020): 0 if below 0.4; 3 if above 0.9; rescaled linearly if between 0.4 and 0.9
- Percentage of the population aged 15 or over who made or received digital payments in the previous 12 months according to the Global Findex Database (2017): 0 if below 50 per cent; 3 if 100 per cent; rescaled linearly if between 50 and 100 per cent
- Doing Business distance-to-frontier indicator (2020): 0 if below 40; 3 if above 80; rescaled linearly if between 40 and 80
- Worldwide Governance Indicator of government effectiveness (2018): 0 if below -1.4; 3 if above 1.4; rescaled linearly if between -1.4 and 1.4

⁴⁷ See KazEnergy (2020).

BOX 1.6.

Will Covid-19 strengthen support for public ownership?

This box studies the effect that past epidemics had on attitudes towards state ownership using data from the World Values Surveys that were conducted between 1989 and 2014 (which covered more than 150,000 individuals across 91 economies) and data on global epidemics since 1970 taken from the EM-DAT International Disasters Database.⁴⁸ This analysis builds on work suggesting that people’s attitudes, beliefs and values are most strongly influenced by experiences occurring between the ages of 18 and 25.⁴⁹

This regression analysis compares attitudes to private and public ownership across individuals with differing degrees of exposure to epidemics during their formative years while taking into account various individual characteristics (X), such as age, year of birth, gender, employment and income decile, for a given country and year. In particular, the following regression is estimated using a linear probability model:

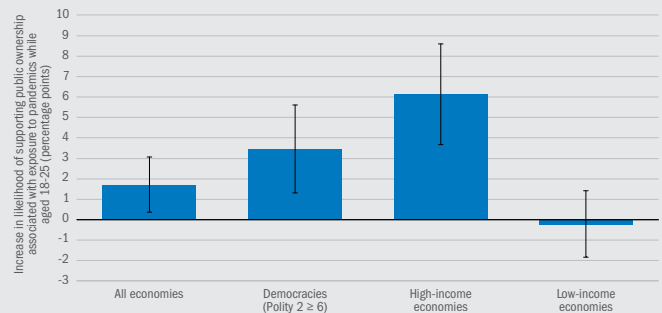
$$Y_{ictb} = \beta_1 \text{Exposure}(\text{age } 18\text{-}25)_{icb} + \beta_2 X_i + \beta_3 \text{Exposure}(\text{time of survey})_{ct-1} + C_c + T_t + \varepsilon_{ictb} (1)$$

where Y is a dummy variable capturing whether respondent i in country c, born in year b and interviewed in year t, favours the expansion of state ownership of business over the expansion of private ownership (responses of 6 or higher on a scale of 1 to 10). Exposure to an epidemic while aged between 18 and 25 is measured by the number of individuals affected by an epidemic as a share of the country’s population, averaged over the eight-year window. Regressions also control for any exposure to an epidemic in the year preceding the year of the survey. Specifications also control for country of respondents C and year of survey T.

This analysis reveals that an individual with the highest level of exposure to an epidemic during their formative years (as measured by the affected share of a country’s population) is, on average, 1.7 percentage points more likely to favour the expansion of public ownership than an individual with no exposure to epidemics (see Chart 1.6.1). This effect is larger in high-income countries and economies with stronger democratic institutions, where respondents may expect to have a greater say in how the state manages its assets.

CHART 1.6.1.

Support for the expansion of state ownership is stronger among individuals who were exposed to epidemics in their formative years



Source: EM-DAT International Disasters Database and authors’ calculations.
Note: These estimates are based on a linear probability model which regresses an indicator of support for public ownership on various individual characteristics, survey effects and a measure of the intensity of an individual’s exposure to epidemics. The effects shown are for the difference between maximum exposure and no exposure. “High-income economies” are as defined by the World Bank. The 90 per cent confidence intervals shown are based on robust standard errors.

Thus, if history is any guide, the Covid-19 pandemic will lead to a further increase in support for public ownership among people aged between 18 and 25 today – members of what is termed “Generation Z”.

⁴⁸ This analysis is based primarily on Aksoy et al. (2020).
⁴⁹ See Krosnick and Alwin (1989).

BOX 1.7.**Nationalisation during an economic crisis**

Governments regularly buy stakes in private companies or take control of them outright.⁵⁰ Such instances are particularly common in the aftermath of major economic crises and periods of social upheaval, when many private companies may find themselves in distress, although nationalisation also occurs at other times – for example, when governments take control of assets that are regarded as strategically important or existing state-owned companies acquire private-sector rivals. Evidence of such nationalisation can also be seen in Chart 1.5. The Covid-19 crisis is likely to be no exception in that regard. Indeed, many large service-sector companies (notably airlines) have already found themselves negotiating – and receiving – large bailout packages (see Box 1.1).

While they address an immediate problem, nationalisations also need to take account of longer term considerations, ensuring that the enterprises in question can be run efficiently and that control is able to revert to the private sector in a transparent manner. The ultimate objective is to ensure that state involvement delivers value for the taxpayer.

In this regard, where bailouts target large listed companies, they could involve instruments such as preferred stock with warrants.⁵¹ Unlike common stock, preferred stock does not confer voting rights on the state. In this scenario, therefore, the bailout does not interfere with the running of the company. This feature may be particularly valuable in normally competitive sectors (such as hospitality and transport), where governments may need to bail out multiple players. On the other hand, preferred stock gives the holder a preferential claim on dividends (which could potentially be higher than the dividends on common stock), thereby protecting taxpayers. Warrants – which grant the right to buy common stock at a specified price before a specified date – could provide a further upside for the taxpayer if the bailed out company and its stock price recover. It is also useful to define up front the exit strategy that will be implemented by the state if the industry recovers.

Where nationalisation targets smaller firms, structures similar to private equity funds could be considered, perhaps with private-sector equity funds providing investment in tandem. Such structures may help to ensure that portfolios of smaller companies are run efficiently. The involvement of private-sector co-investors also introduces a market test allowing the implicit or explicit valuation of non-listed firms receiving state aid.

Where nationalisation pursues long-term objectives associated with state ownership, common stock can be used, with a particular focus on the way that state ownership is structured and the enhancement of corporate governance. State asset holdings could benefit from a high degree of operational independence (as enjoyed, for instance, by many sovereign wealth funds). Conditions relating to environmental or social policy objectives need not necessarily be imposed on specific nationalised enterprises that receive assistance, but bailouts may present an opportunity to review regulations and standards in the relevant sectors (as in the case of the air transport industry).

BOX 1.8.**Industrial Policy 2.0**

The discussion in this box, which builds on Chapter 5 of the *Transition Report 2008* and Chapter 5 of the *Transition Report 2014*, focuses on several broad guiding principles of industrial policy.⁵² In the past, industrial policy used to focus largely on import substitution through tariffs and non-tariff barriers at the border. As that kind of approach gradually went out of fashion, new types of industrial policy emerged, reflecting the greater importance that is attributed to network effects and knowledge in the modern economy. Today, industrial policy typically responds to markets' failure to ensure coordination across various market participants – be it buyers, producers or workers. Such failures may become particularly acute in the face of crises (such as the Covid-19 crisis, the Syrian refugee crisis or the climate change emergency).

For example, an economy may benefit from people being able to work remotely and pupils being able to study online. However, such solutions only work if most individuals and businesses have reliable broadband access – a good example of a network effect. If broadband providers charge high fees for access in remote areas, it may be that few individuals are willing to pay for that service. That combination of a high price and low demand represents a coordination failure, with social costs far exceeding the cost of providing a reliable internet connection. Likewise, the electric car industry will only take off if consumers can easily charge their cars wherever they go. But at the same time, a private network of charging points can only be established if there are enough consumers. In that case, of course, the coordination failure entails not only significant social costs, but also considerable environmental costs.

Solutions may vary depending on the circumstances. Governments may, for example, compensate service providers directly for any public service obligations that are imposed on them, or they may ask service providers to average the cost of provision across all consumers, thus cross-subsidising some users at the expense of others. Some countries opt for state ownership as a means of delivering on such public service obligations (see Chapter 2).

Another increasingly important area is investment in education and basic research. A person's private returns to education (which are reflected in a worker's productivity) are dependent on market opportunities, and they, in turn, are dependent on other people's educations – a coordination failure that governments are well placed to address. In a virtuous circle, educated workforces help to attract a diversified universe of productive firms. In addition, close partnerships between the scientific community and the private sector foster innovation (with basic research being publicly funded for the most part).

Furthermore, unlike investment in physical capital, knowledge that is developed by one private firm can easily be copied by another for a fraction of the cost of developing it. As a result, the private sector may supply too little knowledge in the absence of government intervention.



⁵⁰ See Megginson and Fotak (2020).

⁵¹ The discussion here is based on Megginson and Fotak (2020).

⁵² See EBRD (2008, 2014), as well as WTO (2020).



Traditionally, a distinction has been drawn between horizontal and vertical industrial policies. In some areas, it is possible, as an alternative to focusing “vertically” on specific firms and industries, to implement a “horizontal” package of measures which seeks to facilitate access to finance for high risk ventures, provide small grants to entrepreneurs on the basis of the competition of ideas, reduce the fixed cost of entry into markets (such as the cost of licensing and permissions), lower information barriers, or leverage companies’ efforts to find new export markets.

In other cases, the lines between horizontal and vertical policies are increasingly becoming blurred. Indeed, any company could, in principle, benefit from the public provision of infrastructure (such as a government-supported network of electric charging points). In practice, however, such measures often benefit specific investors (in this instance, an incumbent developer of electric vehicles). Meanwhile, in the case of vocational training, successful initiatives often involve partnerships with specific private sector investors (as seen, for instance, with efforts to establish a large automotive cluster in Morocco). If the policy package is successful, its benefits may be enjoyed indirectly by the wider region through a pick-up in economic activity, but if it fails, taxpayers will have to pick up the bill.

As such policies target specific technologies or firms (be it explicitly or implicitly), the question of how to ensure that taxpayers get value for money is a matter of constant debate. In some instances, governments may be better than the markets when it comes to predicting future winners, but there is no evidence that they are able to do so consistently. Indeed, market failures may actually be exacerbated by government failures.⁵³

In broad terms, policies targeting specific industries need to be based on a careful assessment of local skill-sets and the quality of economic institutions. For instance, attempts to deepen local supply chains are often pursued by requiring a certain percentage of the inputs used in the manufacturing of, say, a car or a wind turbine to be supplied locally. Such requirements may incentivise companies to reach out to existing or new local suppliers, and they, in turn, may be in a position to adopt the latest technologies, leveraging the scale of the new market open to them and benefiting from training provided by large off-takers. That was the case in Norway, for example, following the discovery of offshore oil and gas. However, if the right skills and incentives are not present, such requirements may also create excess profits for firms supplying substandard products at inflated prices and limit imports of the latest technologies, thus undermining the development of the very industries that the local content requirements were intended to support.⁵⁴

Calibrating such requirements and gradually phasing them out as local producers become internationally competitive relies on industry regulators being highly independent and highly professional. Thus, governments with significant administrative capacity have far more policy options than those with more limited capacity, as discussed earlier in this chapter. Where administrative capacity is more limited, policy solutions involving state ownership tend to be more common, as discussed in Chapter 2.



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