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**Public Spending and Government Performance in Europe  
and Asia: Tigers Today and in the Future**

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## **Public Spending and Government Performance in Europe and Asia:**

### **Tigers Today and in the Future**

**Ludger Schuknecht<sup>1</sup>**

#### **Abstract**

In this study, I will look at the spending role of government and the outcomes of government activity in Europe and Asia. Public spending and performance patterns differ hugely across countries. Asian “tigers” and some advanced countries show low public spending coupled with strong performance indicators. Central and Eastern European “tiger” countries are also catching up strongly while featuring leaner and productive governments. Most advanced European Union (EU) countries feature higher spending with divergent performance. Several of the remaining European and Asian emerging economies have the potential to become the economic “tigers” of the future.

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## 1. Introduction

In this study, I look at the spending role of government and the outcomes of government activity for total spending and a number of expenditure categories. The study compares country groups from advanced and emerging countries, notably in Europe and in Asia. By applying descriptive statistical analysis, the study derives some interesting patterns of spending and performance across countries and country groups.

The analysis of public expenditure and related outcomes is important from several angles. First, public spending on the core tasks of government is an essential ingredient for economic progress, development and convergence. Second, the responsible use of public money is important for the legitimacy of and trust in government. Third, good government services not only raise prosperity but also benefit equal economic and social opportunity as it is the poor who benefit the most from good government. Fourth, public spending is a key ingredient to debt sustainability and macroeconomic stability, which, in turn, ensures an adequate balancing of the interests of today and tomorrow and the mastering of population aging and climate-related transformation. Fifth, and finally, public spending through its impact on all these factors determines the relative economic and political weight of countries and regions and their peaceful cooperation in the world.

The literature on the role of public expenditure from an international perspective is relatively limited, in particular when it comes to the catching up process of emerging economies in Asia and Europe. For a comprehensive discussion of many expenditure-related aspects, see Schuknecht (2020). Afonso et al. (2005 and 2007) discuss the performance and efficiency of government for advanced countries and emerging economies. They find very diverse performance in Eastern Europe also compared to Asia, and strong institutions help reduce spending inefficiency. Buti and Székely (2021) report on income convergence between the former Asian “tigers” and the EU and the divergence within EU, making reference to different degrees of spending efficiency. Miyakoshi et. Al (2014) examine the role of public expenditure in developing countries and emphasise the importance of high quality productive spending. Jafar (2009) discusses the role of public expenditure for human development in Asia as regards health and finds that low public spending can go together with high development. Rao (1998) stresses the importance of macroeconomic stability, cost-effective spending, private sector involvement and human resource development for the success of fast-growing Asia. Mura (2014) argues that education and infrastructure spending were most important for the rapid growth in Eastern Europe post 1990.

The analysis in this study provides comparative patterns rather than a full-fledged econometric analysis. It finds a tendency towards higher (non interest) public spending over the past 20 years in many countries, notably on social spending. Asian countries tend to feature much smaller governments than EU countries. Smaller government countries do not spend less (and sometimes even more) on productive categories than their bigger government peers while they spend far less on social protection.

Government performance on core government activities (rule of law, education, infrastructure, income distribution, debt, prosperity) differs hugely across countries. While advanced countries overall do well, a number of big government European countries have shown rising spending and weakening performance. A number of Asian and Central European countries—the “tigers” of the past two decades--feature relatively low spending and strong and improving performance. Other emerging economies in Europe and Asia also report much progress. Further improvements could put them on the path to being the next generation of “tigers”.

## **2. Public expenditure patterns in Europe and Asia**

### **Total expenditure**

Public expenditure should aim to achieve the core roles of government: good framework conditions for the economy, high-quality public goods and services, notably education and infrastructure, and a stable and prosperous economy with reasonable social protection.

The understanding of the role of government, however, has evolved significantly over the past 150 years. It is, therefore, worth starting the discussion of public expenditure with a brief historical flashback. Public spending in the late 19<sup>th</sup> century was not much more than one tenth of Gross Domestic Product (GDP) on average in today’s advanced economies (Schuknecht, 2020). Governments spent little and what they spent was largely on public administration, the military, debt service and infrastructure. Spending on other public goods such as education and social spending, which are very important by today’s standards, were minimal. In the following decades, public spending increased hugely as modern administrations were built, basic social safety nets were created and public education and infrastructure expanded. Consequently, by 1960, total public spending averaged almost 30% of GDP in today’s advanced countries.

In the following decades, public spending increased significantly further. First and until about 1980, this happened in all advanced countries.<sup>2</sup> Thereafter, spending increased very gradually further across countries with some interruptions and a number of countries breaking the trend. By the end of the millennium, public spending in the 38 advanced countries as defined by the International Monetary Fund (IMF), public spending averaged 38.8% of GDP (Table 1). This ratio was almost unchanged in 2019 at 38.6% of GDP. However, when abstracting from falling interest payments on public debt, so-called primary (or non-interest) spending had increased further by roughly 2% of GDP over the first 2 decades of the 21<sup>st</sup> century.

In emerging economies, the size of the state has been considerably smaller over recent decades.<sup>3</sup> In 2019, it was about 7% of GDP lower on average than in advanced countries.<sup>4</sup> Or in other words, the average for emerging economies in 2019 was not far from the average for advanced countries in about 1960. For the past two decades, the pattern is similar to that of advanced countries: total spending changed little while non-interest spending had increased.

When looking at countries and country groups beyond this very general categorization, there are huge differences both in terms of levels and dynamics of public expenditure. Advanced countries featured public spending between about 14% of GDP in Singapore and 55% of GDP in France in 2019. Emerging economies' public spending ratios ranged from 15% in Bangladesh to 47% of GDP in Croatia.

The highest expenditure ratios were reported by South-Western and Center-Northern European countries with an average of about 48% of GDP. These are all EU member countries. For South-Western Europe this reflects a notable increase in total spending and a substantial increase in primary spending as compared to 1999. Center-Northern Europe featured a decline in total spending and broadly stable primary spending. Sweden and Denmark reported strong declines in public expenditure ratios.

Other advanced economies which include mainly Anglo-Saxon countries, and Asian advanced economies showed much smaller public sectors, averaging 35.1% and 22.4% of GDP respectively. In both

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<sup>2</sup> This excludes the advanced economies of Asia outside Japan as for these, little historical data is available.

<sup>3</sup> Emerging economies by the definition of this paper includes all Central Eastern European countries. This differs slightly from the IMF definition. Comparable and reliable historical data beyond a few decades back is not available for this country group.

<sup>4</sup> Comparing the size of government on the basis of public spending, however, is not without perils. In some emerging countries with low public spending, the parastatal sector played a significant role so that public spending understates the role of government. In some advanced countries, like the Nordics, government social benefits are taxed, so that spending ratios overstate the role of government relative to others. Nevertheless, the overall patterns remain relevant.

groups, total spending had not changed much after 1999. Amongst the Asian advanced countries, Japan is the biggest spender, although it is still below the advanced country average. The “classic” Asian tigers and newly advanced economies of the Republic of Korea, Hong Kong, China, Taiwan, China and Singapore reported very low public spending ratios around 20% of GDP.

Amongst emerging economies, the former planned economies of Central Eastern and South-Eastern Europe report average expenditure ratios around 40% of GDP. This is almost 10% of GDP below the average of their European Union peers. None of these countries except Serbia reported an increase over the past two decades while several of them shrank the size of the state beyond what had been achieved in the 1990s. This includes the Baltics, Slovakia, Croatia and Slovenia.

Emerging economies in Asia feature similar public spending ratios as advanced Asia but much lower spending than European peers. The average of somewhat above 20% of GDP reflects a range from 15% to 34% of GDP. There is no major difference between South and East-South East Asia. The spending ratio increased most significantly in China where it more than doubled over the past two decades, largely on account of a huge public investment boom (see below). Viet Nam, Bangladesh and Pakistan also saw increases over this period while spending relative to GDP declined strongly in Thailand.

The COVID-19 pandemic resulted in a major increase in public expenditure ratios across all countries and country groups in 2020. Advanced countries reported the strongest increases by 6.5% of GDP on average in 2019-20 (Table 1). France and Italy show the highest ratios of around 60% of GDP for 2020. The increase of 4.2% in emerging countries was more modest due to the smaller increase in Asia’s emerging economies. Spending ratios are forecast to have fallen slightly on average in 2021.

In conclusion, advanced countries outside Asia feature significantly larger public sectors than their Asian peers. European emerging economies also report bigger governments than emerging Asia. The past 20 years saw upward dynamics in public spending in many countries, notably in South-Western Europe and in some emerging economies, notably China. With the COVID-19 pandemic, public spending increased strongly everywhere and most strongly in Europe. It is too early to say how much of this increase is permanent, but there are risks that lower growth paths and certain programs may have a more durable effect.

Table 1

General government, total expenditure (% of GDP) source from IMF WEO Oct 2021 (WEOGGX\_NGDP)

	I	II	III	IV	V
	1999	2019	Change 1999-	2020	2021
<b>Advanced (all simple average)</b>	38.8	38.6	-0.2	45.3	43.8
<b>Emerging Europe and Asia</b>	30.7	31.6	1.0	35.8	35.6
<b>Advanced EU SouthWest (FRA, ITA, ESP, PRT, BEL, GRC)</b>	46.8	48.1	1.3	56.1	55.0
Belgium	50.5	52.1	1.6	60.0	57.3
France	52.6	55.4	2.7	61.8	60.7
Italy	47.2	48.6	1.4	57.3	57.7
Portugal	42.5	42.4	-0.1	49.0	48.8
Spain	41.0	42.1	1.1	52.3	50.7
<b>Advanced EU CenterNorth (DEU, NDL, AUT, DNK, SWE, I)</b>	50.1	47.6	-2.6	52.7	53.1
Austria	50.3	48.6	-1.7	57.4	54.2
Denmark	54.5	49.5	-5.0	53.8	53.6
Finland	49.9	53.3	3.4	57.0	56.8
Germany	48.2	45.0	-3.2	50.8	53.2
Netherlands	42.6	41.1	-1.5	45.4	48.2
Sweden	55.2	48.0	-7.2	51.8	52.6
<b>Other advanced</b>	35.1	35.1	0.0	42.7	40.2
Australia	36.3	38.9	2.6	44.8	42.8
Canada	41.8	41.0	-0.8	52.8	48.1
Ireland	32.5	24.4	-8.1	27.7	25.2
Switzerland	33.2	31.5	-1.7	36.5	35.2
United Kingdom	34.0	38.9	4.8	49.1	47.7
United States	32.8	35.8	3.0	45.4	42.0
<b>Advanced Asia</b>	21.6	22.4	0.8	28.9	25.9
Hong Kong, China	17.1	21.0	3.9	29.8	24.8
Japan	35.6	37.3	1.7	45.0	43.5
Republic of Korea	16.7	22.6	5.8	25.2	26.5
Singapore	15.9	14.1	-1.8	26.5	19.2
Taiwan, China	22.8	17.3	-5.5	18.3	15.4
<b>Central Eastern Europe (POL, CZE, SLK, LIT, LTV, EST)</b>	41.8	39.5	-2.4	45.7	45.9
Czech Republic	41.2	41.1	-0.1	47.1	47.6
Estonia	40.7	39.5	-1.2	45.6	44.2
Latvia	39.3	37.9	-1.4	42.5	47.1
Lithuania	39.5	33.8	-5.6	42.7	41.7
Poland	42.5	41.8	-0.7	48.7	45.2
Slovakia	48.0	42.7	-5.3	47.8	49.9
<b>South Eastern Europe</b>	40.2	40.4	0.2	46.5	46.1
Bulgaria	36.2	36.0	-0.1	38.4	40.4
Croatia	51.3	47.2	-4.2	55.4	55.2
Romania	35.1	33.5	-1.6	38.6	37.0
Serbia	31.3	42.1	10.7	48.6	47.9
Slovenia	47.0	43.3	-3.7	51.3	49.6
<b>Emerging East and South East Asia</b>	19.8	23.4	3.6	25.7	25.5
China	15.0	34.1	19.1	36.5	33.3
Indonesia	15.1	16.4	1.2	18.2	18.5
Malaysia	24.6	23.5	-1.1	25.4	26.0
Philippines	20.7	21.7	0.9	26.4	27.7
Thailand	26.5	21.8	-4.7	25.3	27.2
Viet Nam	16.7	23.0	6.3	22.4	20.4
<b>Emerging South Asia</b>	18.3	21.2	3.0	22.9	22.0
Bangladesh	10.0	15.4	5.4	15.3	16.1
India	25.4	27.1	1.6	31.1	30.4
Sri Lanka	21.2	20.6	-0.6	21.9	20.0
Pakistan	16.5	21.9	5.4	23.2	21.6



## Education expenditure

Education is considered one of the most important drivers of economic prosperity and of equality of opportunity. The public sector is to provide financial support to ensure that there is adequate investment in skills and education at the societal level so as to reap the social and economic dividends of good education systems.

The share of public spending on education is surprisingly modest, given its importance, while differences across country groups are much smaller than for total spending. The average education spending ratio stood at 4.7% in 2019 in advanced countries compared to 3.9% in emerging economies (Table 2). This reflects about 12% of public spending and a moderate decline by ½% of GDP in both country groups, compared to 1999.

There are important but not huge differences across countries and groups, with the exception of emerging South Asia. Amongst advanced countries, the Center-Northern EU countries have the highest spending ratios at 5.5% of GDP. Belgium, the Nordics and the United States feature the highest country-specific spending ratios. Advanced Asia reports an average of 3.5% of GDP. The Republic of Korea comes close to the advanced country average. Note, however, that the share of education in Asian total spending is much higher than in advanced non-Asian countries and reaches up to 20%. Moreover, the more important question is how this spending translates into competencies and performance. This will be discussed for a number of spending and performance categories in the next section.

Amongst emerging economies, Central Eastern Europe reports average spending above the advanced country average. Estonia and Latvia are amongst the top spenders overall. East-South East Asia reports somewhat lower spending of 4.3% of GDP. The emerging economies of South-Eastern Europe show the same average expenditure ratios as their Asian advanced peers.

The only country group that features public education spending far below the average is emerging South Asia. At 2.4% of GDP, this ratio is only at half the advanced economy average and at 60% of the emerging country figure mentioned above. Bangladesh, Sri Lanka and Pakistan spend least on public education.

In conclusion, public spending on education absorbs about 3.5-5% of GDP in most countries, which is about 12% of total spending on average and up to 20% for some countries. Differences across countries are significant but much smaller than for total spending. Some advanced countries stand out as high spenders, while emerging South Asia reports the lowest spending ratios. There are no figures for the effect

of the pandemic period yet but additional spending on (digital) education was reportedly quite limited—most new spending went into the support of companies and jobs (IMF, 2020).

Table 2

## Public spending on education (% of GDP) from IMF GFS and WB WDI

	2009	2019	Change 2009-2019
<b>Advanced (all simple average)</b>	5.2	4.7	-0.5
<b>Emerging Europe and Asia</b>	4.4	3.9	-0.4
<b>Advanced EU SouthWest (FRA, ITA, ESP, PRT, BEL, GRC)</b>	5.5	4.8	-0.7
Belgium	6.1	6.2	0.1
France	5.7	5.3	-0.4
Italy	4.5	3.9	-0.6
Portugal	6.5	4.4	-2.1
Spain	4.6	4.0	-0.7
<b>Advanced EU CenterNorth (DEU, NDL, AUT, DNK, SWE, FLD)</b>	5.9	5.5	-0.4
Austria	5.1	4.8	-0.3
Denmark	6.9	6.3	-0.6
Finland	6.5	5.6	-0.9
Germany	4.3	4.3	0.0
Netherlands	5.6	5.0	-0.6
Sweden	6.7	6.9	0.2
<b>Other advanced</b>	5.5	4.9	-0.6
Australia	5.4	5.5	0.1
Canada	4.9	4.8	-0.1
Ireland	4.7	3.1	-1.6
Switzerland	4.8	4.9	0.1
United Kingdom	6.2	4.9	-1.4
United States	6.7	6.0	-0.8
<b>Advanced Asia</b>	3.6	3.5	-0.1
Hong Kong, China	3.5	3.7	0.2
Japan	3.6	3.2	-0.4
Republic of Korea	3.9	4.5	0.5
Singapore	3.1	2.6	-0.5
Taiwan, China	4.1	3.7	-0.4
<b>Central Eastern Europe (POL, CZE, SLK, LIT, LTV, EST)</b>	5.8	5.1	-0.7
Czech Republic	4.6	4.9	0.3
Estonia	7.0	6.0	-0.9
Latvia	6.7	5.8	-0.9
Lithuania	6.7	4.6	-2.1
Poland	5.4	5.1	-0.4
Slovakia	4.5	4.2	-0.3
<b>South Eastern Europe</b>	4.7	4.3	-0.4
Bulgaria	4.1	3.9	-0.2
Croatia	4.5	4.8	0.3
Romania	3.8	3.6	-0.2
Serbia	4.5	3.6	-0.9
Slovenia	6.6	5.5	-1.1
<b>Emerging East and South East Asia</b>	3.9	3.5	-0.4
China	2.4	3.5	1.2
Indonesia	3.5	2.8	-0.7
Malaysia	6.0	4.2	-1.8
Philippines	2.5	3.2	0.7
Thailand	3.9	3.0	-0.9
Viet Nam	4.8	4.1	-0.8
<b>Emerging South Asia</b>	2.5	2.4	-0.1
Bangladesh	1.9	1.3	-0.6
India	3.3	3.5	0.2
Sri Lanka	2.1	2.1	0.1
Pakistan	2.6	2.5	-0.1

## Public investment

Public investment expenditure or, more technically, general government gross fixed capital formation is another spending category that is potentially highly relevant for economic development, prosperity and opportunity. Public investment that finances high quality transport, energy and digital infrastructure, or education and health infrastructure strengthens the environment for private investment and the participation in global value chains (Asian Infrastructure Investment Bank (AIIB), 2021). Such infrastructure also boosts individual opportunity by raising productivity and expanding the scope of the labour market, especially for the less well-off.

Public investment on the whole is slightly lower than public education spending (Table 3). At 3.5% of GDP it absorbed 9% of total spending in advanced economies. The relevant spending was 4.3% of GDP or about 14% of total spending in emerging countries in 2019. This reflects a change in patterns compared to 20 years earlier when advanced countries' public investment had exceeded that of emerging economies.

The general impression that public investment has strongly declined in the advanced countries, however, is not correct. Public investment fell to 2.5% of GDP in the EU South Western countries, and notably in Portugal and Spain. In the other two advanced country groups outside Asia, it increased or remained constant on average. In the Asian advanced economies, public investment declined strongly over the past 20 years but from a level that was more than twice as high as the non-Asian advanced countries. As a result, public investment in this country group is still much higher than amongst their non-Asian peers.<sup>5</sup>

As regards emerging economies, there has been a trend towards higher public investment in most countries. When excluding China, all four country groups reported average public investment ratios within a relatively narrow range of 3.8-4.8% of GDP that was similar to the level prevailing in advanced countries 20 years earlier.

The fast-growing Central Eastern European countries as well as East-South East Asian countries outside China reported above average spending, similar to the average for the advanced Asian economies. In Europe, two of the Baltics (Estonia and Latvia) reported public investment of 5% of GDP. In emerging

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<sup>5</sup> Note, however, that these figures are often not well comparable across countries, as the extent of private sector financing differs significantly across countries and the scope of private sector involvement in infrastructure finance increased significantly. Moreover, in many advanced countries, the bottle-neck for public investment has typically not been a lack of money but the absence of efficient and unbureaucratic processes (Schuknecht, 2020b). An assessment of countries' infrastructure policies, therefore, needs to be undertaken from the outcome side rather than by looking only at inputs.

Asia, Malaysia, Viet Nam, Thailand, Bangladesh and India featured similar or higher spending levels. China's 17% of GDP of public investment reflects a huge increase over 20 years earlier and constitutes a distant spending record.

In conclusion, public investment spending in 2019 differed strongly across countries, while being broadly in the range of 2.5% to 5% of GDP (except China). Spending was mostly above average in the advanced Asian economies and the emerging countries of Central-Eastern Europe and East-South East Asia. Contrary to many economists' claims, public investment spending remained broadly stable in non-Asian advanced countries over the past two decades, except in the South West EU group.

<b>Public Investment Spending (% of GDP)</b>	General government gross fixed capital formation as % of GDP from IMF ICSD data		
	1999	2019	Change 1999-2019
<b>Advanced (all simple average)</b>	4.3	3.5	-0.9
<b>Emerging Europe and Asia</b>	4.5	4.9	0.3
<b>Advanced EU SouthWest (FRA, ITA, ESP, PRT, BEL, GRC)</b>	3.4	2.5	-0.9
Belgium	2.3	2.6	0.3
France	4.0	3.6	-0.4
Italy	2.9	2.3	-0.6
Portugal	4.5	1.8	-2.6
Spain	3.5	2.0	-1.5
<b>Advanced EU CenterNorth (DEU, NDL, AUT, DNK, SWE, FLD)</b>	3.5	3.5	0.0
Austria	2.8	3.0	0.2
Denmark	2.9	3.2	0.3
Finland	4.4	4.2	-0.2
Germany	2.4	2.4	0.0
Netherlands	3.8	3.4	-0.4
Sweden	4.6	4.5	-0.1
<b>Other advanced</b>	2.9	3.2	0.3
Australia	2.2	3.9	1.7
Canada	3.1	3.9	0.8
Ireland	3.0	2.4	-0.6
Switzerland	3.4	3.0	-0.4
United Kingdom	1.8	2.7	0.9
United States	4.0	3.5	-0.5
<b>Advanced Asia</b>	7.9	4.7	-3.2
Hong Kong, China	6.6	5.8	-0.8
Japan	9.9	5.0	-4.9
Republic of Korea	6.0	4.8	-1.2
Singapore	7.3	4.7	-2.6
Taiwan, China	9.8	3.4	-6.4
<b>Central Eastern Europe (POL, CZE, SLK, LIT, LTV, EST)</b>	2.6	4.2	1.6
Czech Republic	3.2	4.4	1.2
Estonia	3.3	5.0	1.7
Latvia	1.4	5.0	3.6
Lithuania	2.0	3.1	1.1
Poland	2.5	4.3	1.8
Slovakia	3.3	3.6	0.3
<b>South Eastern Europe</b>	3.2	3.8	0.6
Bulgaria	3.4	3.4	0.0
Croatia	6.9	4.5	-2.4
Romania	1.4	3.5	2.1
Serbia	0.4	3.9	3.5
Slovenia	4.0	3.8	-0.1
<b>Emerging East and South East Asia</b>	8.0	6.9	-1.5
China	21.3	17.3	-6.4
Indonesia	3.0	3.4	0.4
Malaysia	9.5	6.2	-3.2
Philippines	3.0	3.7	0.8
Thailand	8.3	5.0	-3.3
Viet Nam	3.1	5.8	2.7
<b>Emerging South Asia</b>	3.4	4.2	0.8
Bangladesh	4.4	6.3	1.9
India	5.4	5.1	-0.3
Sri Lanka	1.4	3.8	2.3
Pakistan	2.6	1.7	-0.8

## Social expenditure

Social protection spending is a relative “new-comer” as regards state involvement. Only at the end of the 19th century did the first countries introduce social insurance. By the late 20th century and the early 21st century, social security had started to dominate public spending in many advanced countries, but it was still not widely accessible in many poor countries.

There are good arguments why basic social safety nets feature prominently in the discussion on the role of the state and development goals: safety nets not only enhance personal welfare by reducing health and longevity risks, they also increase people’s ability for economic risk taking. For high social spending, however, these positive growth effects might be dominated by adverse effects from higher taxes, disincentives to work, and rent seeking.

Social expenditure is the most important spending category in almost all advanced countries outside Asia and it has grown continuously over the past six decades. The Organisation for Economic Co-operation and Development (OECD) reports social spending almost tripling as a share of GDP from 9% in 1960 to almost one quarter of GDP in the late 2010s (OECD, 2021; Schuknecht, 2020). However, there is a huge country variance and differing social expenditure ratios explain much of the variance in total public spending across advanced countries.

Surprisingly, the coverage of social expenditure data is relatively patchy outside advanced countries. OECD countries provide such data in a relatively consistent manner since the 1960s but this is not the case for emerging economies. IMF data, which is used throughout this paper, only covers such spending for many countries since the 2000s. Still, there are some interesting patterns.

Social protection spending is highest in the European advanced countries at 20% of GDP in 2019. This figure had remained broadly stable over the 20 years in Northern-Central Europe while it had increased by almost 4% of GDP in the South-Western EU countries. Other advanced countries (outside Asia) reported little more than half that ratio at 10.7% of GDP on average.

Social protection spending by general government in advanced Asia was even lower at 6.1% on average. Japan was an exception, at 16% of GDP, reflecting the country’s aging population and increasingly generous social protection. Singapore was at the other end of the spectrum where pension spending has been fully funded and outside the scope of general government.

As regards emerging economies, social spending ratios were quite similar in Central Eastern and South Eastern Europe, at around 14% of GDP in 2019. However, this was much lower than for the

advanced European countries and it was broadly unchanged from 20 years earlier (despite significant population aging in the mean-time). Emerging East-South East Asia and South Asia featured very low social protection spending at 1-8% of GDP. This reflects the patchiness of social security in some of these countries and a greater role of private and family-based social insurance.

In conclusion, advanced countries in Europe showed very generous social welfare systems before COVID-19. These systems are largely responsible for the countries' high total public spending ratios. In a number of countries, such spending has increased significantly further in recent decades. Emerging Eastern Europe reported significantly lower social protection spending. Non-EU advanced countries and notably advanced Asia feature even smaller welfare state spending. Much of emerging East-South East Asia and South Asia are still in the process of developing their systems.

## Social protection spending (% of GDP) from IMF GFS, ILO World Social Protection database, ADB SPI database, and local statistics office

	1999	2009	2019	Change 1999-2019
<b>Advanced (all simple average)</b>	14.62	15.0	14.3	-0.4
<b>Emerging Europe and Asia</b>	14.22	9.1	8.7	-5.5
<b>Advanced EU SouthWest (FRA, ITA, ESP, PRT, BEL, GRC)</b>	16.08	19.2	19.8	3.7
Belgium	16.93	19.2	19.5	2.6
France	21.15	23.7	23.9	2.7
Italy	17.20	19.7	21.2	4.0
Portugal	12.15	17.2	17.0	4.9
Spain	12.98	16.1	17.4	4.4
<b>Advanced EU CenterNorth (DEU, NDL, AUT, DNK, SWE, FLD)</b>	20.67	21.1	20.0	-0.7
Austria	21.08	21.2	20.1	-1.0
Denmark	22.85	24.3	21.6	-1.2
Finland	21.13	22.5	24.0	2.9
Germany	21.32	20.7	19.7	-1.6
Netherlands	15.37	16.4	15.4	0.1
Sweden	22.25	21.4	19.1	-3.2
<b>Other advanced</b>	10.91	13.0	10.7	-0.3
Australia	9.45	11.2	9.5	0.0
Canada		11.2	11.2	
Ireland	11.78	18.1	8.9	-2.9
Switzerland	13.43	12.1	12.4	-1.1
United Kingdom	13.39	16.7	14.8	1.4
United States	6.52	8.6	7.5	1.0
<b>Advanced Asia</b>	2.10	5.9	6.1	-0.1
Hong Kong, China		2.7	4.0	
Japan		15.9	16.2	
Republic of Korea		5.5	6.3	
Singapore	0.28	2.1	0.9	0.6
Taiwan, China	3.92	3.1	3.1	-0.8
<b>Central Eastern Europe (POL, CZE, SLK, LIT, LTV, EST)</b>	14.30	15.1	13.6	-0.7
Czech Republic	11.97	13.4	12.6	0.6
Estonia	11.76	15.3	13.2	1.5
Latvia	15.19	14.0	12.1	-3.1
Lithuania	13.47	16.6	12.4	-1.1
Poland	18.43	16.1	16.8	-1.6
Slovakia	14.99	15.1	14.3	-0.7
<b>South Eastern Europe</b>	14.10	15.4	14.1	-0.4
Bulgaria	12.00	12.9	11.5	-0.5
Croatia	15.46	15.4	14.6	-0.8
Romania	11.38	13.1	11.8	0.5
Serbia		17.1	16.1	
Slovenia	17.54	18.4	16.6	-0.9
<b>Emerging East and South East Asia</b>		2.9	3.9	
China		2.1	8.1	
Indonesia		1.2	1.3	
Malaysia		3.5	4.2	
Philippines		2.4	2.6	
Thailand		3.4	3.1	
Viet Nam		4.7	4.3	
<b>Emerging South Asia</b>		1.9	1.8	
Bangladesh		1.4	0.7	
India		1.5	1.4	
Sri Lanka		3.2	3.2	
Pakistan		1.3	1.9	

### 3) Public spending and public sector performance in Europe and Asia

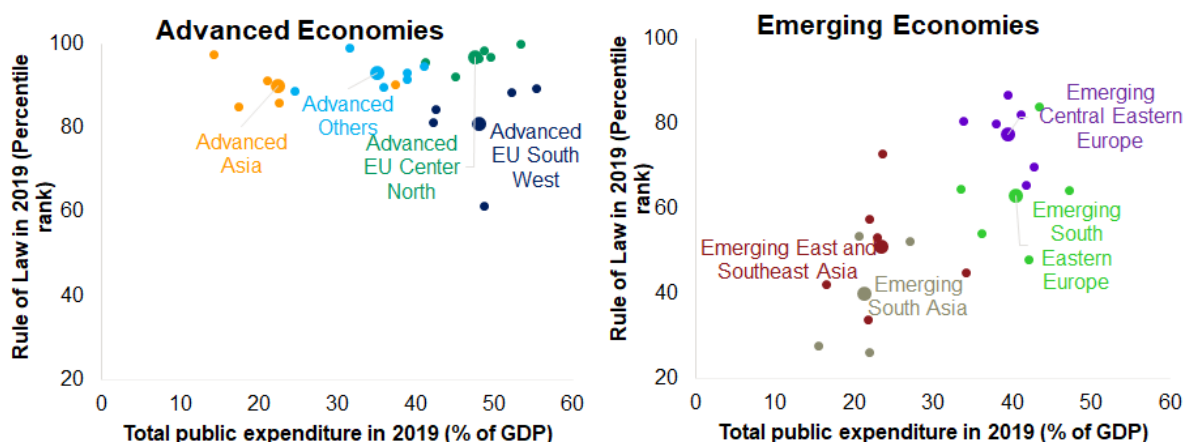
After the description of public expenditure patterns across country groups, it is worth discussing what citizens get for their taxes and whether higher spending delivers better outcomes. This study will not venture deeply into the topic and rather focus on some correlation patterns between spending and performance across countries and categories. We will limit ourselves to a few that are linked to the core role of government in providing essential public goods and services. Of course, there are number of caveats for comparing spending and spending outcomes across countries (Schuknecht, 2020), so that the results are only illustrative and have to be seen “with a grain of salt”.

#### a) Total spending and framework conditions for the economy

One of the most important outcomes of government activity is the framework conditions in which the private sector operates and creates wealth. There are a number of measures that can proxy such framework conditions or rules of the game. A prominent one is the World Bank “rule of law” indicator, as the “rule of law” determines the security of property rights and the reliability, clarity and enforceability of contracts. Another indicator is the World Bank’s “Government Effectiveness” indicator. Given that the two are highly correlated, I only report the results for the correlation between government spending—the size of government—and the “rule of law”.

The results across country groups are quite interesting: there is virtually no correlation between size of government and the rule of law. Amongst advanced countries, the advanced Asian, the EU Center North and the other advanced countries all have very high indicator values with little variation within the groups (Figure 1a). This speaks for quite favorable framework conditions towards a flourishing economy .

Title: Total public expenditure and rule of law in 2019



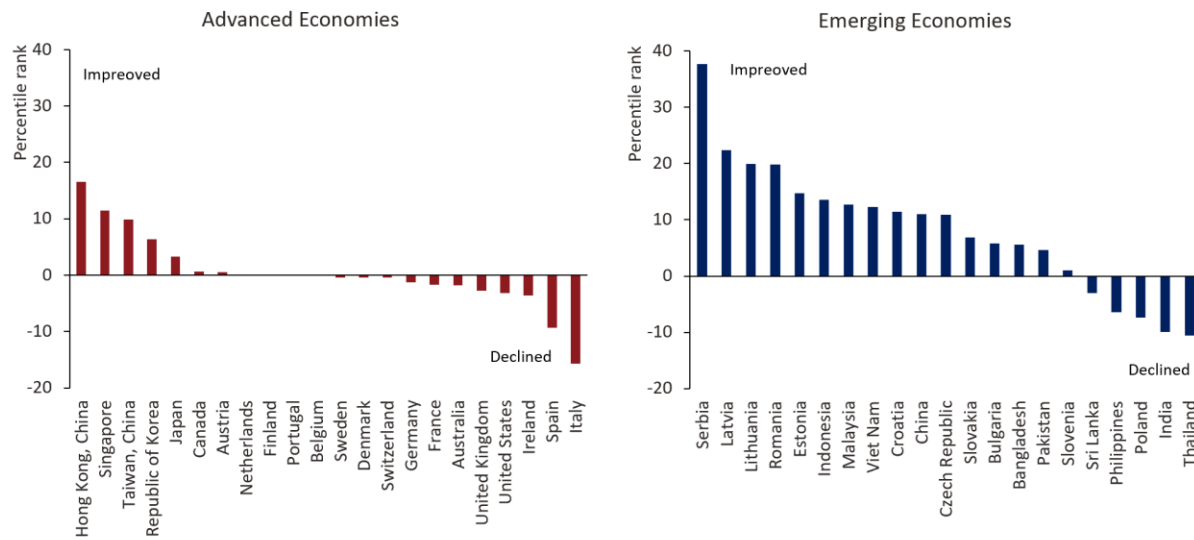


[Figure 1a and 1b]

At the same time, the size of government differs hugely across groups. Advanced Asia clearly has the smallest government sectors, as already described in the previous sections (near 22% of GDP). Even Japan, the largest government country in Asia, “only” reports spending similar to that of the Anglo-Saxon countries and Switzerland (35%) and far below the European advanced country average. The EU Center North and the South West report similar total public spending, while the “rule of law” scores tend to be markedly higher.

The pattern amongst emerging economies is quite different (Figure 1b). Here, we observe a moderately positive correlation between the size of government and the “rule of law”. Emerging South Asia reports the smallest government sectors and the lowest “rule of law” values. Emerging East- South East Asia features small government and very diverse values for this indicator with Malaysia in the top scoring group. In emerging South-Eastern Europe, government spending is much higher and rule of law somewhat better than in East-South East Asia and Slovenia is top scoring. Emerging Central Eastern Europe features similar levels of public spending with significantly higher rule of law values. While these findings say nothing about causality, they nevertheless show that countries with more developed public sectors also feature a more favourable economic environment. Nevertheless, the variance is huge.

Finally, it is interesting to look at the change in public sector performance over the past two decades (Figure 1c). Here, the remarkable progress of the Asian advanced countries as regards the rule of law is noteworthy. At the same time, EU South West and some other advanced countries report a modest to significant decline in this indicator.

**Title: Change in rule of law, 1999-2019**

[Figure 1c]

Again, the picture is very different for emerging economies. Especially some of the European and East South East Asian countries have made significant progress and the Baltic countries stand out. By contrast a few countries report a backsliding in the rule of law.

In conclusion, the size of government in advanced countries is not correlated with the economic framework conditions as measures by the rule of law (or government effectiveness) while there is a moderately positive correlation in emerging economies amidst significant variation. Asian advanced countries and most emerging economies have made significant progress in the past 20 years while some non-Asian advanced countries and a few emerging economies have regressed.

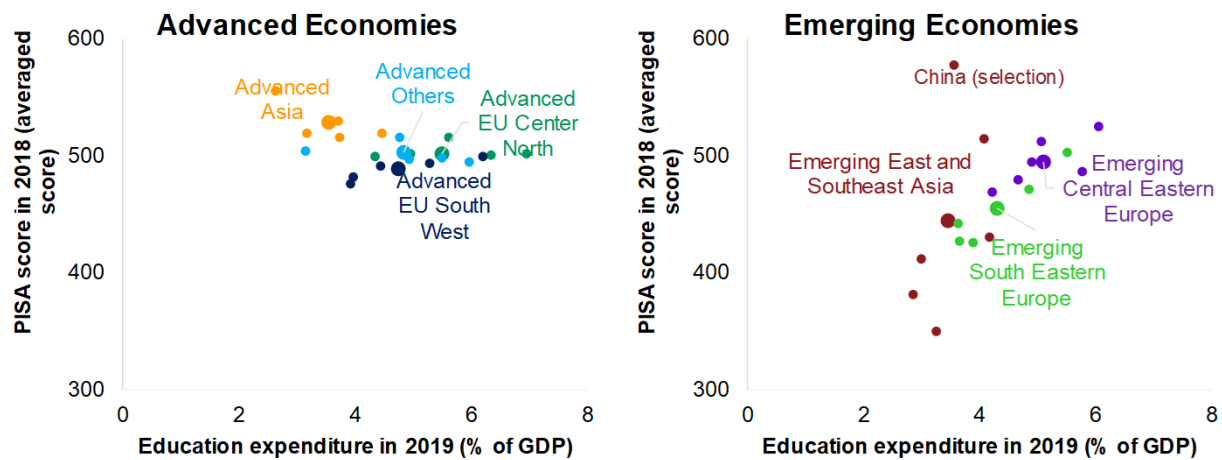
## b) Public spending on education and education performance

It is not easy to measure the impact of public spending on education and skills across countries. There are many dimensions to education—primary, secondary, tertiary, professional—and there is a differing role of the private sector across countries. Nevertheless, it is worthwhile looking at public expenditure ratios and OECD PISA score across countries as proxies for public inputs into the education sector and the level of human capital across countries.<sup>6</sup>

<sup>6</sup> In some very few countries, private education expenditure is quite important. An important difference in spending patterns across countries is on tertiary education which does not affect the chosen measure of education

PISA measures the reading, maths and science competencies for 15 year-olds across countries (see the relevant OECD publications, e.g., OECD (2020)). In advanced countries, the correlation between education spending and education outcomes is, if anything, somewhat negative (Figure 2a). The best-performing Asian advanced economies feature the lowest public spending ratios. The other three country groups report somewhat higher spending and somewhat lower PISA scores on average and significant spending and performance divergence across countries. Only a few countries can keep up with advanced Asia.

Title: Education expenditure and PISA score in 2019



[Figure 2a and 2b]

Amongst emerging economies, the picture is quite different (Figure 2b). First, there is not data for South-Asian countries as they did not participate in PISA in the past. Second, emerging East-South East Asia features the lowest average expenditure ratios (similar to that of their advanced Asian “colleagues”) and the greatest performance divergence. With Vietnam and mainland China it comprises two countries that even outperform most advanced countries. Third, emerging Central Eastern Europe reports the highest average spending, very much in line with the advanced country peers, and PISA scores that are in line with the non-Asian advanced countries. Emerging South Eastern Europe is in between the two groups both in terms of the size of spending and education performance.

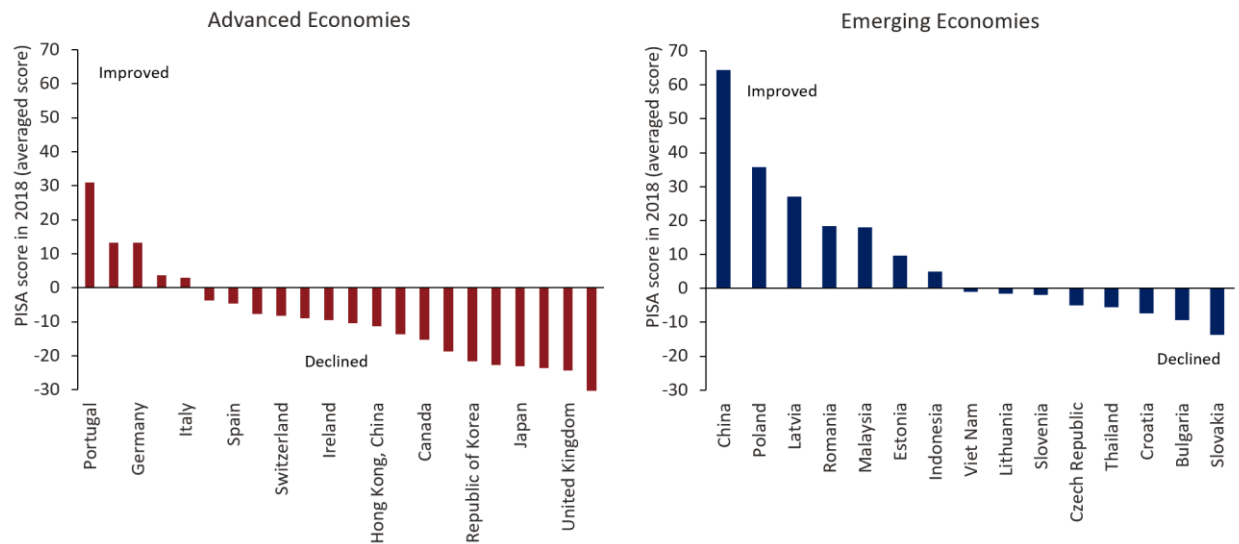
It is also worth looking at the change in education performance across countries in the past (almost) 20 years (Figure 2c). From 2003 to 2018, PISA scores in the advanced countries mostly declined,

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performance. On the whole, however, comparing public education expenditure and education performance as reflected in PISA scores is a reasonable proxy for assessing the effectiveness and efficiency of government.

and in some countries even quite significantly so. Only Portugal reports a strong increase from formerly low levels to near the average. Amongst emerging economies, the picture is more positive (even though

**Title: Change in PISA score, 2003-2018**



the sample size is somewhat reduced). A number of countries from the three relevant groups improved their scores, notably China, Poland and Latvia. Only few countries fell slightly back.

[Figure 2c]

In conclusion, advanced Asia and some emerging Asian economies perform very well in the education domain while reporting low public education spending. The other advanced country groups and emerging Central Eastern Europe also perform reasonably well on average with much higher spending. There are a few less strong performers in Europe and notably in emerging East-South East Asia and South-Eastern Europe.

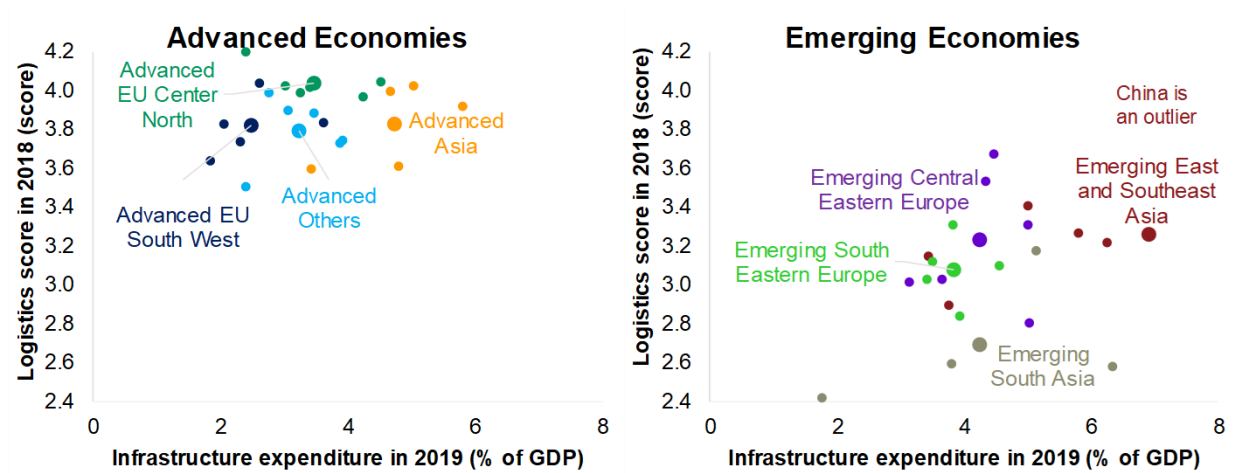
**c) Public investment and infrastructure quality**

Infrastructure is another important building-block for promoting economic prospects and social opportunities within countries. However, the measurement of infrastructure quality is difficult, not all public investment goes into infrastructure in the strict sense of connecting people and facilitating trade, and the role of the private sector in the provision of infrastructure (notably telecom or energy but also other areas) differs hugely across countries (Schwartz, et.al, 2020; Schuknecht, 2020). Still, from a big picture perspective, it is worthwhile conducting the same correlation exercise as before. I use the World

Bank logistics infrastructure quality index as it includes the main elements relevant for connectivity and trade.

Advanced countries have had many decades to build their road, energy, telecom and other infrastructure. It is, therefore, not surprising that all advanced countries show much higher indicators than most emerging economies (Figure 3a and 3b). The EU Center North group posts the highest average indicator, and Germany (contrary to many casual claims about poor quality) reports the highest score of all. The three other groups feature slightly lower averages.

Title: Infrastructure investment and logistics performance



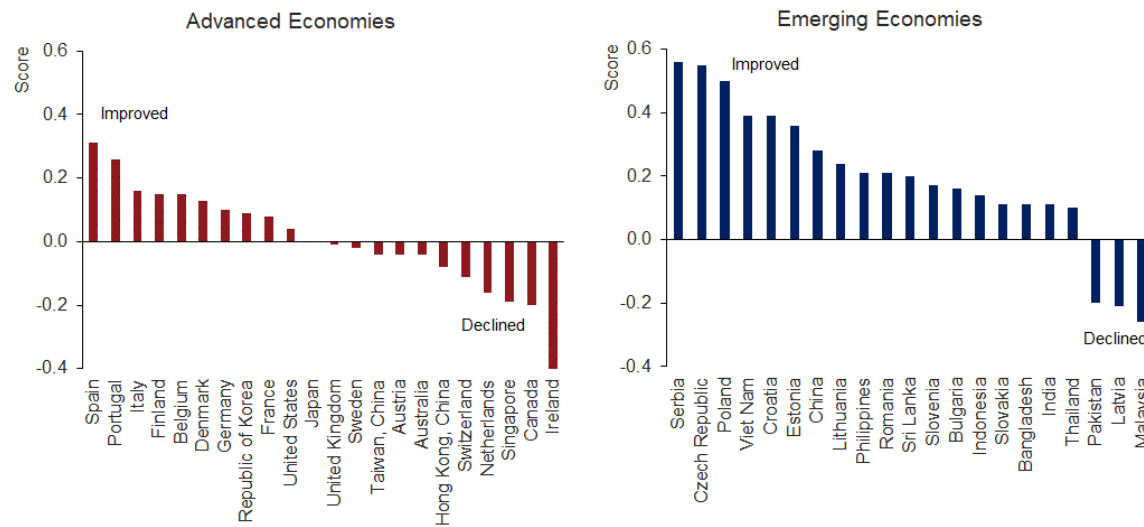
[Figure 3a and 3b]

More interesting, however, is the fact that advanced Asia has caught up with the infrastructure quality of the “West” in a very short time frame, and the high average public investment ratios are probably an important reason for that. Low spending in the EU South West group and a few countries from other groups may reflect a strong role of the private sector (Germany). However, it may also be a sign of low-quality spending (e.g. on white elephants) and the prioritisation of consumptive spending that risk to undermine infrastructure quality in the future.

As regards emerging economies the picture is quite mixed. Public investment spending is high amongst a number of European and Asian economies but infrastructure quality is often still low and much catching up seems necessary. Poland and the Czech Republic feature the best indicator values (on par with other advanced countries) with moderate public expenditure. With massive investment (17% of GDP in 2018 and off the Chart), China has catapulted itself in very little time to a similar quality level as other top performing emerging economies and some of the advanced countries.

These findings are confirmed when looking at the change in infrastructure quality (Figure 3c). Unfortunately, data scarcity only allows a comparison between 2008 and 2018. Amongst advanced countries, improvements and declines in infrastructure quality over the decades are almost balanced. This further contradicts the claim that all or most advanced countries have experienced a deterioration in quality that warrants major new public investment programs. Spain and Portugal have seen the strongest improvement over this decade, contrary to the claims of the damaging effect of austerity. The picture is perhaps a bit more complex than many critics claim.

**Title: Change in logistics performance score, 2008-2018**



[Figure 3c]

When looking at emerging economies, the facts are quite remarkable. Several countries in Europe and Asia report major improvements in infrastructure quality over the previous decade, including Serbia, Czech Republic, Poland, Viet Nam, Croatia, Estonia and China. Only three countries experienced a decline. Given that the overall difference between advanced countries (ca 3.8) and emerging economies in Europe and East Sout-East Asia (ca 3.2) is only 0.6, it may take many countries not more than one or two decades to catch up, given increases of up to 0.6 in the previous decade.

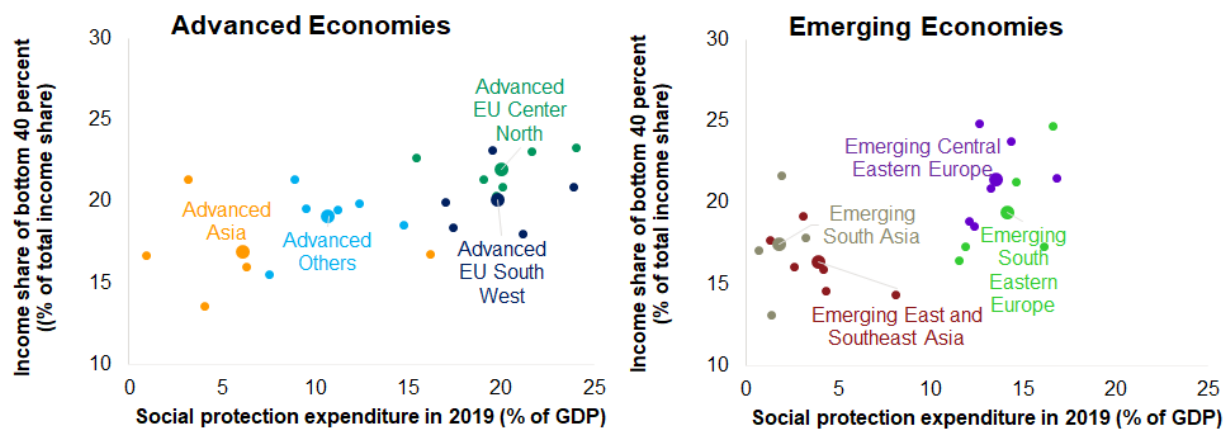
In conclusion, most advanced countries report very high infrastructure quality scores and advanced Asia has fully caught up with the “West”. While there is no evidence of a widespread degradation over the past decade, some countries feature a falling quality index. Emerging economies report lower quality scores on average but a few countries have already caught up with advanced countries. The speed of improvements suggests that more will do so in the next 20 years or so.

**d) Social protection expenditure and income inequality**

Income distribution features prominently in today’s policy debate but the role of government in equalising incomes and the impact this has on growth and opportunity is highly contested. Some studies argue that the insurance effect of more equality boosts growth more than the distortionary effect of taxes and disincentives reduces it. Others claim the opposite. Moreover, it is not just public spending (and taxation) that determines the wedge between market and post-tax/transfer income. Well-functioning labour markets and strong education systems may be equally if not more important.

This study shows the post tax/transfer income share of the bottom 40% of households and its correlation with social protection expenditure (Figure 4a). The correlation between social protection spending and income equality is very moderately positive amidst much variation in the advanced countries. Income distribution is most equal in the EU Center North country group where social protection spending is also very high. But the EU South West groups spends just as much and includes a number of countries where inequality is rather large.

Title: Social protection expenditure and income inequality in 2019



[Figure 4a and 4b]

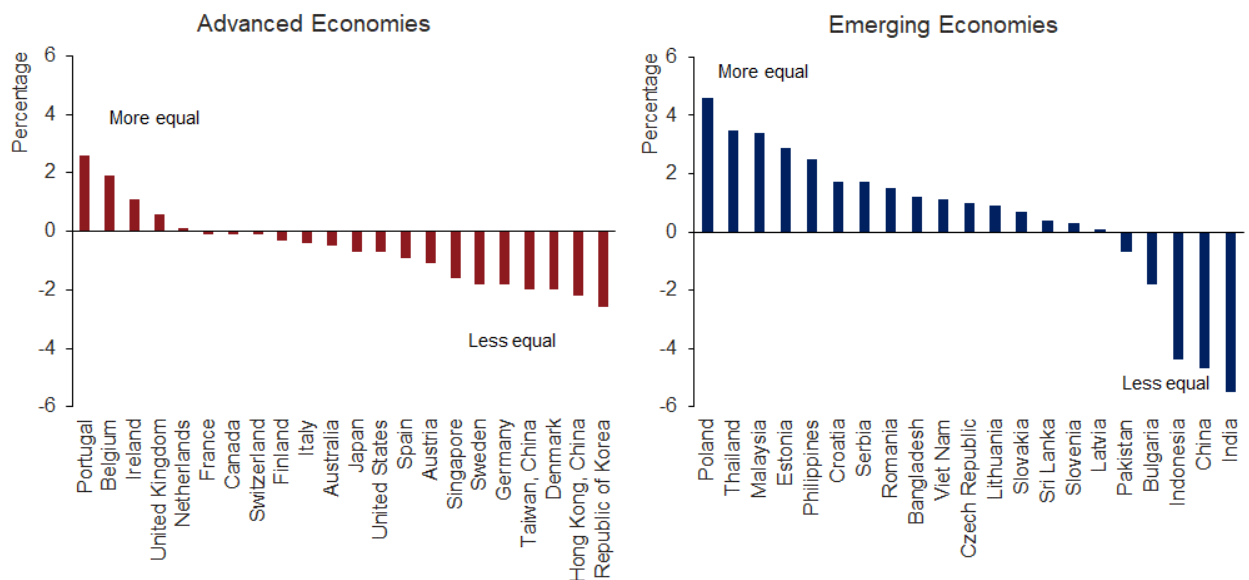
The Asian and other advanced economies spend much less on social protection but a few of them feature income equality almost at a par with the most equal big government countries. This includes Taiwan, China and Ireland. The Netherlands reports high equality with average social protection spending of “only” 15% of GDP, compared to 20% or more in other high-equality countries. Undeniably, some of the Asian advanced economies and the United States feature both low social protection spending and a small income share of the lower two income quintiles.

Emerging economies report much lower social spending but they do not always feature more inequality (Figure4b). The correlation between public spending and equality seems to be somewhat stronger than in advanced countries, though there is (again) huge variation across countries. The income share of the bottom 40% of households in much of emerging Asia is similar to that of advanced Asia but never lower than that of the most unequal advanced countries. Emerging South East Europe reports figures similar to those for EU South West and other advanced countries while Central Eastern emerging Europe is at a par with the advanced EU Center North.<sup>7</sup>

When looking at the change over the past 20 years, there are also clear differences in the patterns across advanced and emerging economies. In most advanced economies, the income share of the bottom 40% of households has declined (Figure 4c). Nevertheless, Portugal, Belgium, Ireland and the United Kingdom report more equality than two decades earlier. For Portugal and Ireland, these figures contradict casual claims of austerity induced inequality after the European financial crisis.

[Figure 4c]

**Title: Change in income distribution, 1999-2019**



Amongst emerging economies, most countries reported a significant or moderate improvement in income equality. Notably Poland, Thailand, Malaysia, Estonia and Philippines stand out. Indonesia, India and China reported the opposite trend. These developments are consistent with the claim that low

<sup>7</sup> Buti and Székely (2021) argue that different European country groups may be on different production possibility frontiers, where South-Western Europe achieves more equality with higher social spending within the country group but much less equality for the same social spending ratio compared to other groups.



skill/low income households in the advanced countries have suffered from global competition while their peers in emerging economies benefitted.

In conclusion, income inequality differs hugely in advanced and emerging economies. While social spending in advanced countries tends to be higher, the average income share of the poorest 40% of households is not very dissimilar in advanced and emerging economies. The correlation with public protection spending is modest in advanced countries while it is more significant in emerging economies. Europe generally report higher social spending and more equality. A number of countries feature relatively efficient welfare states where low social protection spending coincides with a high degree of income equality.

**e) Total expenditure and public debt**

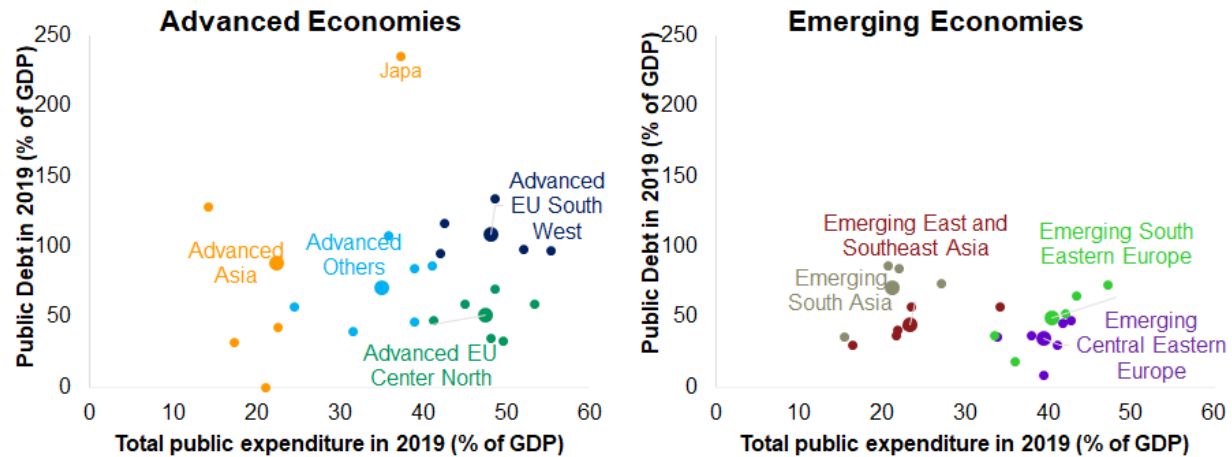
Public expenditure is also related to macroeconomic stability. High public spending may be difficult to finance economically or politically so that it may lead to persistent deficits and higher debt. This may, especially in emerging economies, undermine macroeconomic stability and stoke fiscal and financial crisis. The global financial crisis has shown that high spending and debt can provoke fiscal crisis in advanced countries as well, especially when it comes together with falling economic competitiveness and financial sector problems. Given ultra-low interest rates, however, the consensus of the 1990s—that reasonably low debt is desirable as it provides buffers for future crises or higher interest rates—has dissipated. Still, as assessments may change again in the future, it is important to check whether high spending is correlated with higher debt and, thus, potential sustainability problems looking ahead.

In advanced countries, the public debt situation is quite diverse but there is no clear correlation between public debt and total expenditure ratios (Figure 5a). Only when taking out Japan as an outlier, there is perhaps a modest correlation between size of government and public debt. However, the stronger one seems to be between the size of the country and public-indebtedness: most high-debt countries today are large economies.

As regards, geographic groupings, two groups stand out. The EU Center North countries all feature relatively modest debt and the lowest group average while they feature relatively high spending. The EU South West, by contrast, reports the highest average as all its members are highly indebted while the spending ratio is on average close to their EU peers (and much above the other two groups). In advanced Asia, three economies have very low debt while a pre-funded pension system drove up debt in Singapore

and huge fiscal imbalances for decades left Japan with the highest public debt in the world (>250% of GDP).

Title: Total public expenditure and public debt in 2019



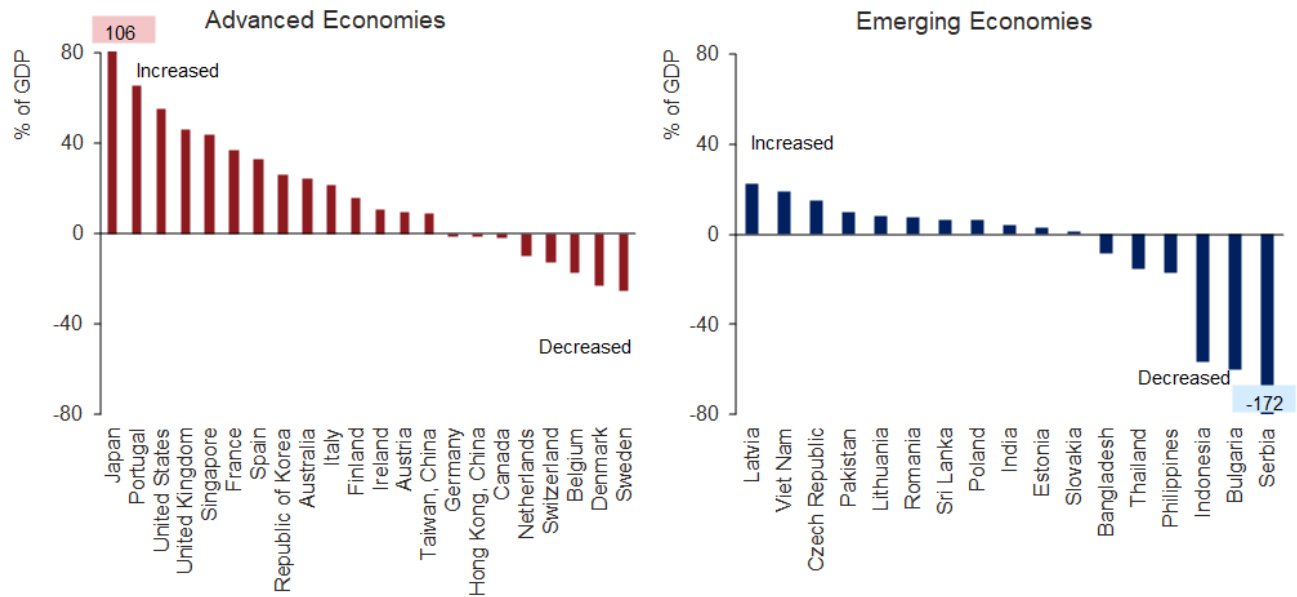
[Figure 5a and 5b]

As regards emerging countries, total spending ratios differ strongly as argued above while debt ratios differ less across countries and across groups than for advanced countries. In particular, there is not a single country with debt above 100% of GDP. Emerging Central and Eastern Europe feature the lowest debt with the highest spending ratio. But this is not much below emerging East and South-East Asia which has the smallest governments.

When looking at changes in indebtedness over the 1999-2019 period, public debt went up almost everywhere (Figure 5c) and it increased significantly further in 2020/21. However, it increased fastest in the largest advanced countries. In fact, in the Group of Seven (G7) it increased from about 85% of GDP in 2007 to 140% in 2020. Debt increased modestly or not at all in the Asian advanced countries. Only a few smaller advanced countries in Europe reduced their public debt ratio before COVID-19 struck.

The public debt increase in the emerging countries was much less dramatic and on average even rather minimal. Only with the COVID-19 pandemic, did public debt in emerging economies increase as well, though less strongly than in the advanced ones.

**Title: Change in public debt, 1999-2019**



[Figure 5c]

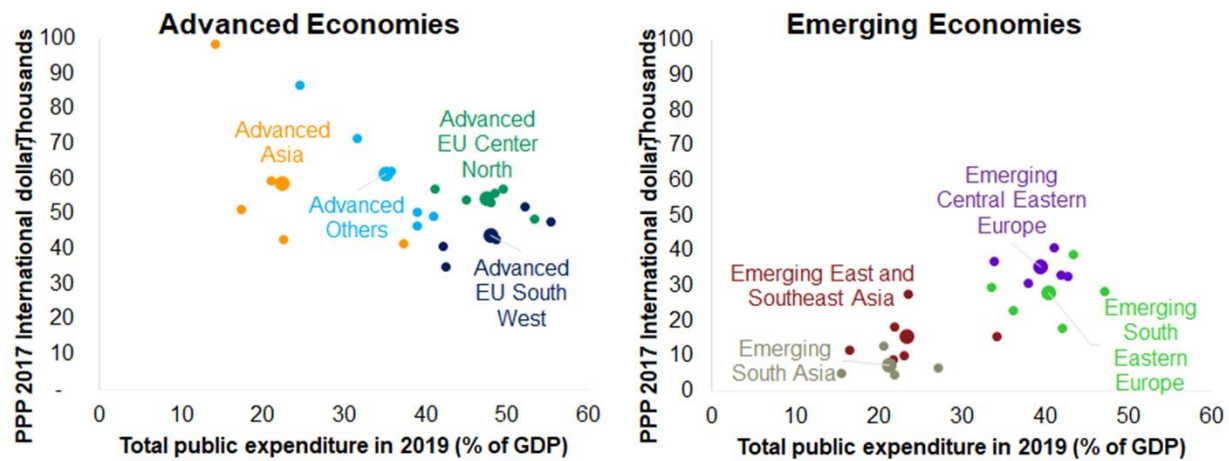
In conclusion, advanced and emerging economies posted record public debt levels in 2019 and this increased further with the pandemic (IMF, 2020; Schuknecht, 2022). However, debt-ratios do not correlate much with expenditure ratios in the respective advanced and emerging country groups. It seems rather, that large countries are particularly highly indebted while smaller economies know of their vulnerability and behave more prudently. Perhaps, after the banks' "too big to fail" of the early 2000s, we now see governments behaving as if they are too big to fail too. Only, who should save them?

**f) Public spending and per capita GDP PPP**

Public spending is supposed to provide public goods and services and ensure well-functioning administrations so that economies thrive. At the same time public spending needs to be financed and taxes tend to be distortionary so that growth tends to be hurt. Over time, this should translate into higher or lower levels of per-capita GDP, and the relation with spending ratios is likely to say something about trade-offs.

What do the numbers tell about the correlation between purchasing power adjusted per-capita GDP and total public spending? While the relationship is quite clearly negative for advanced economies it seems to be more positive for emerging countries (Figure 6a and 6b). The richest advanced countries, the Asian and non-EU advanced country groups feature average per capita GDP PPP of about 60000 US\$. This is about 10% above the average for the EU Center North and one quarter above the EU South West. Singapore is the richest country at about 100.000 US\$ per person, the poorest one is below 40.000. The richest countries all feature public expenditure ratios below 40% of GDP, while the countries below the average display the whole public spending spectrum.

Title: Total public expenditure and GDP per capita in 2019

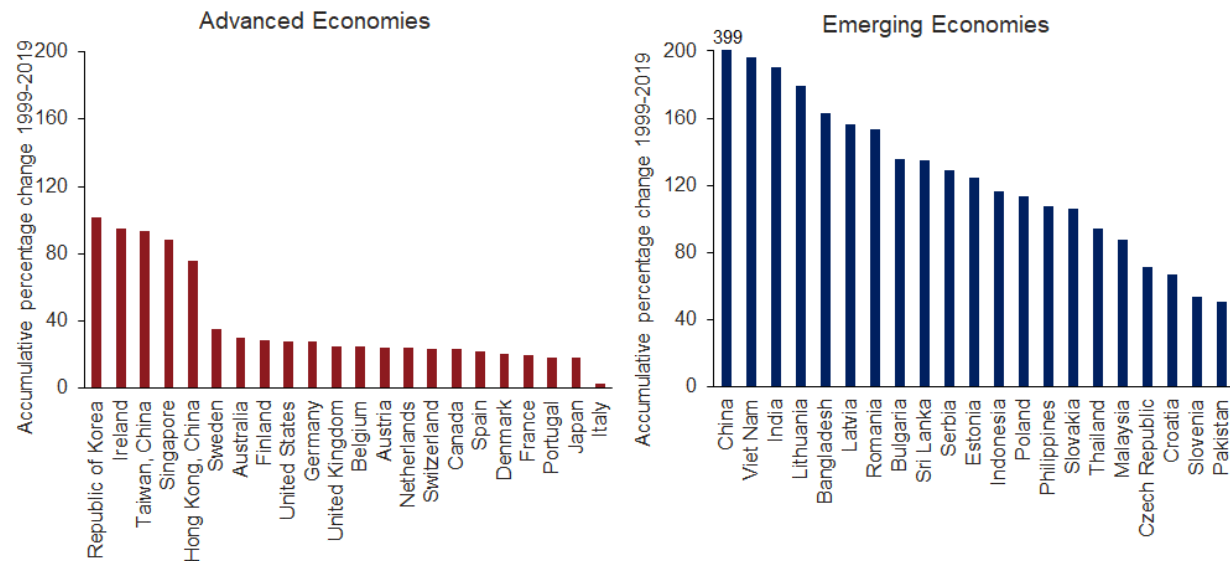


[Figure 6a and 6b]

Amongst the emerging economies, East-South East Asia and South Asia are still relatively poor and the size of the public sector is quite small. European emerging economies of both groups, by contrast feature much large public sectors and higher incomes.

A look at the changes in per-capita GDP over the past two decades nuances the overall picture somewhat (Figure 6c). In fact the distance in prosperity in the advanced countries has increased significantly between big and small government countries (Schuknecht, 2020). This is also illustrated in Figure 6c where four of the top five countries in relative growth performance are from Asia: Republic of Korea; Hong Kong, China; Taiwan, China and Singapore. Or in other words, advanced Asia has rapidly caught up with advanced Europe (Buti and Székely, 2021). From Europe, only Ireland is in the top group with per capita income increases of 75-100%. All these countries feature much below average sizes of the public sector. Sweden is the only “big-government” country with above average per capita GDP growth over the past 20 years.

**Title: Change in GDP per capita, 1999-2019**



[Figure 6c]

Emerging economies generally reported much faster economic growth and most countries cumulative growth rates over the two decades exceeded that of the advanced country top group. This is income convergence “at work”. Asian economies came out on top: per-capita GDP PPP in China almost quadrupled, it almost doubled in Viet Nam and India. A number of European and Asian economies also posted strong growth between 180% and 50% over the period.

In conclusion, there appears to be a clear negative correlation between the size of government and per capita GDP in advanced countries. Moreover, advanced country prosperity seems to have diverged between the countries with large versus small public sectors over the past two decades. For

emerging economies, Asian countries appear to have, on average and when looking at the median, grown somewhat faster than their European emerging economy peers.

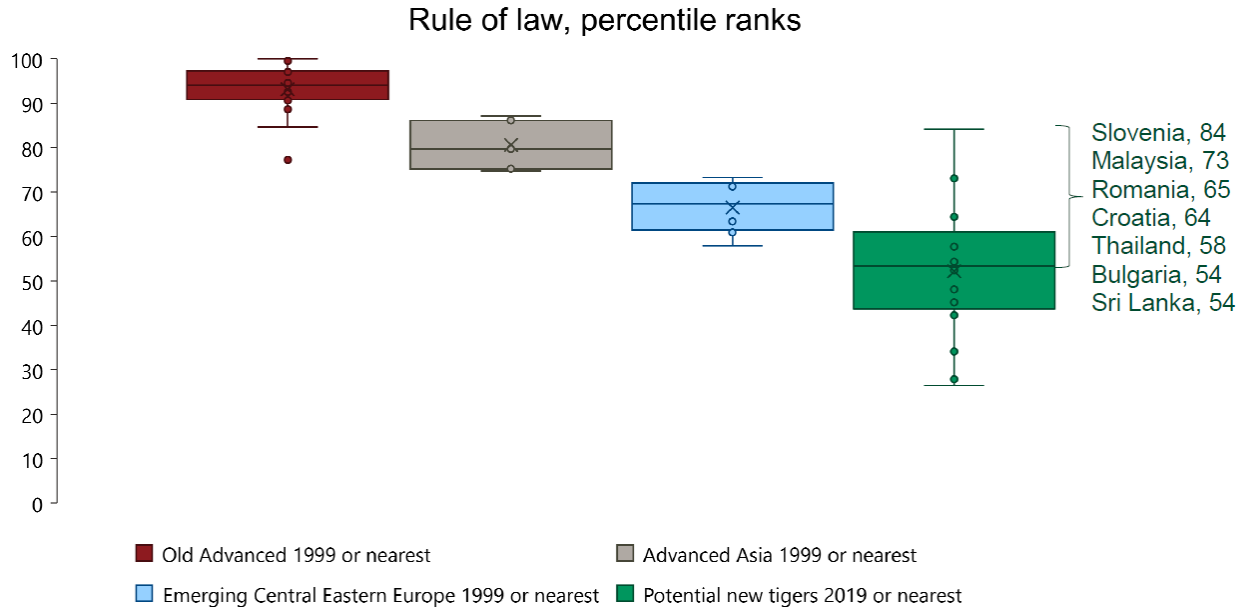
#### **4) Emerging economies of South-Eastern Europe and Asia: wo will be the next “tigers”?**

After World War II, today’s advanced countries of Europe, North America and Oceania emerged from destruction. Japan was the first Asian “tiger” to follow suit and it had caught up with the “West” in the 1980s. A number of additional Asian “tiger” economies started their ascent in the 1960s, 1970s and 1980s which continued until today when some of them even surpassed their Western peers: Singapore, Hong Kong, China, Taiwan, China, Republic of Korea. With the end of communism, Central Eastern Europe became the next group “tigers” with rapidly catching up economies since the 1990s.

In this section, we ask: where did the fast-growing countries of the past two decades stand 20 years ago? Who are going to be the next “tigers” when looking at where the emerging economies of South-Eastern Europe and Asia stand today? Three criteria that we examined in this study seem particularly relevant: the rule of law and favourable framework conditions for the private sector, a good human capital and skill base for the economy and sound infrastructure that connects people and countries internally and externally. As regards these three criteria, the earlier tigers seem to have been strong performers during their ascent.

#### **Economic framework conditions and future “tigers”**

Where did the catching up advanced economies of Asia and the emerging economies of Central Eastern Europe stand 20 years ago from the perspective of rule of law and framework conditions? Which countries of the emerging country group in South-Eastern Europe, East-South East Asia and South Asia are well-positioned today to catch up with their Asian or European peers? Figure 7 illustrates the distribution of scores across and within country groups 20 years ago for the “old” advanced countries, advanced Asia and emerging Central and Eastern Europe.



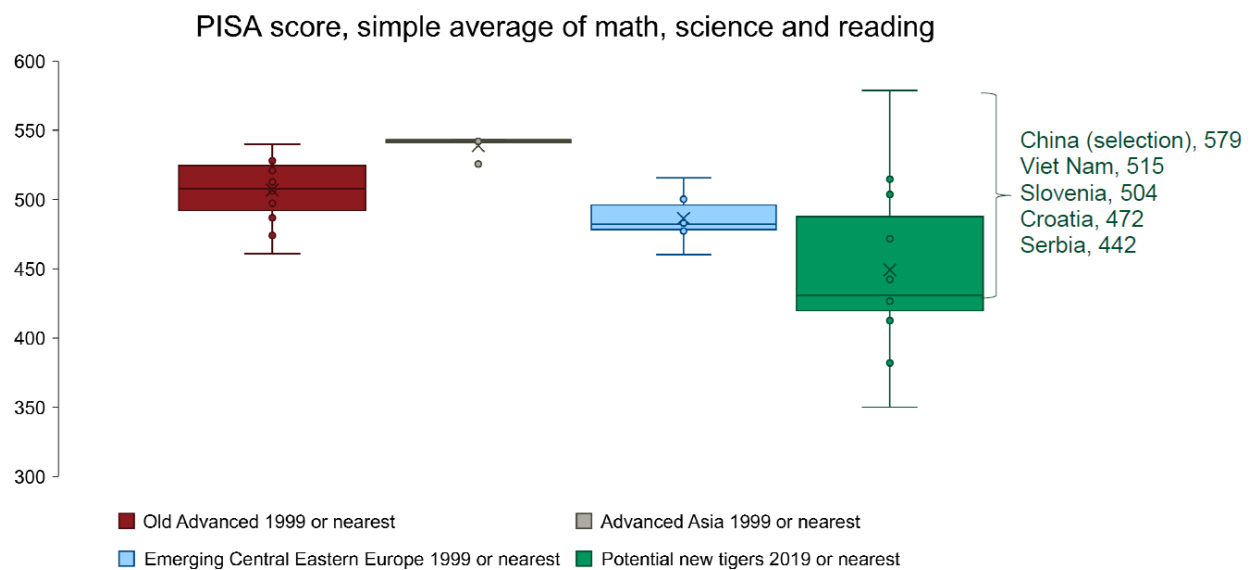
[Figure 7]

Then and today, the “old” advanced countries (burgundy) featured high “rule of law” scores. At that time advanced Asia (grey) reported slightly lower but already very sound values. As reported above, advanced Asia has fully caught up has fully caught up. Central Eastern Europe (blue) also started at a relatively high level in the late 1990s after very transformative years during the 1990s. All in all, the rule of law conditions for rapid growth in today’s advanced Asian economies and Central Eastern European countries were well in place at that time. They are likely to boost prosperity in the future as well.

When looking at the remaining emerging economies, four countries stand out: Slovenia, Malaysia, Croatia and Romania. Their “rule of law” scores that are broadly in the range of Central Eastern Europe at the time of their take off. Thailand, Viet Nam and Sri Lanka feature above average indicators but they remain well below those prevailing in the Central Eastern European “tigers” of the past two decades. Some other countries have also improved, as seen above, but they still feature relatively low scores.

## Human capital and future “tigers”

Turning to human capital as measured by PISA scores, “old” advanced countries posted high education scores in the early 2000s, but already then, the scores for the Asian advanced countries were higher (while their per capita GDP was still much lower) (Figure 8). Central Eastern emerging economies also featured strong human capital scores, almost on par with the “old” advanced countries. Hence, again Asian and Central Eastern European economies were well placed for fast growth in the following 20 years from a human capital perspective and they are in a good position to stay on this course in the future.



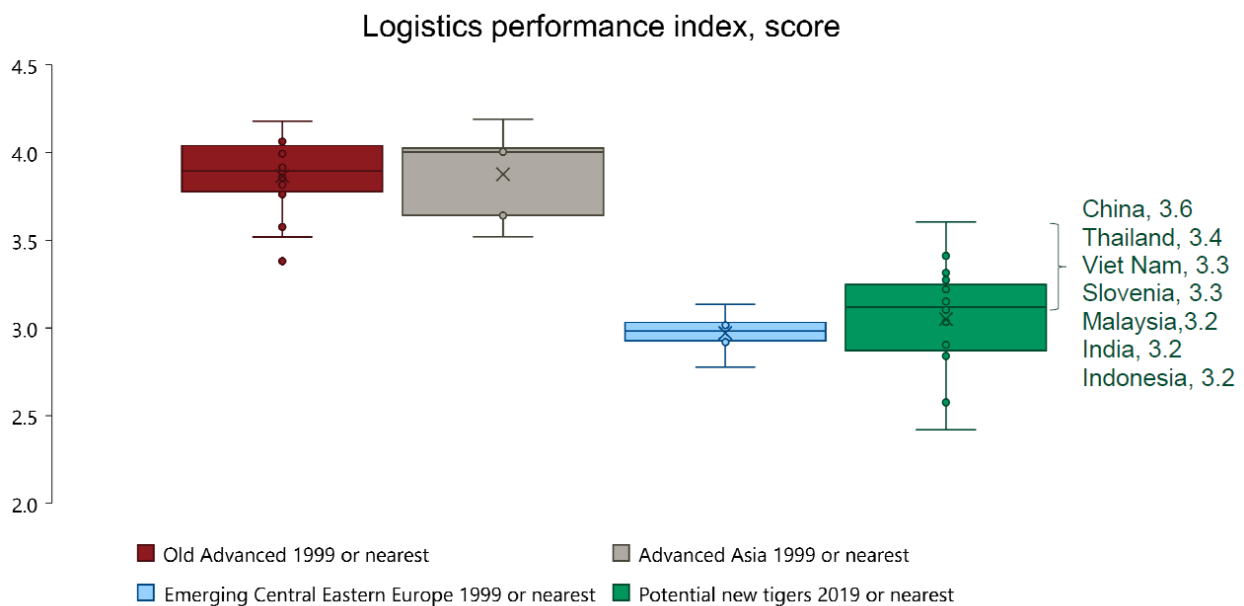
[Figure 8]

When looking at PISA scores for the emerging economies in South Eastern Europe and Asia, the situation is very diverse. For some countries notably in South Asia, there is no information. For the remaining countries, there are some clear success stories, where today’s scores are very promising for the future. This includes China (selected provinces), Slovenia, Viet Nam and Croatia. These countries seem well placed from a human capital perspective to continue on a fast growth path.



## Infrastructure performance and future “tigers”

Finally, we look at infrastructure indicators across countries and country groups. As already discussed above, there are a number of caveats around this data including their relatively late availability (early 2000s). Already then “old” advanced countries, and the Asian advanced countries had top infrastructure quality scores (Figure 9). This was an area where Central and Eastern Europe was furthest behind. During the high-growth and investment phase of the past 20 years, this country group could catch up significantly within relatively reasonable expenditure bounds and is, thus, also well-placed for the future.



[Figure 9]

The potential “tiger” countries of South-East Europe and Asia are not badly positioned if they continue investing in high quality infrastructure. Most countries today feature a higher infrastructure score than the average of the Central Eastern European countries in the late 1990s. China, Thailand, Viet Nam, Slovenia, India, Indonesia and Malaysia are well above that average. Hence, there are quite a few countries that are well advanced on this criterion.

## Synthesis on the prospects of future “tigers”

Putting the findings on these three indicators together and with the caveat that these are not all the relevant factors that determine whether a country is a future “tiger”, there are some interesting

results. First, the “tigers” of today’s advanced Asia and Central Eastern Europe prioritised the “rule of law”, education and infrastructure from early on and with determination. This took precedent over the establishment of the welfare state which in the case of Central Eastern Europe was even curtailed. Twenty years ago, these country groups were well-advanced or advancing rapidly regards government performance in these areas. Both groups are, hence, in a good position to continue on their course of success.

As regards today’s South-Eastern European and Asian emerging economies, the picture is more mixed. Many countries are doing well and progressing on infrastructure, a number of East Asian and European countries also show strong education systems. However, on rule of law and framework conditions the picture is patchier. Slovenia and Viet Nam feature promising indicators in all three categories, a number of other countries show strong results or potential in at least two. But the starting point and experience of the Asian and European “tigers” of past decades shows, that there is some way to go for most countries, and new success stories might be slower to emerge than in the past.

It is also worth recalling that doing well on these three criteria does not require high levels of public spending. A strong public administration that implements the rule of law does not have to be very large. Singapore gets by with a few percent of GDP, Switzerland’s public consumption is only about 12% of GDP compared to 20% in many other advanced countries. Education spending of 3-4% of GDP has financed some of the best education systems. Infrastructure spending of 4% of GDP, implemented efficiently and sustained over a significant period of time is probably sufficient in the emerging economy context, especially if it can be combined with significant private finance.

Hence, there is no reason to argue that today’s governments are structurally underfinanced when expenditure exceeds 20% or 30% of GDP. It is a matter of prioritisation. None of the countries discussed should, therefore, be impeded from becoming a new “tiger” due to an unduly small government. At the same time, some countries in Europe already feature relatively large governments that require high taxes so that an efficient use of public resources seems particularly important.

## **5) Conclusion: the future of public expenditure post COVID**

In this study we examined the size of public expenditure and government performance across several groups of advanced and emerging economies in Europe and Asia. Several findings stand out:

- 1) European advanced countries have the largest public sectors. The difference to other country groups mainly relates to the size of the welfare state. Productive spending on education or infrastructure, by contrast, differ much less across advanced country groups.
- 2) Central Eastern European emerging countries also have larger public sectors than their emerging economy peers. Emerging economies of South-Eastern Europe and notably Asia feature smaller public sectors.
- 3) As regards government performance, there are huge differences across countries and country groups. Advanced Asia has further consolidated its lead position on several indicators while maintaining low spending. Some European advanced economies' performance indicators have declined amidst further increases in total spending ratios.
- 4) There is a more positive correlation between spending and performance amongst the emerging economies. Performance has been converging significantly towards that of advanced country peers over the past two decades.
- 5) When looking at the starting position of the Asian and Central Eastern European "tigers" in the past 20 years, these countries already featured strong indicators on rule of law, human capital and infrastructure at the turn of the millennium. Hence, their success in retrospect does not come at a surprise and they are in a good position for the future.
- 6) A number of the emerging economies of Asia and South Eastern Europe also show strong performance in these domains but the overall situation is mixed. Slovenia and Viet Nam are in a good position on all three accounts while a number of other countries performs well on at least two of them.
- 7) In all emerging countries, spending is high enough to finance the necessary productive spending, in some South East European countries it may already be rather high.

What are the implications for the future? Public expenditure in many advanced countries and especially in Europe is very high and perhaps too high to remain competitive with Asian and European peers (see also Schuknecht, 2022). Public expenditure in many countries could "buy" citizens much better public goods and services. This suggests that a regime shift is necessary to move towards a more productive use of public spending (Schuknecht, 2020a; Buti and Székely, 2021). Expenditure on infrastructure and education are particularly important for future growth prospects. However, institutional settings matter more than public spending to achieve high quality education systems and infrastructure networks (Schwartz, et.al, 2020; Woessmann, 2016). Expenditure savings, prioritisation

towards more productive spending and better spending “governance” are needed so as to strengthen economic dynamism.<sup>8</sup>

For “tiger” economies in Europe and Asia, the findings suggest to keep governments lean and productive and strengthen performance in key areas so as to underpin growth and sustainability. This will allow emerging countries to further catch up with advanced economies. With the continued ascent of emerging economies, their relative weight in the global economy and in geopolitics will increase. This should be of a reason for satisfaction rather than concern.

While the COVID-19 pandemic dust is still settling, two developments stand out. Overall public spending increased hugely, notably in advanced countries. It is not clear yet whether spending levels and patterns will revert to pre-COVID times. That depends on how much of the growth decline and spending increase is permanent. But given high spending ratios in many advanced countries before the pandemic, these increases and rapidly rising public debt have decreased the scope of dealing with future challenges such as population aging, climate change or financial instability.

Moreover, the casual evidence in this paper does not suggest that more spending is linked with better government performance. At a time when many observers call for a stronger role of the public sector and higher spending, this study does not find evidence in support of such claims; on the contrary: “tiger” governments tend to be productive and “lean”.

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<sup>8</sup> Moreover, and beyond the scope of this paper, revenue collection is important. The adverse effect of financing public spending via taxes could be reduced significantly, if tax systems were efficient and if revenue was actually collected. The European Commission (2021) reports that some countries collect, e.g., 20% or even one third less in VAT than statutory rates would suggest. There are also strong arguments that fiscal discipline provides incentives for higher quality spending due to the need for prioritisation (Schuknecht, 2020a). Delegation of fiscal “quality control” to supranational levels could also be a way to get better “better spending” (Buti and Székely, 2021).

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