

# **“The implications of the Covid-19 pandemic for the balance of global economic power”<sup>1</sup>**

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## **Abstract**

This paper sets out an analytical framework within which to think about the likely impact of the pandemic on the balance of economic power internationally. It proposes a definition for economic power and then identifies two main channels through which the pandemic could affect one country's economic power relative to another: the one-off impact on a country's assets (financial and non-financial) and its impact on a country's long-term national capabilities. After a detailed examination of these two channels and a preliminary consideration of how their impacts may vary between different countries and regions, the paper discusses two key factors which are likely to have a major influence on the way the pandemic affects the balance of economic power between countries over the longer term, notably how long the threat from the virus lasts and the strength of the collective international response. The paper then concludes with a summary assessment and recommendation on what countries should do to ensure that they emerge from the pandemic in the strongest possible position.

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## Introduction

The effect of the pandemic on the global economy has in several respects been like a global conflict. Every country in the world has been affected, by the virus itself, by the measures taken to control it, and by the economic fallout.

By the end of January there had been 364 mn confirmed infections and 5.6 mn confirmed deaths worldwide<sup>2</sup> with the true figures likely to be much higher. The cumulative cost of covid-related financial measures since March 2020 amounts to US\$ 16 tn, while, on average, public debt as a share of GDP has risen from 84% in autumn 2019 to 98% in 2021. It has been estimated that, globally, an extra 65-70 mn people were in extreme poverty in 2021 compared to what would have been the case if the pandemic had not occurred.

To combat the pandemic governments have been forced to intervene on an unprecedented scale and scope (again normally only seen in wartime) restricting basic freedoms and impacting on daily lives. In addition to public health measures (lock downs, social distancing, mask mandates) and the creation of vast new testing and vaccination programmes, governments have intervened extensively in monetary and fiscal policy, education, transport, housing, policing and social policy. And while these interventions have usually attracted majority public support, some countries have seen an increasingly vocal minority which rejects the case for mandatory common protective measures, arguing instead for responsibility to lie with the individual.

As in a global conflict, the pandemic has given an enormous boost to technological development and diffusion through society, ranging from vaccine development to diffusion of on-line meeting software. It has also set in train political changes and reforms to government organisation which may take a number of years to work through.

But in some respects, things are very different to wartime. The pandemic has led to enormous loss of life, but mainly among older or otherwise vulnerable groups in society, rather than among the young. It has had a massive effect on daily lives, but has not resulted in mass displacement of population. It has consumed vast resources that might otherwise have been available for other uses and disrupted manufacturing and supply systems, but there is no physical destruction of infrastructure. And rather than fragmenting into alliances, international cooperation has - to a limited extent - stepped up (albeit much less that one would have wished, or expected, given the nature of the threat and the very obvious benefits of collaboration).

Similarly, while a war often has clear winners and losers at its conclusion, and there are enormous disparities in the short term impact of the virus – 2600 deaths for every million people in the US so far vs 4 deaths for every million people in China - it may not be clear for at least several years after the pandemic has receded which countries will be in a stronger

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<sup>2</sup> <https://covid19.who.int/table>

position economically and politically relative to others, as a result of the pandemic, and which will see the opposite effect.

This is illustrated by the current position in China. On the one hand the Chinese authorities have been very successful in maintaining a near “zero tolerance” approach to covid within Chinese borders, to the extent that the number of cases per week at the end of January was running at around 1600 (out of a population of 1.4bn) compared with 4.2 million in the US . But this has come at the price of very strict controls on physical interaction of the Chinese population with the outside world. This is unlikely to be sustainable over the medium term, and yet at the same time it is now very unlikely that the wider world will move to a zero tolerance approach similar to China’s. So China will at some stage have to abandon its zero tolerance approach. But doing so could be very costly, particularly given the lower effectiveness of Chinese vaccines based on traditional non-mRNA technology. Recently published modelling suggests that a decision to open up travel in China now, notwithstanding very high rates of vaccination, could lead to 600,000 cases a day. What at one stage appeared to be a major economic success for China, and other countries with a similar approach, could therefore yet become a serious disadvantage.

And it could also be the case that countries which have had major policy failures early on, whether in public health or economic policy, learn from this relatively quickly, and overtake other countries in the effectiveness of their response to subsequent phases of the pandemic. Thus, the UK’s success in achieving a very rapid vaccination and booster rollout in 2021 followed major difficulties in the acquisition of Personal Protective Equipment (PPE) and initial development of test and trace infrastructure in 2020.

Following a discussion of **what we mean by the balance of economic power**, this paper focuses on three main issues.

First, drawing on the experience of the past two years, it identifies **two main channels** (or categories of effect) through which covid is likely to impact on national economic power, over the medium to long-term. These are (a) the one-off impact of the pandemic on a country’s financial and non-financial assets, and (b) the long-term changes in a country’s capabilities as a result of shifts in behaviour by governments, firms and citizens.

Second, it discusses which of these channels, and which of the effects they encompass, is likely to be most important in determining the **relative economic power** of different countries or regions, and looks at some of the evidence to date on how different countries and regions are performing.

Much depends on the effectiveness of **remedial action** in a particular area following the pandemic shock. Some countries will be better able to organise this response than others (e.g. providing for remedial teaching or spreading the reduction of excessive public debt over a long period of time).

Another factor will be the **extent of changes required to protect against future threats** and how countries respond (e.g. some countries may be more willing or able to build redundancy into government systems to provide spare capacity in the event of shocks than others). The extent to which individuals and institutions in a given society are **sufficiently flexible** to embrace new ways of doing things will also be critical.

Third, the paper considers how the above findings may be changed under **different scenarios** regarding (a) the period over which the pandemic lasts (e.g. as a result of the appearance of new variants) and (b) the future level of international economic cooperation.

### Definition of “economic power”

Before the impact of the pandemic on economic power can be discussed, we first need to define what we mean by the latter phrase. This paper will use the following definition.

*A country’s economic power comprises two elements. First, is its **ability to deliver prosperity and economic security** to its population over the medium to long-term.*

*And second, is its ability to deploy economic assets and capabilities (such as locally owned and controlled firms, markets, financial assets controlled by its population, and its position in global economic governance) **to achieve economic and non-economic ends** internationally.*

This is a definition of “absolute” economic power. An analysis of the “balance of economic power” requires a comparison of the position of one country (or region), under this definition, relative to another.

Ahead of considering the impact of the pandemic on this definition of economic power, five points should be highlighted:

First that the pandemic has, to some degree, **changed our view of what matters in determining economic power** .

Previously we might have focussed on knowledge networks, trading relationships, and reputation/brand, as well as technological/innovative capacity (reflected in the strength of universities and R&D spending) and the strength of one’s institutions, as well as legal and regulatory frameworks. This is all still true. But we now also put more weight on such assets and capabilities as secure and resilient supply chains, certain specific technological capabilities (particularly in health, but also on-line video technology), government technical and administrative capacity, and overall population health.

Second, some effects of the pandemic will be **asymmetric**, strengthening a country’s ability to deliver prosperity and economic security, but not making a discernible difference to its ability to project power internationally. The opposite may also apply.

Third, while every country in the world has had to respond to the pandemic, there are **enormous differences in the form this response has taken** and some of these differences could be very significant for economic power over the long-term. Thus, countries which

imposed extensive lockdowns and those that put in place very generous support packages for the workers affected will face substantially different consequences (both good and bad) to those that did neither of these things.

Fourth, one of the main routes through which the pandemic has affected economic power is **through its interaction with other key drivers of change**, a number of which predated the pandemic. These include, in particular, demographic pressures (as older age groups are more vulnerable to the virus), climate change and biodiversity loss (as the pandemic has demonstrated the scale and speed at which public expenditure can be increased in an emergency), the impact of new technologies (notably AI, big data etc.) and the impact of rising geopolitical tensions (which has contributed to the limited degree of international cooperation), particularly those between the US and China. In some cases the pandemic may simply have accelerated changes that are already underway (without changing the direction), but in certain areas, the pandemic has arguably put countries on a **fundamentally different track** in terms of their economic development. Disentangling what would have happened anyway as a result of these underlying drivers from what is happening only because of the way the pandemic has interacted with these drivers can be very difficult.

Fifth, while the pandemic may have a significant impact on economic power, this is **not necessarily a zero sum game**. Thus the potential productivity boost from more rapid development and adoption of on-line technology may only change the balance of economic power if one country is able to capture the available gains more quickly or more extensively than another.

### **Main channels through which the pandemic is likely to affect economic power**

In the light of the above definition and these considerations, one can identify two main channels through which the pandemic could affect a country's relative economic power.

The first channel is the **one-off impact of the pandemic on a country's assets** (financial and non-financial).

On the financial side, this could include the impact on public debt and private assets. On the non-financial side, it could include the impact on human capital (lost from disrupted schooling), business capital (particularly in small and medium enterprises), and on more intangible assets, such as a country's position as a travel hub or at the centre of critical global supply chains.

By their nature these one off impacts may be relatively straightforward to address if the right policies are put in place. But, if this is not the case, they may end up having a longer lasting impact on economic potential. For example, the experience of the British Empire

after WW1 showed that overseas markets, once lost, were not regained, even after the conflict had ended.

The second channel is the fundamental impact the pandemic may have on a country's **long-term capabilities** as a result of individual or organisational experience and resulting changes in behaviour. Among the most important effects under this channel are likely to be:

- the **diffusion of technology through the entire economy** (particularly on-line working);
- changes to the **effectiveness of government** (e.g. through new, more efficient, institutional structures, enhanced IT and a greater use of large data sets);
- the **impact on the behaviour of citizens** (e.g. changes in consumer tastes, attitudes to hygiene or attitudes to certain kinds of work).

All three of these effects will influence the level and volatility and composition of **economic growth**.

Some effects under both channels will impact **all countries fairly equally**, particularly if manifest in scientific discoveries or the behaviour of large corporations operating all over the world, as these will typically spread very quickly<sup>3</sup>. But others, which are less transferable, could lead to significant **differences** in the relative economic position of individual countries.

In both cases, much could depend on a country's **starting position**. Thus, an economy that is more dependent on tourism or hosting and international travel hub may initially be more affected by travel restrictions and domestic lock downs than one that is more dependent on trade in goods (Germany and China). However, it is also possible that the first country will manage to shift more effectively to on-line working and experience a major productivity boost with lasting effects on its relative position.

In the next two sections we look at the two channels identified above in more detail and consider how they may affect the relative economic power of individual countries, with a particular focus on the **Europe (including the EU and UK), US, China, Japan, and the developing world**.

## Shock to financial and non-financial assets

We begin with the **first channel**, namely the one-off impact of the pandemic on a country's assets.

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<sup>3</sup> Richard Baldwin "The Great Convergence".

While there have been numerous mistakes and false starts in public health policies and the political response to the pandemic, the economic policy mix led by advanced countries starting from the outset of the crisis in March 2020 has been highly successful<sup>4</sup>. This consisted of very loose monetary policy and an unprecedented fiscal response, comprising support to keep workers in jobs, enhanced welfare payments, legal interventions to keep people in housing, loans and guarantees for small and medium sized business, and individually negotiated financial support for larger businesses deemed essential (particularly airlines and mass transit). The precise combination of interventions varied widely from country to country, but actions requiring spending were overwhelmingly concentrated in advanced countries<sup>5</sup>.

The initial economic measures taken by **advanced countries** were complemented by very rapid roll out of highly effective vaccines from the start of 2021. Further support was also envisaged - and has to some extent been provided - through stimulus packages (particularly in the US and EU) which were focussed on long-term goals, addressing damage caused by the pandemic at the same time as dealing with challenges unrelated to the pandemic (under the rubric of “building back better”).

Up to the emergence of the Omicron variant in December 2021, the net result of these policies had been a very strong bounce back in the advanced economies. Indeed, the IMF estimated in October 2021 that, as a group, they have already recovered their pre-pandemic level of GDP. In its latest update published at the end of January<sup>6</sup> the IMF is not as bullish about future growth, largely due to a weaker fiscal stimulus and expectations of tighter monetary policy in the US (rather than disruption caused by Omicron), but it is still expecting growth in the advanced countries to reach 3.9% in 2022 and 2.6% in 2023.

The **Chinese economy** shook of the effects of the pandemic relatively quickly due to its “no covid” policy and achieved growth of over 8% in 2021. However, in its latest forecast the IMF is expecting a substantial slow-down to 4.8% in 2022, reflecting financial stress among property developers and the challenge of transitioning out of the “no covid” policy. **Low-income and other emerging economies** also recovered much of the ground they had lost in 2021, but future growth may be limited due to lack of fiscal space and, in the case of low income countries, by continuing difficulties in accessing vaccine supplies.

### Impact on public debt

Despite their success in delivering a much quicker economic recovery than was initially forecast, the advanced economies have still suffered a very large cumulative economic loss.

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<sup>4</sup>[Fiscal policy and the post-COVID-19 recovery | Chatham House – International Affairs Think Tank](#)

<sup>5</sup> [Policy Responses to COVID19 \(imf.org\)](#)

<sup>6</sup>[World Economic Outlook Update, January 2022: Rising Caseloads, A Disrupted Recovery, and Higher Inflation \(imf.org\)](#)



The policy mix adopted means that this was very largely born by the public sector, at least in financial terms. It will take several years for the full effects on the public financial position to be known, but forecasts for public debt, capturing both covid-related spending and the impact on government revenues of the collapse in growth, provide a good indicator.

**Table 1: Impact of Pandemic on Public Debt**

General Public Debt as a Percentage of GDP (Gross)

|                             | 2019  | 2021<br>(est) | 2026<br>(forecast) |
|-----------------------------|-------|---------------|--------------------|
| <b>Advanced economies</b>   | 103.8 | 121.6         | 118.6              |
| US                          | 108.5 | 133.3         | 133.5              |
| Japan                       | 235.4 | 256.9         | 251.9              |
| Euro Area                   | 83.7  | 98.9          | 92.2               |
| Italy                       | 134.6 | 154.8         | 146.5              |
| <b>Emerging economies</b>   | 54.7  | 64.3          | 69.8               |
| China                       | 57.1  | 68.9          | 80.1               |
| <b>Low income economies</b> | 44.2  | 50.2          | 47.3               |

Source: IMF Fiscal Monitor, Autumn 2021, Table 1.2

**Table 1** summarises the October 2021 IMF forecasts of the impact of the pandemic on gross public debt<sup>7</sup>. This shows that after a sharp rise between 2019 and 2021, public debt either stabilises or falls in most countries or regions. Advanced countries see a total rise in debt of 15% of GDP between 2019 and 2026. And, within this, US debt rises by 25% compared with 9% for the euro area. Chinese public debt rises by a similar amount to the US at 23%, but half of that comes after 2021 (reflecting longstanding vulnerabilities in the Chinese financial system which the state is likely to have to cover). Emerging economies see a similar rise in public debt to the advanced countries, while low-income countries see a very small rise at just 3% (reflecting the financial constraints they are under). It can be argued that net public debt (which deducts debt held by public institutions from the gross figure) is a more relevant indicator of the impact of the pandemic on economic power, but the changes are very similar for net debt as for gross debt.

The significant differences in the impact of the pandemic on public debt raise the question of whether this is likely to lead to long-term consequences for economic power, and in particular a relative loss of economic power for the US versus other countries. One way this could happen is if the rise in debt leads to **policy mistakes**, including an overly rapid

<sup>7</sup> IMF Fiscal Monitor, Oct 2021, Table 1.2. [Fiscal Monitor \(imf.org\)](https://www.imf.org)

withdrawal of fiscal stimulus and other support measures. In contrast to the situation after the global financial crisis, there is a strong international consensus among policy makers that support measures should be maintained as long as is needed to secure the recovery. However, this does not rule out such policy errors, particularly in view of the highly polarised domestic politics in the US and the uncertainties created by surging inflation.

Another possibility is that the sharp rise in public debt could trigger **concerns over debt sustainability**. This is especially so in a country where it seems likely that, over the long term, the growth rate less the interest rate will be exceeded by the primary deficit (total deficit less debt service costs).

The US is insulated from such concerns, despite the very large rise in public debt, as its debt is in its own currency and it is the primary reserve issuer. Individual members of the eurozone may be more vulnerable, given the nature of the monetary union where a member state effectively issues its domestic debt in a foreign currency. Italy, for example saw a 20% rise in public debt between 2019 and 2021 to reach 155% of GDP and the IMF projects that the primary deficit will still be 2.5% in 2026. However, the pandemic has led to an increase in EU solidarity through the creation of the Next Generation EU Fund, and this is likely to matter more for market confidence in the near term than the negative effect of the increase in debt. Similarly, as long as China's growth rate less local interest rates remains well above its primary deficit (projected at 3.5% in 2026) and it maintains capital controls and a substantial current account surplus it is unlikely to face a debt crisis. Advanced country debt sustainability will also be underpinned if a substantial part of the rise in debt reflects stimulus packages with the potential to raise long-term growth rates. By contrast low-income countries and emerging economies, reliant on foreign currency borrowing, are much more vulnerable particularly if there is a sharp tightening in US interest rates.

### **Impact on private financial assets**

Despite the unprecedented negative impact of covid public health measures on economic activity, private financial assets have in many cases been boosted over the period of the pandemic

**Table 2: Impact of Pandemic on Financial Markets**

| Equity Indices              | 06/12/2019 | 28/01/2022 | Change |
|-----------------------------|------------|------------|--------|
| S&P 500                     | 3146       | 4432       | 40.9%  |
| FTSE All Share Index        | 4023       | 4183       | 4.0%   |
| Euro Stoxx 50               | 3692       | 4137       | 12.0%  |
| Nikkei 225                  | 23354      | 26717      | 14.4%  |
| Shanghai SE Composite       | 2912       | 3361       | 15.4%  |
| MSCI Emerging Markets Index | 68.69      | 75         | 8.8%   |

**Table 2** shows the change in equity prices over the past two years. All markets took a very sharp hit at the outset of the pandemic (falling by more than 30% in the case of the S&P 500 between February 21<sup>st</sup> and March 20<sup>th</sup> 2020). However, over the period of the pandemic as a whole, and even after the turbulence at the start of 2022, most markets have experienced a substantial rise with the US market rising by 40% and the Chinese market by 15%. A major factor in this has been the highly accommodating stance of central banks and the extraordinary fiscal measures adopted by finance ministries. The latter both sustained overall demand and directly protected firms from the effects of the pandemic through extensive liquidity support, equity injections and furlough schemes for workers. However, the rise also reflects appreciation in the value of specific sectors which are expected to benefit from the long-term changes in the economy brought about by the pandemic (notably technology stocks and pharmaceuticals). Another supportive factor has been the sharp recovery in commodity prices as the recovery has taken hold.

This rise in equity values will have boosted collective investments, pension and insurance funds, all round the world. In addition, home owners globally have benefited from a sharp rise in house prices. According to one survey<sup>8</sup> residential house prices across 56 markets grew on average by 7.3% in the year to Q1 2021, the fastest rate since Q4 2006. This effect is also linked to very loose monetary policy, but may also reflect the increased demand for space to facilitate working from home.

There was also evidence in mid-2021 that the pandemic was leading to a sharp rise in household savings ratios in a number of countries with traditionally low savings, such as the UK and US. This clearly reflected forced saving due to public health restrictions on certain activities, and was also to some degree a counterpart of the dissaving by the public sector. But it may also have reflected a longer lasting re-evaluation of risks and the perception of a need for a financial reserve to deal with events like the pandemic in the future. However national accounts data for total saving as a share of GDP (i.e. including activities of firms and

<sup>8</sup> [global-house-price-index-q1-2021-8146.pdf \(knightfrank.com\)](https://www.knightfrank.com/global-house-price-index-q1-2021-8146.pdf)

government alongside individuals) shows almost no change in the overall savings behaviour of advanced economies between 2019 and 2021 (see **Table 3**).

**Table 3: Impact of Pandemic on Savings Behaviour**

Total savings as % of GDP

|           | 2019 | 2020 | 2021 (forecast/estimate) |
|-----------|------|------|--------------------------|
| US        | 19.4 | 19.2 | 19.1                     |
| UK        | 15.2 | 13.5 | 13.7                     |
| Euro Area | 25.8 | 24.6 | 25.6                     |
| Japan     | 29.3 | 28.8 | 29                       |
| China     | 43.7 | 45   | 44.6                     |
| India     | 29.8 | 30.2 | 28.7                     |

*Source IMF, Autumn WEO, National Accounts Data*

The rise in equity prices for certain sectors reflects underlying strengths of the economies where those industries are based (i.e. tech in the US and China, and pharma/healthcare in the US and Europe). But the long-term implications of the rise in private financial wealth linked to this is harder to judge. This is partly because a substantial part of the appreciation may yet be unwound when monetary and fiscal policy return to more normal settings (the volatility in equity markets in January 2022 illustrates the potential for this to happen). But also because open capital markets mean that the benefits of higher stock market valuations (and to a much smaller extent higher residential house prices) are widely accessible. Some 16% of the US equity market is owned by foreign investors.

A further way in which the boost in private financial wealth resulting from the pandemic could impact on a country's economic power is if it contributed to a long-term rise in inequality between those who had access to equity market wealth and those who didn't. This in turn could lead to reduced cohesion within society and therefore make it harder for governments to build the consensus necessary to address the future challenges of climate change, technology and aging. This is one of several ways in which the pandemic has had a short-term impact on inequality both within and between societies. But it is too soon to say as to whether it will make a lasting long-term contribution.

### Impact on human capital

In stark contrast to the impact private financial wealth, it is increasingly clear that the pandemic is likely to have a very large negative effect on human capital. There are three main aspects to this. First, is the **impact on the schooling** of young people resulting from school closures and other restrictions during lock downs. Second, is the the negative impact on **workforce skills** of layoffs (either within the framework of furlough schemes, or conventional unemployment) and pandemic-inspired shifts in the shape of the economy

(increased use of technology and a possible long-term reduction in travel, tourism and contact-intensive services). Third, is the long-term impact on the **health of the working population from long covid**, but also the deterioration in mental health (resulting from isolation during lock downs) and the rise in other serious health conditions (arising from the way covid has led to delays in treatment by heavily burdened public health systems).

**Table 4: Impact of Pandemic on Schools**

School closures during the pandemic up to 30 November 2021 (no of weeks)

|              | Full closures | Partial closures | Total |
|--------------|---------------|------------------|-------|
| US           | 0             | 71               | 71    |
| UK           | 16            | 11               | 27    |
| Japan        | 3             | 8                | 11    |
| France       | 7             | 5                | 12    |
| Germany      | 14            | 24               | 38    |
| China        | 9             | 18               | 27    |
| India        | 25            | 57               | 82    |
| South Africa | 15            | 45               | 60    |

Source: UNESCO

[Education: From disruption to recovery \(unesco.org\)](https://unesco.org)

**Table 4** shows the extent of full and partial **school closures** in selected countries. In addition it has been estimated that at the outset of the pandemic (on April 24, 2020) 85% of the world's school children were affected by full or partial school closures. The impact of a given closure may vary according to the alternative support that the children continued to receive from teachers (e.g. through widespread use of on line teaching in some countries) and parental support. But overall the effects are likely to have been negative, not just in terms of the acquisition of knowledge and skills, but also increased risk of dropping out and involvement in crime. It is also likely that the closures will have had disproportionately bad effects on low income and other marginalised groups.

The implications for economic power over the long-term could be considerable as loss of human capital in young people will directly effect future productivity in the economy and long-term social costs. But whether these costs are actually realised will depend on (a) the extent to which countries put effective remedial measures in place by prioritising funding and undertaking the necessary organisation reforms; and (b) the extent to which educational systems capture the positive aspects of the pandemic experience – for example, much greater use of IT for communicating with students, marking home-work etc, and enhancements in assessment systems, particularly in circumstances where traditional exams were not possible. Overall, the best guess is that countries with already strong systems

(such as China, Estonia, Canada, and Finland – which held the top 4 positions in the 2018 OECD PISA survey) will become stronger still, though there is also the possibility that some systems will leapfrog over others as they seek to respond to the pandemic crisis. Notably, a key feature of the proposed Biden stimulus package is federal funding for free child care, while the EU Next Gen package has a strong focus on acquisition of skills to take advantage of the technological transformation of the economy.

According to the ILO, at the worst point in the pandemic in Q2 2020, hours worked world wide were 19% below the level of Q1 2019, equivalent to a loss of 543mn full time jobs worldwide. And at the end of 2021, total hours worked were still expected to be 3% below the pre-pandemic level.

**Table 5: Impact of Pandemic on Working Hours**

Working hours lost due to covid

| % of total working hours | 2020 | 2021 |
|--------------------------|------|------|
| US                       | 9.6  | 5    |
| China                    | 4.1  | -0.4 |
| UK                       | 11   | 5    |
| EU                       | 7.4  | 2.7  |
| Japan                    | 5.1  | 5.3  |
| India                    | 14.5 | 7.2  |
| Low income               | 6.7  | 4.9  |

Source: ILO

**Table 5** shows how the **loss of working hours** varies between countries. China's zero tolerance approach to the pandemic has led to far fewer hours lost than in either the US or Europe, but Europe does significantly better than the US. As with the human capital lost through school closures, the long term effects on economic power will depend in the remedial actions taken by firms and governments, but particularly the latter. One possible short-term consequence of how the US managed the labour consequences of the pandemic can be seen in the current situation, where the US stands out among advanced countries in facing substantial labour shortages as workers are proving reluctant to return to low skills jobs.

**Table 6: Estimated long-term impact of pandemic on health systems**

|         | Total pop<br>(mn) | Infections<br>up to<br>12/12/22<br>(mn) | Estimated<br>share of<br>pop<br>with long<br>covid<br>12/12/22 | Deaths<br>up to<br>29/1/22<br>(mn) | Deaths<br>per 1 mn<br>people<br>29/1/22 |
|---------|-------------------|---|--|------------------------------------|---|
| India   | 1397.4            | 36.7                                    | 1.3%   | 0.49                               | 3.5                                     |
| China   | 1428.4            | 0.1                                     | 0.0%   | 0.01                               | 0.0                                     |
| US      | 333.8             | 49.2                                    | 7.4%   | 0.87                               | 26.1                                    |
| Japan   | 126.1             | 1.7                                     | 0.7%   | 0.02                               | 1.5                                     |
| Europe  | NA                | 90.9                                    | NA   | 1.76                               | NA                                      |
| UK      | 67.7              | 10.7                                    | 7.9%   | 0.16                               | 22.9                                    |
| France  | 66.0              | 6.4                                     | 4.9%   | 0.13                               | 19.3                                    |
| Germany | 82.6              | 7.9                                     | 4.8%   | 0.12                               | 14.2                                    |

Source: WHO, UN

**Table 6** shows the **figures for the cumulative numbers of infections** reported to the WHO up to 12 December (when Omicron began to take off) together with an estimate of the share of the population who may as a result experience **long covid** (using the simplifying assumption that most people up to that point had only been infected once and the finding that more than half of those infected experienced long covid symptoms more than six months after they were infected – the picture is less clear for those infected with Omicron). This is a very rough estimate, but it suggests there could be a significant differences across countries, with the US and UK experiencing significantly worse long-term consequences than western Europe, while China has none. This in turn would result in significantly higher health expenditure, crowding out other uses of public funds as well as reduced productivity on the assumption that those with long covid will be less able to work effectively. **Table 6** also shows the latest figures on the number of covid-related deaths for every 1mn people. This may provide a very rough indication of the relative impact on health systems (since cases of covid which result in death are likely to require the highest amount of health system resources) in terms of displacement of other health care needs. This again suggests that the UK and US are likely to have seen the largest displacement<sup>9</sup>.

<sup>9</sup> This is supported by data showing that over 6mn people are currently on treatment waiting lists in the UK public health system.

**Table 7: Stringency of lock downs**

|               | Health and Containment Index<br>Average (1/1/20 to 26/1/22) |
|---------------|---|
| China         | 70.5  |
| France        | 60.4  |
| Germany       | 61.2  |
| India         | 65.5  |
| Japan         | 44.0  |
| South Africa  | 59.0  |
| South Korea   | 56.8  |
| UK            | 56.7  |
| United States | 58.1  |

Source: Oxford Covid-19 Government Response Tracker, produced by Blavatnik School of Government, Oxford University

On the other hand, **Table 7** shows the average level of stringency (as measured by the “index of health and containment measures” produced by the Blavatnik School of Government) in selected countries over the two years to January 2022. This should be a proxy for the possible long-term impact on mental and other health from covid restrictions. As expected, this shows that China’s level of restriction has been substantially higher than in either the US or the UK and so there may have been significantly more consequences for long-term health in China. Japan is notable for its relatively low average index, complementing its relatively good performance on other metrics in Tables 4-6. Taken together, this data suggests a strong performance by Japan in preserving human capital in the face of the pandemic.

### Impact on “business” capital

The extensive support provided to companies and their employees by governments in advanced countries has limited the damage from covid restrictions to existing firms and hence the loss of “business” capital (i.e. the value inherent in the organisation of established firms). **Small firm bankruptcies** in the US, EU and Japan have, for most of the pandemic, actually been at a lower level than before the pandemic<sup>10</sup>. This has led to concerns that the measures may have prolonged the life of some non-viable firms, contributing to a misallocation of resources. This was probably an unavoidable consequence of providing essential support quickly to viable firms. But it is important that the remaining business support measures are effectively targeted and withdrawn as soon as they can no longer be justified.<sup>11</sup>

<sup>10</sup> Table 1.11 in IMF Autumn Global Financial Stability Report.

<sup>11</sup> Omicron may complicate the picture if there is a prolonged period over which contact-intensive businesses face a sharp drop in demand due to customer caution, but governments resist imposing restrictions and providing related business financial support measures.



Another route through which the pandemic could have a long-term effect on business capital is if concerns over security of supply lead governments or businesses to reassess the acceptability of **very long supply chains**. This issue came to a head in the early days of the pandemic after some countries introduced restrictions on the export of personal protective equipment (PPE), vaccines and other medical products. A general move to shorten supply chains could exclude some firms that have relied on supplying products in this way, while firms that sourced products from long supply chains would face the costs of re-engineering their supply systems. This, in turn could have significant implications for the economic power of countries where companies are headquartered or which host production facilities.

In a 2020 report<sup>12</sup>, the McKinsey Global Institute noted that the pandemic “had not reshaped the world’s production networks in dramatic ways thus far”, but estimated that production of some 16 to 26 percent of global trade, worth \$2.9 trillion to \$4.6 trillion, could move across borders in the medium term as a result of either industry economics or government intervention linked to general (not just pandemic related) concerns over reliance and security of supply. Pharmaceuticals, apparel and communications equipment had the greatest potential to move.

But it is now increasingly understood that strengthening resilience is **much more complex** than simply bringing production on shore, as overseas supply can provide an essential shock absorber to deal with events like the pandemic, facilitating diversification and giving access to less vulnerable locations.<sup>13 14</sup> In addition, there is growing evidence that, far from failing to rise to the challenge, privately run global supply chains have **done remarkably well** in responding to the pandemic-linked surge in demand for durable consumer goods (such as cars) and intermediate goods (such as microchips)<sup>15</sup>. And it is also clear that existing supply chains may be very costly to change in circumstances where they involve thousands of suppliers for a single multinational underpinned by billions of dollars in location-specific investment and numerous long-term relationships.

Against this background, the most recent data on FDI flows<sup>16</sup> suggests that the pandemic has at the very least led to a pause in the development of many global supply chains. Total FDI fell 35% in 2020 to \$1tn compared with \$1.5tn in 2019, while Global Value Chain (GVC) chain intensive greenfield projects in developing and transition economies countries fell by 42% over the same period. By contrast, FDI flows to China actually increased by 6% in 2020 over 2019.

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<sup>12</sup> “Risk, resilience and re-balancing in global value chains” McKinsey Global Institute, August 2020. [Risk, resilience, and rebalancing in global value chains | McKinsey](#)

<sup>13</sup> See “Trade Policy and Medical Supplies” by Simon Evenett, [Trade policy and medical supplies during COVID-19 | Chatham House – International Affairs Think Tank](#)

<sup>14</sup> See also World Trade report 2021 [https://www.wto.org/english/news\\_e/news21\\_e/wtr\\_16nov21\\_e.htm](https://www.wto.org/english/news_e/news21_e/wtr_16nov21_e.htm)

<sup>15</sup> See “Global markets are delivering the goods” Martin Sandbu, Financial Times, 15 December 2021.

<sup>16</sup> [World Investment Report 2021: INVESTING IN SUSTAINABLE RECOVERY \(unctad.org\)](#)

The pandemic has without doubt made the resilience of global supply chains a high priority issue for firms and policy makers. But the implications for relative economic power are uncertain. China, for example, may see an accelerated shift of labour intensive (and hence pandemic sensitive) apparel production to other countries. But this is unlikely to have significant consequences for its economic power. Similarly, pharmaceutical production may be diversified from its existing focus on US, Europe, China and India. But if the IP continues to be developed and controlled in a small number of countries, the implications for economic power may yet again be limited.

### Impact on long-term national capabilities

We turn now to the **second main channel** through which the pandemic is likely to impact on the balance of economic power, namely the way it may affect the long-term capabilities of different countries.

One of the most important aspects of this is likely to be the enormous boost it has given to the development and diffusion of information and communication technologies, particularly in the private sector.

### Development and diffusion of technology

The pandemic has had two main effects on technology. First it has led to the **accelerated diffusion of existing technologies**, such as video for on-line meetings, cashless payment, and delivery of on-line retail services (from estate agency through food delivery and virtual car show rooms) throughout the economy, and including to small and medium enterprises, which might previously have been slower to invest in IT. Second, it has **boosted the development of some new technologies**, either ensuring they develop faster than might otherwise have been the case, or opening up entirely new fields. On-line video services have become much more sophisticated and robust, while Covid has led to the rapid development of mRNA vaccines, anti-viral treatments and new testing technologies. In several cases, government support has been critical in facilitating the development of new technologies.

It seems likely that most technology shifts initiated or accelerated by the pandemic **will remain in place**, and this should deliver at a minimum a one-off boost to productivity<sup>17</sup>. It is also possible that the pandemic will have a sustained positive effect on the future speed of technology development and diffusion in some societies. This could follow from businesses putting more focus on R&D dependent activities, but also from more favourable public

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<sup>17</sup> The disruption caused to labour markets means that it may be some time before we can determine empirically whether this has in fact occurred.

attitudes towards new ways of doing things and even greater government support for science and technology basic research and infrastructure<sup>18 19</sup>

New technologies developed by the private sector under the impetus of the pandemic have the potential to be quickly diffused around the world as a result of the extensive sharing of knowledge that accompanied the development of international production networks in the 1990s<sup>20</sup>. They are therefore unlikely, on their own, to contribute to changes in in the relative economic power of particular countries. But, while new ways of doing things may be available, there is no guarantee that they will actually be adopted in a every national context.

Take up of new technologies depends on long-recognised factors such as the availability of finance, the extent of domestic competition, the quality of regulation and the political and social acceptability of new approaches. In the current circumstances it also depends on factors specific to Covid-19, such as whether governments consciously encourage or discourage working from home and make tax and other changes necessary to sustain it. Countries which have a strong and supportive innovation ecosystem in place - including potentially some low- or middle-income countries - will find their economic power strengthened relative to those that do not.

### Government effectiveness

Across the world, the pandemic has put **enormous strain** on political decision makers and expert advisers, central and local government and public services for health, teaching, transport and police. There has been a highly varied range of experiences (both positive and negative) and their combined legacy - and the way it varies between countries - is likely to be one of the most important ways in which the pandemic will influence relative economic power over the long term.

Of course, the **global financial crisis** also resulted in wide ranging changes to those parts of government focussed on financial regulation and maintaining financial stability, with some of the most radical changes implemented in the US, UK and EU, where the crisis had the severest impact.

But the implications of the pandemic are **potentially on a much bigger scale** because the pandemic has impacted on a far wider range of government functions and there has been a willingness to spend public funds on a vast scale. Resistance to change from public service trade unions has so far tended to be weaker given the emergency situation. On the other hand, the risk of moving too quickly remains, particularly when there is so much “noise”

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<sup>18</sup> See OECD “Science, Technology and Innovation Outlook 2021”

<sup>19</sup> The IMF has estimated that a 10 percent increase in domestic (foreign) basic research raises productivity by about 0.3 (0.6) percent, on average. International knowledge spillovers are more important for innovation in emerging market and developing economies than in advanced economies. IMF WEO, Ch3, Oct 2021.

<sup>20</sup> Richard Baldwin “The Great Convergence” p6.

around the actual effects of the pandemic and the potential long-term benefits of specific reforms.

A number of the “build back better” initiatives announced over the past year include reforms designed to boost government effectiveness over the long term. These packages were necessarily put together quickly and it could be some time before the success or failure of specific policies are clear – some have already had to be reversed. Further reform packages are also likely as the “lesson learning” following the pandemic gets underway. The likely long-term impacts of the pandemic on government effectiveness can be categorised under four headings:

*Changes to the future “vision” of how government should work*

These may include a change in view as to where the **appropriate boundary between public and private provision** lies. Some governments experimented with new kinds of public-private partnership in order to deliver new services very quickly. Some of these have been relatively successful (e.g. partnerships in the US and UK designed to accelerate innovative vaccine development and roll out). But others, much less so. The UK government’s extensive use of private contractors to expand the test and trace system proved very costly and initially created a system which was relatively ineffective<sup>21</sup>. There has also been debate, stimulated by the exceptional macroeconomic measures adopted very early on in the crisis, as to whether the **strong separation of key functions** (such as responsibility for fiscal and monetary policy) needs to be reformed. In practice, coordination in the immediate crisis proved effective, but a further test is likely as central banks and fiscal authorities respond to inflationary pressures. Similarly, the pandemic has highlighted **weaknesses in the resilience** of public services, particularly in countries where long-term reform focussed on efficiency and eliminating overlaps/redundancy has reduced the extent of spare capacity to deal with crises. Some governments may also consider a fundamental shift in priorities **towards greater health spending** with consequent reform of the funding model, recognising, following the experience of the pandemic, that health is likely to grow indefinitely as a share of national output. And there has also been a debate in democracies on how to get the balance right between protection of **civil liberties and human rights** on the one hand, and the need to make extensive use of personal health data and take other measures to protect the wider public good. It can be argued that significantly stronger legal protections and oversight of individual rights will be a necessary condition to allow the pandemic experience of using big data - e.g. for monitoring compliance with covid testing and tracing requirements - to be fully utilised for other purposes.

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<sup>21</sup> [COVID-19: Test, track and trace \(part 1\) - Public Accounts Committee - House of Commons \(parliament.uk\)](https://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/inquiries/parliament-2019/covid-19-test-track-and-trace-part-1)

### *New attitudes to resourcing public services*

It is also possible that the pandemic will lead - in at least some countries - to a change of view on the level of resourcing in public services. Possible examples include: recognition of the need for better resourced local government (UK); greater across the board investment in IT (Germany); a better resourced system for controlling corruption risks, particularly when large amount of money have to be spent very quickly, as was the case with Covid, but which may also prove to be the case in the response to climate change<sup>22</sup>. On the other hand, the need to address the rise in public debt may lead some countries to put such reforms on the back burner indefinitely.

### *New ways of working*

There are numerous examples of covid-linked new ways of working in the public sector which could lead to long-term efficiencies or improvements in services if maintained. These include moves early on in the crisis to break down organisational silos in the UK NHS together with widespread adoption of remote medical appointments. And while remote teaching in schools is clearly a second best compared with in person class room teaching for the vast majority of students, other innovations linked to great use of IT by students and changes in assessment methods (due to the need to cancel in person exams) may have lasting positive effects. In response to the exceptional macroeconomic conditions, several emerging economies resorted to the use of QE to maintain economic activity – a tool which until then had been confined to advanced economies with very strong anti-inflation credibility.

### *Constitutional and institutional reform*

The changes described above are most likely to have a lasting effect - for good or bad - on economic power if enshrined in institutional, legislative, or even constitutional reforms. Some significant **institutional changes** have already emerged - such as the creation of a new Health Security Agency in the UK<sup>23</sup> with a dedicated focus on protecting the public from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats.

But the pandemic may yet also trigger **deeper constitutional changes**. One possibility is reforms designed to deliver a more appropriate division of responsibilities between federal and state governments. On the one hand, the pandemic has shown the benefits of local knowledge and flexibility in dealing with a major public health crisis. But many countries (such as the UK and US) have also grappled with substantial and damaging inconsistencies between federal and sub-federal policies, or between policies in different sub-federal units.

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<sup>22</sup> Theodore Agnew, A UK Treasury Minister, recently resigned in protest at the UK government's lacklustre response to corruption in covid support measures, following a decision to write off £4.3 bn in fraudulent covid loans.

<sup>23</sup> [UK Health Security Agency - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

These have reduced the effectiveness of the overall public health effort due to confused messages to the public and policies in one region undermining those in another. Reforms focused on tackling these problems in the public health space may potentially have wider benefits for national economies.

While such reforms may take several years to be agreed and even longer to be implemented, there are already two examples in the EU where the pandemic has led to a significant shift in responsibilities. First is the 2020 decision to establish the euro 750bn “Next Gen EU Fund” to be funded collectively by EU member states and administered by the European Commission. While the purpose of this fund has been tightly linked to the special circumstances created by the pandemic, it nonetheless represents a significant precedent, which may open the way to similar responses to future crisis. Secondly, the EU also decided to pursue a common approach to purchasing covid-19 vaccines, and while this led to initial frustration when the EU seemed to be falling behind other countries in securing supplies, it has subsequently turned out to be an effective mechanism. By the end of July 2021, the EU had met its target of providing 70% of adults in the EU with at least one vaccine dose.<sup>24</sup>

Other possible reforms, reflecting concerns over adverse political influence in key pandemic decisions, may put more public-health related decisions in the hands of independent technical authorities working to a given mandate (paralleling the move to independent central banks since the 1990s). This could be particularly important at the global level, with a strengthening of the WHO, but potentially going well beyond that to include mechanisms to ensure sustained funding of pandemic prevention, preparedness and response, or new instruments to maximise the benefits of the global trading system as a shock absorber by minimising the risk that future pandemics will lead to global trade restrictions.

### *Implications*

Improvements in government effectiveness in a given country should raise total factor productivity growth. If sustained, this should boost that country’s absolute economic power. Relative economic power will also be boosted vis-à-vis those countries that do not undergo similar changes.

Countries with the **most painful experience** from Covid-19 may - somewhat counter-intuitively - become the best prepared for future outbreaks of a similar infectious disease (this was the experience with East Asian countries that were better prepared for Covid-19 because of their experience with SARS and MERS<sup>25</sup>). But a strong **international initiative** on pandemic prevention, preparedness and response will increase the chances that countries will learn from each other (rather than having to repeat each other’s mistakes).

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<sup>24</sup>[Statement by President von der Leyen on a new milestone in the EU Vaccines Strategy.pdf](#)

<sup>25</sup> Middle East Respiratory Syndrome.

Countries with **strong governance arrangements**, including high levels of transparency and independent audit of government actions, are more likely to learn the right lessons from the pandemic and avoid knee jerk reactions. One can already see differences in the extent to which governments have been ready to learn lessons as the pandemic has progressed. In the UK the government has resisted pressure for an early public inquiry and has said it will not begin until spring 2022, although a number of parliamentary committees have already produced critical reports on aspects of the government's performance.

In addition to the above, richer and **better-resourced** countries, those that had **already begun reforms** before the pandemic struck or have **public sector unions** more amenable to reform, and those with a **recent change of government** (and hence less "baggage" from past decisions) and/or the opportunity to participate in **international initiatives**, are likely to go furthest in adopting reforms indicated as desirable by the crisis experience.

### Individual behaviours

The pandemic is leading to fundamental changes in the **preferences and behaviour of individual citizens**. Such changes are likely to affect all aspects of social and economic life. And, as with the impact of the pandemic on government effectiveness, are likely to be one of the most powerful forces influencing absolute and relative economic power over the long term. The changes to individual behaviour can be categorised under three headings: the impact on citizens as (a) consumers, (b) producers and (c) voters.

#### Consumers

The pandemic may lead to a **long-term shift in attitudes to unhealthy lifestyles**, given the higher risk from covid for those with pre-existing conditions, such as obesity. Individuals may change their behaviour autonomously (reducing meat consumption, taking more exercise), or they may respond to government incentives (through sugar taxes etc) in part motivated by government determination to protect future spending in tax-funded public health systems, which might otherwise be absorbed treating patients with covid.

A further driver of change is the likely shift **towards much greater working from home**. Estimates for advanced countries suggest that a maximum of around 40% of jobs could be carried out from home<sup>26</sup>. This has tended to reduce demand in such diverse areas as commuter transport, casual dining and work clothes. But has also increased demand for DIY products and services and amenities close to where people live. Some of these demand changes will be neutral for economic performance (depending on the scale and of adjustment costs). But there is also scope for the shift to lead to substantial improvements in resource efficiency, productivity and environmental protection. However, whether these are fully realised will depend on how far company leaderships and governments prove willing to accept the related economic adjustments (e.g. by allowing the use of space in metro city centres to change) and possibly force the pace of change through government

<sup>26</sup> <http://www.csls.ca/ipm/39/Blit-Skuterud-Veall.pdf> and <https://www.nber.org/papers/w26948>

regulation. The high level of uncertainty over exactly what the future balance will look like may leave many governments to adopt a *laissez faire* approach, but this could lead to significant opportunities for positive change being lost.

The growth in **consumer demand for on-line services** (such as banking and financial services) and retailing has been accelerated by the pandemic, as has government desire (and capability) to provide services to citizens on line.

A major change is also possible - though less certain - in consumer tastes regarding **long-distance travel**. Virtual meetings may be substituted for **business travel** even after covid related travel restrictions are lifted, and particularly in circumstances where companies are under pressure to reduce their green-house gas emissions. Environmental concerns may also reduce **demand for leisure** travel, as could any longer-term travel restrictions linked to the pandemic. Additional testing, information gathering and the risk of sudden imposition of much tighter travel restrictions could all become permanent features of long-distance leisure travel. However, the way the travel industry and consumers have responded to rising international terrorism threats, and related measures, over the past half century suggests that the long-term impact on demand could be limited.

### *Producers*

There is evidence in the US of the pandemic leading to a **reduction in labour market participation**. This could be explained by temporary factors, such as concerns over the health risks of certain jobs, uncertainty over the long-term prospects of contact-intensive economic sectors, or the impact of continuing labour market support measures where they are still in place. But it may also mark a longer-term trend with implications for economic performance and relative economic power. For example, if low skill workers are much less willing to accept a situation in which they have to take several jobs simultaneously, with low pay and benefits, this could lead to a significant shift in the distribution of returns on economic activity towards labour. This could in turn be re-enforced by geopolitical developments which increase the costs and uncertainties of sourcing products via international trade. So far, this shift seems to have been confined to the US among advanced countries, which may reflect the stronger social safety nets in Europe.

### *Voters*

The pandemic has in general **raised voter awareness** of the major health and environmental risks the world faces. This may enable some countries more easily to build a consensus around difficult, long-term decisions, on such issues as climate change.

But the handling of the pandemic has also become **intensely political**, which could have the opposite effect, and reflects the decisions policy makers have been required to make balancing the interests of one group against those of another, or one key principle of public life (such as respect for individual freedoms) against another (the duty to support the collective good and take responsibility for the costs one's actions may impose on others).



The pandemic has both **intensified political divisions** that already existed in society and **created new divisions** that did not previously exist, e.g. between those that are more than happy to be vaccinated and those that are hesitant, and as a result may impose substantial health-related costs, not just on themselves, but on society as a whole through public health systems.

Greater divisions in society will typically undermine economic power as it makes it harder to build consensus on difficult, but necessary policies.

### Scenario Analysis

There are **two key factors** which are likely to have a major effect on the way the pandemic affects the balance of economic power between countries over the longer term.

First, is **how long the threat from the virus lasts**. Omicron illustrates the scope for the threat both to exceed previous expectations and to change in nature. The new variant is much more infectious than the previous dominant strain (Delta), is more capable of evading the anti-bodies created by previous infection or vaccination, and is less amenable to some anti-viral treatments. But it may also be as much as 50% less dangerous for anyone who is infected and some experts have argued that it could mark a more benign evolution in the virus's mutations to the point where it can be treated like other viruses circulating widely in the human population.

The longer the threat from the virus lasts, the stronger, overall, will be the position of countries with large financial resources, high innovation capacity, strong systems of governance, and a high degree of social cohesion. Positive attitudes towards vaccination and a willingness to accept expert scientific advice are likely to prove even more crucial than they have hitherto, while countries which are flexible and able to learn quickly from their mistakes are also likely to come off better.

**Table 8: Factors Likely to Influence a Country's Ability to Cope Successfully with an Extended Pandemic**

|             | Inverted TI<br>Corruption<br>score (1) | Vaccination<br>rate (2) | Innovation<br>capacity (3) | Social<br>conflict (4) |
|-------------|--|-------------------------|----------------------------|------------------------|
| India       | 60                                     | 50                      | 36.4                       | NA                     |
| China       | 55                                     | 83                      | 54.8                       | NA                     |
| US          | 33                                     | 62                      | 61.3                       | 90                     |
| Japan       | 27                                     | 79                      | 54.5                       | 39                     |
| UK          | 22                                     | 71                      | 59.8                       | 52                     |
| France      | 29                                     | 76                      | 55.0                       | 65                     |
| Germany     | 20                                     | 73                      | 57.3                       | 56                     |
| Brazil      | 62                                     | 69                      | 34.2                       | NA                     |
| Singapore   | 15                                     | 81                      | 57.8                       | 33                     |
| Denmark     | 12                                     | 81                      | 57.3                       | NA                     |
| Switzerland | 16                                     | 66                      | 65.5                       | NA                     |
| South Korea | 38                                     | 85                      | 59.3                       | 90                     |

1. Transparency International Corruption Perceptions Index 2021.

This shows 100-index. Thus a high score means a high level of perceived corruption.

2. Percentage of population fully vaccinated, as of 28.1.22, WHO Dashboard.

3. Global Innovation Index 2021. A high index means high innovative capacity.

4. Percentage of people who say there are very strong conflicts between people who support different political parties. Pew Research Centre, Spring 2021 Global Attitudes Survey.

**Table 8** seeks to capture some of these considerations for a range of countries using a number of indices. Singapore performs strongly across the board, as does Japan, and to a large extent Germany. Despite its strong position on innovation, the US appears less well prepared than the leading EU countries for an extended pandemic due to a relatively low vaccination rate for an advanced country (reflecting vaccine hesitancy), a high degree of social polarisation and relatively weak governance. China does well on attitudes to vaccination and innovation capacity, but is undermined by weak governance.

The impact of an extended pandemic on individual countries' economic power will also depend on the precise reasons for the extension (most likely new variants that bypass the protection we have from current vaccines) and the policies adopted in response. For example, if foreign travel remains heavily restricted, this will have a disproportionate effect on those countries that rely on travel hubs and international tourism.

A second key influence will be the **strength of the collective international response** to the challenges posed by the pandemic. To date this has been much more limited than one would have expected given the nature of the crisis - a global pandemic. In line with the "America First" stance of the Trump Administration, the initial economic policy responses by

advanced country central banks and finance ministries were almost entirely determined at national level (and without explicit ex ante coordination) while the International Financial Institutions operated very largely within their existing resource envelopes. In the first year of the crisis, the only significant area of economic policy coordination was on the G20 Debt Service Suspension Initiative (DSSI) agreed in April 2020 which provided cash flow relief to vulnerable low-income countries.

With the accession of the Biden Administration in January 2020, international economic cooperation has picked up, notably with agreement on a US\$650 allocation of Special Drawing Rights (SDRs) by the IMF to boost global liquidity. But even now, the level of cooperation is falling well short of what is needed. The DSSI has now ended and its successor mechanism, the “Common Framework for Debt Treatments after the DSSI” which is intended to provide long-term relief to countries in debt distress is moving very slowly, in part due to disputes over implementation between China and the West. At the same time the Access to Covid Tools (ACT) - Accelerator partnership, launched by WHO and partners, in April 2020 to deploy tests, treatments and vaccines in response to covid closed its 20-21 budget with a funding shortfall of US\$14.3bn<sup>27</sup>.

If this pattern continues it will mean two things. First, that the global threat from the pandemic will continue longer than would otherwise be the case, making all countries worse off. And second that the divergence between countries that are relatively well equipped to deal with the pandemic and those that are not will become substantially larger.

At present, the prospect of increased commitment to finding cooperative international solutions looks limited, particularly given the prospect that President Biden could become even more constrained by Congress after the autumn mid-term elections in the United States. However, this could yet change unpredictably, perhaps as a result of a political shift away from populism in a number of members of the G20 and/or a sudden increase in the perceived threat from the virus. In the event this does happen, it will not only favour poorer countries that are dependent on international assistance, but also those countries, such as the EU and Singapore, that find it relatively straight forward to operate within strong international frameworks.

## Summary and conclusions

The paper has provided an **analytical framework** within which to think about the likely impact of the pandemic on the balance of economic power internationally. It has emphasised the enormous remaining uncertainty, both about the way the pandemic will evolve from here on and also over how key actors will respond to different future scenarios. Notwithstanding this key caveat, it has also sought to give some initial indications as to how specific countries or types of countries are likely to fare over the medium to long-term.

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<sup>27</sup> The funding gap for 2021-22 is currently \$23.2bn.

The paper has described the enormous one off financial and non-financial costs resulting directly from the pandemic and from the measures taken to combat it. These are spread very differently across countries, reflecting both their initial attributes (e.g. whether they had the capacity to undertake financial support for their economies on a massive scale), but also their policy choices (“living with covid” vs “no covid”). However, it argues that, if the right policy measures are adopted (including prioritising remedial measures for losses in human capital), these disparate effects need not have a lasting effect on the balance of economic power. Moreover, there is plenty of technical advice on what to do<sup>28</sup>.

On the other hand, the paper also identifies, two areas where the pandemic is likely to affect the long-term characteristics and capabilities of individual countries - government effectiveness and the individual behaviour of citizens - and makes the case that these effects could have lasting consequences for the balance of economic power. Corporate behaviour is also likely to change substantially, but this is less likely to affect the position of one country relative to another

While there has been considerable variance in performance up to this point, the earlier analysis suggests it will be countries with a high degree of social consensus, strong governance, high quality public services, a positive attitude towards scientific expertise and advice, and high innovative capacity that are likely to fare best, and that the longer the pandemic lasts the better they will do.

This group includes a number of members of the European Union (particularly its Scandinavian members, but also Germany and possibly France) and developed East and South East Asian economies (Japan, Korea, Taiwan and Singapore). Within the EU an important question will be whether the more successful countries will influence the weaker ones to perform better, either through example, or through EU level coordination mechanisms, such as the Next Generation EU Fund.

The UK could yet also be part of this high performing group, though this will depend critically on whether appropriate policies are adopted to deal with the very high one off non-financial costs incurred during the pandemic, to learn the lessons from mistakes (and successes) made in handling the pandemic to date and to capture the benefits of the technological transformation it has brought about<sup>29</sup>.

The US’s very strong innovative capacity will clearly be an asset in responding to the continuing effects of the pandemic, but its overall performance looks likely to be undermined by political divisions and distrust of science within large segments of the population. President Biden’s inability to date to pass a comprehensive stimulus package with spending focused on urgent social needs illustrates the problem. China also has a

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<sup>28</sup> For example, the IMF has produced a tool kit on how to avoid reducing spending too rapidly.

<sup>29</sup> Recent decisions to prioritise the return to normality over maintaining relatively light public health precautions, to require civil servants to return to their offices (regardless of need), and the apparent handling of losses through fraud on covid support loans, to not bode well in this respect.

number of technical and administrative strengths, but has a very difficult transition to manage out of its current “no covid” policy, and the effectiveness of its broader response may be undermined by a lack of transparency and low public participation in key decisions.

The way some countries responded to the global financial crisis provides a useful guide as to **how best to manage the aftermath of the pandemic and maximise the chances of a high performing outcome.**

Ireland and Iceland, two small countries which were among the most severely affected by the financial crisis, underwent open and far-reaching examinations across society of what went wrong and followed through with deep seated reforms. In both cases their subsequent economic performance has been very strong.

In the case of the pandemic, such inquiries will play a major role in ensuring that countries emerge from the pandemic with their economic power intact, or, more likely, enhanced. These examinations should once again be exercises of high national significance, looking not only at the handling of the pandemic, but also at the pandemic’s implications for the future shape of the economy and society. They should include an assessment of what societies will need to do to make themselves sufficiently resilient to future pandemic threats, but also of what the pandemic will mean for diverse but fundamental issues, such as the overall role of health spending in GDP and how this should be funded, interconnectivity between urban centres and other areas (in the context of far more extensive home working), and the future role of air travel.