

AFTER THE PANDEMIC: THE MEDIUM AND LONG-TERM IMPACT OF COVID-19 ON THE GLOBAL ECONOMY

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Executive summary

The COVID-19 pandemic has brought huge social and economic uncertainty to the global economy. In the short-term, the world economy is in the process of contracting on a scale far greater than witnessed during the 2008/9 Global Financial Crisis. Indeed, some countries are likely to experience economic reversals matching those witnessed during the Great Depression in the 1930s.

While there is an emerging consensus amongst forecasters that economic activity will thereafter bounce back strongly, there is also broad acceptance that the level of economic activity will be permanently lower than it would have been in the absence of COVID-19. The extent of this ‘scarring’ is difficult to estimate, as most countries are still in the first phase of their fight against the pandemic. Lockdown measures are curtailing economic activity, driving up unemployment, and depressing international trade. The longer they continue, the greater the negative economic impact will be.

In the long-term, a return to the pre-COVID economic trajectory seems unlikely, even if recoveries prove to be U- or V-shaped. According to the International Monetary Fund, the cumulative global output loss by the end of 2021 could be equivalent in scale to the Japanese and German economies added together. Some nations – mostly in the emerging world – face a particular struggle to recover.

Central banks and governments have already committed trillions of dollars to keep households and businesses afloat, and prevent financial markets from seizing up. This bridge-building will be more effective within nations than across nations. Even when countries lift their internal lockdown measures and re-open their economies, a state of “external lockdown” will likely remain in place. Nations will simply not be able to re-engage with a prosperous and dynamic world economy. Whatever policymakers achieve domestically, they cannot fully offset the impact on a country’s exports (and, hence, its overall GDP) of collapsing demand elsewhere. We may see more ‘social distancing’ between countries as they emerge from lockdown at different times. This will likely mean that relationships between countries – which were already changing – are fundamentally reshaped.

Such developments could fuel a further ramping up of the anti-globalisation narrative that had become prevalent before the pandemic began. There was already significant disagreement over whether the existing rules and institutions that govern international trade and commerce are fit-for-purpose. The threat to the old “rules-based” system will intensify as global economic co-operation dwindles. This will make even more important those initiatives underway to promote trade liberalisation, especially in Asia. The countries involved and the new blocs created could have an opportunity to largely define their own rules and standards.

The cost of bridge-building will be most visible in the form of much higher levels of government debt, akin to increases more typically seen during wartime. At this stage, the consequences of these hefty debt increases are unclear. The better the bridge, the bigger the economic rebound and the more digestible the debt becomes. Wartime experience suggests, however, that significant scarring could lead to either higher inflation, more austerity or, for countries in desperate financial circumstances, capital controls or default.

Technology could potentially have a significant impact. Just as the post-war technology boom boosted US economic recovery in the 1950s, the war against COVID-19 will also lead

to significant technological changes that, in time, will trigger major shifts in how societies operate. Not all of these shifts, however, may be positive for all.

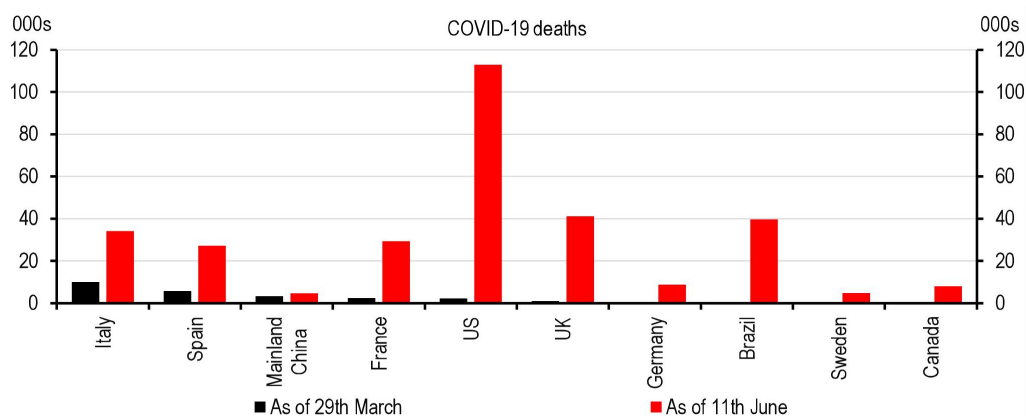
One obvious change is the likely proliferation of home working, an outcome that may significantly reduce time spent on travelling to places of work. In turn, this might lead to a reduction in office space and an increased supply of property for residential purposes. A second related change is a likely proliferation of ‘virtual’ meetings and ‘virtual’ conferences: audio-visual quality will doubtless improve at a rapid rate in coming quarters and, as it does so, the need for physical meetings will decline. This will both reduce costs for companies and limit the business risk associated with heightened restrictions on the cross-border movement of people. It will also reduce the amount of air travel needed. In all of these cases, there may be a significant and lasting climate ‘dividend’.

A third change – again already happening before the COVID-19 lockdowns – is the use of automation and artificial intelligence to shorten global supply chains and encourage ‘reshoring’, leading to a growing income gap between already-industrialised economies and the rest. This process may be accentuated through the economic consequences of COVID-19. Governments may increase their preparedness against other rare but high-impact risks through a renewed and widened focus on ‘strategic industries’ and ‘national champions’. Such policies might help Governments to demonstrate to their citizens how they are putting their interests first, but they also underline why protectionism is likely to be one response to COVID-19. It would also be regrettable if global economic co-operation is undermined precisely when broad international agreement will be required to implement many of the policies needed to mitigate the considerable risks to the global economy associated with the long-term consequences of COVID-19.

What will the global impact be of the COVID-19 pandemic?

When the first cases were reported in Wuhan, COVID-19 was still regarded by both Western nations and international organisations as a local incident that would, at most, knock maybe a tenth of one percent off global economic growth¹. Since then, it has of course spread rapidly around the world. With the lockdown measures effectively instigated in Wuhan having been emulated – at least to a degree – elsewhere, the global economy now appears to be on the verge of output losses that, in some countries, may exceed those witnessed during the Great Depression of the 1930s.

1.COVID-19 deaths: late-March and mid-May



Source: ECDC

Making predictions about the course of the crisis itself is hazardous. The virus itself is new and the global situation continues to change quickly. No one can be sure how the virus might subsequently mutate. We don't know whether COVID-19 will exhibit a seasonal pattern.

While some potential vaccines have moved to the testing stage, manufacturing a vaccine at scale and distributing it globally remain some way off. We may be only in the foothills of discovering an effective antiviral drug. And, thanks to a shortage of testing – both for current sufferers and for the “recovered” who may have antibodies – we don't know what the true mortality rate is.

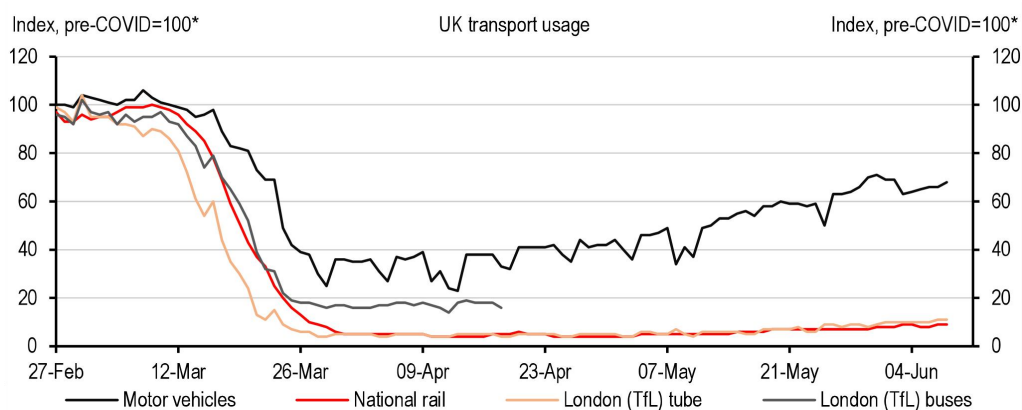
¹ See, for example, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>

Lockdown and herd immunity

We do know, however, how the majority of governments have reacted to COVID-19. The lockdown measures that proved effective in Hubei province and have enabled China tentatively to begin the transition back to normal life, have been widely emulated. Most economists agree that there is no near-term trade-off between a “social-distancing” lockdown and underlying economic performance. It is better to stop the initial rapid spread of the virus in a bid to buy time for increased health provision, than to carry on as normal and leave the virus unchecked. In the absence of a pharmaceutical solution, lockdowns and social distancing – with occasional lifting – are the best options available.

There are two versions of lockdown. The first takes places within nations. Its success varies depending on the quality of the housing stock – the worse it is, the more difficult it is for the public to comply with social distancing guidance – and the availability of financial resources to allow businesses to go into hibernation and workers to be furloughed. Many Emerging Markets score poorly on both counts, which is one reason why financial outflows from emerging economies in the early months of 2020 were so large. Investors grew fearful of financial chaos and capital controls and decided to take their money elsewhere.

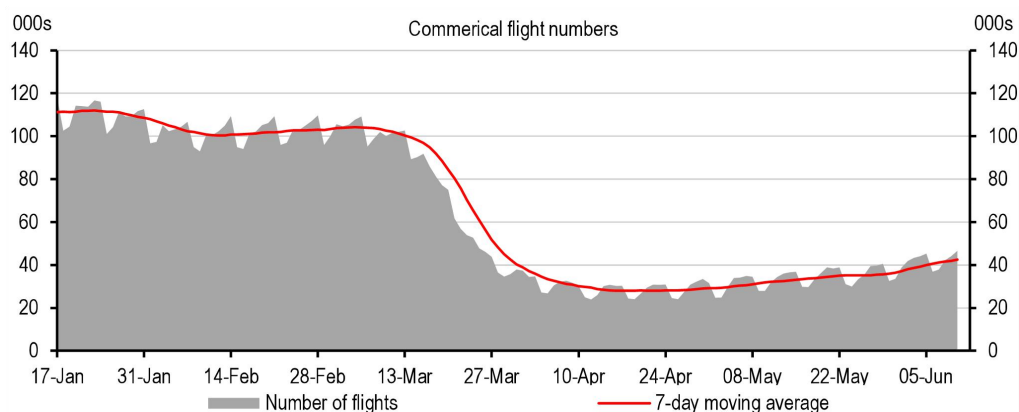
2.The UK lockdown: collapsing transport usage



Source: UK Government. Note: *For roads, the data is compared with an equivalent day from the first week of Feb 2020, for rail it is the equivalent week in 2019 and TfL tube and bus it is equivalent day in 2019. Data on TfL buses is not available from 19th April due to the change in boarding policy.

The second version of lockdown – the one that has been so damaging for aviation companies – takes place between nations. China’s decisive internal lockdown – primarily affecting Hubei Province and, within it, Wuhan – may have come to an end in mid-April but all foreign entry (with very few exceptions) to the country is, at the time of writing, prohibited. In the same way that other countries have followed China’s lead with regard to implementing lockdown measures, it is likely that those countries in the process of easing those lockdown measures will take a similar approach to foreign visitors. One result is likely to be a persistently lower flow of people between nations (particularly between developed and emerging nations) with potentially huge implications for travel and tourism, alongside migrant labour flows and their corresponding remittances.

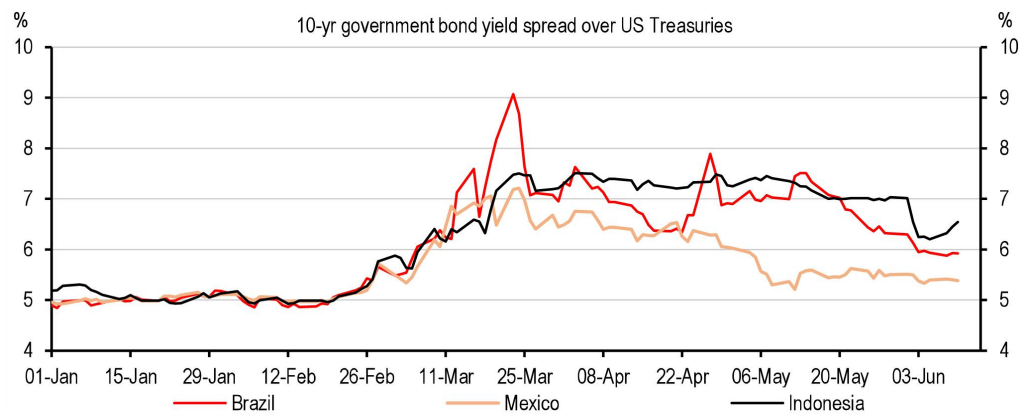
3. Commercial flight volumes worldwide have collapsed



Source: Flightrader24

The implication is that any recovery in the global economy will be, at best, patchy. Some countries are easing restrictions, even as others are in the middle of lockdown. Those countries unable to afford or impose a sustained lockdown may be left with no choice other than to accept a painful journey – in terms of mortality rates – towards herd immunity that will leave them for an extended period of time economically and financially marooned.

4. Emerging market funding costs have risen



Source: Refinitiv Datastream

These differing experiences, in turn, suggest that the global economy will be unable to fire on all cylinders for many months, if not years. The connections upon which globalisation depends – most obviously, the increasing freedom of movement of goods, services, people and capital across borders – will be stymied, necessarily restricting the rate of global growth. And, in the absence of a vaccine, all countries will be vulnerable to reinfection, suggesting that intermittent lockdowns may become a fact of life for a considerable period of time.

How will countries change as a result of the COVID-19 pandemic?

Countries around the world are already debating how they may change post-COVID-19. In some, there is a belief that the common purpose amongst people that has proved critical to efforts to contain the spread of the virus should be reflected by a reshaping of society. Those who have stayed at home, foregone their income and postponed their education should be rewarded for their sacrifices by policies ranging from renewed investment in public services to making labour markets more secure and to taxes on the wealthy.

It is likely that many governments will focus on supporting households and businesses as they recover from the economic disruption caused by the pandemic. The extent to which this focus encompasses radical new policies remains to be seen. There may be profound implications both for the distribution of income and wealth within nations and relations between nations. An effective universal basic income that provides a guaranteed income “floor” for all citizens, whether rich or poor would be affordable only with a sizeable increase in the tax burden on corporations, high earners and the wealthy. To raise such taxes may require worldwide income tax regimes for a country’s citizens (in line with existing US tax policy) and significant restrictions on the mobility of wealth and capital. There would also have to be clearer rules on citizenship. Those nations offering a universal basic income would have to impose tough immigration rules to prevent others elsewhere in the world from taking advantage of tax laws. That, in turn, might restrict the free flow of labour across borders, increasing inequality and potentially adding to existing economic migrant problems.

In terms of public health, in the absence of globally- or regionally-agreed health standards, a new health “nationalism” may emerge in which movement of people across borders will be severely restricted. The degree of restriction may, in turn, be related to the emergence of home bias with regard to medical supplies. When, for example, a successful vaccine eventually materialises, it might be distributed within countries to health workers first, other “essential” workers second, and the rest third. Between countries, however, there is no one

with jurisdiction to preside over such a process and it might result in nations competing to retain and obtain vital supplies.

This, in turn, may increase government support for so-called “national champions” – strategic industries or companies that are deemed essential for the security of the state and its citizens. These “champions”, in turn, would receive the state’s protection from hostile foreign takeover, by definition leading to a balkanisation of global capital markets and, in turn, potentially undermining the interests of shareholders. In the process, the rules of international trade would be turned on their head, as domestic security would trump international engagement.

The emergence of national champions would be consistent both with a return to centralised “command-and-control” structures, and a shift away from reliance on the free market. This has already been seen in the way that some companies in some countries have volunteered to produce goods not for their normal customers but instead for healthcare, while others have been required to do so. There may be more to come. If, for example, the socialised European healthcare system proves to be more successful than the primarily private sector American equivalent in confronting COVID-19, there is likely to be greater political sympathy in the future for states to have an enhanced role in allocating resources.

How will the wider world change as a result of the COVID-19 pandemic?

The modern, globalised world did not fully emerge until the mid-1990s. After the Second World War, the world split into three separate groupings – namely the West, the Soviet Bloc and what became known as the non-aligned movement. The first two entered the Cold War, a struggle that led to decades of conflict and upheaval. It was only with the ground-breaking reforms launched by Deng Xiaoping to open up China up in the late-1970s and the collapse of the Soviet Union in the early-1990s that a fully globalised world began to emerge.

To facilitate a more globalised world, a series of international rules were needed that were policed by a collection of institutions mostly created in the 1940s and 1950s – the United Nations (and, within it, the World Health Organization); the International Monetary Fund, the World Bank, the Organization for Economic Cooperation and Development, the European Economic Community (later the European Union) and the General Agreement on Tariffs and Trade (GATT - now the World Trade Organization). More recently, these have been augmented by the creation of the G20.

Yet even before the arrival of COVID-19, these institutions were under strain. The broad consensus about the future of global trade had been replaced by disagreement over whether the rules and institutions were fit-for-purpose. Rising inequality and weaker-than-expected global growth sowed seeds of popular discontent that created the conditions for new brands of protectionism and nationalist politics, which in turn have led to waning support for international institutions. The UK's withdrawal from the European Union and President Trump's wavering support for NATO are two examples of how this has manifested, even before the WHO was criticised in some quarters for its handling of the COVID-19 crisis.

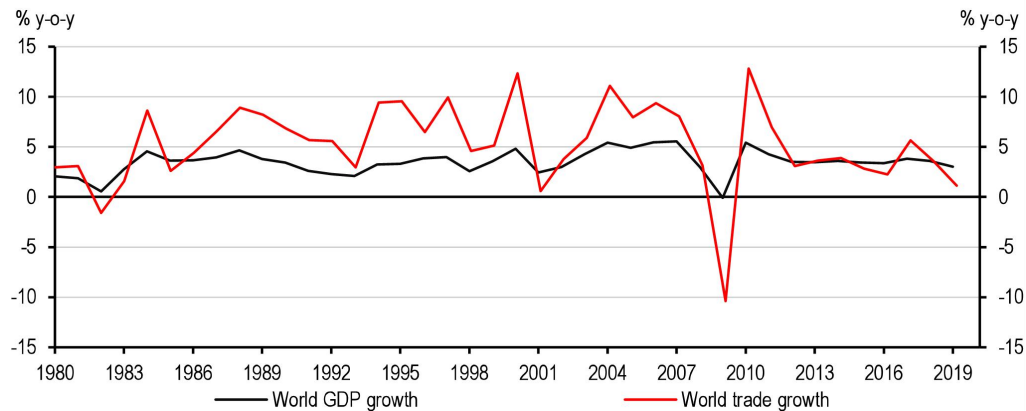
COVID-19 may yet do more damage. On 13 April 2020, President Macron suggested that supply chains covering everything from food to pharmaceuticals would have to become more "local". He argued that it was no longer possible for France to rely on the vagaries of

international markets in the midst of an international crisis which threatened shortages of basic essentials. In March, there was a dispute between Germany and Italy with regard to medical supplies. There have been accusations that there are cross-border inconsistencies regarding medical standards and that medical supplies have been diverted from one country to another. Underneath all this – and contributing to criticism of the WHO – is mistrust over statistical reporting of COVID-19 cases and subsequent deaths.

Admittedly, we are seeing a coordinated response in some areas. Scientific advances in the battle against COVID-19 are being widely shared and disseminated. The Federal Reserve quickly moved towards the establishment of international swap lines for US dollars, easing pressure on vulnerable currencies and capital markets elsewhere in the world. There are the beginnings of a pan-Eurozone agreement on additional spending priorities which may pave the way to some form of debt mutualisation. And the G20 has agreed a debt moratorium for some of the world's poorer countries to provide additional financial space to support efforts to prevent the further spread of COVID-19.

Co-ordination, however, can easily break down. Soon after the Global Financial Crisis, regional fault lines began to appear. Both the US and Germany were quick to reverse their earlier fiscal stimulus measures – even if in the US, some of the tightening occurred automatically at the state level thanks to the impact of balanced budget requirements. Regulatory barriers designed to protect the interests of local taxpayers were installed, leading to the creation of ring-fenced local banks. And, as already noted, the political mood in many countries turned away from globalisation towards isolationism and nationalism. One casualty was world trade which, since the Global Financial Crisis, has expanded much more slowly relative to GDP than in earlier decades.

5. World trade growth has slowed relative to world GDP growth

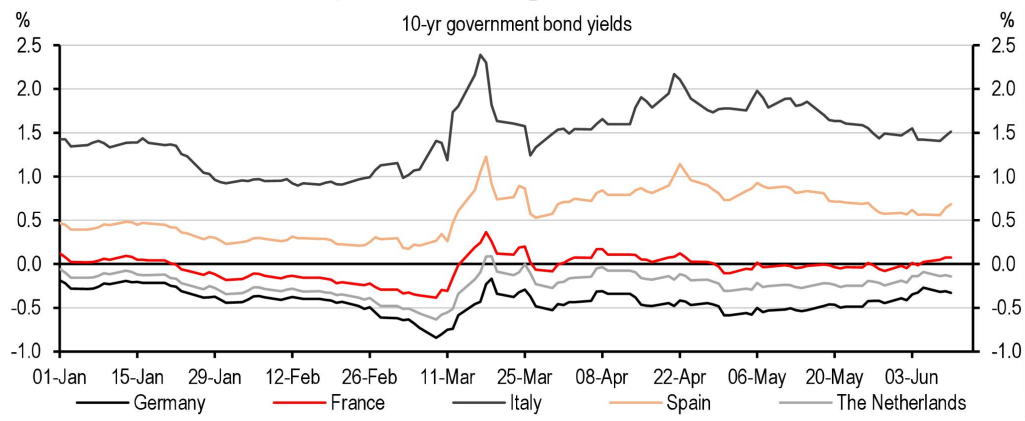


Source: IMF WEO

It is difficult to say whether we will now see the emergence of similar cross-border strains. The US Presidential Election in November could lead to a change of tone in the event of a Democratic victory, but recent trade tensions between China and the US have been underpinned by bipartisan sentiment. It could be that, once COVID-19 is under control, the WHO will emerge unscathed and there will be a series of newly agreed international health protocols, but it is just as likely that the WHO will bear the brunt for COVID-19 failings. And, even as some countries emerge from their internal lockdowns, external lockdowns could remain in place for an indefinite period of time, including within the European Union's Schengen area which is synonymous with frictionless movement of people across borders.

In other words, the risk of dislocated nationalistic responses to a global pandemic remains high, particularly given emerging narratives regarding the struggles and sacrifices that nations have each made. That, in turn, provides an unhelpful backdrop in assessing the longer term global economic outlook.

6. Within the Eurozone, Italy is under more pressure than others



Source: Refinitiv Datastream

What will the future economic trajectory look like?

If accurately predicting how far economies will fall in the near term is difficult, accurately assessing the extent to which they will recover thereafter is even more so. The long-term economic outlook is particularly uncertain. The degree of “scarring” – as the UK’s Office for Budget Responsibility (OBR) described potential long-term economic damage in its April assessment of the impact of COVID-19 – is almost impossible to calculate at this early stage². Estimates and assumptions vary enormously.

Based on a three-month lockdown followed by a partial reopening in the following three months, the OBR assumes that the level of economic activity in the UK will return to its pre-virus path by 2021. The International Monetary Fund, in contrast, accepts that global economic activity may end up permanently lower than it might otherwise have been, with a cumulative global output loss by the end of 2021 equivalent in scale to the Japanese and German economies added together, if not more³. Table 7 shows shortfalls in economic activity in 2021 according to April 2020 forecasts made by the Peterson Institute for International Economics⁴ and the UK’s OBR alongside June 2020 forecasts made by the IMF, benchmarked against HSBC’s pre-COVID-19 projections made at the end of 2019. The variance between the forecasts reflects both the huge uncertainty regarding COVID-19 and the fact that forecasts are currently being cut on an almost daily basis. Most projections suggest the level of GDP in 2021 will still be considerably lower than it would have been in the absence of COVID-19, although the level of vulnerability is particularly large for the likes of India and Brazil.

7.How real GDP forecasts vary and what they imply about economic “scarring”

2019	2020	2021	2019	2020	2021 “Scarring”
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² See <https://obr.uk/coronavirus-reference-scenario/>

³ See <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/>

⁴ See <https://www.piie.com/system/files/documents/dynan2020-04-10ppt.pdf>

7. How real GDP forecasts vary and what they imply about economic “scarring”

		(% yr)	(% yr)	(% yr)	(2019=100)	(2019=101)	(2019=102)	Shortfall (% points)
US	IMF	2.3	-8.0	4.8	100.0	92.0	96.4	-6.7
	PIIE	2.3	-8.0	10.2	100.0	92.0	101.4	-1.9
EZ	IMF	1.2	-8.0	4.5	100.0	92.0	96.1	-5.5
	PIIE	1.2	-12.0	12.0	100.0	88.0	98.6	-3.1
UK	IMF	1.4	-10.2	6.3	100.0	89.8	95.5	-6.9
	PIIE	1.3	-9.0	8.5	100.0	91.0	98.7	-3.7
	OBR	1.4	-12.8	17.9	100.0	87.2	102.8	0.3
Mainland China	IMF	6.1	1.0	8.2	100.0	101.0	109.3	-2.4
	PIIE	6.1	1.5	8.0	100.0	101.5	109.6	-2.1
India	IMF	4.2	-4.5	6.0	100.0	95.5	101.2	-10.1
	PIIE	4.8	-0.5	8.0	100.0	99.5	107.5	-4.5
Japan	IMF	0.7	-5.8	2.4	100.0	94.2	96.5	-4.6
	PIIE	1.0	-8.0	3.8	100.0	92.0	95.5	-5.5
Brazil	IMF	1.1	-9.1	3.6	100.0	90.9	94.2	-9.8
	PIIE	1.2	-6.0	0.5	100.0	94.0	94.5	-9.6

Source: IMF, PIIE, OBR

In principle, the economic policy objective for any government facing COVID-19 is clear. Macroeconomic stimulus has to support otherwise-bankrupt companies and otherwise-unemployed workers during the period of lockdown, in the hope that they can emerge into a post-virus world in which business can return to normal. It is the equivalent of building a bridge over the economic and financial crevasse created by COVID-19⁵. Those countries with deep and liquid domestic capital markets and with credible institutions are likely to be best placed to engage in bridge building. Those lacking these advantages – mostly in the emerging world – will struggle to do the same, which is one reason why the G20 and others are trying to find ways to ease the financial burdens in Emerging Markets.

Building bridges is a much better option than doing nothing but, nevertheless, there will be consequences:

- Levels of public debt will soar relative to GDP, in particular during the period of lockdown. Thereafter – and consistent with wartime experience – public debt will likely end up permanently higher than it would have been in the absence of COVID-19.

⁵ See King, S.D., Suppression, Depression and Beyond, HSBC Research, available at <https://www.research.hsbc.com/R/10/QPSFc7pQjohf>

- Bridge building will be more effective within nations than across nations. Once a country ends its lockdown, it cannot simply re-engage with a prosperous and dynamic world economy. Whatever policymakers achieve domestically, they cannot fully offset the impact on a country's exports (and, hence, its overall GDP) of collapsing demand elsewhere. Smaller, more open, economies may have a disadvantage in the event that they are cut off from their sizeable international markets.
- Some companies – primarily small and medium-sized enterprises – may opt to go out of business. Their owners will not wish to be saddled with additional debt, nor will they want to take on the personal liabilities associated with such debt. As a result, of the millions of workers now losing their jobs, some will struggle to find gainful employment when lockdowns end.
- Within the financial system, the ratings agencies risk adding an unhelpful pro-cyclical risk. As revenues shrink, so ratings downgrades become more likely, increasing the cost of, and lowering the availability of, credit for a wide range of companies (and their numerous suppliers), notwithstanding additional support from governments and central banks. Ratings agencies may struggle to see the other side of the bridge.
- The logistics of loan guarantees and outright “gifts” are not straightforward. Even if the ultimate credit risk rests with governments, it may prove tricky to persuade loan officers at banks to lend to companies that, in the short term, are severely loss-making. Some countries have already moved to “gifting” money to companies, as their policymakers have concluded that funding is otherwise unlikely to materialise with sufficient speed.
- The uncertainties associated with COVID-19 lockdowns threaten both physical and human capital. At the very least, some physical investment will be postponed and, in the event that companies fail, other investment will simply not happen. The consequence is likely to be a smaller capital stock than might otherwise have occurred. Meanwhile, school and university shutdowns may undermine both the volume of education and the reliability of qualifications. Unemployment for school leavers and recent university graduates may be particularly high. Without being employed in the

first place, there is no possibility of being furloughed. As such, human capital will be underutilised and productivity gains may, as a result, be lower.

- “Insurance” against future pandemics (and, in the absence of an effective vaccine, the return of the current virus) will inevitably be in high demand. In the same way that Homeland Security was boosted in the US after 9/11 or banks were told to hold more capital after the Global Financial Crisis, such insurance will, in the near term, divert resources to what might loosely be described as “non-productive” areas. And to the extent that governments take the view that a much wider range of economic activities should now fall under the “strategic industries” banner, global supply chains are likely to be attenuated with home bias becoming a much bigger influence, marking a part-reversal of the efficiencies gained over the last half century. Those with larger domestic markets in terms of market scale may ultimately cope better in these circumstances than others.

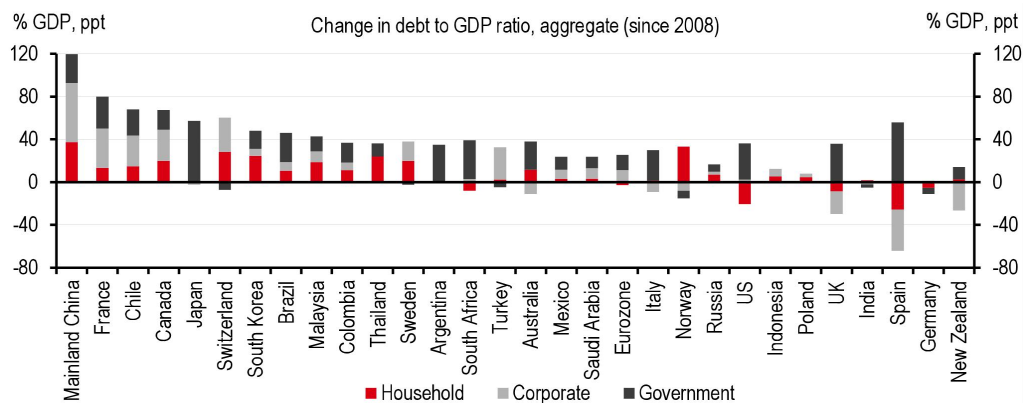
In sum, the likelihood is that, even after a strong rebound in economic growth later in 2020 or in 2021, there will be no return to business as usual. Political and social priorities will likely shift, with a greater emphasis on health security and a reduced weight on near-term economic gains, in much the same way that, following the Global Financial Crisis, financial stability was prioritised over economic growth. Supply chains will be shorter than before – accelerating a trend that was already underway prior to COVID-19 – particularly in the increasing number of areas in which national security is emphasised, with a loss of near-term economic efficiency. Companies may be less international than they once were, fearing both the return of cross border lockdowns and sudden shortfalls of available labour in key offshore centres.

Overall, the likelihood is that the level of economic activity and its growth rate will be persistently lower than would have been the case had COVID-19 never appeared, suggesting that higher levels of public debt – an inevitable consequence of dealing with COVID-19 – may not always be easily digestible.

How will global debt be affected by COVID-19?

Even before the arrival of COVID-19, the level of global debt (both public and private) was exceptionally high relative to the level of global income. A limited number of European countries had reduced their debt/GDP ratios but, for the majority of nations, higher levels of debt were a lasting legacy of the Global Financial Crisis. Typically, these higher levels reflected additional borrowing from both governments and companies.

8. Most governments borrowed their way out of the Global Financial Crisis



Source: BIS

Given already-high debt levels, the spread of COVID-19 – and the implications that it carries for both government borrowing and the level of GDP – arguably couldn't have come at a worse time. Fortunately, persistently-low interest rates have kept the debt-interest burden at a relatively low level, suggesting that there is plenty of room for government debt to rise further in the months ahead, particularly in those countries in which central banks stand ready to underwrite additional debt issuance. By comparison, at the end of the Second World War, UK government debt had risen to over 200 per cent of GDP, more than double today's ratio.

The question is what happens to this debt when the virus is finally in retreat and economic growth has stabilised. The more successful that borrowing proves to be in safeguarding economic activity on the other side of the bridge, the more easily digestible the higher future debt burden will be. If, on the other hand, the additional borrowing is unable to prevent

wholesale ‘scarring’, the greater the future political challenge will be in deciding who ultimately has to repay the extra debt.

That debate was particularly active after the Great War (1914-18), partly because countries emerged from the conflict (and the Spanish flu outbreak shortly thereafter) in differing states of financial health. For Germany and Austria, burdened with reparation payments in addition to the costs of the war itself, inflation was the only escape mechanism. The value of government debt issued during wartime was swiftly destroyed, effectively reducing financial wealth to virtually nothing. For the UK, a desire to maintain its pre-war economic approach persuaded policymakers to rejoin the Gold Standard at the 1914 exchange rate, which in turn imposed a huge internal devaluation on the UK economy and led to persistent austerity and wage cuts. Other countries eventually ended up defaulting, although some of these defaults were more a consequence of the Great Depression at the beginning of the 1930s than the First World War itself.

Put another way, the “scarring” after the Great War turned out to be far worse than after the Second World War. As a result, debt was a lot less digestible in the 1920s than it was in the late-1940s and the 1950s. One reason for the difference was the willingness after the Second World War to put differences to one side – most obviously through the Marshall Plan – to build a future in which everyone could flourish. Recognising the importance of mutual interdependence was of fundamental importance. Even then, however, rationing in the UK persisted until 1954 while, in the US, the continued operation of regulation Q – banning banks from offering interest payments on current accounts – in effect allowed the Treasury to finance government borrowing at below-market interest rates, an excellent example of so-called “financial repression”.

Can technological change support the global recovery?

Times of difficulty have often provided a catalyst for remarkable technical progress. Within a decade of the end of the Great War, the US economy was booming thanks to the impact of mass production (particularly cars), mass consumption (thanks to rapid growth of consumer credit) and mass entertainment (radio and the first talking pictures at the cinema). Biplanes were also still a common fixture following the outbreak of the Second World War in 1939, but, by 1945, the jet engine – a harbinger of mass international travel – was in the ascendant.

It may be that COVID-19 will also lead to significant technological change that, in time, will trigger major shifts in how societies operate.

One obvious change is the likely proliferation of home working, an outcome that may significantly reduce time spent on travelling to places of work. In turn, this might lead to a reduction in office space and an increased supply of property for residential purposes. A second, related, change is a likely proliferation of ‘virtual’ meetings and ‘virtual’ conferences: audio-visual quality will doubtless improve at a rapid rate in coming quarters and, as it does so, the need for physical meetings will decline. This will both reduce costs for companies and limit the business risk associated with heightened restrictions on the cross-border movement of people. It might also reduce the need for air travel. In all of these cases, there is likely to be a significant and lasting climate ‘dividend’.

A third change – again already happening before the COVID-19 lockdowns – is the use of automation and artificial intelligence to shorten global supply chains and encourage ‘reshoring’, leading to a growing income gap between already industrialised economies and the rest.

Technology may have been a driving force behind late-20th Century globalisation but, particularly in the light of COVID-19 and the enhanced desire for national “security”,

technology can equally be used to enforce separation. By doing so, we may end up in a world in which some countries bounce back from COVID-19 with heightened levels of domestic protection while others are left economically and financially stranded.

What are the possible policy future implications?

Any assessment of the long-term economic and political consequences of COVID-19 has to be highly speculative. Considerable uncertainties remain over both how long the lockdown measures will be needed, and the pace at which they will be lifted. Forecasters, meanwhile, differ greatly in their assessments regarding the degree of long-term “scarring” associated with COVID-19.

Nevertheless, it is possible to set out some key parameters that will ultimately determine the post-pandemic future. Those countries unable to successfully impose lockdowns – whether through financial or social-distancing constraints – are likely to end up with more economic “scarring”. Emerging Markets are particularly vulnerable. Those countries that demand a new internal ‘social contract’ may choose to distance themselves from the globalised world that positively impacted billions of people in the pre-virus era. Those countries able to keep their businesses afloat for longer may build more effective “bridges” to the future than others. Those countries with large internal markets may perform relatively well in an increasingly dislocated world. And those countries that can agree on common medical standards may discover that they can more easily engage with each other than with countries that cannot – or will not – accept common standards applied by an international adjudicator.

The considerable risks to the global economy associated with the long-term consequences of COVID-19 suggest that there is plenty of room for mitigation policies, if international agreement can be reached. These include, but are not limited to, the following:

- Agreement on international health standards and, thereafter, consistent enforcement. In the same way that, after the Second World War, the GATT paved the way for an open trading system, attempts to deliver common health protocols could allow borders to open up more effectively. This will be particularly relevant for those nations that

are heavily dependent on income from travel and tourism and remittances from migrant workers.

- Support for debt forgiveness or debt restructuring for those nations most financially vulnerable as a consequence of COVID-19. The G20 has already moved in this direction, but there is a long overdue opportunity to rethink burden-sharing arrangements between international creditors and debtors.
- A recognition that, for those nations with the weakest financial positions, temporary application of capital and exchange controls may be necessary but, equally, the establishment of a clear path back to “openness” once crises are over.
- Attempts to limit the degree of reshoring by emphasising the importance of an open global trading network. Hundreds of millions of people have been taken out of poverty in recent decades thanks to an increasingly integrated global economy. If the global economy becomes more closed, hundreds of millions more could be trapped in poverty, a very unequal global economy will be created and cross-border economic migration may increase.
- Increased emphasis within economies on an equitable distribution of income after the crisis, with a recognition that health and other key workers have played a major part in safeguarding others’ livelihoods.
- A reiteration of the importance of price stability in a world in which finance ministries and central banks have had to take unprecedented decisions, including the monetary financing of much higher levels of government debt: a return to the inflationary 1970s would ultimately be an act of self-harm.