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Will globalization survive COVID-19?

Yes, but there will be winners and losers

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Globalization, already slowing before the COVID-19 pandemic, will likely take multiple hits in its wake. The pandemic and health emergency measures introduced may lead to a prolonged recession, which could be worse than the one experienced in 2009. But will the impact be strong enough to turn an already ongoing post-Global Financial Crisis (GFC) 'slowbalization' into outright deglobalization?

To complicate things, the COVID-19 crisis is happening in conjunction with a new flare-up in US/China tensions and significant volatility in oil prices. Will the China-US decoupling accelerate? Or will the two superpowers finally find a truce to fight the virus as a common enemy together? Will the USD remain the dominant international currency? Or will the ability of China to control the virus better accelerate the role of the RMB as a challenger? How will corporates adapt to this new environment? Will international supply chains be reorganized along regional or countries' dimensions? Will COVID-19 slow down the gradual shift to a carbon-neutral global economy as political focus shifts towards health and economic as well as energy security?

One should always be careful not to extrapolate long-term implications from single big events. We live in a very complex and interconnected world, and some of the long-term implications of massive events such as COVID-19 are very uncertain. What is certain is that—as has been the case with every major crisis in the past—there will be winners and losers. These might not be visible yet as we are still in a state of emergency with significant liquidity support from fiscal and monetary measures 'lifting all boats,' but the differences between winners and losers on a regional, country and sector level will become more pronounced going forward. Investors might be required to make more nimble and selective decisions in order to benefit.

In this paper, we explore the key drivers of globalization, analyze COVID-19 impacts, and leverage the IMD Country Competitiveness Framework to assess the winners and losers. We believe that long-term investors such as Sovereign Wealth Funds and other sovereign institutions should pay attention to these trends and adjust their portfolios for the post-COVID-19 world.

"The call to reign in globalization reflects a belief that it has eliminated jobs in the West, sending them East and South. But the highest threat to traditional jobs is not Chinese or Mexican; it is a robot."

– Angus Deaton, Nobel Prize Winner, 2015

Contents

The ups and downs of globalization

The ebbs and flows of globalization can be split into different phases, marked by technological innovations (mainly in transport and communication) and the opening and integration of new regions in global markets.

Globalization as we know it today is supported by a global institutional and legal framework that emerged post-WWII to guarantee the three key freedoms of globalization: free movement of capital, goods and people. More recently, freedom of information, data and knowledge has been added to reflect the rise of the intangible economy.

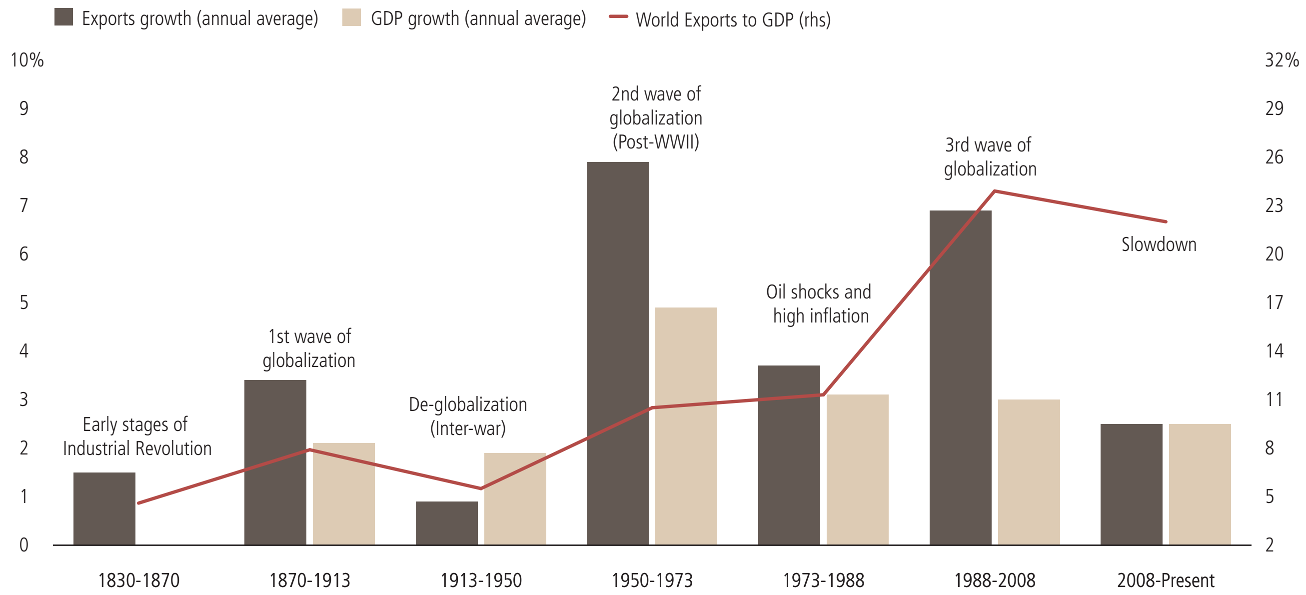
Historically, we can distinguish four main phases of globalization, each one interrupted by major events or severe crisis:

- The era from 1870 to 1914 is usually considered to be the first wave of globalization, marked by achievements in transport and communication like steam-powered boats and underwater telegraph lines, as well as general technological breakthroughs like electricity and refrigeration. However, there was little coordination on global trading or tariffs. It ended with the Great War, paving the way for the rise of nationalism across the world.
- After the Second World War, in the 1950s, the second wave of globalization started. The Bretton Woods Agreement and a set of global institutions (such as the United Nations, International Monetary Fund, and World Bank) created a new global framework for growth and international trade. Multinational corporations in developed markets ventured abroad and foreign direct investments increased. Global trade was dominated by manufacturing. The so-called Washington Consensus became the blueprint for countries to integrate and enjoy the benefits of globalization.
- Following a correction caused by oil price shocks and high inflation in the late 1970s, the era of hyper-globalization restarted in the early 1990s, after the fall of the Berlin Wall. Tariffs and regulation decreased, goods flowed freely in and out of previously closed economies, and labor migration picked up. Complex global value chains were set up, helped by the leap in communication and information technology. The financial sector expanded internationally with mega financial institutions operating in every country of the world. This was the era of the rapid rise of China and other emerging markets and the associated oil and commodity boom.
- The era of hyper-globalization ended with the GFC in 2008-09. This started the phase we are in now, which The Economist labelled 'slowbalization.'[1] Since the GFC, growth in international trade and global capital flows slowed significantly. Then the winds of nationalism started blowing around the world and opposition to migration became louder. The relationship between China and the US deteriorated and the concept of US-China decoupling gained ground among Western diplomatic circles. Protectionism is no longer taboo and the Washington consensus is no longer dominant around the world.

The era of hyper-globalization ended with the GFC 2008-09.

[1] The Economist asks: Is this the era of slowbalization?" The Economist 24 January 2019.

Exhibit 1: Global trade volumes and real GDP growth – The long-term view



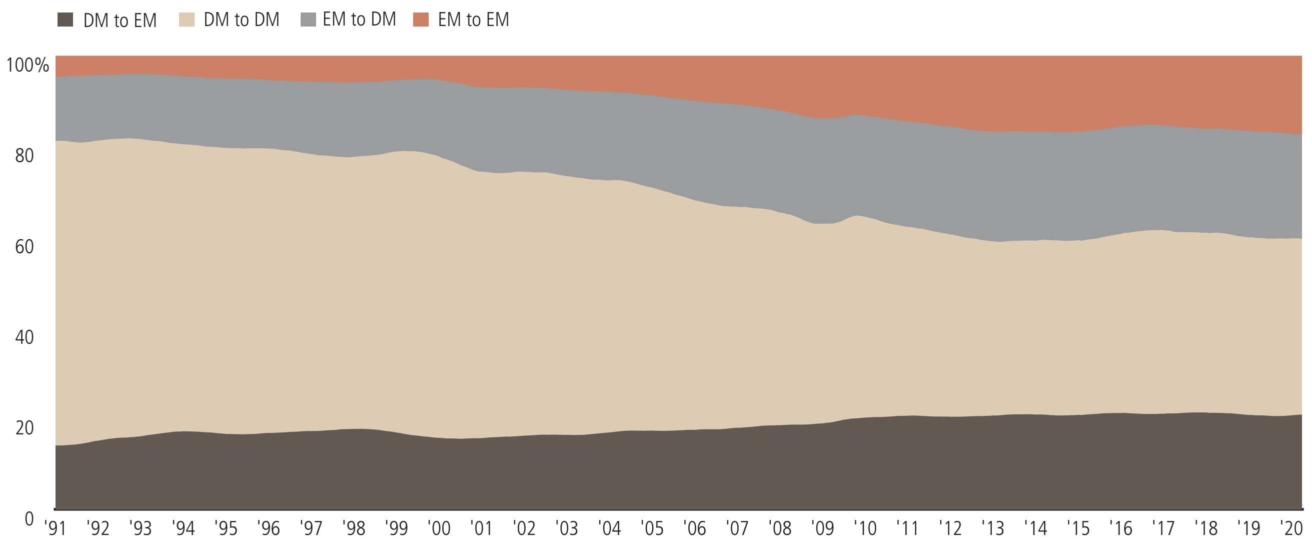
Source: Maddison, IMF, WTO, World Bank, Haver, UBS estimates. Note: Values till 1988 are taken from the report "The World Economy: A millennial perspective" by Angus Maddison. Latest data point for World Exports to GDP is taken as a five-year average. UBS estimates as of 30 June 2020. For more information, please refer to the UBS Investment Bank Research note "Mulling Macro: 200 Years of Globalisation"

The rise of emerging markets is closely associated with globalization

Advanced economies were the main beneficiaries of the first two phases of globalization. In the third and fourth waves, emerging markets (EMs) were the big beneficiaries, with their share of global GDP increasing from 36% in 1990 to 51.2% in 2008. EMs continued their uninterrupted rise through the slowbalization phase, with their combined GDP reaching nearly 60% of total global GDP in 2019. Without low tariffs, free movement of capital and easy cross-border technology transfer, EMs could not have caught up with Western economies at the rapid pace experienced over the last three decades.

During this time, various factors played together to create an unprecedented boom in what was first called the Asian Tigers and later, with varying intensity, the so-called BRIC economies (Brazil, Russia, India and China). With tariffs decreasing and low levels of regulation compared to developed economies, EMs became the production hub of choice for multinational companies. This was amplified by strong urbanization trends and demographic profiles tilted towards the young and mobile, providing a seemingly endless stream of cheap manufacturing workers, and at the same time, an emerging group of consumers.

Exhibit 2: Direction of global trade across DM and EM, 1990-2019



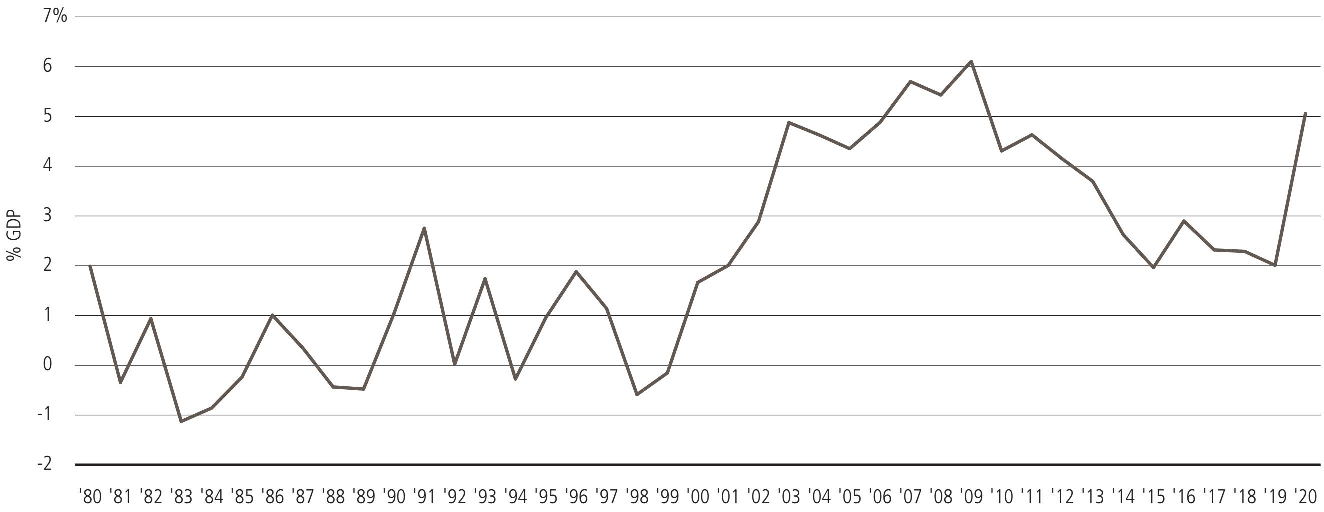
Source: UNCTAD, Haver, UBS Investment Bank. Data as of April 2020.

Supply chains lengthened considerably, and global trade exploded as many products were processed in several locations and often imported by EMs for later re-export. The boom in EMs also resulted in massive demand for commodities and building materials (oil, steel, cement, aluminum) to satisfy the ever-growing real estate sector and to build large-scale infrastructure projects to support their booming economies. The oil price boom that started in the early 2000s was largely driven by the massive appetite for energy in China and other emerging markets. Russia, the Gulf economies and many other commodity-based emerging economies benefited in an unprecedented way from the rise in commodity prices.

The rise of China and other Asian countries that started in the early 1990s and continued in the post-GFC years has changed the structure of the global economy. Should slowbalization turn into outright deglobalization following COVID-19, will their rise continue? Following decades of low growth and stagnation, are we entering an era where advanced economies — given their competitive advantage in technology, education and skills — will reduce the growth gap with EMs?

[1] https://shareaction.org/investors-inconsistent-climate-votes/

Exhibit 3: GDP growth differential EM vs DM



Source: IMF. Data as of April 2020.

Slowbalization has been a long-term effect of the Great Financial Crisis

The GFC — a financial crisis that erupted in the Western world with global spillover effects — had a negative impact on globalization. The GFC unleashed falling income levels, rising unemployment and increasing inequality within countries, creating a fertile ground for an anti-globalization policy response. Anti-globalization policies have largely been driven by advanced economies, with the US in the lead. But despite being largely national and carried out with different intensities across countries, these policies have already caused a significant weakening of the key freedoms of globalization.

International trade stagnated since the GFC, and global capital flows — particularly foreign direct investments (FDIs) — never returned to pre-GFC growth levels. National governments started to introduce controls to inward and outward foreign direct investments as priorities shifted to protecting knowledge and domestic industries. Opposition to immigration increased in both advanced and emerging economies, which has reduced the ability of countries to attract the skilled labor needed to manage the ongoing fourth industrial revolution.

The GFC has also caused a gradual weakening of the Washington Consensus and the associated international institutional and governance framework. This has led to a decline in global coordination and rising isolationism which has become very evident in the current COVID-19 crisis. Most policy actions remain in the hands of individual governments, particularly the US and China.

What the post-GFC slowbalization phase showed is that a severe crisis — in addition to the short-term material and financial damage it may cause — can have profound long-term implications. These effects are largely driven by how political priorities shift as a result of changing needs and preferences among individuals and how corporates and businesses adapt to the changed external environment. Politicians will likely adapt their actions by leveraging the changed voters' perception about global risks and the need for a more domestic focus.

Will COVID-19 be the final knock-out punch for globalization?

A decade after the GFC, the global economy is experiencing another severe crisis. The COVID-19 crisis — which has spread globally — is not a financial but a health crisis. Its economic carnage is caused by the restrictive measures taken to slow its spread. These measures might differ across countries in terms of intensity, but all have a negative impact on production and consumption levels.

The global economy is experiencing a recession that will be much deeper than the GFC, possibly the worst on record in the post-WWII period. No country — including the majority of EMs which managed relatively better than advanced economies during the GFC — will escape it. China might ultimately still grow in 2020, but after years of buoyant growth, a growth rate of 1% will feel like a recession for this country as well.

The GFC and the COVID-19 crisis are very different in nature but share an important feature: they are both global. They might have originated in different countries but quickly spread around the world as a result of the high level of integration between economies. The GFC was blamed on hyper-globalization in the financial sector and unleashed a powerful regulatory response to reduce international interlinkages in the financial system and to reduce global risk. The following global recession paved the way for the rise of nationalism and unilateralism, culminating in protectionist policies, reducing global trade growth and rising geopolitical tensions.

COVID-19 unveiled the risk of complex international value chains — particularly in the health sector — and this is likely to unleash another political response in the years to come. But will the COVID-19 crisis have the same negative impact on globalization as the GFC? The shortening of international value chains was already underway as a result of structural changes that occurred in the global economy, including technological progress, the shift from manufacturing to services and geopolitical tensions. How does COVID-19 impact these factors? Should countries only decide to shorten value chains in the health sector to reduce dependency on foreign countries, which appears likely, it would not be a game changer for globalization. In order to see a shift towards deglobalization, we would need to see a broader shift towards domestic production across a wide range of manufacturing and service sectors and a substantial rise in the barriers to the free movement of goods, people and capital.

The evolving geopolitical situation following the GFC has been an important factor behind the shift from hyperglobalization to slowbalization. US-China decoupling, fragmentation in European integration and rising nationalism and protectionism are all associated with the severity of the GFC and its impact on the global economy. Will COVID-19 lead to an acceleration of these trends, pushing the world towards deglobalization?

COVID-19 unveiled the risk of complex international value chains

Exhibit 4: Key Features of different phases of globalization

Post-War II globalization	Hyper-globalization (1990-2008)	Slowbalization (2008-2020)	Post-Covid deglobalization (2020-?)
– Trade in goods combined with complementary domestic policies – The gains and pains are shared with the market in charge of efficiency and government of redistribution – Developed markets are the main beneficiaries – Energy intensive – Global governance established	– Global Value Chain revolution and offshoring. Rise in cross-border flow of capital, know-how and human capital – Financial integration – Manufacturing sectors in advanced economies disrupted – Government redistribution but weakened by high debt and tax competition – Income disparities rising within countries – China and other EMs main beneficiaries as they catch-up with export-led growth models – Energy intensive / Commodity super cycle – Global Governance effective (e.g. response to 2008's financial crisis)	– Shift from manufacturing to services – Digitization and automation – Rising tariffs and other barriers – International trade stagnant – Service sectors disrupted and new sectors emerging – Anti-immigration and war for talent – Developed markets still leading – EMs catching up in technology and innovation – Less energy intensive / Sustainable – Global governance weakened – Multipolar system and regionalism – New institutions emerging?	– High public debt – Decline in labor cost arbitrage – Shortening of global value chains – War for technology, know-how and talent – Digitization and automation accelerate – Increasing government intervention in economic matters – Higher taxation to reduce debt load – European integration slowing down (but Europe benefiting from US-China conflict?) – Lower carbon emissions – Rise of renewables – Weak international cooperation – Regional institiutions – More divergence between winners and losers – Tax coordination – The Asian century

Source: UBS Asset Management. Data as of August 26, 2020.

The impact of COVID-19 on the key drivers of globalization

The dynamics of slowbalization are diverse but interconnected. Technology and a changing structure of the global economy were already having a negative impact on globalization.

This interconnectedness is very visible in the relationship between the two largest economies in the world, China and the US. US-China decoupling is not only about reshoring of manufacturing activities to respond to the fears of the US middle class. The new battleground is technology. Whoever leads in this sector — automation, AI, big data — will ultimately lead in the future. That is why we believe that US-China decoupling is and will be the main factor that determines whether slowbalization will turn into outright deglobalization in the years to come.

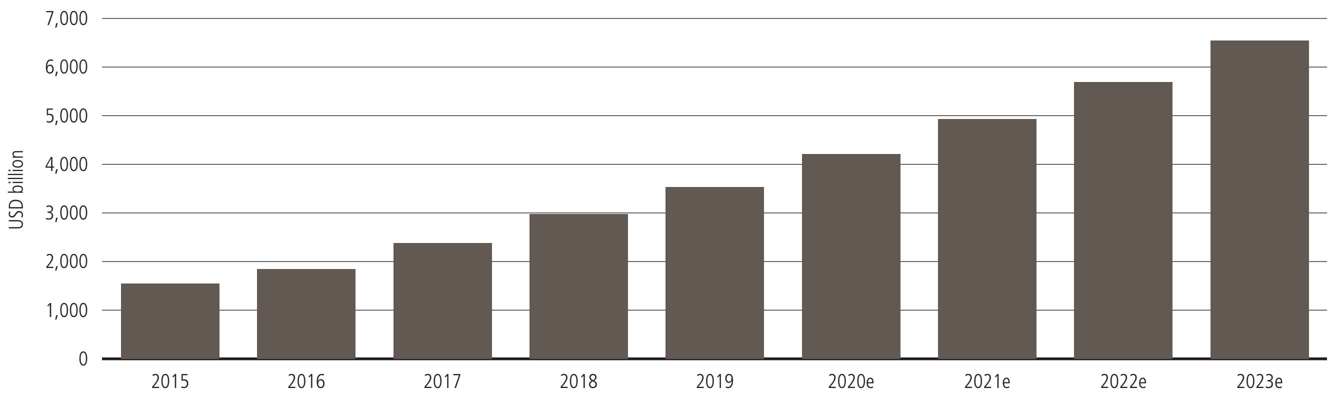
COVID-19 has accelerated the rise of the intangible economy

In the past, technological progress, especially in the areas of transport and communication, has been highly supportive of globalization, especially in a world that was still marked by large regional differences when it comes to labor costs, taxes or regulation. Each step, from the steam-powered ship to intercontinental flights, brought the world closer together, allowing multinational corporations to use these regional differences to their benefit.

However, in the last two decades, technology has changed the structure of the global economy with a shift from tangible to intangible assets. What we consume as technology has seen a dramatic transition, which is sometimes called a move 'from stuff to fluff.' While in the past, our technology consumption was linked largely to (EM-made) 'stuff' in the form of TV sets, video recorders or DVDs, today, more and more technology is consumed as a service and transacted and stored in the virtual space.

The increasing value added from installed software and intellectual property on a smartphone (or even car) relative to the value added from assembling the hardware is a good example. The setup of large software or social media companies is very complex, particularly as far as taxation and regulations are concerned, but it does not require the complex supply chains that have been a feature of the international manufacturing sector for many years.

Exhibit 5: Global retail sales generated online, in USD bn



Source: eMarketer, UBS, as of July 2020.

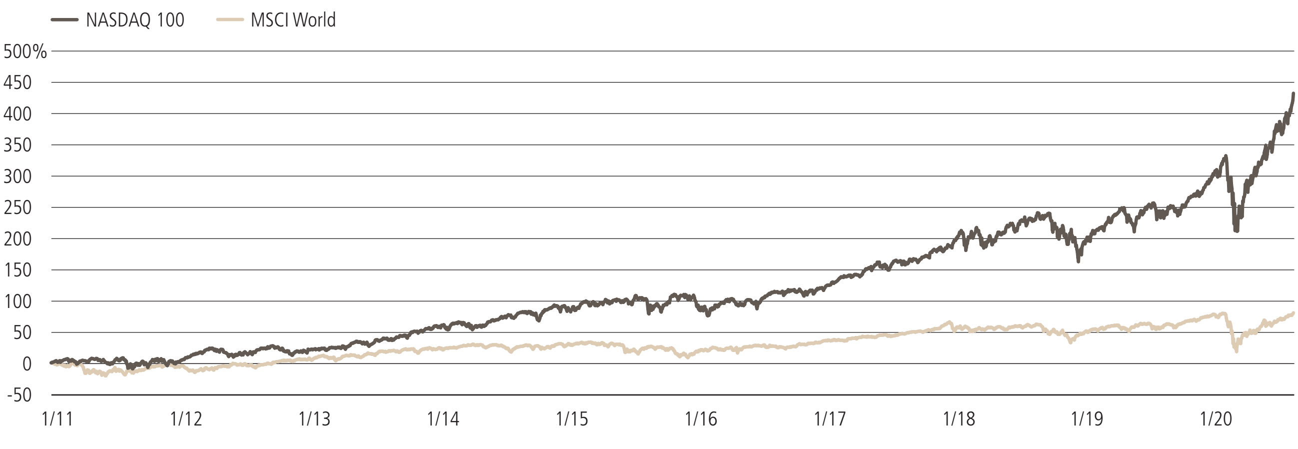
Lower marginal gains coming from transport and communication and the shift from tangible to intangible goods have already contributed to a significant slowdown in globalization. New technologies, in particular in the area of highly automated production technologies, might suddenly unleash substantial additional anti-globalization effects. Examples are 3D printing and next-gen robotics, which are making cheap labor less relevant and could drive an ongoing reshoring trend back to developed economies.

Especially in the area of highly value-added goods, it might make more sense to build a new plant equipped with robots, 3D printers and solar cells in the US desert instead of Asia, as long as the key market is also 'locally' in the US. This drive to more local production also means less trade and logistics and it will be amplified by increasing political pressure, but also incentives to bring production capacity back to the US.

How does COVID-19 impact technology and its implications for globalization? The lockdowns of 2020 have accelerated the shift towards a more online-oriented world; one might argue that the lockdown measures have forced almost two older generations to suddenly become 'digital natives'. Countries that have been lagging behind in digitization — for example many European economies — have shifted more business and consumption online, boosting servers, cloud computing and data management.

As of mid-2020, investors had already decided: technological firms are the winners of the pandemic as the tech sector held up very well during the March sell-off, and has been leading in the subsequent recovery. COVID-19 might also temporarily reduce the regulatory pressure on the big global tech companies, allowing these companies to take advantage of the sudden rise in the adoption of digital tools.

Exhibit 6: Tech-heavy Nasdaq 100 outperforms broader market 2011-2019

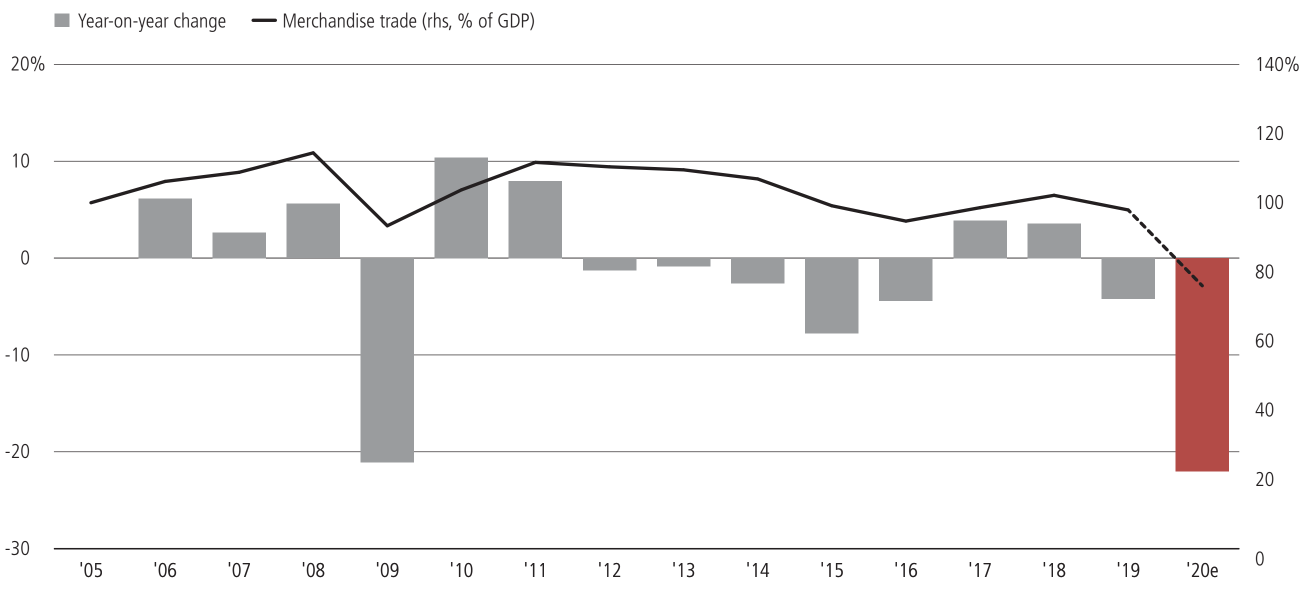


Source: UBS Asset Management, Bloomberg. Data as of 26 August 2020.

Global value chains: from just-in-time to just-in-case?

The 'opening up' of new regions over the course of the 20th century was a key driver of globalization. After the Second World War, new global institutions like the United Nations (UN), the International Monetary Fund (IMF) and the World Trade Organization (WTO) brought the world closer together, aligned rules and regulations and led to a decrease in tariffs and protectionism.

Exhibit 7: International trade year/year 2005-2020



Source: The World Bank, UBS estimates, 2020.

It is largely the rise in US-led protectionism that has slowed down the growth in international trade since the GFC. And we believe COVID-19 will further dampen growth: 2020 is set to be the second year in a row of falling international trade. According to the WTO, COVID-related trading costs—e.g., higher cargo prices, more stringent border controls and travel restrictions—are equivalent to a 3.4% global tariff.[2] This is in addition to global average tariffs which the WTO estimates were about 8% in 2018.

The COVID-19 pandemic created two types of shocks to our global supply chains, which highlighted the unpreparedness of corporates and governments, and which we believe will have a lasting impact. The initial supply shock caused by the coronavirus outbreak in China forced companies in the West to reorient their supply chains to domestic markets or alternative locations. However, the subsequent demand crisis reduced the need for some products, e.g., cars, but massively increased the need for others, such as medical equipment.

[2] World Trade Organization, *World Trade Report 2019*, November 18, 2019.

In the case of health care, the West's dependence on Chinese generic drugs visible over recent months is requiring the leading pharmaceutical firms to transfer production to safer locations. In the case of car manufacturing, the disruption in the global supply of components, together with a significant reduction in car demand because of permanent changes in mobility, is going to have profound implications on the structure of the industry.

Will global supply chains return to normal after a few years of uncertainty and turmoil? Yes and no. The dependence of the West on (primarily) Asian cheaper supplies may not radically change the need for some companies to outsource production to emerging markets. But for some industries, the transformation that the crisis has imposed is likely irreversible, requiring the development of more domestic markets where bilateral trade treaties are going to be more important than global multilateral agreements such as the WTO. However, certain frozen international supply chains might not be reactivated or could be shorted as corporates manage the risk of future pandemics or any other global severe event. Finally, if the drastic government measures taken after the GFC can serve as an example, the political review of the COVID-19 crisis might take years and could yield significant additional measures to make supply chains more resilient and to make countries less dependent on essential goods produced abroad (think antibiotics and protective equipment).

Populism, tariffs and the risk of new 'cold wars'

According to the World Bank, the COVID-19 global recession will lead to the broadest collapse in per capita incomes since 1870.[3] The collapse will not be confined to developed economies. For the first time in decades, output in emerging markets will fall, dealing a blow to EMs' progress towards catching up to DMs, and plunging millions into poverty. We believe the rise in poverty in advanced and emerging markets coupled with the loss of jobs as digitization accelerates will fuel populism in the years to come.

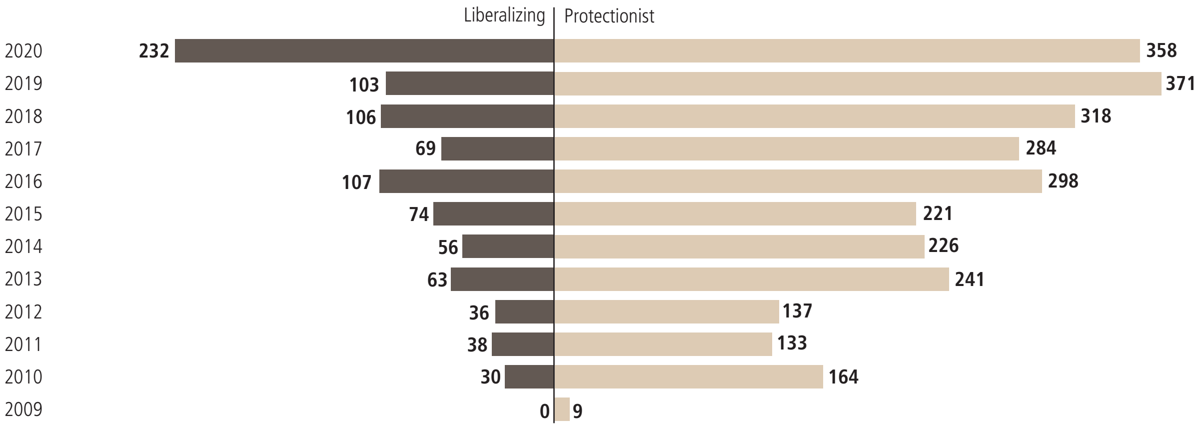
In terms of international cooperation, international institutions created to ensure the three freedoms of globalization — such as the WTO — have been politically weakened over the past few years. We also saw the emergence of new multilateral institutions created under the impulse of China, for instance the Asian Infrastructure Investment Bank (AIIB), where the US does not have a seat on the board. In other areas — for instance defense — key multilateral institutions like NATO have been weakened as well. COVID-19 has further impacted international cooperation, providing the US with new ammunition against China and further eroding the reputation of the World Health Organization. The strong cooperative spirit that emerged in the aftermath of the GFC, with the G20 ensuring a common response to the financial crisis, appears a thing of the past.

In developed markets, trends towards populism in general could be interpreted as a backlash against imbalances that have accrued over time, and in particular during the last phase of hyperglobalization, which was able to boost growth massively, especially in EM, but did not achieve a fair distribution of the benefits, particularly in advanced economies. But the topic of fairness has over time developed into one of the top concerns in public and political discourse. This has led to a global backlash against a 'liberal elite' which is now exploited by populists.

The changes that we witnessed in 2020, and the shock to peoples' lives has also reinforced the need for a 'true' populism, understood as the government acting for people and their needs, which is now more important than ever.

[3] World Bank. *Global Economic Prospects*, June 2020.

Exhibit 8: Number of liberalizing and protectionist measures initiated – goods trade



Source: USB IB Global Trade Alert, UBS estimates. Data as of June 2020.

In the US, President Trump introduced a new competitiveness and 'we-against-them' attitude in global politics. But what is generally considered to be Trump's confrontational stance in the area of 'trade' consists in fact of two separate components which might develop differently in the future.

Tariffs tend to behave cyclically, and periods of high tariffs can be reversed. It is likely that future US administrations will remember that the real 'unfair' advantage that the US always had was in fact the ability to run exactly such a trade deficit, which allowed a focus on high value-adding services and (design of) high-tech products instead of being locked into a large manufacturing sector. It is therefore entirely possible that future US administrations will revert back to an international trade regime less geared towards tariffs.

There is a second element that we believe it is more relevant than tariffs for the future of the US-China relationship and globalization in general: the introduction of economic and geopolitical hurdles to stop China from catching up in the high-tech area and to ultimately challenge the role of the US as global superpower. These can include a wide range of policy measures ranging from preventing US capital and know-how from flowing into China to sanctions against countries and corporates that do not comply with US regulations. It could also include policies to facilitate the repatriation of US value chains from China and barriers to portfolio flows into the Chinese equity and fixed income markets.

While we believe that tariffs could be rolled back at some point, one has to be much more hesitant when it comes to the stickiness of other 'non-tariff measures' aimed for example at the acquisition of high-tech know-how by the Chinese, or US investments in China.

Also, there is fear that Trump could repeat what he did with China with other countries or regions, including Europe. Therefore, the biggest hit to globalization from all kinds of protectionism so far has most likely been an increase in uncertainty, affecting investment decisions of corporations which in their very nature are long term. The most affected investments are likely to be cross-border and involve multiple jurisdictions as corporates reduce the risk of policy-induced disruption of long international value chains.

How does COVID-19 impact the growing US-China confrontation? The confrontation between the two largest economies in the world has been a key geopolitical issue since Trump's election almost four years ago. In the US, it has bipartisan support and even if Trump does not get re-elected, most of the measures might not get reversed. COVID-19 is likely to exacerbate the confrontation as Trump, facing a presidential election with a struggling economy, will attack China to improve his reelection chances, pointing out that COVID-19 originated in China which has dented Chinese credibility. Other countries — including the UK, Japan and a few others — might be tempted to jump on this wagon though with a less virulent attitude.

US-China decoupling is therefore a much broader phenomenon with the potential to alter well established geopolitical equilibrium that emerged in the aftermath of the Second World War: US leadership, European integration and international cooperation. The US has gradually reduced its role of the 'policeman' of the world and focused much more inward to protect its own economic and financial interests.

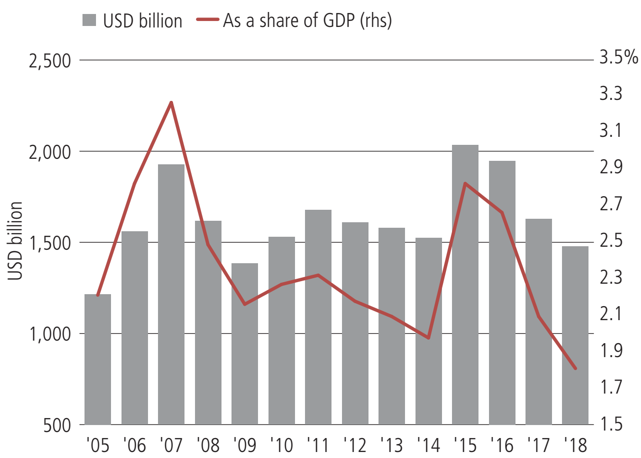
What about Europe? The European integration process suffered a near mortal blow in 2012 due to its sovereign debt crisis. In the end, the European project did not fall apart but the process of further integration — including shared defense and fiscal integration — has stalled since then. COVID-19 has pushed some countries — notably France and Germany — to accelerate the European integration to prevent the uneven negative impact of the pandemic on member countries from putting the entire European Union project at risk. The EUR 750bn fund just launched by the European Commission is the only cross-country political and financial initiative launched to deal with COVID-19. If successful, it might pave the way for a further acceleration in the European integration process. With regards to its attitude towards US-China decoupling, Europe is also raising more barriers to Chinese investments in sensitive sectors but we believe it is unlikely to escalate any confrontation with China further.

Rising barriers to global capital flows

Driven by technological changes, tariffs and populism, two of the three pillars of globalization are already in decline: free movement of people and goods. The third pillar, the free movement of capital, has been under attack for awhile and data points to broadly falling global capital flows.

The rise of cross-border capital flows has been a fundamental feature of globalization. The lengthening of international value chains in the hyperglobalization era boosted global foreign direct investments (FDIs) to unprecedented levels. Global FDIs rose from less than 1% of global GDP in the early 1990s to a peak of over 3.3% of global GDP in 2007. This is a rise of around 8% per year over 2000-07. Global FDIs have not regained those pre-GFC levels since.

Exhibit 9: World FDI inflows in USD billion and as % of GDP

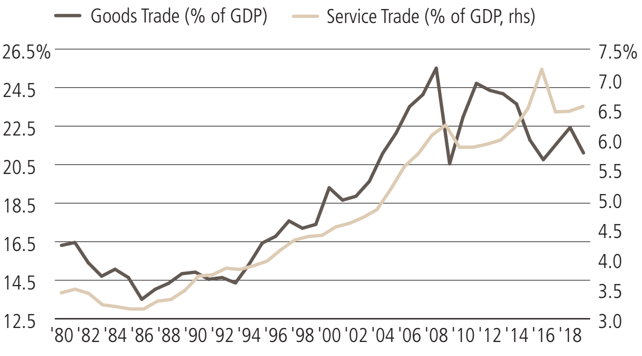


Source: OECD, UBS. Data as of year-end 2019.

The stagnation in global FDIs in the post-GFC world has been caused by a host of factors. At a business level, digitization in global cross-border supply chains is leading to a shift towards intangibles and asset-light forms of international production. As noted by the United Nations Conference on Trade and Development (UNCTAD), this is visible in much faster growth for trade in services than in manufactured goods since 2007. At a policy level, the global regulatory environment for FDIs has become much more stringent as several countries introduced new investment restrictions for foreign investors on the basis of national security concerns.

The sectors most exposed to such measures are infrastructure, core technologies and other sensitive assets. It is clear that corporations are now more hesitant in undertaking new investment ventures, anticipating higher risks of future 'taxation' (i.e., tariffs) in certain regions.

Exhibit 10: Global trade in goods and services (% of world GDP)



Source: UNCTAD, Haver, UBS. Data as of year-end 2019.

The US is leading the way under President Trump's impulse, but several countries have or are considering adopting similar measures. Whilst these measures are targeted at all foreign countries, the main target is China. This is visible in the sharp drop in China FDIs experienced since Trump launched his campaign against China. The drop partly reflects Chinese domestic policies but there is no doubt that a more hostile environment to Chinese investments in both advanced and emerging markets is playing an important role.

How does COVID-19 impact global capital flows? According to UNCTAD, global FDIs are set to drop by 30%-40% to the levels prevailing in the early 2000s.[4] Most of this fall is cyclical and reflects falling global demand; as the global economy recovers, it is reasonable to expect a rise in FDIs. However, COVID-19 has raised fears of hostile foreign takeovers in sectors considered strategic and this has prompted governments to increase their scrutiny of foreign investments. This is not only happening in the US but also in several European countries, Australia and Japan.

Could rising protectionism in global capital flows also hit portfolio flows? Some of the measures being discussed in the US – for instance preventing US pension funds from investing into Chinese listed equities – indicate that this is a possibility. Global portfolio flows have held up relatively well so far as investors diversify their portfolios away from low returning assets in the Western world towards faster growing EMs. China has gradually opened up its fixed income and equity markets and the flow of assets from Western investors has increased over the last few years. However, in a scenario of further escalation in the confrontation between the US and China the introduction of sanctions hitting USD-denominated transactions with Chinese institutions cannot be ruled out.

[4] World Investment Report 2020. 16 June 2020. United Nations Conference on Trade and Development.

Deglobalization or evolution towards a different type of globalization?

By looking at how COVID-19 impacts the dynamics of globalization, it is clear that the trends already underway before the crisis will continue and in some cases will be strengthened. Due to the mechanics described above, it is clear that various good and bad outcomes are possible going forward in a world marked by the effects of COVID-19 and slowbalization.

One possible outcome could be increased regionalization of the world. It is for example possible that Asian supply chains could fracture into two chains, with international companies having one factory in China to supply the domestic market, and another one outside China to supply the rest of world. Would this be necessary diversification of supply chains or instead be inefficient redundancy that would further diminish previous gains from globalization?

Exhibit 11: Three global blocks

		US	EU	China
Economics	GDP (2019)	$21.4 trillion	$18.3 trillion	$14.4 trillion
	Population	328 million	446 million	1.4 billion
	Median age	38	43	38
	Unemployment rate	3.6% (2019)	7.4% (2019)	3.6%
	Public debt	~$19 trillion	$11 trillion	~$5.5 trillion
	Number of billionaires	607	~310	373
	Military spending	$732 billion	~$300 billion	~$180 billion
Markets	Currency	USD	EUR	RMB
	Daily FX turnover (2019)	~$5.1 trillion	~$1.6 trillion	~$300 billion
	Equity market capitalization (2019)	~$30 trillion	~$7.5 trillion	~$6 trillion
	Bond market size (August 2020)	~$33 trillion	~€18 trillion (EEA)	~$27 trillion
	PE fundraising 2018	~$212 billion (NA)	~$82 billion	~$77 billion
Innovation	Patent applications per year (2019)	~621K (USPTO)	~181K	~1.5 million
	Total R&D gross domestic expenditure (2017)	$549 billion	$430 billion	$496 billion
	Internet users	293 million	398 million	~900 million
	Tertiary education students (enrolled 2019)	~20 million	~20 million	~40 million

Source: Bloomberg, BIS, IMF, World Bank, Statista, Tradingeconomics, USPTO, EPO, WIPO, ICMA, NCSES, eMarketer, Internetworldstats, UBS 2020.

On the other hand, with Brexit, we might have seen the start of an active rollback of the institutions and frameworks that supported globalization in the post WWII era, including traditional regional blocks. In addition, the role of economic blocks has to be seen as more differentiated in this context. As the example of the EU shows, these large blocks allow maximum freedom 'within' and require maximum opening to each other from its members, but can be highly protective towards the rest of the world. In the case of Brexit in particular, conservative thought leaders promoted leaving the EU with the idea of carving out additional economic freedoms for Britain and its trade partners. Would the demise of some blocks and the creation of other large blocks, for example in Asia, therefore ultimately be positive or negative for globalization?

It is yet unclear in what form and institutional setup new regional blocks, for example in Asia, could organize. Also, the relations of these blocks to the rest of the world as well as 'within' members could manifest in many different ways, with different outcomes for globalization as a whole.

Could slowbalization and regional block building amplified by the pandemic therefore lead to substantial additional divergences in the development of key economic variables of nations, further diminish international cooperation and drive monetary and fiscal policies further apart? And could recent surges in nationalist behavior even turn into confrontational approaches, leading for example to competitive devaluations, or, in the worst case, cold wars turning hot?

None of this is decided yet, and there are also reasons for optimism. The COVID-19 pandemic also highlighted to large parts of the global population that there are certain global problems that we are facing together on this planet; a feeling that climate change was never really able to fully mobilize. It also unleashed unprecedented levels of international cooperation and feelings of global unity among private individuals. The scientific community, for example in the area of vaccine development and sharing of research, showed an unprecedented level of cooperation, boosted by virtual communication tools. Some corporates even put intellectual property considerations aside in the development of treatments.

It is yet unclear in what form and institutional setup new regional blocks, for example in Asia, could organize

This was not always echoed by governments, which to various degrees engaged in vaccine and protective equipment nationalism. Also, some people see the COVID-19 crisis as the return of the big state, which was instrumental in paying workers, bailing out corporations and organizing the public health response. Therefore, the ultimate outcome from these trends is still unclear. But the same way we saw a new institutional framework after WWII and extensive sets of rules after the GFC, in the years following the crisis during which there will be a global discussion about the lesson learned and how to prevent such a crisis from happening again, we could see the creation of new international institutions.

These, however, could be centered around new and innovative themes. The COVID-19 pandemic could have pushed the globalization of data to the next level so that it can finally claim its rightful place as a key factor of globalization next to people, capital and goods and continue carrying globalization forward from this point. Also this might ultimately lead to the creation of new institutions and new forms of doing business and might include the launch of digital currencies, which would also allow a much faster distribution of aid in times of crisis and much easier and direct monetary policy adjustments. Of course, this will not happen without frictions; with big tech seen as the 'winners' of the pandemic, the question of rising inequality is likely to get addressed with new forms of digital taxes which would be seen as fixing the inequalities caused by globalization, technological change and the pandemic at same time.

Competitiveness Framework: The winners and the losers

The relevance of global and country factors

In 2010, Harvard Business Review published a study conducted by Noam Wasserman from the University of Southern California, and Bharat Anand and Nitin Nohria from Harvard Business School, trying to identify the incremental explanatory power of individual CEOs (Wasserman, 2010). They used a sample of 531 companies — all US firms — from forty-two industries over a period of nineteen years and were able to explain 49% of the variability in Return on Assets, and 67% of a Tobin's Q — a standard metric that captures a company's growth opportunities and that is measured as the ratio of the market value of the company relative to its value in the books (see Exhibit 12).

Because all firms are based in the United States, the impact of global factors makes it difficult if not impossible to measure because very likely the impact of say Chinese trade policies may affect all companies in the sample in a similar way. Still, they were able to find that 14.7% out of the 49% variability in Return on Assets, and 13.5% out of the 67% variability in Tobin's Q, are due to CEO-specific characteristics. By contrast, very little of the variability in stock returns and return on assets is due to country-specific or global factors.

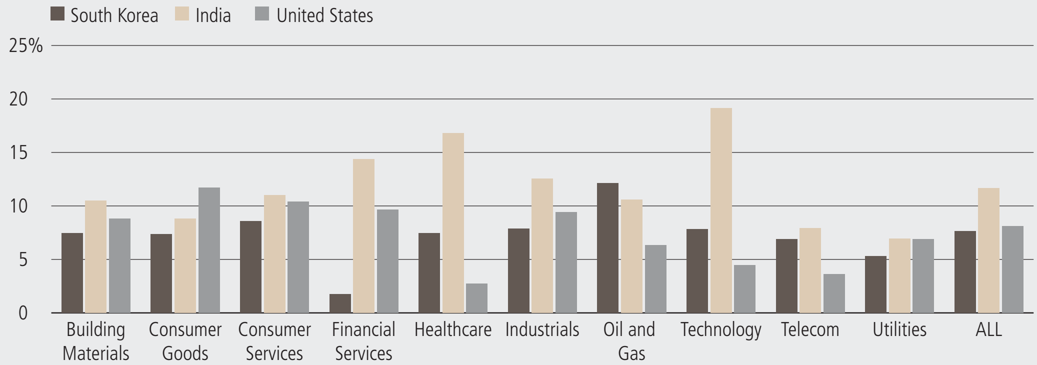
Exhibit 12: Explaining performance

	Return on Assets	Tobin's Q
Year	2.6%	5.2%
Industry	6.3%	15.5%
Company	25.5%	32.8%
CEO	14.7%	13.5%
Total Explanatory Power	49.1%	67.0%

Source: Wasserman et al. (2010)

A recent study by Oriana Bandiera from the London School of Economics, Stephen Hansen from Oxford, Andrea Prat from Columbia, and Raffaella Sadun from Harvard has resolved the problem of using only US data (Bandeira et al. 2019). They studied the performance of 1,114 CEOs in six countries and were able to differentiate between 'leaders' and 'managers' by analyzing the day-to-day behavior of the CEO. A leader-CEO is typically more focused in externally-oriented activities, time spent with C-suite executives, and internal communications, while manager-CEOs are more focused on production activities and one-on-one meetings. There are many interesting results in their study (particularly that leader-CEOs have a significantly stronger effect on corporate performance). Relevant for us, they find that 17% of the variance in CEO behavior index is caused by country effects.

Exhibit 13: Return on invested capital



Source: Datastream. Data as of December 2019.

Unfortunately, they do not report the incremental impact of global factors on a company's performance overall. Besides, while the study is impressive both in its scope and detail, it includes mostly small companies (in median, firms in this study have 300 employees and USD 35 million in sales), so naturally for such firms the impact of global factors should be smaller than for the average publicly listed company, for instance.

IMD sample of international companies

IMD Institute has created the largest sample of international companies to assess the impact of global and country factors on corporate returns. Our sample of companies comes from the standard database for international companies, Datastream. We first obtain from Datastream accounting and stock price information from 27,147 firms from eighty-five countries, in the period 1991-2019. We further classify the companies into ten industry groups.[5]

We consider two measures of performance. The first is the annual stock price performance of the company. All the firms in the sample are publicly traded, which is obviously a problem because it restricts our conclusions to listed companies only. Returns are measured in US dollars to allow for comparability.[6]

[5] Industry groups are: Building Materials, Consumer Goods, Consumer Services, Financial Sector, Healthcare, Industrials, Oil and Gas, Technology, Telecommunications, and Utilities

[6] This is in any case not a problem since the econometric analysis controls for country-fixed and time-variant effects, so exchange rates are accounted for.

Exhibit 14: How much factors explain

	Return on Invested Capital			Stock Returns		
	All Sample	OECD	non-OECD	All Sample	OECD	non-OECD
Global	0.2%	0.2%	0.7%	16.7%	15.2%	32.6%
Country	2.6%	1.6%	6.4%	8.9%	5.8%	11.9%
Industry	1.9%	2.4%	1.3%	1.6%	1.9%	1.7%
Firm	33.1%	34.6%	23.9%	9.4%	10.5%	4.7%
CEO	6.1%	6.0%	7.4%	4.0%	4.4%	2.7%
Number of Observations	53,870	41,200	12,670	82,610	66,231	16,379

Source: IMD World Competitiveness Center. Data as of December 2019.

The second performance metric was the return on invested capital (ROIC), measured as operating profit (earnings before interest, tax, depreciation and amortization, or EBITDA), divided by the sum of debt and equity.

These two indicators provide different insights. ROIC is based on accounting data and is therefore historical. Moreover, it reflects one-shot results of a company—the profitability of investment in the given year. In contrast, stock returns are forward looking because investors buy stocks to benefit from future returns and dividends. Moreover, stock returns reflect the future, long-term performance of the company, which is directly related both to the firm growth prospects and to the firm level of risk.

Exhibit 13 displays median ROIC in South Korea, India, and the United States, across firms and years, and classified by industry.

Note that on the rightmost bars in the graph, India's return on capital (12% in median) is larger than in South Korea and the United States. Additionally, within countries there is a wide variation depending on the industry. For instance, while the technology industry in India generates close to 20% return on capital annually between 1995 and 2018, the return on consumer goods is only 8.5%. Similarly, financial services in South Korea yields a meager 2% over the period, compared to oil and gas (12%).

Subsequently, in Exhibit 14, we have estimated how much of the variability of each measure of performance is explained by Global, Country, Industry, Firm, and CEO-specific characteristics.[7] On average, variations in performance that are similar for all companies over time are what we call 'global' factors. Anything that is systematic across countries is a 'country' factor. Likewise for industries. After that, any specific variation of performance is either firm or CEO-specific.

Among the factors explaining ROIC, the dominant is firm characteristics. Note that across industries there is not much difference in ROIC that is not captured by firm differences themselves. Our interpretation is that companies such as Apple and Samsung display different returns on investment because of their differences in product portfolio, technology, culture, and value, and to a lesser extent because one is American and the other is South Korean. Fluctuations in ROIC are also very much independent of global and country phenomena.

[7] Methodologically, this consists of estimating regressions of stock returns and ROIC on year, country, industry, firm, and CEO dummies, and computing the explanatory power of each regressor.

For the entire sample of firms and countries, CEOs explain 6% of the firm's variability in ROIC. Everything else equal, this means that, on average, a CEO could have a ROIC which is 6% higher or lower than her predecessor. For an average ROIC in the sample of about 5%, the impact of the CEO is ±0.3%. Note that such impact is not only caused by personal characteristics, but also by individual choices of financial strategies, growth tools, recruitment of talent, and so on.

For stock returns, results are somehow different. In fact, the most important determinant of stock performance is the set of global factors that impacts all companies alike. On average, 16.7% of the variability of a company's stock return is caused by global factors. Besides, almost 9% of such variability is country-specific. Only 9.4% and 4% is explained by firm and individual CEOs, respectively. This means that if Apple and Samsung display different stock returns it is mostly due to the country's nationality.

There are interesting differences in result when one looks at OECD and non-OECD countries separately. In summary, we can say that global and country factors are way more important in less developed economies. By contrast, CEOs and a firm's characteristics are more determinant of performance among OECD countries.

Global factors become less important over time

Having established the relative importance of global and country factors in determining stock returns and profitability, it is interesting now to analyze their impact over time.

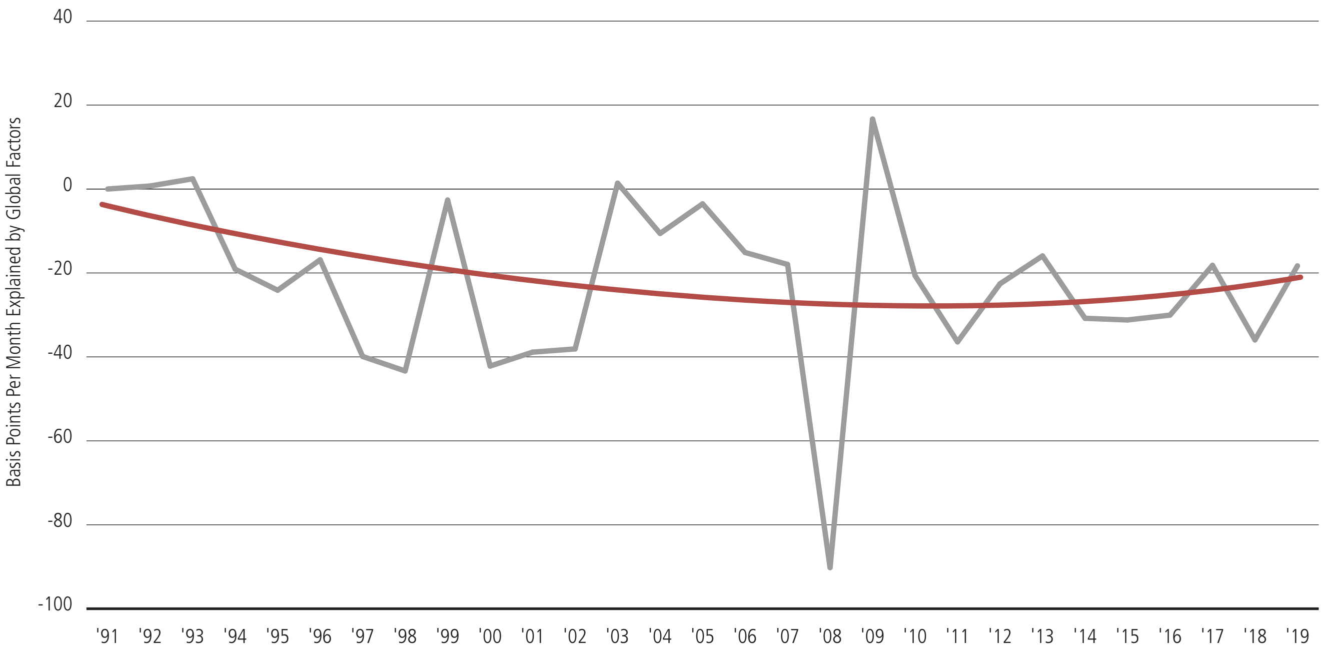
Over the last several years, our observation is that, because of trade wars, geopolitical events, changes in regulation, and competition among countries, the world economy is becoming less globalized. Today, countries are more important than the overall economic cycle; countries are also more important than industries when looking at portfolio returns. Is it different now from say ten years ago?

Obviously global trends play a role in company´s performance. What is relevant for our purposes is to separate out global from national factors. That is — is there a deglobalization trend in the last few years?

To investigate that, we have estimated the impact of year, country, industry, firm, and CEO variables on stock returns (we focus on market returns only because they are forward looking and more relevant from investors' perspective). To do that and in simple terms, we estimate regressions of stock returns on indicators of year, country, firm and CEO. So we can decompose the variability of stock returns into a part that is common over time for all companies (the global factor); a component that is common for all stocks from the same country (the country factor); a component that is common for all stocks from the same industry (the industry factor). Additionally, we calculate the stock return variability specific to each company and CEO.

Subsequently, we have reported the estimates over time. See the results in Exhibit 15. The magnitude of the effects must be interpreted in relation to the first year in the sample (1991) and in terms of basis points per month, relative to the average return for the whole period.

Exhibit 15: Global factors over time



Source: IMD World Competitiveness Center. Data as of December 2019. Red line indicates trend line (Polynomial, 2nd order).

It is noteworthy that global effects are most positive in 2009 and most negative in 2008. This is a clear quantitative evidence of the globality of the 2008 crisis, as all stocks, independently of country and industry, fall significantly in 2008 to recover partly in 2009.

We have also added a time trend to highlight that there are two sub-periods when global factors behave differently. In the period 1991-2008 global factors become gradually more important. However, the red line in Exhibit 15 illustrates the deglobalization process taking place since 2009, by which the importance of global factors in stock returns as been declining on average.

Country factors have become more important over time

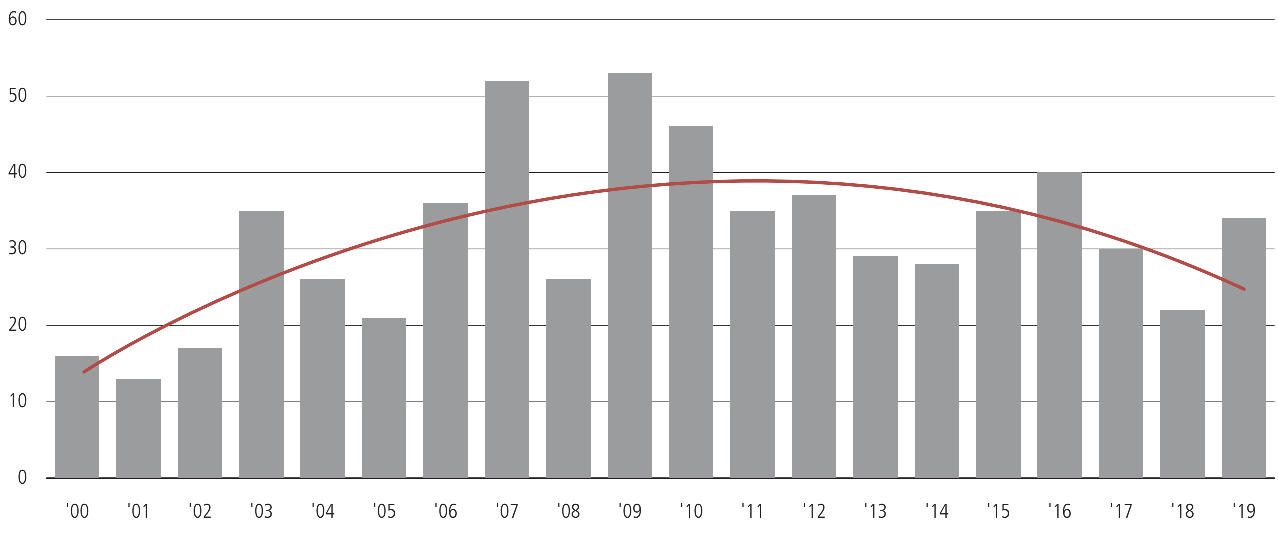
Let us show a final piece of evidence highlighting the importance of countries in global markets.

Exhibit 16 plots the number of days in a given year when markets move in the same direction. Specifically, we have collected daily stock price information for eight stock markets in the world: United States, China, India, UK, France, Germany, Brazil, and Switzerland. For each country we use the relevant stock market index (Dow Jones, Shanghai, CAC40, etc.). For each day, we check whether all eight stock markets move in the same direction, up or down. Intuitively, when stock markets respond to idiosyncratic or local shocks, it is expected that they go up or down irrespective of each other. However, when all markets respond to the same global factor(s), it is expected they go all up or down together.

On average, stock markets move together 32 days in a year (roughly 15% of all trading days). In certain periods, and in particular in the period before and after the 2008 financial crisis, stock co-movement was higher, exceeding 50 days in a year. This is intuitive and consistent with the previous results.

We have also plotted a time trend. It shows how, during the last five years, stock co-movement has declined, indicating an increasing importance of country-specific effects.

Exhibit 16: Co-movements of stock markets



Source: Bloomberg, IMD World Competitiveness Center. Data as of December 2019. Red line indicates trend line (Polynomial, 2nd order).

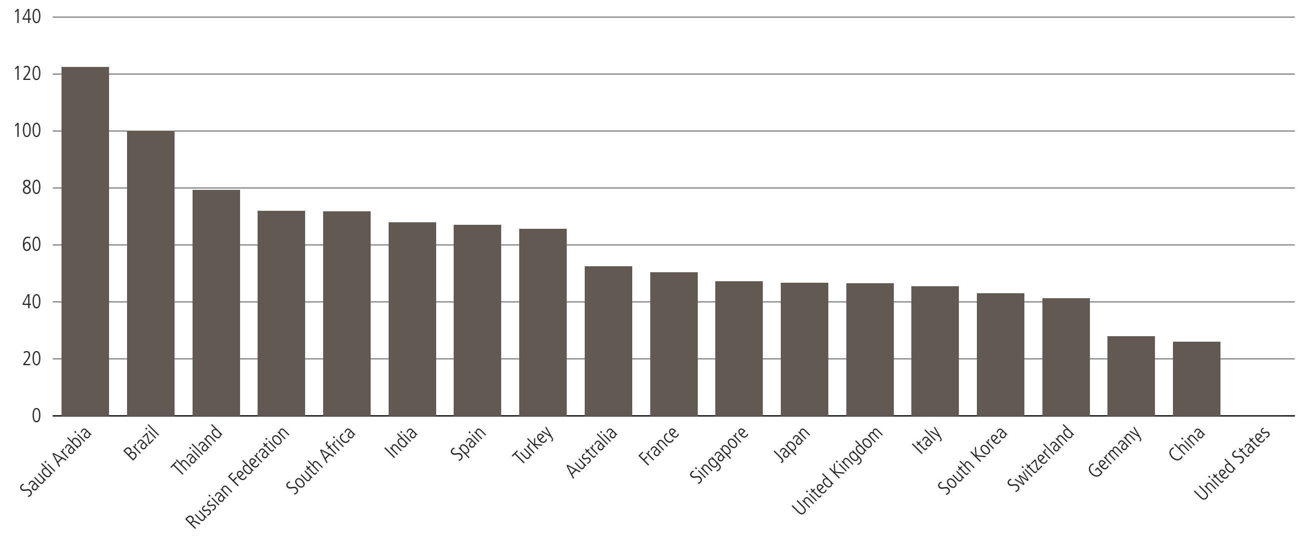
For which countries is deglobalization more important?

Our last piece of analysis tries to identify the countries for which global factors have become less relevant. This is the same as saying that companies in these countries are relatively more exposed to country-specific factors and variability.

Exhibit 17 shows the magnitude of the country effects for a sample of countries (the most relevant economies) relative to the United States. Such effects are calculated in a similar fashion as in the previous sections. Note however that the absolute magnitude of the effect does not have a direct economic interpretation.

First note that for all countries, the country effect is larger than for the US. This is natural given that the US market is a good measure for a global factor affecting all countries, so the bars for each country represent the importance of the country-specific effects besides the impact of global factors. This also explains why China displays one of the smallest effects, being also one of the largest economies. The most idiosyncratic (less 'globalized') markets tend to be relatively smaller economies (Thailand, Spain) or developing economies (Brazil, India).

Exhibit 17: Country effects



Source: IMD World Competitiveness Center. Data as of December 2019.

The winners and the losers

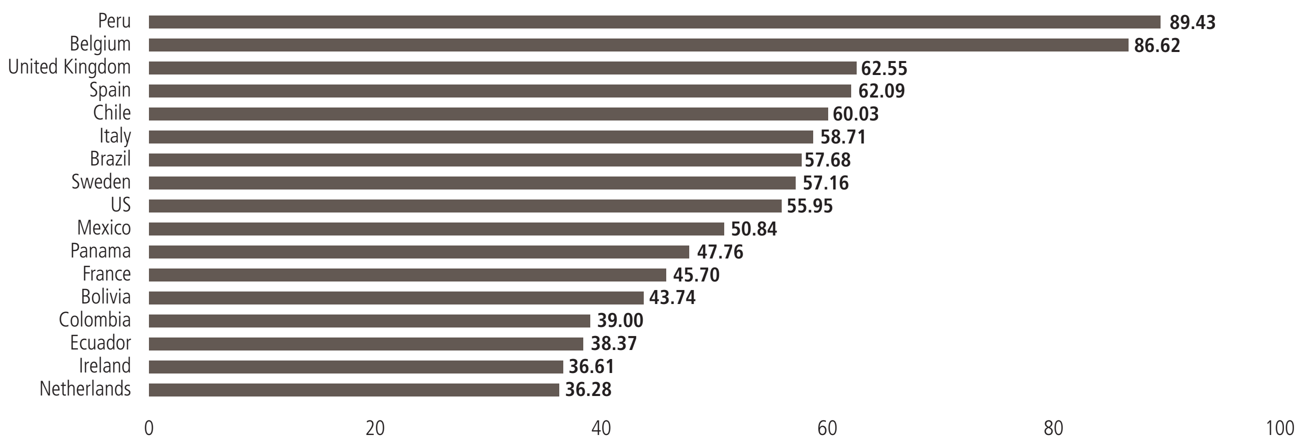
Who will benefit the most from the deglobalization trend? The 2020 IMD World Competitiveness rankings have shown that the top five most competitive economies are all small. This is interesting as the rankings already incorporate part of the impact of COVID-19 in policies and perceptions. The surge of small economies is the result of their ability to apply tough recipes of economic policy, and have them accepted by the population. It also reflects the advantage of these economies at generating social consensus, and also that in the last years, the more financially healthy governments are small nations.

The ranking is topped by Singapore, Denmark, Switzerland, Netherlands and Hong Kong. Two of these economies (Singapore and Hong Kong) are authoritarian regimes, where the implementation of long-term economic strategies is easier. Denmark, Switzerland and Netherlands are European democracies. It is also interesting that, to different degrees, these three economies are integrated into the European Union: Netherlands as a Euro member, Denmark as an EU member, and Switzerland as part of the Schengen area.

We believe successful countries in the coming years will be (1) those with strong institutions that are able to build social consensus around policies — think about the US and the current social and political fragmentation; (2) small economies that enjoy the protection of nearby, large markets, be it China or Europe; and (3) countries with healthy finances who can support the domestic economy in the most devastating crisis of the last decades.

Exporting countries unable to tap into domestic markets will be the big losers, in our view. Especially if they have weak currencies — such as India and Brazil — and if they depend on low-value added products such as agriculture or basic supplies, like most African countries. Add to them the oil-exporting countries: sustainability will be a differentiator for companies and countries in the coming years, and will be a required license to operate. This goes against economies that rely on fossil fuels and polluting energies.

Exhibit 18: COVID-19 deaths per 100,000 population



Source: John Hopkins University as of September 1, 2020.

Conclusion: Implications for long-term investors

COVID-19 amplifies and speeds up the ongoing evolution of globalization trends rather than completely disrupting the world as we know it. It also emphasizes already-existing market issues, particularly liquidity problems in the fixed income markets.

One of the key takeaways of this examination is that the slowdown in globalization we experienced since the GFC will likely continue COVID-19 possibly at a faster rate in certain strategic sectors (i.e., health and technology). We believe globalization will evolve towards a model that is more regionalized, more focused on services, less capital intensive and less energy intensive.

This will present both significant challenges and opportunities for investors. It might be the right time for sovereign investors to take advantage of recent dislocations to take direct exposure to longer-term secular trends that are being accelerated by COVID-19, especially in the technology and healthcare sectors. The growth centers of future regionalization, in particular in Asia, could offer robust long-term opportunities as the region exhibits many potentially attractive megatrends including population growth, urbanization, and aging demographics.

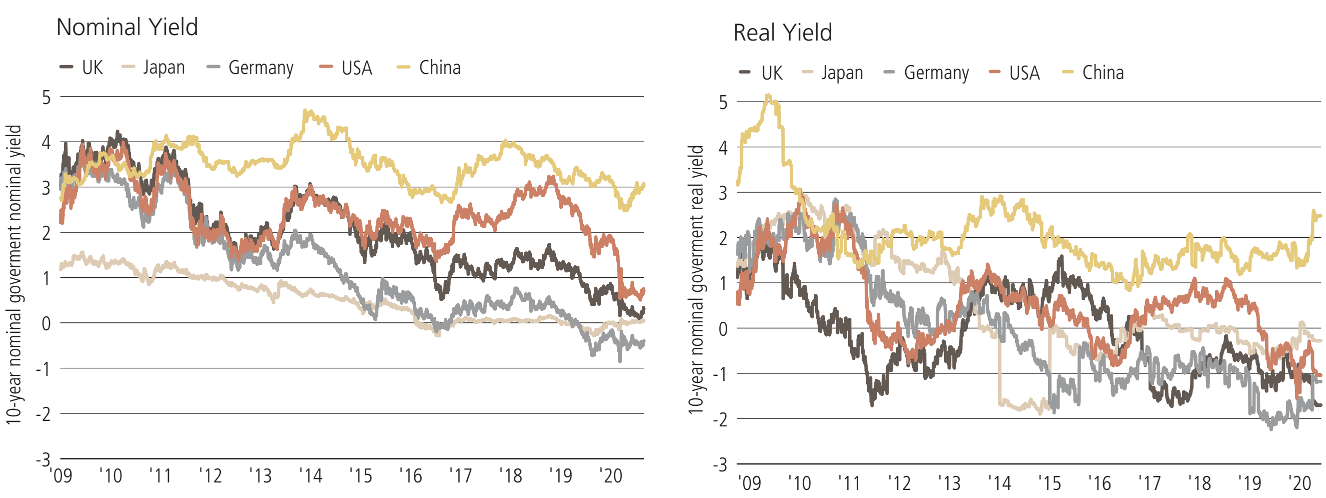
In a more digital, less globalized and more regionalized world, we think the following trends will therefore be crucial for sovereign institutions in their investment process.

Negative real interest rates a challenge for long-term investors

Low or negative interest rates were already a feature pre-pandemic, creating massive challenges for investors that are required to invest in liquid and safe assets such as government bonds. Rich valuations in all types of assets considered to be relatively safe and predictable make the search for alternatives challenging.

COVID-19 has further exacerbated the low yield environment, with interest rates expected to remain low for a prolonged period of time. Facing an unprecedented recession, US interest rates have converged towards the zero level already prevailing in Europe and Japan. US Treasuries – the last bastion of positive real yields on government bonds – are a key asset class for central banks and sovereigns given their large historical exposure to the leading global reserve currency.

Exhibit 19: Nominal and Real long term interest rates US, Euro and Japan (data to be provided)



Source: Bloomberg, UBS. Data as of August 2020.

On top of that, is inflation a risk that should be considered in investment decisions now? Just because globalization caused a deflationary push, it does not mean that a slowdown in globalization automatically means more inflation. Demographic trends, technology, excess capacity in industrial goods, negative output gaps and even higher debt levels following the COVID-19 crisis are likely to keep inflation low for quite some time. This may be even more so the case should slowbalization lead to a shift from a period of globalization marked by trade in physical goods towards 'digital globalization' where trade in data and digital goods will be much more resilient towards tariffs, government control, nationalism or border controls.

The COVID-19 crisis in conjunction with new trade war rhetoric and accelerating US-China decoupling might further suppress investments on the corporate side due to rising uncertainty about the ultimate winners and losers of the new global regime; on the consumer side, the shock of the crisis might lead to a long-term increased saving rates.

To us, all these factors point to low inflation over the short term. As a consequence, investors should not expect that the unprecedented fiscal and monetary support during the crisis will automatically lead to higher inflation. For that, a significant additional rise in protectionism or even a cold trade war turning hot would be needed if history is any guide. For now, the lower-for-longer yield environment should continue to be the base case for investors.

Investors should not expect that the unprecedented fiscal and monetary support during the crisis will automatically lead to higher inflation

Given stagnant FX reserves and the fact that several sovereign wealth funds experienced withdrawals during the COVID-19 crisis and the concurrent sharp decline in oil prices, the return that sovereign investors are able to generate on accumulated assets will become even more important. Therefore, fixed-income heavy investors like central banks may feel unprecedented pressure to diversify. They now face two choices: a) further increase allocation to equity which remains supported by the upcoming recovery and massive liquidity but involves higher volatility; or b) further broaden the investible universe by including alternative asset classes such as real estate and infrastructure bonds which could provide return enhancement (illiquidity premium) and — most importantly — diversification away from government bonds and other traditional fixed income assets.

While such asset classes are illiquid, they usually have lower volatility than listed equities, and thus are expected to contribute to improved risk-adjusted returns. Furthermore, real estate does not carry substantial reputational risk for central banks as they can invest into this asset class through a very diversified portfolio across countries and sectors. With regards to infrastructure bonds, a relatively new asset class, there might be still a certain lack of diversification opportunities. However, this asset class is developing fast and more and more institutional investors are moving into this asset class searching for further diversification away from fixed income.

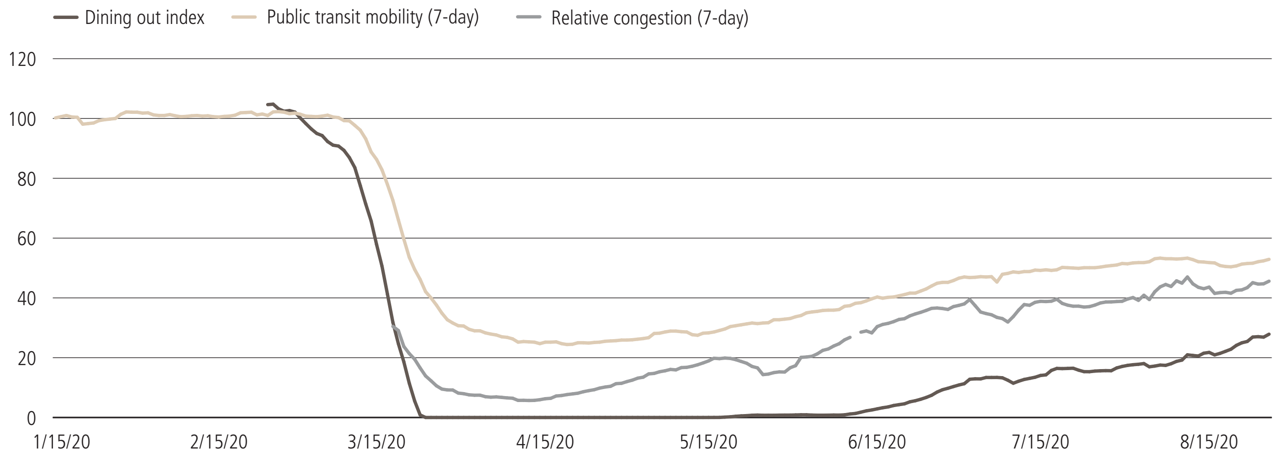
When it comes to the consequences for equities, it will likely be very difficult for value stocks to perform strongly for extended periods without a meaningful rise in inflation expectations and commodity prices. A relative increase in the attractiveness of value would rather go along with growth correcting current relatively high valuation levels.

EM vs. DM: a regional/country approach to pick up winners

The COVID-19 crisis and general slowbalization trends could hit the large economic blocks of the world in different ways.

The US was generally well positioned to master slowbalization and reshoring trends when compared with export-oriented regions in Europe and Asia. On a revenue basis, nearly 70% of the S&P 500 revenues are sourced domestically, with a 60-40 split between services and goods.[8] The higher level of services might mitigate the shrinking of global value chains; at the same time, the US has many more domestically-exposed companies, limiting the impact from protectionism. The US is also expected to be the winner of the move 'from stuff to fluff' and data becoming a key driver of future globalization as it is the leader of the de-materialized economy. However, the service and consumer-driven economy of the US is very much dependent on openness and consumer sentiment, both factors which are dramatically impacted by the pandemic. In a sense, the US is an example of a country where existing strengths and ongoing trends were not really amplified by the crisis.

Exhibit 20: Mobility & activity trends for New York



Source: Google, UBS Evidence Lab, as of 26 August 2020.

[8] UBS Q-Series paper "Future Reimagined: Propelled to The Thinking Economy" published on June 18th 2020.

In this context, a regional strategy for the US would focus on technology, which has developed in a quality play based on good balance sheets combined with growth, and healthcare, which besides the boost from the current crisis has long-term megatrends like demography on its side.

In EM, companies could be vulnerable to currency weakness as well as an intensification of fiscal pressure. We also expect that DM companies will increasingly reshore routine tasks and automate them going forward. In addition, protectionism hitting not only manufacturing but more and more (digital) services could be a risk not yet fully priced in. A UBS Evidence Lab survey of 450 senior executives of Korean, Taiwanese and Japanese export-related businesses conducted between March 16-31, 2020 found that 85% of corporates still intend to move some capacity out of China, and that they intend to do so imminently. Corporate balance sheets are not as solid as in DM and also private debt levels are worse. However, several countries in the region have mastered the COVID-19 crisis relatively well and could ultimately have a head start in the rebound. It has yet to be seen to what extent under a continued slowbalization, reshoring and trade war scenario, technological disputes like what we are witnessing between the US and China will affect emerging markets overall, e.g., by slowing the adoption of global and digital standards. Also, EM FX is likely to suffer more trade-weighted depreciation, but ultra-low DM yields might slow the trend.

While we recommend a sector-specific asset allocation for the US which can still be implemented with passive strategies, we think that this is not so straightforward in EM. Markets like China already demonstrate how successful active strategies can be employed in regions that are in transformation; for some time already, it was relatively easy for active investors to beat the index by underweighting the indebted and only slow growing 'old' economy, and going long 'new' economies in services, consumer discretionary and tech, which the state wants to grow as part of a national strategy.

By region/market group, EM ex-China is expected to be the most vulnerable. On a country level and also based on the IMD Global Competitiveness Framework, we consider Korea, Taiwan and China to be well prepared as they have a good financial position and ability to respond to crisis, and showed a good management of the COVID-19 crisis so far. We are less optimistic on Brazil, Indonesia and India.

Could Europe be a relative winner of the crisis, in particular since it is massively under-owned by investors and priced for eternal decline? Could the crisis have damaged the outlook for long-term leadership from the US and China to such an extent that Europe could become the winner over the next decade on a relative basis? The recent recovery included rallies in value stocks, the European markets and the euro, and voices were becoming louder that were suddenly constructive for Europe.

On a country level, we consider smaller, dynamic economies like Denmark, Switzerland, Sweden, Norway, Netherlands and Ireland to be well prepared, a view also supported by the IMD Global Competitiveness Framework.

Move away from traditional benchmarks and embrace investment themes

We believe that global wealth and global growth is likely to grow slower than in the past on a net basis. However, at the same time, shifts between the different pieces of the 'pie' are expected to be more vicious going forward, as growth in one region or industry is more likely to come at the cost of another. This is bad news for passive investors but good news for more flexible investors that do not shy away from benchmark-agnostic investing according to shifts in sector performance or regional power, with each block subject to technological disruptions and megatrends. When it comes to the question which sectors and trends to focus on as part of an active strategy, we consider the following points to be particularly relevant:

- When it comes to industry sectors globally, we expect the most negative direct effect from slowbalization for the Materials and Transport sectors, and the least negative effects for Food retail, Utilities and Insurance.
- The Coronavirus crisis might have permanently changed the consumption behavior of large parts of the population, for example the older generations, which were forced to become more digitally savvy in a relatively short period of time.
- In addition, employees have worked from home, manufacturing had to figure out ways how to produce with even less workers, and governments have used data to fight the pandemic. Each of this will accelerate a move away from the material and towards the intangible. AI, cloud technologies and collaboration tools should see further strong growth. Disruption might happen in particular in sectors which were until now less affected by digital change, including household products, groceries, personal care and home improvement.
- Should 30%-45% of jobs in high-income countries be done from home in the future as UBS Evidence Lab research suggests,[9] it would have strong positive implications for software, education, medical technologies and discretionary spending, while potentially hurting retail, materials and some areas of real estate.
- The COVID-19 crisis has also created new incentives to shorten long value chains and to reshore production; this in combination with an aging population, and continuing falling prices of technology will likely further fuel the demand for automation. Consumer Goods, Wholesale Trade, Transportation, eCommerce-driven Warehousing, and Construction are characterized by both low labor productivity and high potential for automation. Countries with higher per-capita incomes have higher robot density, as higher wages in these countries make installation of industrial robots economically feasible as a substitute for human labor. Apart from higher wages, from a labor supply point of view, an aging demographic also motivates firms to automate their production lines, thereby reducing reliance on human inputs, according to UBS Evidence Lab research. Several major European countries, such as Italy, France, the Nordics and Spain will experience significant aging in the coming decades and might see a relatively higher automation growth than the major robot consumers today (China, Korea, Japan, the US and Germany).

[9] UBS Q-Series paper "Future Reimagined: Propelled to The Thinking Economy" published on June 18th 2020.

Higher public debt, higher taxation

UBS research suggests that global public debt/GDP will rise by 20 percentage points to 101% of GDP (PPP-weighted) by end-2021.[10] In comparison, during the GFC global public debt increased by only 12 percentage points. For debt to stabilize, growth needs to improve strongly, real interest rates need to stay very low or fall further, and primary balances need to improve considerably.

As a consequence, UBS research suggests that US corporate tax rates could move higher than after the cut in 2018. A 28% US rate would be a ~3.7% hit to S&P 500 earnings, with Banks, Transport and Retail hurt the most. Also, a potential digital tax is still in question, which might have a considerable market impact as Tech and Communication Services are nearly 30% of global equities. A Biden victory in the November US presidential election could make such taxes more likely, and would also reduce the pressure on Europe to abstain from similar measures which would disproportionally affect US companies. Besides digital, carbon taxes could gain further momentum as they can also be sold as addressing popular environmental goals which would affect energy-intense businesses. Finally, food/beverages could be a tax source to address obesity and health issues following the COVID-19 crisis.

COVID-19 and ESG

Will the Coronavirus crisis slow the fight against climate change by crowding out the limited potential that people have to pay attention to critical issues?

We still believe that key principles of sustainability and long-term investing are in natural alignment with the objectives of sovereign investors, offering them not just the possibility to lead by example but also a potential source of alpha and a nontraditional framework to assess the risk/return of their investments in the context of their mandate and responsibility for their stakeholders.

Also, now that the concepts of long-term investing and sustainability started to merge together, we believe that sustainable themes themselves like energy efficiency, water, growing inequality and an aging population are an important part of long-term benchmark agnostic strategies.

However, the biggest contribution that sovereigns, like central banks, which at the same time are regulators in their market, can provide in the greening of the financial system will most likely be in the area of international standard setting and in creating an international level playing field for other investors and issuers.

Will the COVID-19 crisis slow the fight against climate change by crowding out the limited potential that people have to pay attention to critical issues?

[10] UBS Q-Series paper "Future Reimagined: Propelled to The Thinking Economy" published on June 18th 2020.

We believe globalization will evolve towards a new model

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Americas
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