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Executive summary

AFTER DECADES OF INCREASING GLOBALISATION on e'er front, from trade | pushed further by the growing role of value chains | to technology, movement of people and investment, there now seems to be a turn towards slower globalisation if not deglobalisation, at least in some areas.

DEGLOBALISATION IS NOT A NEW CONCEPT but rather a megatrend which has been seen before, for example right before the First World War. Signs of deglobalisation, measured by decelerating trade and investment, and smaller global value chains, started

1 Is the current phase of globalisation over?

Most economic historians consider the century before the first world war as the first phase of modern globalisation. It was marked by sharp increases in trade, movement of people and capital flows. Global trade grew at an unprecedented rate of almost 4 percent per year for nearly a century, a development attributed to technological progress which greatly reduced transaction costs, such as transportation and communication and also to the easing of government restrictions, including import tariffs. In addition, movement of people between continents ballooned, driven by working-class Europeans migrating to the Americas. Against this backdrop, capital flows also boomed, as capital looked for profitable projects overseas.

However, the first world war interrupted the globalisation process. The global political order was turned upside down with the demise of the gold standard and increased protectionism to protect domestic economies. Globalisation only resurged after the second world war. The renewed wave of globalisation was built on the pillars of newly created international organisations designed to ensure economic cooperation between countries. A high point was the signing in 1947 of the General Agreement on Tariffs and Trade (GATT), which led to a series of agreements that lowered tariffs and eliminated other existing restrictions on trade. Since then, trade and foreign direct investment have grown steadily, as have international mobility, technological changes and capital flows. But with the 2007-2008 global financial crisis this super-cycle of growing changes reached its peak. Since then, global trade has greatly reduced, as has global investment flows. In other words, deglobalisation may be happening.

What is meant by deglobalisation should be clarified. Among the many definitions that can be found, we opt for a narrower one, related to economic factors, in particular a reduced number of changes, whether trade, investment, technology or movement of people. It should be noted that deglobalisation does not equate to economic decoupling, which refers to two specific economies reducing their economic linkages and, thus, their interdependence. Nevertheless, we consider if and how fast decoupling is happening between the US and China, given their increasing strategic competition (Garçon-Herrero, 2018). We also consider how decoupling and deglobalisation interact.

Meanwhile, the economic literature does not offer a clear consensus on the pros and cons of globalisation. The traditional argument in favour of globalisation, since Adam Smith, has been heightened competition and efficiency gains from specialisation. More recently, globalisation has been associated with higher economic growth and poverty reduction. Khan and Riskin (2001) found that poverty reduction in China could be attributed to the opening up of its economy, for example. Other positive effects include economies of scale and scope that can lead potentially to reductions in costs and prices (Intriligator, 2003; Rogo, 2003). In addition, Tomohara and Taki (2011) proposed that globalisation leads local employers to pay higher wages as foreign companies are given market access.

Since 2008, the economic literature on globalisation has been less favourable. Hillebrand (2010), for example, argued that protectionism may improve income equality in some countries, although he still thought that a retreat from globalisation could lead to profound negative implications for the global economy. Even before the global financial crisis, the economic bedrock of globalisation, namely the link between trade and growth, was challenged. Rodrigue and Rodrik (1999) argued that the empirics of the trade and growth relationship are far from settled. Rodrik (2011) pushed the concept of the *Washington Consensus*, which globalisation will not be able to coexist with democratic and national self-determination. In other words, excessive government power could cause protectionism, while excessive market freedom could cause economic instability. The globalisation paradox seems to have become more visible lately based on the increasing number of trade disputes and government responses to severe shocks, including COVID-19. A few studies have attempted to measure the degree to which a deglobalisation process might be taking place,

although most focus on trade (Garçon-Herrero, 2018). Antràs (2020) found little systematic evidence to indicate that the world economy has entered an era of deglobalisation, but acknowledges that globalisation is continuing at a much slower pace.

To determine in which phase of globalisation or deglobalisation we are, this Policy Contribution evaluates key aspects of economic changes, namely trade, global value chains (section 2), technology (section 3), movement of people (section 4), and financial flows (section 5).

The available data points to a slowdown in the globalisation process insofar as interlinkages are growing less rapidly. This is particularly the case for trade and investment. While it is still too early to assess how permanent the process is, it seems important to measure the speed of the process for the different types of economic change (trade, technology, people and capital).



Figure 2: Global trade volumes (year-on-year, %)



Source: Bruegel based on UNCTAD, Bloomberg.

Figure 3: Growth of global trade in services (year-on-year, %)

Source: Bruegel based on UNCTAD.

The degree of integration of global value chains (GVC) has also declined since the GFC. If this integration is measured by the value of intermediate goods that are either imported to be re-exported, or are exported to other countries for them to re-export, there has been a net decline since 2008 (Figure 4). The decline has been much more significant for Germany, Europe's exporting powerhouse, than for the US and China (Figure 5). The EU remains the world region most integrated into GVCs, but the decline in its participation is happening faster than for other regions, and is in line with EU's declining share of manufacturing exports at the global level.

Figure 4: World global value chain participation (%)

Source: Bruegel based on UNCTAD-Eora, Natixis. Note: Estimated data for 2016-2018. GVC participation is defined as the sum of imports of intermediates and exports of intermediates that are then used in the importing countries' exports, as a share of total exports.

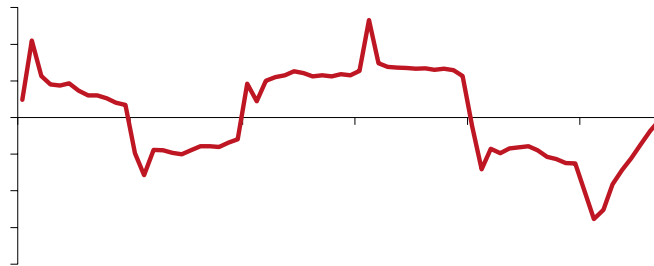
Figure 5: GVC participation, selected economies (%)

Source: Bruegel based on UNCTAD-Eora, Natixis. Note: Estimated data for 2016-2018. See note to Figure 4 for definition of GVC participation.

Amid these changes, the World Trade Organisation (WTO) has been weakened as the facilitator of global trade flows. Its appellate body, which arbitrates in disputes, has been functioning poorly, resulting partly from the greater heterogeneity of the WTO as more emerging countries have joined the club, and partly from the lengthy process involved in settling trade disputes. But more important have been the increasing confrontations on trade between the US and China. President Trump's profound disdain for multilateralism and China's state-led system are not compatible with the liberal nature of the global trading system and might have weakened the WTO's foundations. China has also been hit by US sanctions, which are being targeted against countries beyond Cuba, Iran and Russia. US sanctions against China are a further push towards their decoupling in trade, and also in terms of technology and investment flows. In other words, US-China decoupling is reinforcing the post-GFC deglobalisation trend, at least in terms of trade and global value chains.

The deglobalisation trend has clearly accelerated since 2019, ending in a collapse in trade flows at the peak of the COVID-19 pandemic (Figure 6). One of the reasons for the deceleration in trade before the pandemic was the US-China trade war and, consequently, the reduced trade flows between them, after a series of tit-for-tat protectionist measures (Figure 7). While the pandemic is an exceptional event and the immediate impact of the collapse in

Figure 7: China's trade in goods with the US (year-on-year,%)



Source: Bruegel based on www.wind.com.cn/.

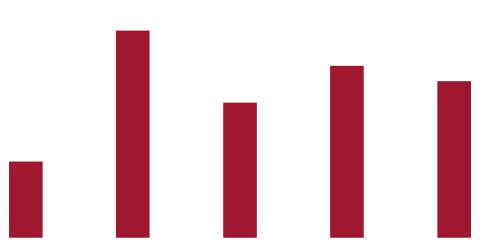
In summary, the slowdown in globalisation trends is more notable for trade and global value chains, which have been shrinking and fragmenting since the global financial crisis.

3 Technology protectionism is still embryonic but evolving amid US-China decoupling

For years, the technology sector has been expanding globally with benefits in terms of economies of scale and network externalities. But such expansion could be deterred by policy constraints, as seen in the case of the technology decoupling between the US and China. In particular, the decoupling has sown the seeds of technology protectionism. In this section, we look at the various channels through which technology deglobalisation is happening, from export controls and screening of foreign investment, to bans on telecommunication software and hardware.

Firstly, transfer of technology has become increasingly restricted as global technology competition intensifies through export controls on high-end technology products. Approvals for exports of sensitive technology were first implemented by the US to tighten its control over technology transfer to the rest of the world by reducing export licenses for sensitive technological products (Figure 8). But since the outbreak of the US-China trade war under the Trump Administration, export controls have been targeted increasingly at China, with the number of approvals for China declining sharply (from a growth rate of 27 percent in 2016 to -9 percent in 2018; Figure 9). In turn, China has in 2020 introduced export licenses for key technologies, including drones and artificial intelligence.

Figure 8: Approved US licenses for tangible items, software and technology (000s)



Source: Bruegel based on US Department of Commerce.

Figure 9: Approved US licenses for tangible items, software and technology exports to China (000s)

Source: Bruegel based on US Department of Commerce.

Beyond trade, the free flow of investment has also been limited, especially in relation to technology, because of increased investment screening. This is particularly the case for the US, after the granting of increased powers by Trump to the Committee on Foreign Investment in the United States (CFIUS), with the intent to block an increasing amount of Chinese mergers and acquisitions in US, especially in the high-end industrial sector. The EU has followed and set up its own investment screening process in April 2020, pointing to technology protectionism globally, and especially aimed at China's move up the technology ladder. These moves show the unease in the West about China's increasing engagement in technological innovation. Western measures will only serve to drive technological decoupling.

More specifically for US-China competition, the US has introduced the so-called 'entity list', which effectively forbids US companies from conducting business with the Chinese companies on the list. The US Bureau of Industry and Security published such a list of entities deemed a risk to US national security as early as 1997, but the number of names on the list has expanded quickly since 2019, with the addition of Huawei and some of its affiliates and more Chinese corporations.

In September 2020, China announced the release of its own entity list in retaliation, though the names of targeted companies have not been made public at time of writing². The grounds for listing targeted entities have been made public, including the taking of discriminatory measures against Chinese businesses on non-commercial grounds. Interestingly, the announced consequences of being on China's entity list are not sanctions, as is the case with the US entity list, but are rather being blocked entirely from trade and investment with China. All in all, technology decoupling may eventually reinforce trade decoupling

1 See <https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list>.

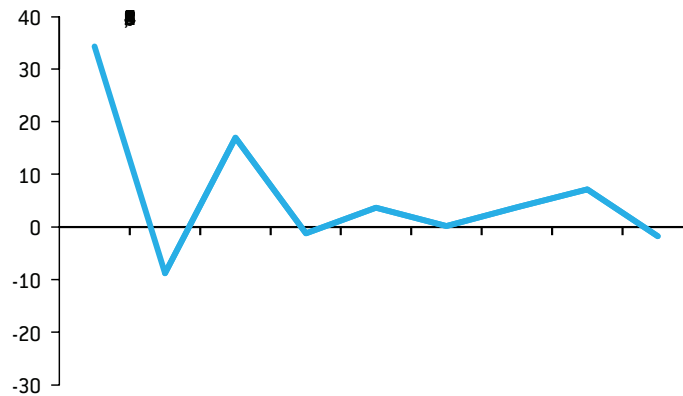
2 See http://english.mofcom.gov.cn/article/policy_release/questions/202009/20200903002580.shtml.

as the web of sanctions and prohibitions expands, and this is particularly the case for high value-added products with a large share of technology components. It goes without saying



Short-term movements have also been growing. However, what has long been perceived as a boom in international mobility, until COVID-19 struck, is actually somewhat inaccurate. Some of the flows of people had started to decelerate before COVID-19 and the number of short-term visitor arrivals slowed down markedly after 2017 (Figure 13). Of course, the number of international flights collapsed in 2020 because of global COVID-19-related restrictions on mobility (Figure 14). Trends beyond the pandemic could mean international mobility does not return to previous levels. Concerns about the impact of travel on health and the environment are likely to redefine the tourism industry. This is even more the case for business travel.

Figure 10: Growth of global trade in travel services (year-on-year, %)



Source: UNCTAD.

Figure 11: International migrant stock (millions)

Source: United Nations.

Figure 12: US visa refusal rates, tourists and business travellers, selected countries

Source: US State Department.

Figure 13: International tourist arrivals (billions)

Source: Bruegel based on UNWTO.

Figure 14: International flight passengers (year-on-year, %)

Source: Bruegel based on Airports Council International.

5 Financial deglobalisation is less pronounced but still noticeable

Increasingly, there are some early signs of financial deglobalisation. This has become more noticeable as the confrontation between the US and China has moved beyond trade with a growing number of conflicts in the financial sector. In this section, we examine globalisation trends through the lenses of foreign direct investment, portfolio investment and cross-border lending.

The decline in cross-border capital flows is particularly evident in foreign direct investment (FDI), the most stable and possibly the most productive type of capital flow. Both inward (Figure 15) and outward FDI (Figure 16) flows as a share of global nominal GDP have been declining since the global financial crisis. This is especially true for outward FDI, which halved from 2.7 percent in 2008 to only 1.2 percent in 2018. This follows the trends of the decline in global trade and the fragmentation of global value chains, and could possibly be a consequence of those. While there was a noticeable recovery in outward FDI in 2019, preliminary data for 2020 points to a collapse in mergers and acquisitions, which is likely to be negative for FDI flows. It is hard to know whether FDI is no longer growing because of lack of demand, or because of constraints that make it harder for investors to operate. In an

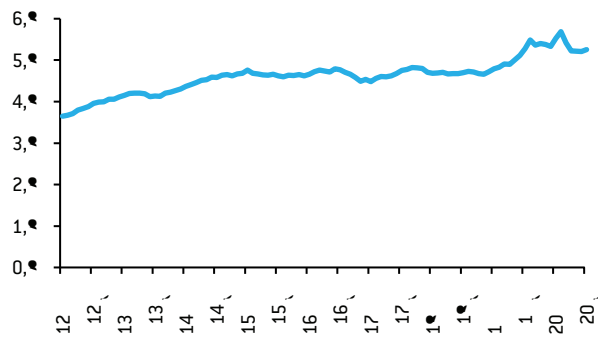
Figure 18: Chinese FDI flow to the US (% of GDP)

Source: Bruegel based on UNCTAD and www.wind.com.cn/.

A less-pronounced trend than for FDI is also observable for portfolio flows. Portfolio flows into emerging markets have also slowed down globally since the European sovereign crisis in 2010 (Figure 19). The rebound of portfolio inflows after the initial COVID-19 shock has been milder than after the GFC (Figure 20). All in all, it is hard to talk of financial deglobalisation for

assets (Figures 21 and 23). Beyond the numbers, there is evidence of government attempts to decouple further. For example, the US State Department has asked universities to divest their holdings of specific Chinese assets, mainly related to Xinjiang or China's military-related companies⁶. That said, these moves have so far stayed bilateral and have not been followed by other countries. In fact, total foreign holdings of both Chinese bonds and US treasuries have increased (Figures 22 and 24), which is understandable given the economic importance of

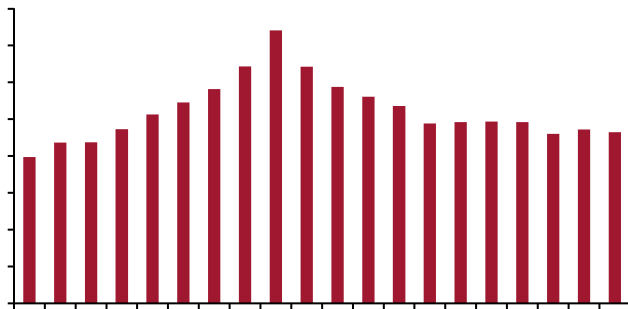
Figure 24: Total foreign holdings of US Treasuries (\$ trillions)



Source: Treasury International Capital.

Cross-border bank lending meanwhile has not returned to the 2008 peak level, either in dollar terms or as a share of nominal GDP, notwithstanding a gradual recovery after the GFC (Figure 25). There is a shift towards more lending into emerging markets, which comes at the cost of less lending flowing into developed markets (Figure 26). It is thus hard to argue that there is a deglobalisation trend in cross-border bank lending. Rather, its nature is changing with an increase in emerging market flows.

Figure 25: Global cross-border lending, total claims (\$ trillions)



Source: Bruegel based on BIS, UNCTAD.

Figure 26: Cross-border lending, total claims (\$ trillions)

Source: BIS.

In line with the reduction in cross-border lending, cross-border financing has become more difficult. For example, Chinese technology firms listed in the US have opted for secondary listings to avoid the risk of delisting from the US stock market. This has been done by Alibaba Group, JD.com and NetEase Inc, which have opted for secondary listings in Hong Kong. The Chinese government has meanwhile adopted policies to encourage the domestic funding of technology companies, including the launch in 2019 of the Science and Technology Innovation Board (SSE STAR Market). Based in Shanghai, the STAR Market has the objective of supporting promising technology start-ups in their equity financing, helping to avoid US equity markets. China has also been increasingly selective in its choice of foreign banks in the arrangement of its sovereign issuance overseas. For example, HSBC was absent from an offering of China's US-dollar denominated bonds in October this year, possibly due to geopolitics. Since the renminbi has not yet become an international currency, China can use its sheer size in financial deals in screening market participants.

The deglobalisation trend is less pronounced than in other areas for financial flows, with the exception of FDI which is more closely linked to trade and the real economy. Nevertheless, the financial decoupling between the US and China is increasingly evident and is not only limited to FDI, though less FDI is significant. If the world returns to capital controls, there will be greater dislocation of global savings and, ultimately, lower potential growth.

6 Conclusions

After decades of increasing globalisation in every aspect, from trade | pushed further by the growing role of value chains | to technology, movement of people, and investment, it seems the trend has turned towards deglobalisation, or at least slower globalisation. Deglobalisation is not a new concept but rather a megatrend which has been seen before, right before the First World War. The slowing of the globalisation process, after decades of growing globalisation since the reform of the international financial architecture after the Second World War, appears to have started in 2008, at least for trade, global value chains and foreign direct investment. The deceleration in trade and FDI globally has been fuelled recently by the strategic competition between the US and China, which is pushing them to decouple from one another, not only in terms of trade and FDI but, most notably, in technology. COVID-19 has been a second, more important factor pushing deglobalisation. Beyond trade and FDI, movement of people has been an obvious victim of COVID-19.

The deglobalisation of trade is happening in terms of value and volume of gross trade and in terms of the importance of global value chains. In other words, there are signs of a reduction in the exchange of intermediate goods between countries as a result of exploitative comparative advantage and specialisation gains. These trends should not surprise us given the increasingly protectionist policies of a number of governments, notably the US, and the related weakening of multilateralism, as clearly exemplified by the decline of the WTO.

Beyond trade, technology decoupling between the US and China is seen in reduced approvals for export licenses, limits on use of hardware (through sanctions and the imposition of lists of companies with which US and other companies cannot trade) and outright bans on software. FDI flows are also shrinking, especially between US and China. FDI screening is one obvious factor hampering FDI flows. International flows of people started to decelerate in 2018, with much sharper declines in the wake of COVID-19. Finally, the trend towards deglobalisation is much less evident for finance, with the exception of FDI, though increasing attempts to decouple particular types of financial flows are emerging, including pressure to delist Chinese companies from US stock exchanges and the imposition of sanctions for transactions with certain Chinese companies and individuals. However, it is too early to confirm the depth and the sustainability of this new trend towards slower globalisation, if not deglobalisation, which may be happening in more domains that we are fully aware of.

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