EUROPEAN TRADE FINANCE

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RIKARD FORSLID AND MARK
SANCTUARY CONSIDER THE
RISKS TO GVCs POSED BY
CLIMATE CHANGE

GRAHAM BRIGHT
DISCUSSES POTENTIAL
THREATS AND OBSTACLES TO
GLOBAL TRADE IN 2023

LEBASTARD ET AL

EXAMINE THE IMPACT OF

COVID-19 ON SUPPLY

DISRUPTIONS

A EUROPEAN PERSPECTIVE ON TRADE FINANCE

Foreword

elcome to the Spring edition of ETF, a *World Commerce Review* supplement. This publication has been prepared in response to readership demand for an overview of trade finance from a European perspective.

In these turbulent and unique times issues such as geopolitical tensions, macroeconomic volatility, trade digitalisation, sustainability and shifting supply chains will be examined in forthcoming editions, with the most respected authors providing the reader with the most comprehensive information available.

Our brief is to provide all the data necessary for the readership to make their own informed decisions. All editorials are independent, and content is unaffected by advertising or other commercial considerations. Authors are not endorsing any commercial or other content within the publication.

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Navigating international trade through economic turbulence

International trade is returning to pre-pandemic levels, but threats are emerging. Graham Bright discusses potential obstacles to trade

s the logistics of trade become smoother and returning to pre-COVID levels, new threats are emerging, requiring all players in the trade ecosystem to take notice and act. Political upheaval, wars, rising energy prices, raw material shortages and transport costs have compounded to make the past six months the most challenging, not only for major economies, but in emerging economies also. This is no longer an isolated issue, but a global situation.

International trade is complex enough, and the immediate problems and how these may be navigated can be categorised as follows.

Proximity

Buyers and sellers are geographically distanced, never meet, must establish trust, agree modes of operation, agree timelines for order placement and delivery and contend with high transport costs and risk.

There are few solutions to help here, although companies are actively seeking more local providers, or at least countries with closer borders or ports. The rising cost of import from some countries traditionally thought of as cheap, has led to buyers actively seeking out new markets, not only for closer product but with shorter transit times and a better view of all the players involved, through the lifecycle of transactions.

Language

With emerging markets and with many spoken languages, even though English may be the most common language in trade, as is the US Dollar for settlement of deals, documents must be translated and interpreted to ensure that the conditions required and goods you order are the goods received according to agreed contracts.

Just as SWIFT and the ISO collaborated to standardise the format and meaning of structured financial instructions, the international trade arena is yet to find a common language for proforma invoices, sales contracts etc as buyers will still require local language and nuances in each document for their purchases and contracts.

With every crossborder transaction comes risk. Whetherbyroadin countries with poor infrastructure to the high seas, where freak storms, piracy, loss or damage of cargo and even sinking are thankfully rare, these are still substantial risk events

The top four languages spoken in the world are currently English, Mandarin, Hindi and Spanish, followed by Arabic and French. As a financial institution, to assist our clients with their local documents, we recommend authorised and certified translation services into English, still the most common language used in international trade.

Transport

Container prices have risen substantially, as has the fuel for trucks to physically transport them. Critical raw materials such as precious metals for batteries are also in short supply. This is further affected by the conflict in Ukraine, displacement of containers and rising general material costs including food.

With every crossborder transaction comes risk. Whether by road in countries with poor infrastructure to the high seas, where freak storms, piracy, loss or damage of cargo and even sinking are thankfully rare, these are still substantial risk events.

Whilst there is insurance available to cover such risks, there is the inevitable increase in cost.

Know your foreign customer

Do we really know enough about our customer 5,000 miles away? With no direct relationship, the issue of identity, the critical requirements of means and intent to pay always arises.

Databases of financial information to assist in working out creditworthiness do exist, and are extensively used, however there is always a doubt on authenticity of paperwork, reputation of banks providing proof of funds and potential collusion between parties to defraud financial guarantors etc.

This is especially difficult in some emerging markets jurisdictions where there is no equivalent of a Companies House or official register, use of trusts to mask the true beneficial owners, shareholders and directors.

In trying to ascertain the true extent of credit risk, EEB use the additional network of agents and partners to meet the client, procure the financial statements and ensure collateral, trust and confidence are obtained. Our use of blockchain in ensuring the validity of documents and identity for KYC and compliance as golden records also assists in this area.

Trade restrictions

Whether to preserve home industries or prevent financial flight in low liquidity economies, all countries have customs duties on imports and suffer tariffs on exports. In addition to these restrictions, each country has its own regulations, which are changing frequently and usually in isolation.

Firms need to be aware of the International Chamber of Commerce recommendations, all geared around trying to standardise the way in which all players in the ecosystem are armed with the same information, details, rules agreements, conditions and contract terms to facilitate rapid, secure, electronically backed trade.

Documentation

We have talked about the complexity of rules, and documentation is no different. Trade documents have unstructured data, with the addition of Free Trade Agreements, many of the trade barriers are being swept away by the introduction of the Model Law on Electronic Transferable Records (MLETR) aimed to enable the legal use of electronic transferable records both domestically and across borders.

This model law is of critical importance, adopted by the United Nations Commission on International Trade Law allows the use of transferable documents and instruments in electronic form, such as bills of lading, warehouse receipts, bills of exchange, promissory notes and cheques. Importantly it allows title and possession to pass instead of waiting for paper documents.

This key piece of legislation, which will benefit all economies will allow merging of logistics and supply chains, and regulatory documents, in a single electronic transferable record.

Foreign markets

While we always think about KYC elements, knowing the market is also key to successful trade, especially as we deal in over 150 countries. Even if they are geographically close, each market is different, with their own customs, regulations, type of goods, consignees, middlemen, agents, weights and measures, minimum and maximum deal size, etc.

As a financial institution we analyse the goods, the market conditions, which instruments are acceptable, so understanding foreign markets is essential. Again, having people on the ground, well versed in how local commerce works, the local players, regulation and custom is vital to sustainability of healthy business.

Payment and liquidity

Apart from bad debt risk, companies in many economies are now constrained by the high value of the US dollar, costly and often prohibitive exchange rates vs local currency, lack of liquidity where local banks are unable or unwilling to support foreign transactions, and few payment channels supporting remittance to foreign countries on an exceptional basis, again attracting major fees.

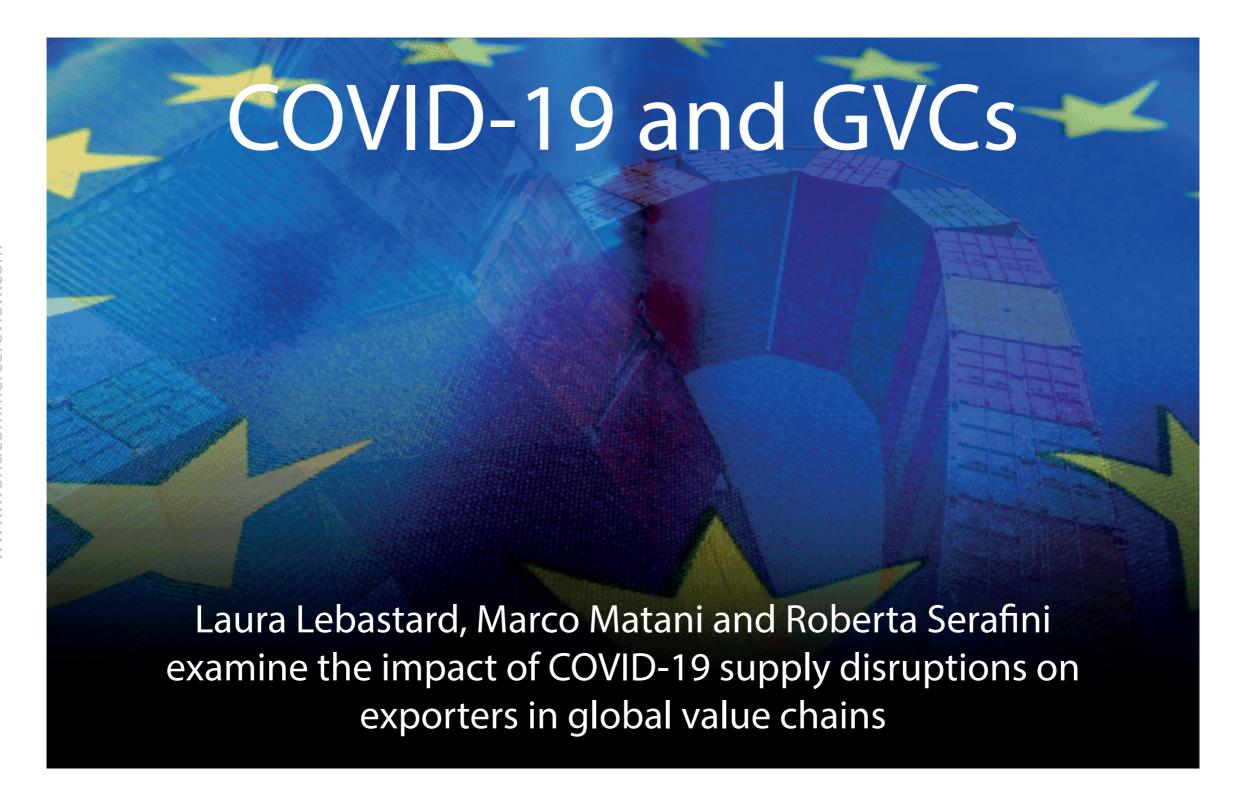
In some cases we hear of charges being so punitive that small buyers are discouraged from buying from abroad and being disintermediated in international trade deals. To counter this, our institution assists clients by mitigating their risks and requirement for 110% of collateral required by major banks for the entire period of a trade.

Imagine you are a small SME wanting to import goods for USD 250,000, but your bank demand you lock those funds in an escrow account for one year. This is clearly untenable for smaller clients as this effectively kills their cashflow, the lifeblood of business.

So, as one example of how we assist, we take a more proactive approach in charging fees for issuance of instruments, assigning title after receipt of full settlement at the end of the transaction. Their business is preserved, enabling them to remain competitive and to build more sustainable transactions.

In conclusion, despite market fluctuations, FX pressure, liquidity, transport cost rises, identity, paperless digitised trading and regulatory pressures being as strong as ever, additionally influenced by geopolitical, environmental and governance issues, EEB remains ever vigilant, confident and well positioned to understand, and manage the constantly changing environment in which the world of trade finds itself tackling every day.

Dr Graham Bright is Head – Compliance & Operations, at Euro Exim Bank



OVID-19 triggered a debate on whether supply value chain trade is primarily a source of vulnerability or a source of resilience. This column uses data on French firms over the period January 2020 to December 2021 to show that participation in global value chains increased firms' vulnerability to the pandemic shock in terms of both export sales and probability of survival in the export market – especially when supply bottlenecks were more salient.

Firms located relatively more downstream in the value chain were more severely affected by supply disruptions. At the same time, the results suggest that exporting firms benefited from sourcing their core inputs from different countries, supporting the hypothesis that diversification in global value chains fosters supply chain resilience.

The outbreak of the COVID-19 pandemic resulted in a sharp contraction in both demand and supply, driven by lockdown measures adopted in many countries across the globe in response to the severity of the contagion and its geographical spread.

The global nature of the crisis meant that firms engaged in international trade were exposed to international disruptions on top of domestic ones, with weaker foreign demand for exporting firms, and a reduction in supply translating into shortages of intermediate inputs for importing firms.

Firms involved in global value chains (GVCs) – namely, firms that both import intermediate inputs and export goods – faced these two additional challenges to their ability to produce and therefore sell their goods (Baldwin and Tomiura 2020).

In this context, the further upstream the disruption occurs, the greater is the potential for supply bottlenecks to propagate negative shocks. Thus, the COVID-19 pandemic has triggered a debate among academics and

policymakers on whether supply value chain trade is primarily a source of vulnerability or a source of resilience (Mirodout 2020, Baldwin and Freeman 2022).

In our recent paper (Lebastard *et al* 2023), we exploit rich customs data covering all French firms engaged in international trade to estimate the impact of supply chain linkages on exporting activity during the pandemic¹.

Exporters in global value chains suffered relatively more than other exporters during the COVID-19 crisis

The monthly frequency of the data allows us to differentiate between three periods during the unfolding of the COVID-19 crisis. The first phase was between February and April 2020, when lockdowns caused activity to come to an abrupt halt in a number of non-essential manufacturing and services sectors.

The second phase was between May and August 2020, when exports recovered to some extent in response to the gradual lifting of pandemic-related restrictions.

The third phase was from September 2020 to the end of 2021, when disruptions to global supply chains emerged and progressively intensified. We focus on all firms that had exported every month between July and December 2019.

Within this sample, our treatment group comprises all exporting firms that had imported intermediate inputs at least once over the same period. We assess firms' performance during the crisis, in terms of export sales and probability of survival in the export market. The richness of the dataset allows us to then deepen our analysis and look at several sources of heterogeneity.

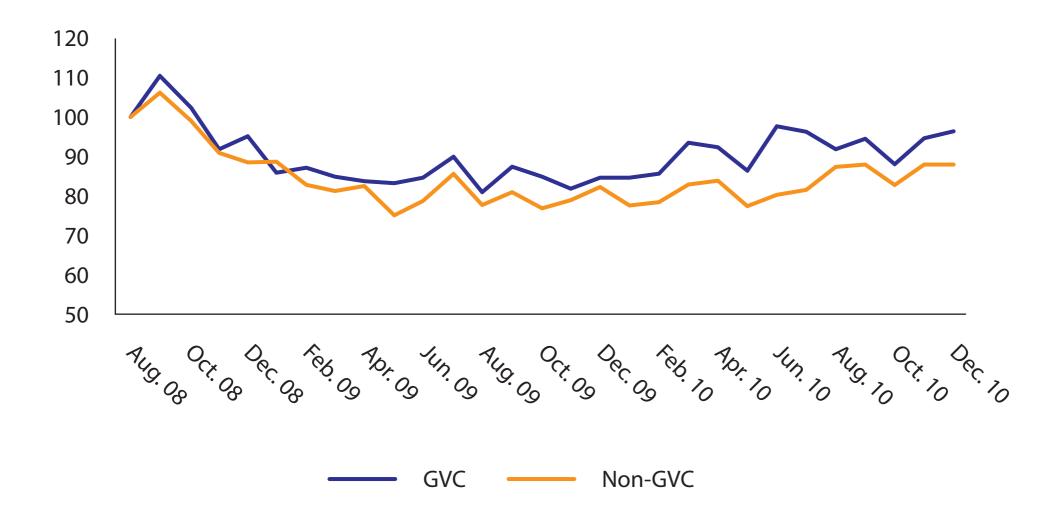
In particular, we investigate the extent to which the pandemic had a differential impact depending on whether firms are located more upstream or downstream along the value chain and on whether they diversify the countries from which they source their inputs.

Firms in global value chains: comparing the COVID-19 crisis and the great financial crisis

Our data show that firms involved in global production networks in the pre-crisis period experienced the sharpest fall in exports at the onset of the COVID-19 crisis, and recovered at a slower pace than non-GVC exporters after the economic reopening (Figure 1, panel a).

Figure 1. Export performance over time of GVC firms and non-GVC firms

a) COVID-19 crisis (total exports, January 2020 = 100)

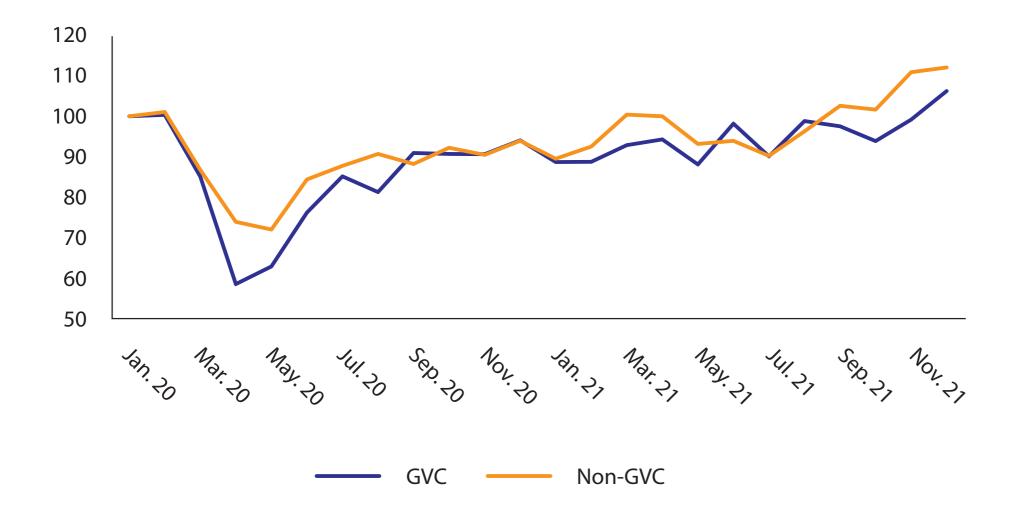


Notes: The charts are based on firm-level data for France. We only include firms that exported every month in the pre-crisis period. GVC firms are included if they imported at least once during the six months before the crisis.

Sources: Direction générale des douanes et droits indirects and authors' own calculations.

Figure 1. Export performance over time of GVC firms and non-GVC firms

b) Global financial crisis (total exports, August 2008 = 100)



Notes: The charts are based on firm-level data for France. We only include firms that exported every month in the pre-crisis period. GVC firms are included if they imported at least once during the six months before the crisis.

Sources: Direction générale des douanes et droits indirects and authors' own calculations.

In April 2020 GVC exporters recorded export volumes that were 42% lower than the levels recorded in January 2020. For non-GVC exporters, the cumulative decline was less drastic, reaching a trough in May 2020 at 28% below the level recorded in January 2020.

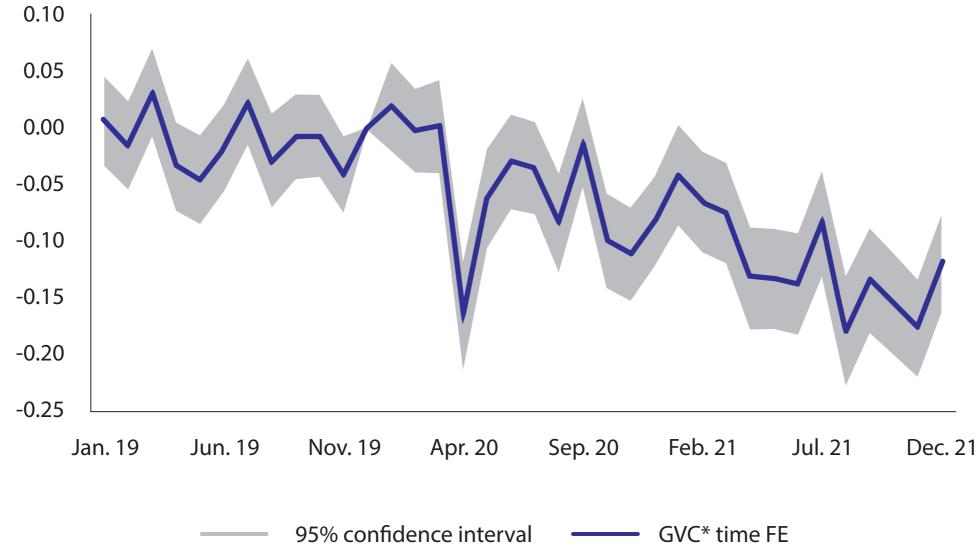
The two groups diverged further when the pandemic-related restrictions were lifted in the summer of 2020 and when the recovery took shape over the following year. By March 2021 nominal exports of firms not involved in global value chains had reached their January 2020 levels and by September 2021 they had recovered well beyond their pre-pandemic levels, while it took until December 2021 for GVC firms to exceed their January 2020 export levels.

Interestingly, during the 2008 global financial crisis the situation was reversed (Figure 1, panel b), with GVC firms recording much smaller reductions in their nominal exports than their non-GVC counterparts. Compared with August 2008, nominal exports of GVC firms had fallen by 19% in August 2009, while exports of similar non-GVC firms had fallen by a quarter at their lowest point in May 2009.

In comparison with the COVID-19 crisis, the collapse in trade in 2008 was less sizeable and less abrupt, although it was more persistent for both types of firm, suggesting that whether supply value chain trade is mainly a source of vulnerability or a source of resilience ultimately depends on the nature of the crisis.

The pandemic had a relatively greater impact on GVC firms' exports, especially when supply disruptions intensified Figure 2 illustrates the estimated effect of participation in global value chains on firm-level exports. Our treatment group includes all continuous exporters that had imported at least once between July and December 2019; the control group is the remaining exporting firms in the dataset, ie. those that did not import over that period.

Figure 2. Event study, effect of the pandemic on GVC firms' exports



Notes: The estimated effect is computed as in Lebastard et al (2023), where the dependent variable is the natural logarithm of exports. The treatment group comprises all exporting firms involved in global value chains (GVCi is equal to 1 if the firm imported at least once in the six months immediately before the crisis) while the control group comprises the other continuous exporters. The econometric model controls for the size of the firms by including firm fixed effects and for time-specific shocks using time fixed effects (FE). The reference month is December 2019.

Sources: Direction générale des douanes et droits indirects and authors' own calculations.

Our results point to the emergence in April and May 2020 of the first negative and significant effect of being part of a global value chain during the pandemic, and a new more sizeable and persistent decline in exports starting in October 2020².

Estimates from a difference-in-differences model show that indeed over the latter period exports by non-GVC firms benefited from the pent-up demand and accumulated savings, while those of GVC firms remained constrained owing to protracted unavailability of imported inputs³.

Additional evidence shows that firm survival followed a similar trend to that observed for exports, pointing to a greater discontinuity of trade flows for GVC firms.

Firms further downstream hit the hardest

We exploit the richness of the dataset to deepen our analysis and assess whether the negative impact of GVC participation on export performance differed depending on firms' position along the value chain.

In particular, based on Antràs *et al* (2012) we use the latest OECD Input-Output Tables to compute an index of upstreamness of production for 45 sectors. We then combine this measure of industry-level upstreamness with product-level information on firm trade flows following Chor *et al* (2021), computing for each firm an average of the respective index of import and export upstreamness.

We find that participation in GVCs increased firm vulnerability during the pandemic, with the negative impact of supply disruptions being greater for firms located relatively more downstream in the value chain. In particular, GVC firms in the lower half of the index distribution saw their exports decrease by about 8% compared with non-GVC

exporters during the lockdown, while the remaining – more upstream – GVC firms did not have significantly worse export performances than non-GVC firms (Figure 3).

Both upstream and downstream GVC firms were strongly negatively affected during the period from September 2020 to December 2021, when disruptions along value chains were at historically high levels, although downstream firms were most affected.

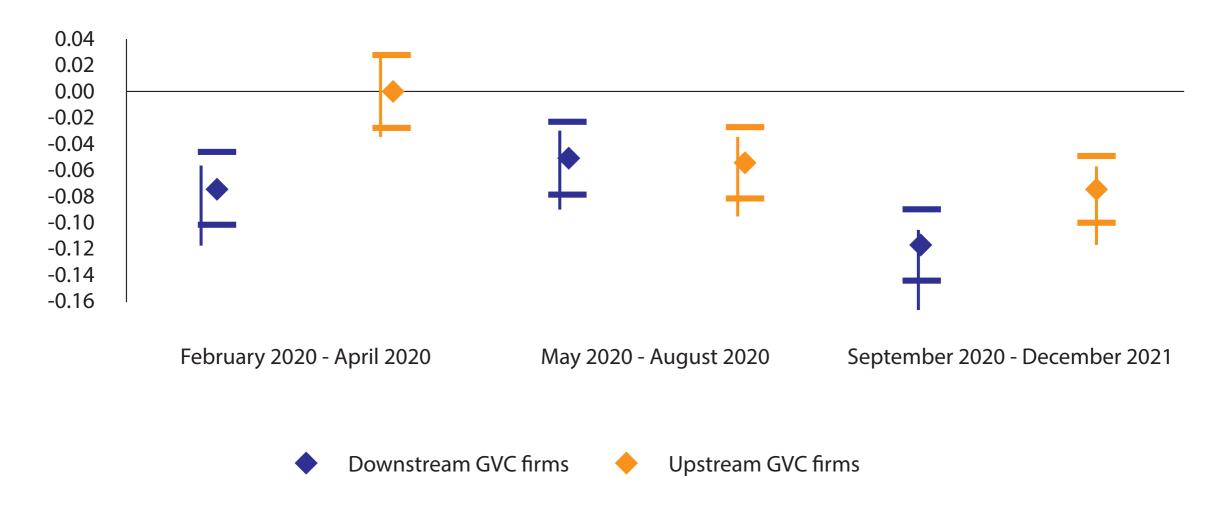
The fact that downstream firms were hit harder would seem to confirm that, although negative shocks occurred in both demand and supply during the pandemic, supply shocks were indeed predominant.

In this respect, the COVID-19 crisis differed from the global financial crisis, which was mainly a result of a demand shock propagating up the value chain via adjustments of firms' inventory holdings (the so-called bullwhip effect, as in Altomonte *et al* 2012).

More diversified sourcing networks for core imported inputs partially shielded firms from shocks. The pandemic has raised the question of whether diversification would foster supply chain resilience and therefore help reduce countries' vulnerability to future external shocks. We try to shed some light on this by estimating the effect of diversification of imports among GVC firms on their export performance.

We follow the approach in Lafrogne-Joussier *et al* (2022), where a firm is considered as diversifying its GVC involvement whenever its 'core' imported products (ie. representing at least 1% of its imports before the pandemic) are sourced from at least two countries.

Figure 3. Difference-in-differences, effect of being downstream or upstream



Notes: For the basis of the the coefficient estimates, see Lebastard et al (2023). Sources: Direction générale des douanes et droits indirects and authors' own calculations.

In our study, however, we test the effect of diversification by allowing the threshold for a product to be identified as 'core' to vary between 1% and 30% of total imports between July and December 2019.

Our results, as shown in Figure 4 below, suggest that exports of GVC firms suffered from the lack of diversification for products representing more than 15% of total imports.

Conclusions

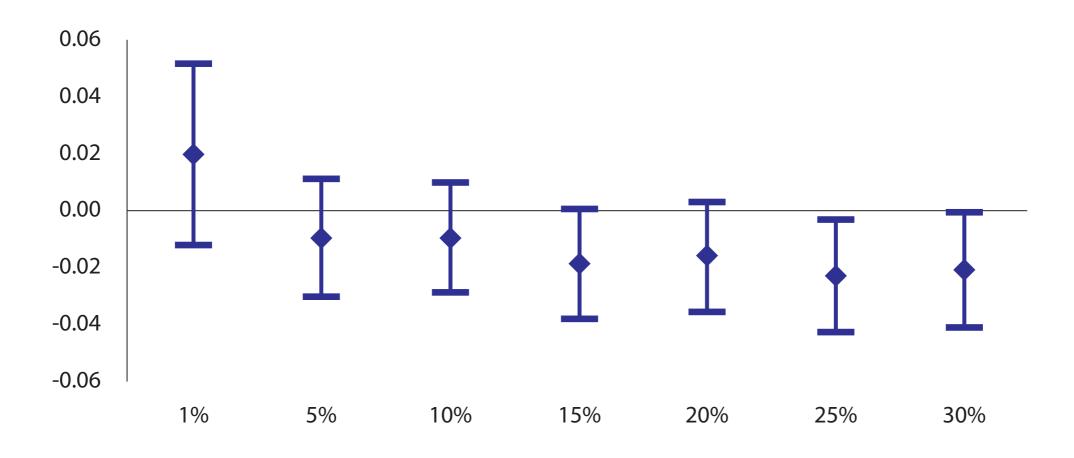
In this column we investigate the impact of supply chain linkages on exporting firms during the pandemic. Highly granular data for the universe of French exporters allow us to provide one of the first firm-level quantifications of the impact of supply bottlenecks that occurred in 2021, when disruptions along value chains were at historically high levels.

We find that exporters in global value chains suffered relatively more than other exporters during the COVID-19 crisis. This was the case both in terms of export losses and in terms of the greater likelihood of discontinuity in export relations, particularly when supply disruptions were at historically high levels.

This additional negative effect was mostly driven by exporters at downstream production stages, whereas diversifying sourcing networks for core imports helped to buffer the impact. ■

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Figure 4. Difference-in-differences, effect of diversification of source countries for core inputs



Estimation coefficient

Notes: For the basis of the coefficient estimates, see Lebastard et al (2023). Core products are defined as products representing a minimum percentage (as indicated on the x-axis) of the total imported products in the six months before the crisis.

Sources: Direction générale des douanes et droits indirects and authors' own calculations.

Endnotes

- 1. Our analysis is based on French customs data, known as "Statistiques du Commerce Extérieur", provided by Direction générale des douanes et droits indirects; access to firm-level confidential data from France has been made possible within a secure environment offered by CASD Centre d'accès sécurisé aux données (Ref. 10.34724/CASD).
- 2. The absence of any pre-trend before the pandemic confirms the comparability of our treatment group and control group.
- 3. As detailed in Lebastard et al (2023), our results prove robust to a number of robustness checks, including more stringent criteria for GVC involvement.

References

Altomonte, C, F di Mauro, G Ottaviano, A Rungi and V Vicard (2012), "Global Value Chains are not all born identical: Policymakers beware", VoxEU.org, 4 January.

Antràs, P, D Chor, T Fally and R Hillberry (2012), "Measuring the Upstreamness of Production and Trade Flows", American Economic Review 102(3): 412–16.

Baldwin, R and E Tomiura (2020), "Thinking ahead about the trade impact of covid-19", Chapter 5 in Economics in the Time of COVID-19, CEPR Press.

Baldwin, R and R Freeman (2022), "Global supply chain risk and resilience", VoxEU.org, 6 April.

Chor, D, K Manova and Z Yu (2021), "Growing like China: Firm performance and global production line position", Journal of International Economics 130.

Lafrogne-Joussier, R, J Martin and I Mejean (2022), "Supply Shocks in Supply Chains: Evidence from the Early Lockdown in China", IMF Economic Review 4.

Lebastard, L, M Matani and R Serafini (2023), "GVC exporter performance during the COVID-19 pandemic: the role of supply bottlenecks", ECB Working Paper Series No. 2766, January.

Mirodout, S (2020), "Resilience versus robustness in global value chains: Some policy implications", VoxEU.org, 18 June.

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Climate risks and global value chains

Extreme weather events will become more frequent as global temperatures rise. Rikard Forslid and Mark Sanctuary analyse the impact of the 2011 Thailand flood on Swedish firms

xtreme weather events will become more frequent as global temperatures rise. This is a challenge for companies that depend on complex international supply chains. There is an academic literature that analyses the impact of natural disaster shocks at the firm level (eg. Barrot and Sauvagnat 2016, Boem *et al* 2019, Carvalho *et al* 2021, Todo *et al* 2015, Zhu *et al* 2016, Kashiwagi *et al* 2021).

These studies focus on the Great East Japan Earthquake or on natural disasters in the US and find significant domestic effects as well as spillovers between Japan and the US. For example, Boehm *et al* (2019) find that the Great East Japan Earthquake caused the output of subsidiaries of Japanese firms in the US to fall roughly one-for-one with the decline in imports.

In a recent study (Forslid and Sanctuary 2022), we provide evidence of the impact of extreme weather events on two small countries located far from one another in the impact of the catastrophic 2011 Thai flood on Swedish importing firms. Both Sweden and Thailand are small countries located far from one another.

A priori, it would seem that Thai imports could be easily substituted by imports from countries closer to Sweden. Instead, the evidence points to very large effects. Production falls by an average of 8% among the affected Swedish firms, and the multipliers are very large, with a fall in production almost 30 times larger than the fall in imports.

The Thai flood of 2011 began in July of that year and inundated 9.1% of the total land area of the country, affecting close to 13 million people, with 728 deaths. Damages were estimated at \$46.5 billion, dispersed across 69 provinces in every region of the country, and Bangkok and its vicinity were paralysed for two months (Poapongsakorn and Meethom 2013).

The flood hit the manufacturing sector especially hard. METI (2012) report, for instance, production losses of 84% in transport machinery, 77% in office equipment, and 73% in information and communication equipment. The time to recover differed between sectors, but also among individual firms depending on their location.

The fact that Sweden is a small economy far away from Thailand seems to have aggravated the effects of the shock. Multipliers are much higher than in other studies on large countries In the automotive industry Toyota required 42 days to partly resume operations, while Honda required 174 days. Thailand produced approximately 43% of the world's hard disk drives in 2011, and recovery was somewhat slower than in the automobile sector. Many companies had facilities in Ayutthaya, where industrial parks were heavily inundated (Haraguchi and Lall 2015).

Overall, however, Thai industry recovered within months and had made important progress within six months. Production in March 2012 was 10% lower than that in March 2011, which may be compared to the maximal loss of 77% in November 2011 (METI 2012).

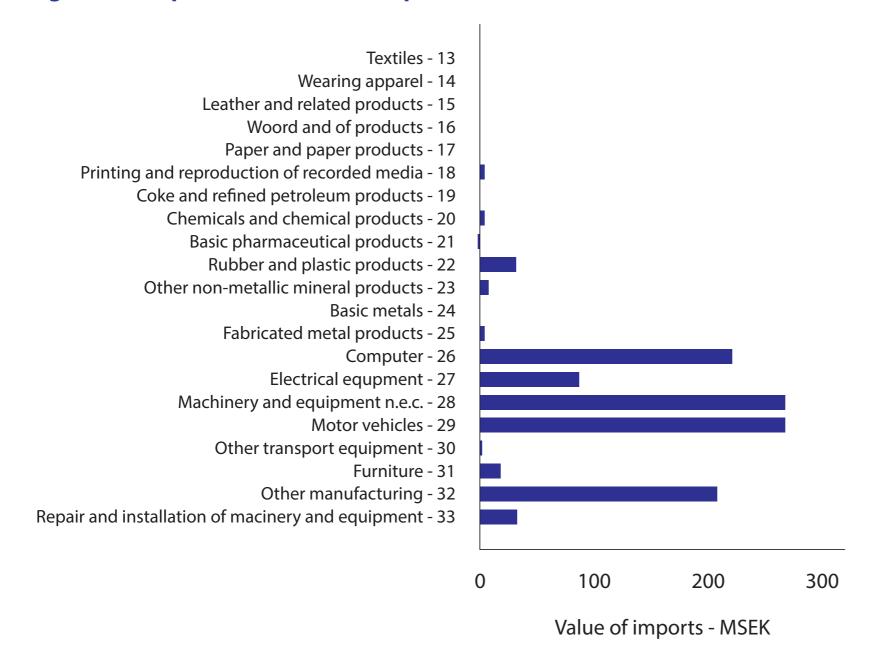
Swedish manufacturing imports from Thailand was concentrated in machinery and equipment (Sector 28) and computer and electronic products (sector 26) both in terms of value and number of importing business, shown in Figure 1.

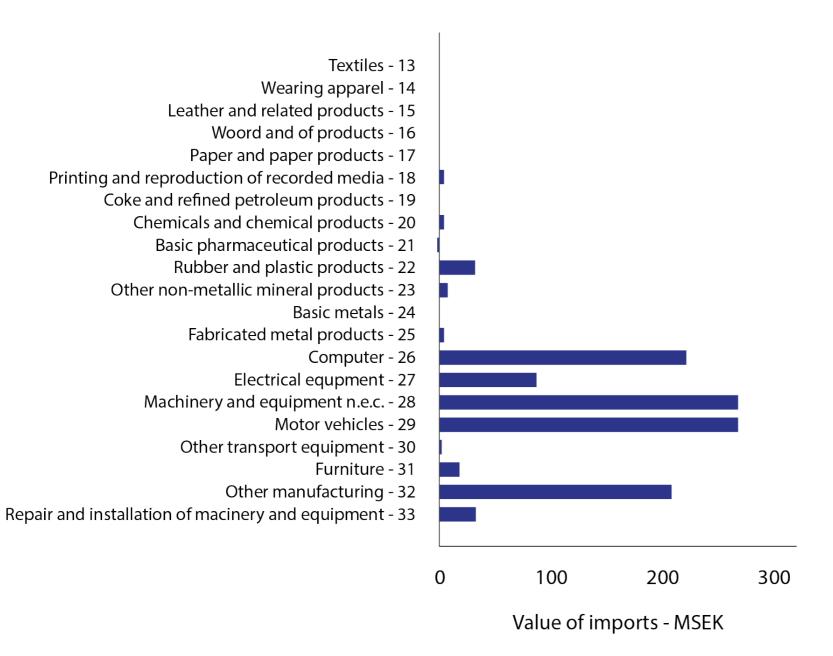
Estimating the impact of the flood on Swedish businesses requires careful study design. For our Thai flood study, we use firm-level data, including the products each business imports, and the countries from which these imports come from, over the period from 2006-2013.

Swedish businesses with an average of at least some (greater than zero) imports from Thailand in the two years prior to the flood (2009 and 2010) are assigned to the treated group, while all other Swedish firms that import during this period are assigned to the control group.

Figure 2 illustrates the divergence in imports between the treated and control groups of firms, the magnitude of the flood's impact is clear. Thai imports by Swedish businesses fell by around 90%: Swedish imports from Thailand were around €100 million lower in 2012, the year following the flood.

Figure 1. The pattern of Swedish imports from Thailand





Source: Statistics Sweden

Moreover, sales by exposed Swedish firms dropped 8% drop in 2012. This suggests the Thai flood caused a drop of about €3 billion in sales by Swedish business, a 30-fold amplification.

Interestingly, the adverse impacts to Swedish businesses persisted for two years through to 2013, even though Thai production had largely recovered within six months of the flood waters receding. This indicates that fixed costs in establishing links in supply networks may be substantial, and once severed, supplier-buyer relationships may be costly to re-establish (eg. Antras and Chor 2021).

Swedish importers predominantly switched to other Asian suppliers, and there is weak evidence of reshoring (where Swedish businesses sourced alternative inputs from EU countries). Larger businesses were better at handling the shock, facing a smaller drop in the value of imports from Thailand than smaller businesses.

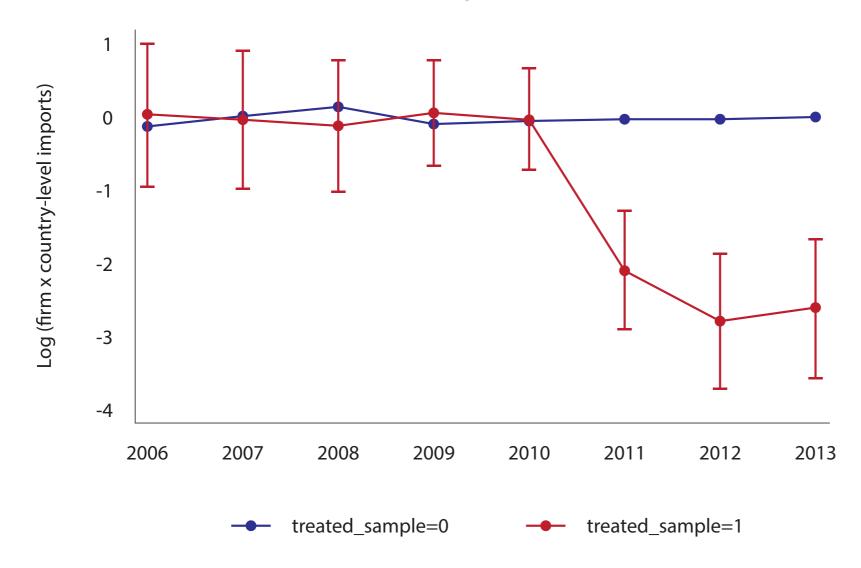
Geographical diversification of suppliers is also important in determining how well Swedish businesses weathered the shock. Exposed businesses that import a product from more than one country are almost completely shielded from the disruptions caused by the flood; it was easier for these firms to substitute to similar inputs from non-Thai countries of origin.

In contrast, businesses that imported a product from Thailand only were unable to source alternative suppliers of the goods affected by the flood. There were also strong negative horizontal effects. Swedish businesses cancelled orders of goods that were complementary to the goods they were unable to obtain from Thailand – imports of other goods from other countries fell by around 80%.

Overall, these new insights suggest that firms were poorly prepared to manage the disruptions arising from the flood, even though some firms hedged their operations with multiple sources of critical inputs.

Figure 2. The impact of the 2011 Thai flood

Predictive margins with 95% CIs



Source: Forslid and Sanctuary (2022).

Moreover, imports from Thailand were slow to recover as Swedish businesses turned to other countries to meet their needs for critical inputs that Thailand had been unable to supply. The fact that Sweden is a small economy far away from Thailand seems to have aggravated the effects of the shock. Multipliers are much higher than in other studies on large countries.

Similarly, we find that small businesses are worse hit by the shock than large firms, possible due to weaker negotiating power. These microeconomic insights help clarify aggregate effects of foreign extreme weather events on the home economy.

While individual firms may suffer significant losses from events like the Thai flood (Xu and Monteiro 2022), and the aggregate effects were non-negligible, securing alternative sources for critical inputs can help support better economic resilience to extreme weather at home.

Rikard Forslid is Professor of Economics at Stockholm University, and Mark Sanctuary

References

Antras, P and D Chor (2021), "Global value chains", NBER Working Paper 28549.

Boehm, CE, A Flaaen and N Pandalai-Nayar (2019), "Input linkages and the transmission of shocks: Firm-level evidence from the 2011 Tohoku earthquake", Review of Economics and Statistics 101(1): 60–75.

Carvalho, VM, M Nirei, YU Saito and A Tahbaz-Salehi (2021), "Supply chain disruptions: Evidence from the Great East Japan Earthquake", The Quarterly Journal of Economics 136(2): 1255–1321.

Forslid, R and M Sanctuary (2022), "Climate Risks and Global Value Chains: The impact of the 2011 Thailand flood on Swedish firms", CEPR Discussion Paper 17855.

Haraguchi, M and U Lall (2015), "Flood risks and impacts: A case study of thailand's floods in 2011 and research questions for supply chain decision making", International Journal of Disaster Risk Reduction 14: 256–272.

Kashiwagi, Y, Y Todo and P Matous (2021), "Propagation of economic shocks through global supply chains—evidence from Hurricane Sandy", Review of International Economics 29(5): 1186–1220.

METI - Ministry of Economy Trade and Industry (2012), "White paper on international economy and trade 2012". Poapongsakorn, N and P Meethom (2013), "Impact of the 2011 floods, and flood management in Thailand, ERIA Discussion Paper 34:2013.

Todo, Y, K Nakajima and P Matous (2015), "How do supply chain networks affect the resilience of firms to natural disasters? Evidence from the Great East Japan Earthquake", Journal of Regional Science 55(2): 209–229.

Xu, A and J-A Monteiro (2022), "International trade in the time of climate crisis", VoxEU.org, 12 December.

Zhu, L, K Ito and E Tomiura (2016), "Global sourcing in the wake of disaster: Evidence from the Great East Japan Earthquake", RIETI.

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Developing Europe's policy towards China Ursula von der Leyen wants to de-risk, not de-couple trade with China, arguing that trade can remain strong as long as the EU can increase its resilience in some strategic sectors

ur relationship with China is one of the most intricate and important anywhere in the world. And how we manage it will be a determining factor for our future economic prosperity and national security. China is a nation with a unique history dating back from early civilisation through the rise and fall of dynasties.

Its philosophers have shaped culture and society in much of today's world – from Lao Tzu's teachings about living in harmony with nature to the ethical values of Confucius. The Four Great Inventions of Ancient China – the compass, gunpowder, papermaking and printing revolutionised world civilisation. But this latest era is in many ways one of the most remarkable chapters in that long, winding and often turbulent history.

In less than 50 years China has moved from widespread poverty and economic isolation to be the world's second largest economy, and a leader in many cutting-edge technologies. Since 1978, growth has averaged over 9% per year and more than 800 million people were lifted out of poverty. This is one of the greatest accomplishments of the past half century.

China's reach stretches across all continents and global institutions – and its ambitions are far greater still. Through the Belt and Road Initiative, it is the largest lender to developing countries. And its economic, industrial and military power puts into question any notion of China itself still being a developing country.

We heard that last October when President Xi told the Communist Party Congress that by 2049 he wanted China to become a world leader in "composite national strength and international influence." Or to put it in simpler terms: he essentially wants China to become the world's most powerful nation. Given its size and global influence, it is positive that China's economy has eventually reopened after COVID-19.

And it is good that our citizens, businesses and diplomats are able to exchange once again. Because understanding each other starts with speaking with one another. But at the same time, we are concerned by what is behind this return to the global stage.

We must collectively show that our democratic system, our values and our open economy can deliver prosperity and security for people Defining a European strategy towards China – defining what success looks like – must start with a sober assessment of our current relations and of China's strategic intentions. Our relationship with China is far too important to be put at risk by failing to clearly set the terms of a healthy engagement.

It is clear that our relations have become more distant and more difficult in the last few years. We have seen a very deliberate hardening of China's overall strategic posture for some time. And it has now been matched by a ratcheting up of increasingly assertive actions. There was a stark reminder of that last week in Moscow during President Xi's state visit.

Far from being put off by the atrocious and illegal invasion of Ukraine, President Xi is maintaining his 'no-limits friendship' with Putin. But there has been a change of dynamic in the relationship between China and Russia.

It is clear from this visit that China sees Putin's weakness as a way to increase its leverage over Russia. And it is clear that the power balance in that relationship – which for most of the last century favoured Russia – has now reversed.

Most telling were President Xi's parting words to Putin on the steps outside the Kremlin when he said: "Right now, there are changes, the likes of which we have not seen for 100 years. And we are the ones driving these changes together."

As a permanent member of the Security Council, China has a responsibility to safeguard the principles and values that lie at the heart of the UN Charter. And China has a responsibility to play a constructive role in advancing a just peace. But that peace can only be just if it is based on upholding the sovereignty and territorial integrity of Ukraine. Ukraine will define the terms of a just peace that requires the withdrawal of invading troops. Any peace plan which would in effect consolidate Russian annexations is simply not a viable plan. We have to be frank on this point.

How China continues to interact with Putin's war will be a determining factor for EU-China relations going forward. And of course, China itself has also taken a more assertive stance in its own neighbourhood. The show of military force in the South China Sea and East China Sea, and at the border with India, directly affect our partners and their legitimate interests.

We also underscore the importance of peace and stability in the Taiwan Strait. Any weakening of regional stability in Asia, the fastest-growing region in the world, affects global security, the free flow of trade and our own interests in the region.

The grave human rights violations occurring in Xinjiang are also a cause for great concern, as laid out in the recent report of the UN High Commissioner for Human Rights. How China meets international obligation regarding human rights will be another test for how – and how much – we can cooperate with China.

Just as China has been ramping up its military posture, it has also ramped up its policies of disinformation and economic and trade coercion. This is a deliberate policy targeting other countries to ensure they comply and conform.

We saw it when China responded to the opening of a Taiwan office in Vilnius by taking retaliatory measures against Lithuania and other European companies. We have seen it with popular boycotts against clothing brands for speaking out on human rights or with sanctions against Members of the European Parliament, officials and academic institutions for their take on China's actions.

We have seen that member states increasingly have to deal with Chinese activities in their societies which are not tolerable. And we have seen it in the region – for example when China severely restricted Australian exports of

barley and wine because of its government's questions on the origin of COVID-19. This is all part of a deliberate use of dependencies and economic leverage to ensure that China gets what it wants from smaller countries.

These escalatory actions point to a China that is becoming more repressive at home and more assertive abroad. There are three broad conclusions we can draw on how China is changing – which in turn must shape how our policies will need to change too.

The first is that China has now turned the page on the era of 'reform and opening' and is moving into a new era of security and control. We saw this earlier this month when President Xi repeated his pledge to make the Chinese military a 'great wall of steel that effectively safeguards national sovereignty, security, and development interests'.

We saw it with Beijing's Global Security Initiative, which it seeks to embed in UN documents and international discourse more widely. We can expect to see a greater focus on security – whether military, tech or economic. All companies in China, for example, are already obliged by law to assist state intelligence-gathering operations and to keep it secret.

We can also expect even stricter economic control measures as part of a strengthening of the Chinese Communist Party's steering of the economy through its institutions and leaders. And we can expect to see a clear path and push to make China less dependent on the world and the world more dependent on China.

Or as President Xi put it bluntly a few years ago: "China must tighten international production chains' dependence on China to form a powerful countermeasure and deterrent capability." This is especially true when it comes to critical raw materials like lithium or cobalt. For sectors like high-speed rail and renewable energy technology. Or for emerging tech that is central to future economic and national security – like quantum computing, robotics or artificial intelligence.

The second conclusion we can draw flows from this – and that is that the imperative for security and control now trumps the logic of free markets and open trade. In his report to the recent Party Congress, President Xi told the Chinese people to prepare for struggle. It is no coincidence that he used in his opening speech the words 'douzheng' and 'fendou' repeatedly – which both can be translated as struggle. This is indicative of a world view shaped by a sense of mission for the Chinese nation.

Which brings me to the third conclusion. And that is that the Chinese Communist Party's clear goal is a systemic change of the international order with China at its centre. We have seen it with China's positions in multilateral bodies which show its determination to promote an alternative vision of the world order.

One, where individual rights are subordinated to national security. Where security and economy take prominence over political and civil rights. We have seen it with the Belt and Road Initiative, new international banks or other China-led institutions set up to rival the current international system.

We have seen it with China's set of global initiatives and by how it positions itself as a power and peace broker, for instance through the recent Saudi Arabia and Iran agreement. And we have seen the show of friendship in Moscow which says a thousand words about this new vision for an international order.

With all this in mind, our response must start by working to strengthen the international system itself. We want to work with our partners on global issues like trade, finance, climate, sustainable development or health.

For that, we need to reinforce the institutions and systems in which countries can compete and cooperate and from which they benefit. This is why it is vitally important that we ensure diplomatic stability and open communication with China.

I believe it is neither viable – nor in Europe's interest – to decouple from China. Our relations are not black or white – and our response cannot be either. This is why we need to focus on de-risk – not de-couple. And this is part of the reason why I will soon be visiting Beijing together with President Macron.

Managing this relationship and having an open and frank exchange with our Chinese counterparts is a key part of what I would call the de-risking through diplomacy of our relations with China. We will never be shy in raising the deeply concerning issues I have already set out. But I believe we must leave space for a discussion on a more ambitious partnership and on how we can make competition fairer and more disciplined.

And more broadly, we need to think about how we can work together productively in the global system in the future, and on which challenges. There are some islands of opportunity that we can build on. Take climate change and nature protection. I very much welcome the leading role China played in securing the historic Kunming-Montreal Global Biodiversity agreement. And a few weeks ago, China was also an active player in the global deal to protect biodiversity in international waters.

At a time of global conflict and tension, these are notable diplomatic achievements – which China and the European Union worked on together. And we look forward to working together in the same spirit ahead of COP28 later this year. This shows what can be done when interests align. And it shows that diplomacy can still work – whether on pandemic preparedness, nuclear non-proliferation or global financial stability.

The point here is that we do not want to cut economic, societal, political or scientific ties. China is a vital trading partner – accounting for 9% of our goods exports and more than 20% of our goods imports. While imbalances are growing, most of our trade in goods and services remains mutually beneficial and 'un-risky'.

But our relationship is unbalanced and increasingly affected by distortions created by China's state capitalist system. So we need to rebalance this relationship on the basis of transparency, predictability and reciprocity. We have to ensure that our trade and investment relations promote prosperity in China and in the European Union.

The Comprehensive Agreement on Investment, the so-called CAI – for which negotiations concluded in 2020 – aimed at such rebalancing. But we have to recognise that the world and China have changed significantly in the last three years – and we need to reassess the CAI in light of our wider China strategy.

nd we know there are some areas where trade and investment poses risks to our economic and national security, particularly in the context of China's explicit fusion of its military and commercial sectors. This is true for certain sensitive technologies, dual-use goods or even investment which comes with forced technology or knowledge transfers.

This is why – after de-risking through diplomacy – the second strand of our future China strategy must be economic de-risking. The starting point for this is having a clear-eyed picture on what the risks are. That means recognising how China's economic and security ambitions have shifted. But it also means taking a critical look at our own resilience and dependencies, in particular within our industrial and defence base.

This can only be based on stress-testing our relationship to see where the greatest threats lie concerning our resilience, long-term prosperity and security. This will allow us to develop our economic de-risking strategy across four pillars.

The first one is: making our own economy and industry more competitive and resilient. This is particularly the case when it comes to health, digital and the clean-tech sector. If you look at the global market for net zero technologies,

it is set to triple by 2030. Our ability to remain front-runners in this sector will shape our economy for the decades to come.

This is why, you all know it, just last week we put forward the Net Zero Industry Act as a key part of our Green Deal Industrial Plan. The aim is to be able to produce at least 40% of the clean tech that we need for the green transition – such as solar, onshore and offshore wind, renewable energy in the broadest sense, batteries and storage, heat pumps and grid technologies.

But to achieve this goal we will also need more independence and diversity when it comes to the key inputs needed for our competitiveness. We know this is an area where we rely on one single supplier – China – for 98% of our rare earth supply, 93% of our magnesium and 97% of our lithium – just to name a few.

We are deeply mindful of what happened with Japan's imports of rare earths from China a decade ago when foreign policy tensions between the two in the East China Sea became acute. And our demand for these materials will skyrocket as the digital and green transitions speed up. Batteries that are powering our electric vehicles are forecasted to drive up demand for lithium by 17 times by 2050.

This is why we have put forward the Critical Raw Materials Act to help diversify and secure our supply. And we need to think about this right across our Single Market to strengthen our resilience on cyber and maritime, space and digital, defence and innovation.

The second part of this de-risking strategy is better using our existing toolbox of trade instruments. Over the last years we have put in place measures to address security concerns, whether on 5G, the Foreign Direct Investment or

export controls. We have given ourselves the tools to counter economic distortions, notably through the Foreign Subsidies Regulation, as well as a new instrument to deter economic coercion.

We now need the unity at EU level for a bolder and faster use of those instruments when they are required and a more assertive approach to enforcement.

My third point, China's changing policies may require us to develop new defensive tools for some critical sectors. The European Union needs to define its future relationship with China and other countries in sensitive high-tech areas such as microelectronics, quantum computing, robotics, artificial intelligence, biotech, – you name it.

Where dual-use purposes cannot be excluded or human rights might be implicated, there will need to be a clear line on whether investments or exports are in our own security interests. We need to ensure that our companies' capital, expertise and knowledge are not used to enhance the military and intelligence capabilities of those who are also systemic rivals.

So we have to look at where there are gaps in our toolbox which allow the leakage of emerging and sensitive technologies through investments in other countries.

This is why we are currently reflecting on if and how Europe should develop a targeted instrument on outbound investment. This would relate to a small number of sensitive technologies where investment can lead to the development of military capabilities that pose risks to national security.

The Commission will present some initial ideas as part of our new Economic Security Strategy later this year. This will map out where we need to strengthen our economic security and how to better use our trade and tech security tools.

The fourth part of our economic de-risking strategy is alignment with other partners. On issues that concern our economic security, we have much in common with our partners around the world. This is especially true of our G7 and G20 partners and those in the region and beyond who are often more integrated with China and more advanced in their thinking on de-risking.

As part of this, we will focus on free trade agreements where we do not yet have them – such as with New Zealand, Australia, India, our ASEAN and Mercosur partners – on modernising agreements where we have them – such as those with Mexico and Chile – and on better using the others that already exist. We will enhance cooperation on sectors such as digital and clean tech, through the Trade and Technology Council with India or the EU-Japan Green Alliance.

And we will invest in infrastructure in the region and beyond through the Global Gateway strategy. We are offering developing countries a genuine choice when it comes to infrastructure investment and finance. All of this will help strengthen our supply chain resilience and diversify our trade – which must be a central element of our economic de-risking strategy.

We have in front of us a task to refocus on the most important issues. And it is a reflection of the need to adjust our strategy in line with the way the Chinese Communist Party seems to be changing. But if we are to manage this relationship to prepare for the future, we must do it together.

At this defining moment in global affairs, we need the collective will to respond together. A strong European China policy relies on strong coordination between member states and EU institutions and a willingness to avoid the divide and conquer tactics that we know we may face. But I also want to say that nothing is inevitable in geopolitics.

China is a fascinating and complex mix of history, progress and challenges. And it will define this century. But our story about how we relate to China is not yet fully written – and it need not be a defensive one.

We must collectively show that our democratic system, our values and our open economy can deliver prosperity and security for people. And at the same time, we must always be ready to talk and work with those who see the world differently.

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ince the Bretton Woods Agreement of 1944, international economic organizations (IEOs) — including the International Monetary Fund (IMF), the World Bank Group (WBG) and the World Trade Organization (WTO) (and its predecessor, the GATT) — have laid the foundation of the rules-based system that has reduced economic conflicts and supported global economic growth.

They help countries to cooperate to address global challenges

For example, the IMF provides a way to pool financial resources so that a country can borrow when it falls into financial difficulty, helping to prevent and mitigate debt crises that could imperil growth across the world.

Similarly, the WBG provides a mechanism that promotes economic development and alleviates poverty. The WTO, through its negotiation mechanism, allows countries to lower trade barriers in a coordinated and reciprocal fashion, and through its dispute mechanism, prevents the escalation of trade disputes into all-out trade wars.

But these institutions are being undermined

Especially given current global challenges, the relevance of these institutions' policy objectives has not gone away, nor has the need for countries to cooperate to achieve them. However, the IEOs have come under increasing attack in recent years.

The IMF has been criticized for not reflecting the increased economic weight of large emerging economies

One quite valid criticism is that the IEOs are lagging behind changes in the world economy. They have not kept pace with the increasing weight of large emerging market economies. For example, the voting system at the IMF is based on quotas that blatantly underweight large emerging market countries such as China and India.

And the WTO has also been criticized, for not recognizing that these same emerging economies are ready to compete on an equal footing, and for 'judicial activism' by its Appellate body

In stark contrast, at the WTO, some of these large emerging market economies, rather than assuming full trade responsibilities, cling to special and differential treatment provisions reserved for countries that are not ready to compete on an equal footing.

Reforming the IEOs will not happen at once, nor will it eliminate the national rivalries playing out on the world stage As a result, many countries have lost faith in the WTO's capacity to foster further trade liberalization, preferring to negotiate their own deals with select partners. The WTO's dispute settlement function has also been questioned by countries that believe it has overstepped its mandate by indulging in 'judicial activism,' prompting Washington to virtually paralyze the dispute settlement process by holding up appointments to the Appellate Body.

Geopolitical polarization is straining IEOs and the pressure on them has only intensified in the past year or two.

- National security concerns linked to China-US rivalry, the Russian invasion of Ukraine and the initial trade
 restrictions applied by some countries during the COVID-19 pandemic have shaken confidence in the
 dependency and the reliability of global supply chains.
 - Many economies are now promoting 'onshoring,' 'nearshoring' or 'friendshoring' of supply chains, which is inconsistent with extending most-favoured nation status to all partners a fundamental principle of the WTO.
- The urgency to achieve climate change goals is being used to justify a resurgence in subsidies' local content requirements for example, the recently enacted Inflation Reduction Act, which provides large subsidies to electric vehicles but only those produced in a country with which the United States has a trade agreement, thereby excluding most of the world. Such requirements, again, undermine the WTO's most-favoured nation and national treatment principles.
- Use of the global financial system as a foreign policy tool for example, the proliferation of financial and investment restrictions that have raised concerns about the dollar's dominance of the international financial

system — has led the developing countries of Brazil, Russia, India and China (the BRICs) and some other countries to explore parallel payment and reserve currency systems.

Rather than weakening these institutions, we need to make them more responsive to changes in the world economy

While IEOs will need to accommodate legitimate domestic policy concerns, policies that lead to further sidelining and undermining of multilateral institutions are counterproductive and will weaken economic growth, which in turn may effectively compel middle-power and developing countries to go against their economic interests and 'take sides' at a time when geopolitical tensions are escalating.

To avoid what the IMF calls 'geoeconomic fragmentation,' we will need to buttress the rules-based trading system, making it more predictable, fair and effective in avoiding the escalation of trade disputes into trade wars.

We will also need to reinforce its global financial safety net, keeping the IMF at its centre by allowing the world's most dynamic economies to increase their contributions to its pool of financial resources.

Any changes must be incremental and carefully balanced

Updating and recalibrating the IEOs will not be easy. It will require building consensus on a package of incremental reforms that could be regarded as balanced — with something for advanced, emerging and developing countries alike.

Ideas are out there: what is needed is brokering consensus on feasible fixes

Fortunately, there are good ideas out there (see, for example, this piece by one of us, *The IMF and the WTO Need Symmetrical Reforms*). The key question: how to get a group of systemic countries to buy into a policy dialogue

aimed at identifying a balanced package of incremental reforms? How to rekindle a kernel of hope for international cooperation so that countries could accept engaging in a quiet consensus-building dialogue?

The G20 should meet the challenge

We believe that as the premier forum for global economic cooperation the G20 needs to step up and provide a policy space to reconcile economic dynamism with multilateral rules. The G20 has the key economic players—the large economies and the main IEIs (it can also invite others to ad hoc meetings), and it can readily mobilize the expertise required to engineer innovative ways forward.

The New Delhi Leaders' summit should call for a policy dialogue to frame a set of actions

Leaders at the September 2023 G20 Summit in New Delhi, India, should call for an exploratory 'policy dialogue,' aimed at having a frank discussion to identify which reforms could restore confidence in the effectiveness of IEOs by making them more reflective of current economic realities.

The goal should be to come back to leaders with a set of incremental and balanced reforms that can command widespread support.

A kickstart on IEO reform could spark a renewed spirit of cooperation in other places it is desperately needed

Reforming the IEOs will not happen at once, nor will it eliminate the national rivalries playing out on the world stage. But if the world is able to come together on some sensible reforms to the IEOs, that renewed spirit of cooperation could breathe new life into other areas where international cooperation is desperately needed.

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