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How Geopolitical Tensions Reshape Trade Patterns

Geoeconomic Fragmentation, or China's Big Manufacturing Push?

Geoeconomics and Geofinance Initiative

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Abstract

It has become received wisdom to consider the world economy as increasingly shaped by forces of fragmentation, resulting from geopolitical tensions and strategic competition between great powers, including through trade and industrial policies. This *Ifri Paper* reconsiders this narrative using international trade data. It shows that, far from being a widespread trend, geoeconomic fragmentation of trade flows is only significant in "hotspots"; that is, for Russia's foreign trade and for China-United States bilateral exchanges. Outside these hotspots, there is no tangible sign that geopolitical tensions have been shaping international trade blocs, nor is there any hint of a trend toward nearshoring – on the contrary, in fact. There is no evidence either that competing industrial policies have been reshaping trade patterns. The clearest trend is much more specific: it is the massive surge in China's surplus in manufactured goods trade, up to 11% of the world's total or these products since early 2023. Sudden and common to all main directions and all main sectors, this push has been policy-driven. As economic security concerns reinforce governments' focus on manufacturing, this has become a major challenge to international coordination.

Résumé

Il est devenu habituel, presque évident, de considérer que l'économie mondiale est remodelée par des forces de fragmentation, résultant des tensions géopolitiques et de la concurrence stratégique entre les grandes puissances, au travers notamment de leurs politiques commerciales et industrielles. Cette *Note* confronte cette hypothèse aux données récentes de commerce international. Elle montre que, loin d'être une tendance généralisée, la fragmentation géoéconomique des flux commerciaux n'est significative que dans les « points chauds », en l'occurrence le commerce extérieur de la Russie et les échanges bilatéraux entre la Chine et les États-Unis. En dehors de ces points chauds, il n'y a pas de signe tangible que les tensions géopolitiques façonneraient des blocs commerciaux, ni même qu'une tendance à la relocalisation proche (*nearshoring*) serait établie, au contraire. La concurrence entre politiques industrielles ne semble pas non plus avoir joué un rôle déterminant pour structurer les schémas commerciaux. Une beaucoup plus spécifique se dégage : il s'agit de l'augmentation massive de l'excédent de la Chine dans le commerce des produits manufacturés, qui se monte depuis début 2023 à 11 % du total mondial de ces produits. Soudaine, commune aux grands secteurs et régions partenaires, cette poussée trouve son origine dans des choix politiques. Alors que les préoccupations de sécurité économique renforcent l'attention portée par les gouvernements à l'industrie manufacturière, ce phénomène est devenu un défi majeur pour la coordination internationale.

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Introduction

Coming after the Sino-American tariff war initiated by the Trump administration, Russia's war on Ukraine and ensuing economic sanctions seemed to warrant an obvious conclusion: geopolitical tensions have fragmented the world economy. This interpretation is supported by unprecedently high-profile initiatives like the American CHIPS and Science Act and Inflation Reduction Act, which have focused attention on the return of trade-distortive industrial policies and the competition among economic powerhouses in this area. These twin trends, geoeconomic fragmentation and competing industrial policies, are now widely viewed as the overarching influences shaping changes in globalization, and in particular in trade patterns.

This narrative matters because it heavily conditions policy priorities; but is it warranted? While the reality of the above-mentioned trends is beyond doubt, it does not imply that they are a fitting characterization of the way geopolitical tensions shape trade patterns, in a context marked by acute crises and uneven developments – including the large number of trade and cooperation agreements under negotiation.[1] Trade war, and even more war itself, obviously have major impacts on the countries directly concerned – and these are important actors in recent episodes. But does it mean that geopolitical affinities are increasingly structuring trade patterns?

As to industrial policies, they are undeniably taking on renewed importance, in sensitive sectors, and geopolitics is no stranger to their motivations. They are, therefore, a significant ingredient of recent changes in the international economic policy landscape. But have they been shaping trade patterns decisively as a result? It is unclear, perhaps because some of these policies are by definition narrowly targeted (the famous "small yard, high fence" Sullivan approach being a case in point).

In both cases, a good place to start is to confront the trade data with common interpretations. This is what this *Ifri's Paper* is about, with the objective of proposing a simple characterization of recent overarching trends, related to the way geopolitical tensions are reshaping trade patterns.

1. On this trend and its interpretation in terms of relational power, see, *e.g.*, Gomart and Jean (2023).

New cold war? What new cold war? Confronting the trade data with the geoeconomic fragmentation narrative

The dominant narrative about geoeconomic fragmentation

The term "geoeconomic fragmentation" was coined by the International Monetary Fund (IMF) to describe a "[p]olicy-driven reversal of integration, often guided by strategic considerations" (Aiyar *et al.*, 2023, p. 5). In this "umbrella paper", it is mainly described as a risk for the world economy, but other IMF papers are more assertive, stating, for instance, that "geo-economic fragmentation (…) is becoming a reality" (Baba *et al.*, 2023, p. 4). Such statements are based on ongoing trends, including rising protectionism and use of cross-border restrictions on national security grounds, as well as a sharper focus on the resilience of supply chains.

While the reality of these policy trends is undeniable, it does not imply that they are central in shaping recent trends in global economic linkages. For that matter, the most influential analysis is probably that of Gopinath *et al.* (2024). To evaluate the influence of geopolitical tensions, this study defines a hypothetical Western bloc, including the United States (US), Europe, Canada, Australia and New Zealand, and a hypothetical Eastern bloc comprising Belarus, China, Eritrea, Mali, Nicaragua, Russia and Syria, while other countries are considered nonaligned.[2] Based on econometric estimates of quarterly, bilateral flows, it "document[s]—using recent data—that trade flows and the number of announced FDI projects between a US-centered and a China-centered bloc is declining by 12% and 20% more than trade and investment between countries within the same bloc since the onset of the war in Ukraine" (Gopinath *et al.*, 2024, p. 3). These are strong results (similar in magnitude and significance for foreign direct investment [FDI] and trade), that "provide support for the argument that trade and investment flows may

2. A wider definition is also considered, based on a statistical analysis of the United Nations votes. The narrower definition is more specific and, thus, should be a more robust indicator of any impact of geopolitical affinities on trade patterns. Accordingly, it is used by default in the analysis below, but robustness checks using the wider definition give qualitatively similar results (the relevant figures are mentioned below, and complete data are available upon request).

be starting to fragment along geopolitical lines" (*ibid.*, p. 3), and vindicate the parallel made with the Cold War period.

Other studies support this interpretation. For instance, Blanga-Gubbay and Rubínová (2023), based on gravity model regressions with high-dimensional fixed effects, show that "trade flows have become more sensitive to geopolitical distance since the start of the war in Ukraine, leading to the first signs of overall trade fragmentation along geopolitical lines, *i.e.* friend-shoring" (p. 2). They point out that trade between hypothetical East and West blocs has grown 4% slower than intra-bloc trade since the start of the war, which they interpret as "the first signs of fragmentation in global trade". The conclusion, conveyed in the 2023 World Trade Report, is that "trade is gradually becoming reoriented along geopolitical lines" (WTO, 2023, p. 9). Another example is Fernández-Villaverde *et al.* (2024), who introduce an index of geopolitical fragmentation derived from various empirical indicators to measure geopolitical fragmentation, and conclude that it increased significantly following the 2007-2008 financial crisis, reaching its highest level since the beginning of their sample, in 1975. A survey published by the World Economic Forum in January 2024[3] is telling about how pregnant this narrative has become: it emphasizes geoeconomic fragmentation, and seven in ten "chief economists" interviewed thought that its pace would accelerate.

On the difference between war, trade war and tensions

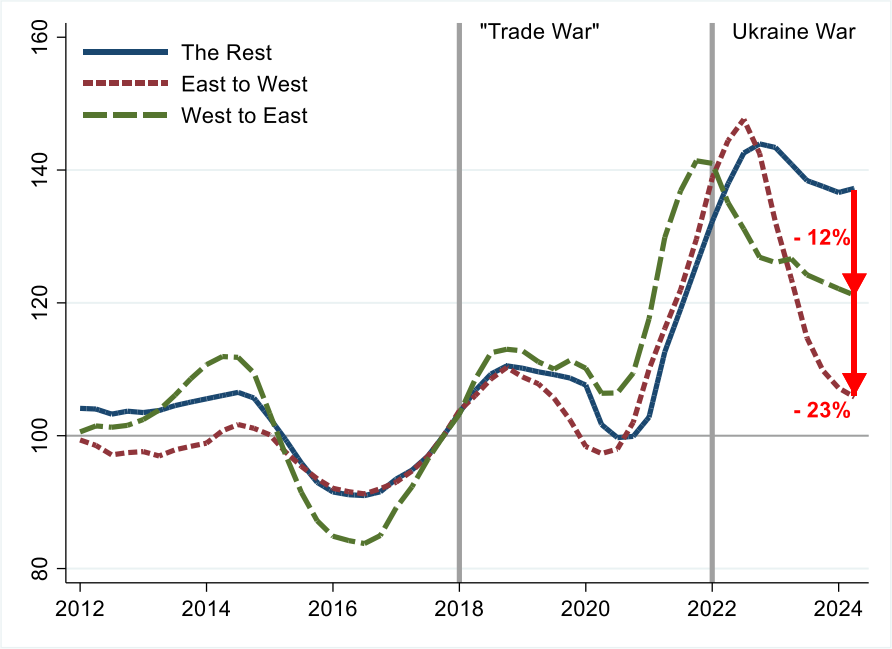
These concerns are well placed, to the extent that policy changes in this direction are undeniable, as already mentioned. Trends and concerns in the private sector go in the same direction: supply chains have lengthened (Qiu *et al.*, 2023), firms tend to diversify suppliers out of concerns about tensions and their fallout (Aksoy *et al.*, 2024), and their interest in reshoring and friend-shoring is rising (IMF, 2023, p. 92). Still, the question remains whether this narrative accurately reflects the dominant trends shaping world economic linkages. To address it, this note retains the spirit of the Gopinath *et al.* (2024) analysis; that is, comparing recent evolutions in flows categorized according to geopolitical preferences. In contrast to this and other papers, though, it sticks to a simple comparison of aggregate flows in value. While unsophisticated, this approach has the merit of being fully transparent and easily understood, in both its assumptions and implications. It does not take into account the usual determinants of trade flows included

3. See www.weforum.org.

in gravity equations, but these are unlikely to make a significant difference over such a short period.[4]

The point is not to question the above-mentioned empirical findings. They are well-established statistical facts, which can be illustrated by simple calculations on world trade flows in value. Compared to 2017, trade flows between "blocs" have been lagging significantly behind the rest-of-world trade, by 12% (West-to-East flows) to 23% (East-to-West flows) (see Figure 1 below).[5]

Figure 1: Trade between blocs lags behind the rest of world trade, by 12% to 23%



(trailing 4-quarter sum of trade flows in value, index 2017=100)

Source: Author's calculations based on importing country's custom data (except for Russian imports, for which mirror declarations by the exporting country are used), as collected by Global Trade Tracker.

Note: Following the Gopinath *et al.* (2024) narrower definition of blocs, "the West" includes the US, Europe, Canada, Australia and New Zealand, while "the East" bloc comprises Belarus, China, Eritrea, Mali, Nicaragua, Russia and Syria. Other countries are considered nonaligned. In the graph, "The Rest" refers to all flows that are not either "East to West" or "West to East" (thus including flows between nonaligned countries and blocs).

However, statistics in themselves strongly reduce the complexity of reality, based on specific assumptions – not a "damned lie", as the famous

4. Among time-varying determinants, gross domestic product (GDP) is the main one susceptible to significant variations in the short term but is unlikely to make a big difference across the groups of countries considered in the present case. Using the narrow classification, nominal GDP growth was a bit quicker for the "East" bloc, mainly due to China; on the contrary, this bloc is the slowest-growing since 2017 when using the wider classification.

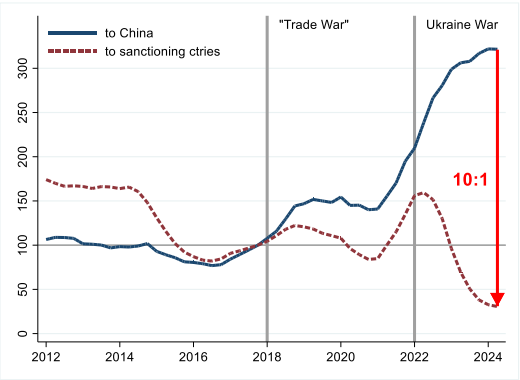
5. Using the wider definition of blocs, the corresponding figures are 13% and 15%. Global Trade Tracker collects export and import data in real time from national customs administrations.

alleged quote goes, but their sheer value added. In the present case, the concern is that grouping countries in large blocs, as all the above-mentioned studies do, lumps together very different situations. Indeed, beyond diffuse geopolitical tensions, recent years have been marked by far more specific and intense episodes, chiefly the Russian war against Ukraine, and the trade war initiated by the Trump administration against China. Despite the undeniable climate of geopolitical tension, these episodes can be considered "hotspots". Accordingly, their impact on trade relationships is likely to be more intense than the fragmentation referred to above.

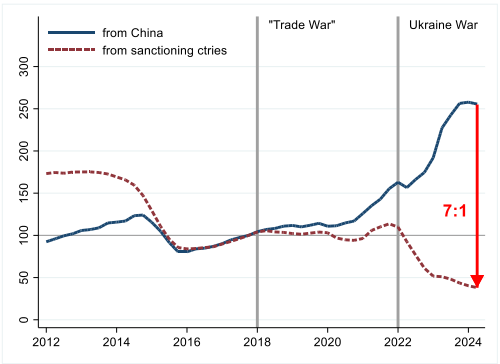
Russian trade offers a first illustration. Following the wide-ranging trade sanctions applied by the US and its allies, it has been profoundly disturbed. Qualitatively, this change fits the fragmentation narrative; quantitatively, it is an entirely different story. Compared to 2017, Russia's trade flows with sanctioning countries have decreased by approximately one order of magnitude compared to trade with China (divided by 10 for exports, by 7 for imports; see Figure 2).[6] Not surprisingly, the impact of war on trade flows is massive and incommensurate with the consequences of diffuse tensions.

Figure 2: Russian trade with sanctioning countries has been cut by one order of magnitude, compared to its trade with China

Panel A: Russia's exports by partner



Panel B: Russia's imports by partner



(trailing 4-quarter sum of trade flows in value, index 2017=100)

Source: Author's calculations based on Global Trade Tracker.

Note: Russia's trade is measured using only mirror declarations by trading partners. Sanctioning countries include Albania, Australia, Canada, the EU, Iceland, Japan, Korea, Montenegro, New Zealand, Norway, Republic of North Macedonia, Switzerland, Taiwan, Ukraine, United Kingdom, United States.

The second major case in point is bilateral trade between the US and China since the Trump administration initiated its trade war, which can be

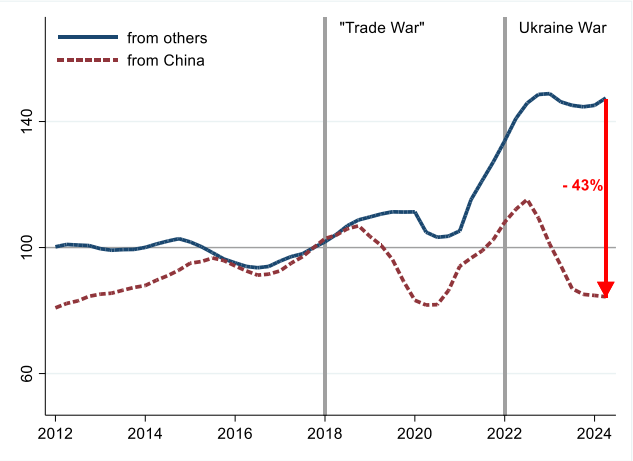
6. I stick here to the 2017 reference to ease comparison across figures. Taking instead as a reference end-2013, just before the Crimea annexation, would make more sense from a political point of view. In this case, the same calculations show that the relative exports of sanctioning countries, compared to China, have been divided by 13, and imports by 18. Due to the lack of reliable statistics, Russia's trade is measured using only mirror declarations by trading partners, in all these calculations.

dated from the first quarter of 2018. Given the importance of additional tariff measures taken by both countries, still covering more than 60% of bilateral trade, the corresponding flows have been greatly affected, as already well documented (Bown, 2022). Several studies have shown that this limitation of direct trade linkages has been accompanied by an increase in indirect linkages, in particular as the US increased imports from countries like Vietnam, Mexico and other "connector countries", as the IMF nicknames them, which themselves stepped up their imports of components from China (Alfaro and Chor, 2023; Freund *et al.*, 2023; Gopinath *et al.*, 2024). In other words, indirect linkages have partly replaced direct ones. Substantial trade diversion is taking place, with the corresponding costs and opacity, and there is far less effective decoupling than meets the eye.

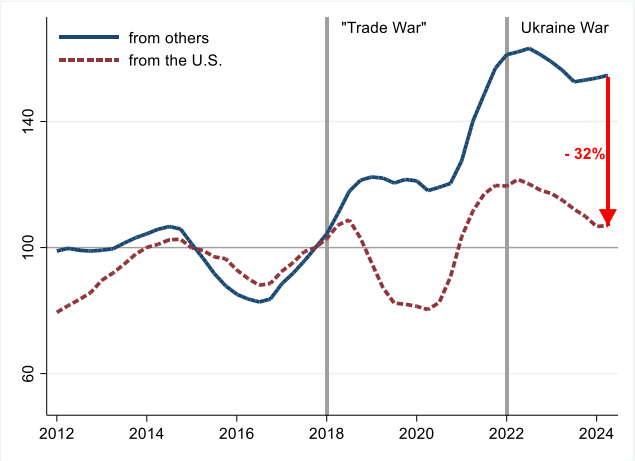
Still, it remains a fact that direct trade linkages have been seriously disturbed. Applying the same analysis of relative changes as above shows that bilateral flows lagged behind trade with third countries by 32% for Chinese imports from the US, and by 43% for opposite flows (Figure 3). Again, this is far more than the average impact claimed for geoeconomic fragmentation.

Figure 3: Bilateral trade between the US and China has lagged behind their trade with third countries by 32% to 43%

Panel A: US imports



Panel B: Chinese imports



(trailing 4-quarter sum of trade flows in value, index 2017=100)

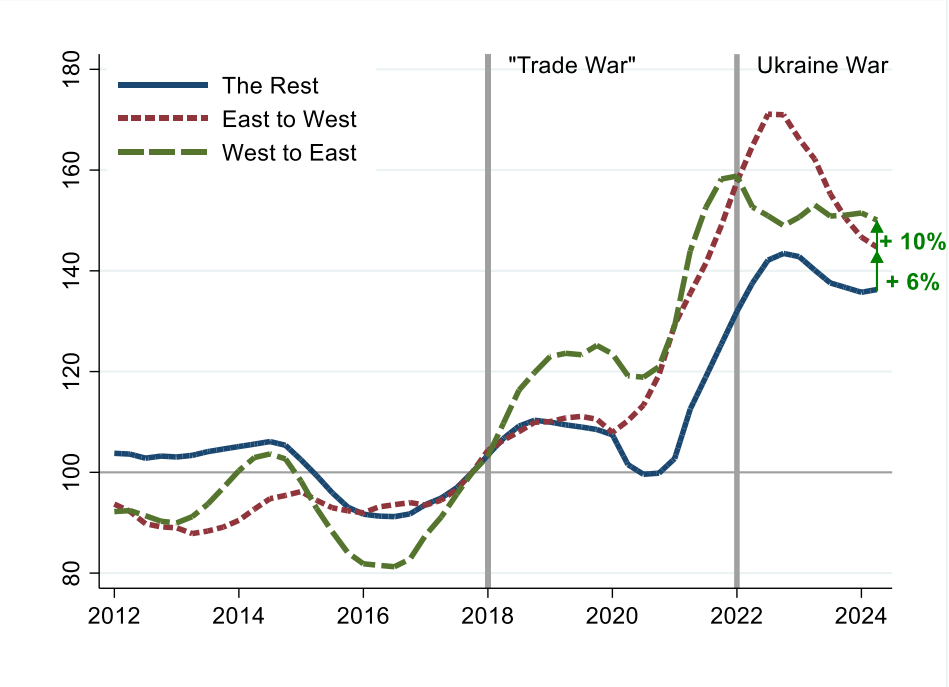
Source: Author's calculations based on Global Trade Tracker.

Outside hotspots, no geoeconomic fragmentation is visible in trade flows

Emphasizing that trade disturbances in "hotspots" exceed by far the orders of magnitude put forward in average assessments of geoeconomic fragmentation raises a simple question: What is left of the alleged impact of geoeconomic fragmentation, once these hotspots are excluded from the analysis? The short answer is: not much.

Using the same methodology as before, the comparison of between- and within-bloc trade flows gives a radically different result once hotspots are excluded (*i.e.* when both Russian foreign trade and China-US bilateral flows are ignored). Between-bloc flows do not lag behind the rest of trade anymore; they actually even outperform slightly the rest of trade flows, by 6% for East-to-West exports and 10% for those in the opposite direction (see Figure 4:).[7]

Figure 4: Outside "hotspots", no sign left of geoeconomic fragmentation of trade flows



(trailing 4-quarter sum of trade flows in value, index 2017=100)

Source: Author's calculations based on Global Trade Tracker.

Note: The figure refers to trade flows following the IMF's narrower definition of geopolitical blocs (see Figure 1 note). All flows considered here exclude "hotspots", meaning that Russia's foreign trade and bilateral flows between US and China are disregarded.[8]

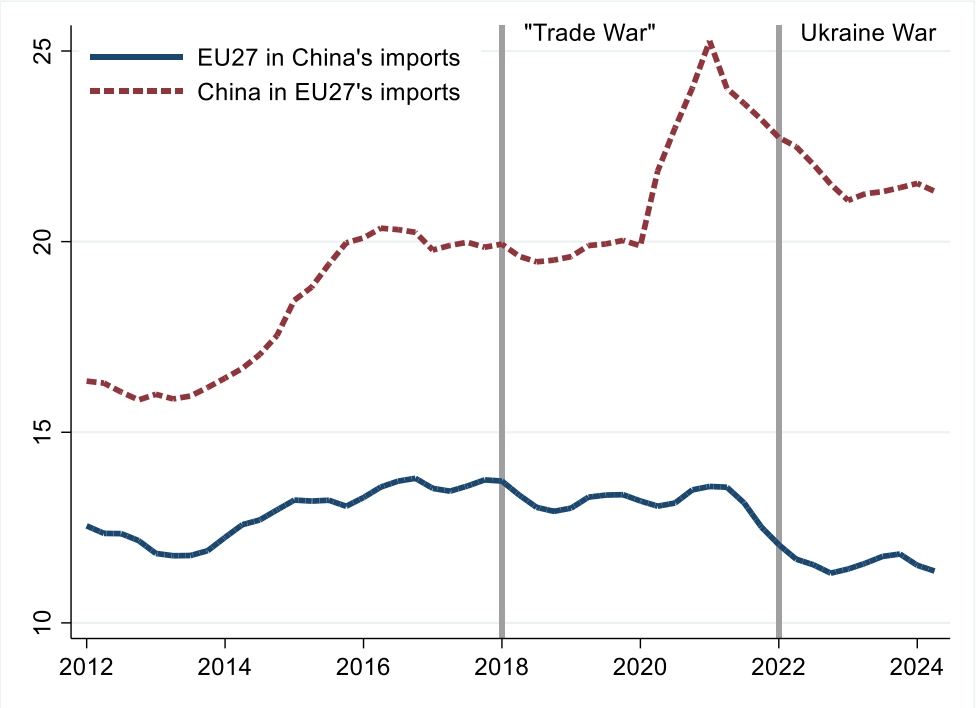
War is massively hitting Russian foreign trade, and trade war is strongly affecting bilateral exchange between the US and China. This matters, if only because these hotspots accounted for 5.3% of world merchandise trade in the year to the second quarter of 2024 (down from 7.4% in 2017). Outside these hotspots, though, there is no clear sign of widespread geoeconomic fragmentation of world trade.

An interesting illustration of this non-fragmentation is the case of relations between the European Union (EU) and China, marked by

7. Using the wider definition of blocs does not change this gap for East-to-West flows, and results in flows from West to East underperforming the rest by 4%.
8. For the sake of simplicity, I refrain from adding Belarus's foreign trade to this definition of hotspots, but doing so changes only marginally the results. I also checked that an unweighted analysis (based on medians to cope with outliers) gives similar results (the main difference is that East to West flows are slightly underperforming the rest in this case).

increasing tensions over recent years, including *inter alia* Chinese sanctions against members of the European Parliament in March 2021, and the Chinese *de facto* ban on imports from Lithuania from December 2021 to the end of 2023. For all the discourse about economic security and de-risking, China's share in the EU's total extra-EU imports has increased, not declined, over this period. From 19.9% in 2017, it reached 21.3% in the year to the second quarter of 2024 (see Figure 5:). Noteworthily, investment relations also exhibit contrasted patterns. While China's FDI to the EU has significantly receded since its heights of 2016-2017, the EU's greenfield investment in China reached a record high of 3.6 billion euros in the second quarter of 2024 (Rhodium Group, 2024).[9]

Figure 5: China's share in EU imports has increased since 2017



(share of import from partner in total imports, based on trailing 4-quarter sum of trade flows in value, in %)

Source: Author's calculations based on Global Trade Tracker.

Note: Calculations for EU27 exclude intra-EU trade.

9. These figures mainly result from a few very large investments, in particular by German firms in the automotive and chemical sectors. Part of it may reflect "in China for China" strategies, which may be seen as signs of further forthcoming fragmentation, but they may also result in significant exports from Chinese production facilities, as observed recently for electric vehicles.

And nearshoring? No – supply chains are lengthening, not shortening

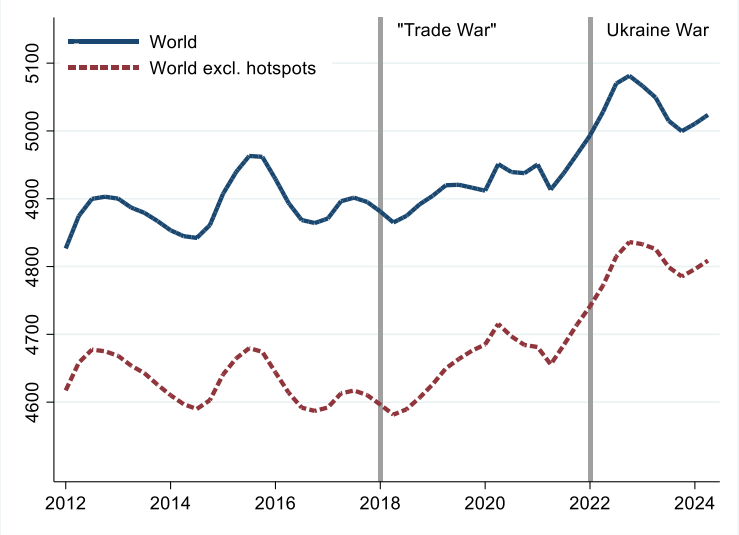
Another commonly held hypothesis is that geopolitical tensions should make firms more aware of the risks inherent in long-distance transportation – the Houthis' disruptions of shipping through the Bab-el-Mandeb Strait being a clear illustration. The logical consequence should be a shortening of supply chains, encapsulated in the expression "nearshoring". Another formulation of the same idea is to assume a trend toward regionalization, the form of which depends on the way regions are defined.

To assess this hypothesis, I focus on manufactured goods, since this is the sector where global value chains are most widespread, and where the rationale of supply chains shortening arguably makes more sense.[10] Simple computations show that the average distance travelled by one dollar (USD) of world trade of manufactured goods has not decreased since the launch of the Sino-American trade war in early 2018. On the contrary, it increased slightly, and this finding holds when the above-mentioned hotspots are excluded. On average, international trade thus involves more, not fewer, long-distance transactions.

While this does not mean that distance does not matter in firms' decisions, it does show that no widespread nearshoring trend is visible so far in the trade data, whether for manufactured products only or for all products. Excluding hotspots does not alter qualitatively this result, which is not surprising for at least two reasons. One is that Russia's invasion of Ukraine resulted in significant trade destruction between neighboring countries; the other is that, as already mentioned, declining direct trade between the US and China has been accompanied by increasing indirect linkages, often involving distant trading partners.

10. Doing the same calculations for all products does not change the results qualitatively, even though changes in the relative prices of commodities introduce additional volatility in indexes. Robustness checks, available upon request, were also carried out, using medians instead of means.

Figure 6: The average distance traveled by world trade flows of manufactured products has increased, not decreased, over recent years



(average distance traveled by 1 USD of world trade of manufacturing products, in km)

Source: Author's calculations based on Global Trade Tracker and CEPII's Gravity database.

Note: The indicator is computed as the average distance between trading partners, weighted by the value of bilateral trade flows. Distances are computed between capital cities (they are thus "theoretical", and do not account for disturbances like the ones caused by the Houthis). All calculations are based on trailing 4-quarter sums of trade flows in value.

Trade and geopolitics: not so simple!

These results might sound counterintuitive. Despite the undisputable background of increased geopolitical tensions, world trade is not fragmenting into blocs beyond a few hotspots accounting for hardly more than one-twentieth of the total; it is not even regionalizing. What should we conclude? Certainly not that geopolitical preferences would be unimportant for global economic linkages. There is overwhelming evidence to the contrary, even beyond hotspots. As "politics has slowly seeped into the business environment" (EUCCC, 2024, p. 4), private-sector managers and investors have no choice but to adapt. As a matter of fact, statistical analysis shows that, since the Ukraine invasion in particular, geopolitical risks are much more frequently mentioned in corporate calls with market participants and analysts than they were before (ECB, 2024, p. 44). The reality of this influence is probably even more true for FDI than for trade; witness the recess of FDI flows between the US and China, or the increasing importance of Hungary as a recipient of Chinese FDI in the EU.[11]

11. Since fall 2022, Hungary has consistently been the leading destination of China's direct investment in the EU, with the exception of the first quarter of 2024, due to significant EV manufacturing projects (Rhodium Group, 2024).

Geopolitical tensions do influence the way firms and states assess risks and opportunities, but it is simplistic to reduce this influence to a reshaping of world trade along the lines of geopolitical blocs, or even along regional lines. War turns trade patterns upside down and tariff war heavily diverts trade flows, but not much seems to happen elsewhere in terms of fragmentation, even in cases such as Sino-European relations, where tensions do not prevent China from selling more and bilateral greenfield investment flourishes. Widespread geoeconomic fragmentation may occur in the future; so far, it has not. In this, I concur with Setser's (2024a) conclusion of a "surprising resilience of globalization" – which, as Brad Setser stresses, does not mean that it is healthy. Geopolitical tensions influence states' strategies and firms' appreciation of risks but, so far, outside "hotspots", they have not led to a reorganization of trade patterns along the lines of geopolitical blocs.

This seemingly paradoxical conclusion reminds us that, despite tensions, the economic logics that gave rise to the international division of labor in the first place persists. The present situation is thus best described as resulting from the opposing influences of geopolitical tensions and economic attraction; or, in the words of Quah (2024, p. 1), "coalescence, associated with economics; (…) fragmentation, associated with geopolitics."

Overarching trends: geopolitically-motivated industrial policy competition, or China's big manufacturing push?

Now, if geopolitical affinities between blocs have not been decisive in shaping recent international trade patterns outside hotpots, how has this geopolitical influence materialized? In trying to address this question, it is natural to turn next to industrial policy. As mentioned in the introduction, recent US laws such as the Inflation Reduction Act or the CHIPS and Science Act are prominent cases of controversial, geopolitically motivated initiatives with potentially wide-ranging impacts. And the issue is far from being limited to the US. On the contrary, "the salience of industrial policy has risen greatly in recent years" (Juhász *et al.*, 2023, p. 214), and it "has gained increased prominence in public discourse over the last several years" (Evenett *et al.*, 2024, p. 5).

These and other papers have extensively documented the spread of these policies, across all continents and income levels, even though practices and tools vary widely across countries. The link with geopolitical tensions is clear. For instance, a detailed analysis of new industrial policy measures undertaken in 2023 shows that, among the four most-cited, official motivations, three had a clear geopolitical dimension: strategic competitiveness (37.0% of cases), supply-chain resilience (15.2%), and geopolitical concerns and national security (19.7%) (Evenett et al., 2024, p. 19).[12] This study also uncovers what it calls the "tit-for-tat nature" of these policies, by showing that "states tend to impose measures in sectors that others have targeted in the past" (*ibid.*, p. 22).

Most of these policies have "traditionally focused on promoting manufacturing industries" (Juhász *et al.*, 2024, p. 216), and are trade-distorting (as were 71% of the new measures identified in 2023, according to Evenett *et al.*, 2024). But the consequences for international trade are uncertain, to the extent that "it is no longer appropriate, if it ever was, to identify industrial policy with inward-looking, protectionist trade policies; contemporary industrial policies typically target outward-orientation and export promotion" (Juhász *et al.*, 2024, p. 214).

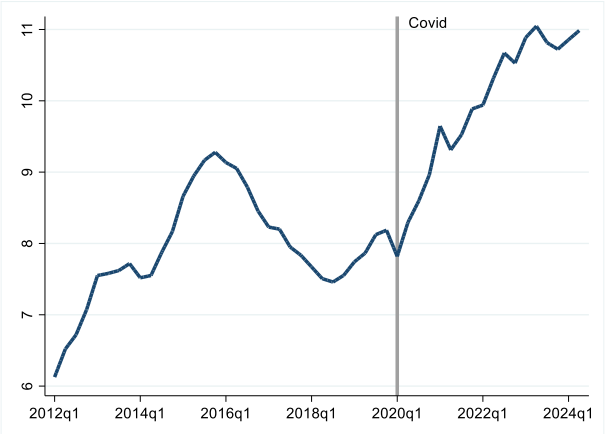
12. The second-ranking motive is climate-related concerns (28.1%).

Given their "tit-for-tat nature", though, it is tempting to see in this spread a cross-country competition of industrial policies, whose resulting impacts would more or less cancel out, or at least would be scattered, depending on the ambition and success of competing initiatives. Recent trends in world trade in manufactured goods tell a different story. In the words of Baldwin (2024), they have been characterized by China becoming "the world's sole manufacturing superpower".

China's surging manufactured goods trade surplus: massive, sudden, across the board

The most striking recent trend has been the surge in China's manufacturing goods surplus since the COVID-19 pandemic. From an already very high level of 8% of the world's total trade in manufactured goods, this surplus has reached 11%, a figure not seen for decades (Figure 7:).[13] Remarkably, this is not only a matter of the Chinese manufacturing sector becoming increasingly outsized. While its exports have outperformed the rest of the world by 15% since 2019, its imports, in contrast, have underperformed world trade by 6% over the same period (Figure 8:). It is not a question of size so much as of imbalance.

Figure 7: China's surplus in manufactured goods trade has skyrocketed since the Covid pandemic



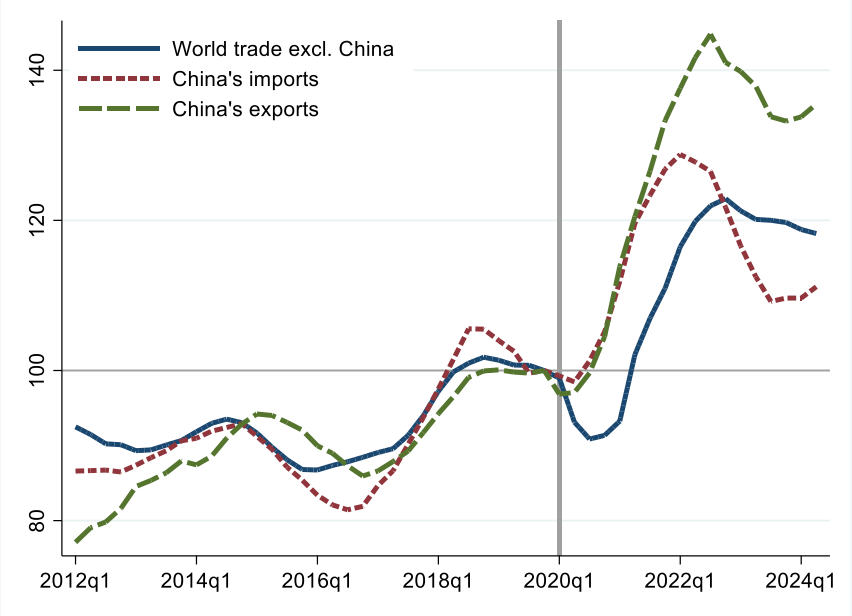
(% of world trade of manufactured products, based on trailing 4-quarter sum of trade flows in value)

Source: Author's calculations based on Global Trade Tracker.

Coverage: Harmonized System's sections 6 to 20, excluding Section 19 (Arms and ammunitions, for which the data lack reliability) and Section 14 ("Natural or Cultured Pearls, Precious or Semi-Precious Stones, Precious Metals, Metals clad with Precious Metal, and articles thereof; Imitation Jewelry; Coin", which is strongly dominated by gold and jewelry in China's trade).

13. Noteworthily, this surplus already surged massively, by more than 3 percentage points of world trade in manufactured goods, between early 2012 and end-2015. This increase was mainly due to a pronounced slowdown of imports, itself partly related to weakened investment (Kang and Liao, 2016) as well as significant price effects (against a backdrop of collapse in oil prices), and it was half-reversed during the 15 months that followed.

Figure 8: In manufactured goods trade, China's exports outperformed the world, while its imports underperformed



(trailing 4-quarter sum of trade flows in value, index 2019 = 100)

Source: Author's calculations based on Global Trade Tracker.

Coverage: See note in Figure 7:.

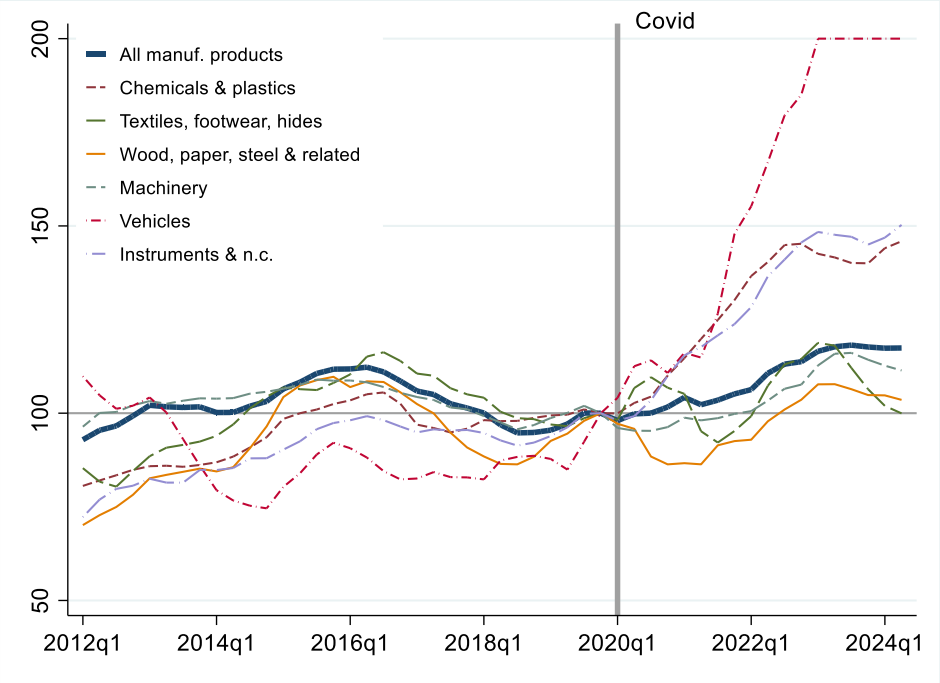
By its sheer size, this change matters a lot, even at the worldwide level. Hence the questions about its origins. A possible explanation might be that productivity improvements in China's manufacturing sector increased the country's comparative advantage in this sector; after all, these improvements are obvious and even spectacular in many cases. However, several features do not fit well with this hypothesis. To begin with, the surge has been extremely sudden, essentially taking place between the first quarter of 2020 and the second of 2023. Three years – amid pandemic crisis and lockdowns – are a rather implausible time span for a decisive improvement in comparative advantages.

Moreover, if across-the-board productivity improvements were the main explanation for the recent surge in China's manufacturing trade surplus, they should have been accompanied by an exchange rate appreciation (in a local application of the Balassa-Samuelson effect). This is not what happened – on the contrary. Even though the yuan real effective exchange rate appreciated by 6% between January 2020 and March 2022, it then fell back to close to 9% below its pre-COVID level, and has remained there since mid-2023.[14]

14. Source: Bank for International Settlements, not seasonally adjusted index. This is consequential for partners, of course. For instance, according to the ECB, "since 2021, China has accounted for the euro area's entire appreciation in the real effective exchange rate based on producer prices" (Al-Haschimi

A cross-sectoral analysis provides an additional argument to reject the hypothesis of a change that would have been mainly productivity-driven. Partitioning the manufacturing sector into six main branches shows that, despite significant differences (a spectacular rise in vehicles, in particular), China's coverage ratio improved between early 2020 and mid-2024 for every single one of these branches (Figure 9:). Admittedly, these branches are very large and have been defined arbitrarily for presentation purposes. Still, it seems highly unlikely that China's sudden and major productivity improvements might have spanned such a large array of products.

Figure 9: China's coverage ratio of manufactured goods trade increased in all branches



(based on trailing 4-quarter sum of trade flows in value, index 2019 = 100)

Source: Author's calculations based on Global Trade Tracker.

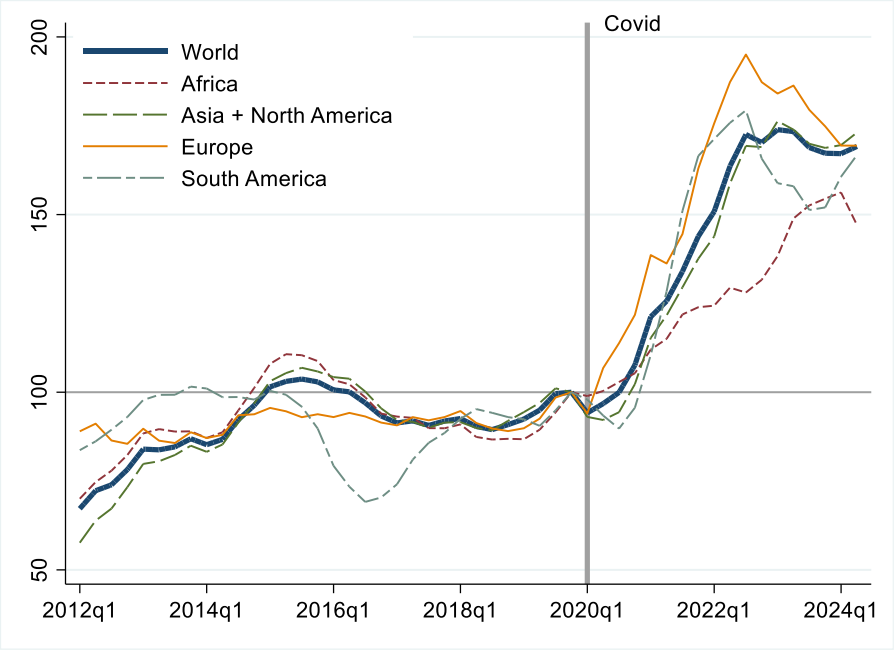
Note: The coverage ratio is computed as the ratio of exports over imports for each branch, rebased to 100 for the last quarter of 2019. For presentation purposes, values for the "vehicles" group of products are bound to the index 200. The latest value of the index, for 2024Q2, is 289, corresponding to a coverage ratio equal to 3.39 in absolute terms. Branches are defined based on sections of the Harmonized System of classification: Chemicals and plastics (sections 06+07), Textiles, footwear, hides (08+11+12), Wood, paper, steel & related (9+10+13+15), Machinery (16), Vehicles (17), Instruments & n.c. (18+20).

An alternative interpretation might emphasize the role of local determinants, such as energy prices, especially in a period marked by sharp shocks. In this case, the improvement in China's manufacturing trade should have been contrasted across partner regions, depending on their own characteristics. Assessing whether this has been the case is complicated by the above-mentioned impact of the Sino-American trade war. Since trade

et al., 2024). On the relation between productivity shocks and real exchange rates, see, for instance, Lee and Tang (2006) or Beckmann *et al.* (2015).

diversion effects through so-called "connector countries" have been emphasized, this concern can be overcome by grouping together Asia and North America, so that the US is part of the same group as the most important "connector countries". Doing so shows that China's surplus in manufactured goods trade, already positive with regard to all the aggregate regions before 2020, increased significantly with each of them (Figure 10:).[15]

Figure 10: China's surplus in manufactured goods trade increased with all aggregate regions



(based on trailing 4-quarter sum of trade flows in value, index 2019 = 100)

Source: Author's calculations based on Global Trade Tracker.

Coverage: See note in Figure 7:.

Note: Regions are defined following Global Trade Tracker classification where, among other features, Russia belongs to Europe and Turkey to Asia.

Making sense of China's big manufacturing push

Summing up, China's manufacturing surplus has suddenly surged big-time from an already very high level, more or less in all branches and all directions. The only credible explanation left is that this surge has been policy-driven. The background is well known. The COVID-19 pandemic hit an economy that was already facing big challenges, with an outlook summarized in IMF's Article IV consultation in 2019 as "slower growth, rising debt, higher uncertainty" (IMF, 2019, p. 17), and ongoing financial regulatory strengthening.

15. An analysis based on coverage ratios gives the same qualitative results, except for Africa, for which the initially very low coverage ratio increased in recent years.

While rebalancing had been discussed at least since 2006, when "shifting the composition of growth away from exports and investment towards increased consumption" was described to the IMF as "a key element of the government's overall strategy to rebalance growth" (IMF, 2006, p. 5; see also Blanchard and Giavazzi, 2006), imbalances remained obvious in 2019, still characterized *inter alia* by exceptionally high savings and low consumption. Responses to the pandemic, in a context also marked by a severe adjustment in the housing market, only made these imbalances worse. The share of final consumption in GDP fell from 55.8% in 2019 to 53.5% in 2022, below its 2005 level (54.3%)![16] So much for the rebalancing toward consumption, even though this share bounced back to 55.7% in 2023. The main reasons are known: Government support to the economy has focused on the supply side, while consumers' confidence was plummeting (partly in response to strict and prolonged lockdown policies).

Indeed, like all economies with the capacity to do so, China supported its economy massively in response to the acute crisis ensuing from extended lockdowns, even though, by advanced economies' standards, its fiscal expenditures remained rather limited and short-lived.[17] This support included increased disbursement and coverage of unemployment insurance as well as personal income tax cuts. However, given the limited coverage of the social safety net and the lack of additional income support for vulnerable households, public support was, in fact, overwhelmingly directed toward the supply side, through a combination of tax and financial relief, liquidity provisions and waived social contributions. No global assessment of the supply-demand balance is available, to my knowledge, but the repetition of recommendations in IMF's Article IV annual consultations is telling in itself: "Shortcomings in the social protection system have added to widening income inequality and the halting recovery of household demand (…), [t]he investment-driven recovery has reversed earlier, hard-won progress in rebalancing" (2021 consultation, IMF, 2022a, p. 12); "it will take the systematic strengthening of the social protection system to sustain high-quality growth" (2022 consultation, IMF, 2023, p. 21); "[The Directors] recommended a budget neutral reorientation of expenditures toward households to support consumption" (2023 consultation, IMF, 2024a, p. 3); "The aggregate household saving ratio remains high as upgrades to the social safety net have been modest, and leverage is still increasing in many sectors amid the authorities' continued focus on supply-side policies" (2024 consultation, IMF 2024b, p. 10).

Mechanically, this has been accompanied by an increased current account surplus, from 0.7% of GDP in 2019 to 2.5% in 2022 and 1.4% in 2023, according to available statistics. This is not a major increase, and China's

16. Source: National Bureau of Statistics of China. Meanwhile, the gross national savings rate, already as high as 43.8% of GDP in 2019, increased to 45.7% in 2022, and fell back to 43% in 2023.
17. By IMF reckoning, China's additional spending and forgone revenue in 2020-2021 was approximately 5%, compared to more than 10% for the G20 average (IMF, 2021, p. 10).

current account surplus in 2023 remained, for instance, lower as a share of GDP than that of the Euro Area (1.7%).[18] However, current account statistics are not the most insightful indicator to gauge the imbalances at stake in the present case, for two main reasons. The first is that published statistics are subject to serious methodological concerns for the purpose of faithfully representing the nature of interactions with foreign partners. Beyond long-standing questions about the quality of statistics regarding trade in services,[19] the main problem is that large discrepancies have appeared between the representation of trade in goods flows in balance of payments statistics of trade and in customs statistics. Since 2022, the gap has become so large that, according to Setser (2024b), adjustments following standard practice might multiply the reported current account surplus by a factor of 2.5.

The second reason why current account statistics are not so insightful here is that they overlook the specificities of the manufacturing sector. This matters because several studies suggest that China largely outweighs other countries in terms of industrial policy expenditures (*e.g.* DiPippo *et al.*, 2022; OECD, 2023). And these policies might even have intensified in the response to the pandemic. Beyond the general pro-supply-side bias, the manufacturing sector seems to have specifically benefited from targeted support measures. Quasi-fiscal operations such as temporarily reducing electricity tariffs or waiving port fees are examples (IMF, 2021, p. 10). But the central dimension of this specific pro-manufacturing bias is probably financing, in a country where the banking sector is dominated by state-owned enterprises (SOEs), and where credit is known to be strongly influenced, in both prices and quantities, by political objectives and affiliations.[20] In the past, housing and infrastructure investment have been favorite recipients of policy-led credit expansions, designed to sustain growth. But both were largely incapacitated in recent years, due to the unfolding correction on the housing market, and to the already sky-high level reached by Chinese infrastructure investments. The result has been an extraordinary growth of lending to the manufacturing sector, constantly exceeding 30% year-on-year from the fall of 2020 until the end of 2023.[21]

This outcome should be no surprise. In fact, they logically stem for the 14th Five-Year Plan, published in 2021, which explicitly sets the objective to "maintain the basic stability of the proportion of the economy taken up by

18. In the year to the second quarter of 2024, the EU also exhibited a surplus in manufactured goods trade, but it was comparatively limited, at 2.4% of the corresponding world trade (down from 2.9% in 2017).
19. The introduction in 2014 of a new methodology for calculating tourism outflows led to surprising results, potentially conflating travel expenditures with acquisition of foreign financial assets, for amounts that are far from trivial (see for instance Wong, 2017).
20. This bias is, for instance, directly illustrated in Harrison *et al.* (2019) for SOEs. See also, for instance, Song *et al.* (2011) and Hachem (2018).
21. Source: People's Bank of China. See, for instance, "Monetary Policy Analysis Group of the People's Bank of China" (2024), and previous quarterly reports, as well as Durfee *et al.* (2023). As emphasised by the latter, the headline growth rate for financing into manufacturing has often been lower, due to the slowdown of financing through bonds, but it remained very high (the figure of 18% is cited for the third quarter of 2023).

the manufacturing industry, enhance the competitive advantage of the manufacturing industry",[22] in contrast to the two previous plans' calls for rebalancing in favor of services. Given that deindustrialization is a logical consequence of structural change beyond intermediate wealth level, reaching this target warranted special efforts.

The political priority given to the manufacturing sector is also visible in the preferences openly expressed by China's leader. Xi Jinping underlined the necessity to grasp key and core technologies "in [China's] own hands", for the country to guarantee economic security, in an explicit focus on technological self-reliance;[23] he emphasized that "high-quality development" required "continu[ing] to focus on the real economy" and "boost[ing] China's strength in manufacturing".[24] More recently, his new political slogan has been even more explicit, with a call to mobilize "new quality productive forces", while he made clear that "developing new productive forces does not mean neglecting or abandoning traditional industries".[25] Meanwhile, Xi Jinping also made clear his reluctance to "provide excessive guarantees, in order not to fall into the trap of 'welfarism' that encourages laziness."[26] Taken together, these declarations should make clear that the manufacturing push evident from trade data and apparent from the supply-side bias in macroeconomic policies is a deliberate political choice.

22. Article VIII of the plan; as translated by CSET (Xinhua News Agency, 2021, p. 19).
23. 2018 speech at the Chinese Academy of Sciences and Chinese Academy of Engineering (as reported in *Qiushi Journal*, and translated in Meinhardt and Sebastian, 2021, p. 2).
24. Report to the 20th National Congress of the Communist Party of China. See www.idcpc.org.cn.
25. Yu, Evelyn, "Xi Wants 'New Productive Forces' to Fit Local Conditions", *Bloomberg News*, March 5, 2024, available at: www.bloomberg.com.
26. Address about China's commitment on common prosperity at the 10th meeting of the Central Committee for Financial and Economic Affairs, August 2021.

Conclusion: Coordination challenged

Temporarily and to some extent, China's big manufacturing push might have been welcome in a context where other countries, the US in particular, exhibited a symmetrical bias, as generous fiscal support for demand was not matched by supply-side improvements (Soyres *et al.*, 2022). It proved helpful in moderating partners' inflation pressures. But an imbalance it remains, and as such, it is likely to be both unsustainable and destabilizing for trading partners.

Of course, there is more to international trade than just manufactured goods, which represent around two-thirds of merchandise trade, itself accounting for about four-fifths of world trade. In value terms, manufactured goods thus represent a "big half" of world trade in goods and services. Politically, though, manufacturing plays an even bigger role than these statistics suggest, because of its central importance in technology (in most countries, this is where most private R&D expenditure takes place, and where productivity gains are fastest), in defense (for the production of related materials), in the green transition, and even in local development and place-based policies (*e.g.* Neuman and Simpson, 2014). And, as emphasized above, China's big manufacturing push was itself, in large part, politically motivated.

Confrontational policies such as the one applied under the first Trump administration did not prove efficient in dealing with the issue, judging by their (unsurprising) failure to limit either the US current account deficit (or manufacturing trade deficit, for that matter), or China's surplus. And it is doubtful whether a doubling-down in this direction under a second Trump administration would do better. While confrontation might add to the geopolitical motivation for maintaining these biased policies, it also makes it less likely that Chinese voices arguing for a true rebalancing effort are heard; and these voices are numerous even among influential Chinese economists, arguing that present policies are not in the country's best interest.[27]

However, given the political importance that governments (rightly or wrongly) place on their manufacturing sector, this imbalance is a source of increasing tensions. Noteworthily, partners' concerns may well be aggravated by the fact that China enjoys a dominant position, defined by a

27. See, for instance, "These 11 Chinese Mainstream Economists All Call for Govt Aids to Chinese Households", *Pekingnology*, August 22, 2024. On the political difficulties of such rebalancing, see for instance Pettis (2024).

more than 50% worldwide market share, in a disproportionately large number of products – six times as many as the United States and Japan, and twice as many as the EU (Jean et al., 2023). It is unlikely that China's trading partners will accept for long seeing their manufacturing sector squeezed as a result of its policies, and persisting in this direction may only sharpen tensions. Contemplated or implemented temporary trade barriers against Chinese manufactured goods exports are trending upward, and they are not limited to the US and the EU. In 2024, such actions have been reportedly announced or considered, *inter alia*, in Mexico, Chile, Colombia, Brazil, Thailand, Vietnam and Indonesia. This is by no means new, and the frequency of these actions is highly variable over time, but, over the first 10 months of 2024, the number of trade remedies brought by developing countries against Chinese imports was almost double its 2023 level – not enough to conclude about a long term trend, but still a meaningful signal of increased trade tensions.[28]

These tensions are often described as rooted in Chinese industrial overcapacities. This is understandable, given that the above-mentioned imbalances have resulted in turbocharged manufacturing investments, themselves building very large production capacities in many sectors. This characterization is also reminiscent of the approach followed for the steel industry, with the establishment by G20 leaders in 2016 of the Global Forum on Steel Excess Capacity (GFSEC), hosted at and facilitated by the OECD. But it is unconvincing, for two reasons. One is effectiveness. At the end of 2024, the first "key message" on GFSEC's website, "Global steel excess capacity is surging",[29] sounds like an acknowledgment of failure. The other reason is methodological. In emphasizing that "[t]he notion of excess capacity (…) is not simply a comparison of a country's capacity and production, or defined as a low capacity utilization rate" (GFSEC, 2024, p. 6), the GFSEC secretariat itself recognizes that this is not an accurate way to define the problem. It is also not clear how the global approach taken in this context, comparing production capacity to consumption, could be meaningfully applied at a country level. And as a matter of fact, I am not aware of enforceable commitments related to overcapacities in international agreements.[30]

The analysis above suggests that the present imbalances are better characterized as resulting from two main coordination failures. One is macroeconomic, linked to the long-standing imbalance of the Chinese economy, marked by the already exceptionally high savings rate and low share of final consumption in GDP; the other pertains to the realm of

28. According to an analysis by China's Ministry of Commerce of data collected by the WTO's Trade Remedy Information Center in 2024, this number was reckoned to be 91 as of October 27, up 82% from the 2023 number of 50. See www.chinatrademonitor.com.
29. See www.steelforum.org, consulted on December 3, 2024.
30. The WTO Agreement on Fisheries Subsidies, adopted in June 2022, includes references to overcapacities, but they are not explicitly defined and are used as a motivation rather than a commitment or surveillance device.

industrial policies, but in a very wide sense since it concerns, to varying degrees, the manufacturing sector as a whole.

The macroeconomic dimension is delicate because, despite the IMF's surveillance and policy advice mandates, there are no clear rules in this area. In addition, imbalance sources are shared, with the US arguably exhibiting abnormally low savings, and the EU insufficient investment. Still, China's entrenched macroeconomic imbalances remain an important part of the explanation for its surging manufacturing trade surplus, and their correction remains necessary to improve coordination. IMF and G20 meetings are places where these matters can be discussed. The difficulty of putting pressure on surplus countries to adjust has been a structural problem ever since the Bretton Woods conference, but an approach coordinated across a large array of partners is probably the most efficient way to proceed.

The industrial policy dimension is perhaps the most controversial, notably because it can be viewed as a breach of China's WTO commitments, in particular those made under the Agreement on Subsidies and Countervailing Measures (SCM). Because subsidies covered in this agreement are those "specific to an enterprise or industry or group of enterprises or industries" (Article 2), they are usually thought of as more narrowly targeted, but the principle remains when distortions cover the entire manufacturing sector – that is, they should not "cause (…) adverse effects to the interests of other Members" (Article 5). It is a logical consequence of this interpretation that partner countries take action in response, through trade defense instruments and WTO disputes. These responses are likely to multiply as long as underlying imbalances are not corrected. If applied in a consistent way, they are legitimate responses to a situation that is harmful to domestic industries and problematic from a political and social point of view. They are also necessary to build the leverage needed to push for a rebalancing, even though they might not be sufficient to deal with the problem at scale.

Geopolitical tensions have thus played a key role in shaping trade patterns in recent years, but not in the sense usually assumed. Rather than through political alliances or affinities, their most decisive influence has probably been over China's economic policy choices. This results in severe imbalances that give rise to increasing economic and political tensions. Widespread geoeconomic fragmentation of world trade is not visible, at least so far. In contrast, the geopolitically-motivated challenges to international coordination are striking.

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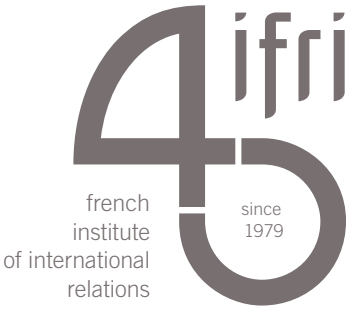

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