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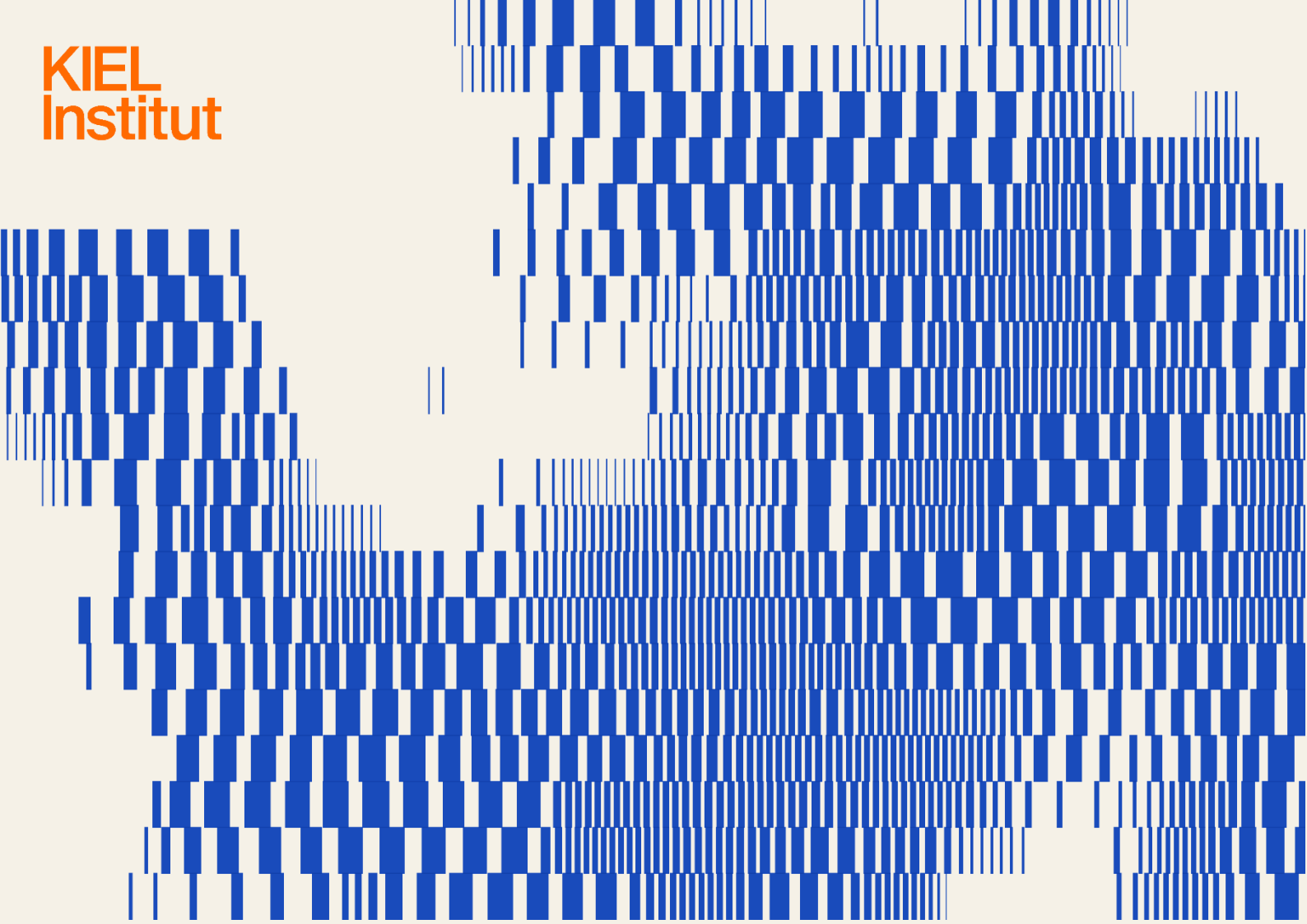

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Competing with China in Third Markets

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Abstract*

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Between 2002 and 2024 China's goods exports grew more than seven-fold and its share of world exports rose from 7.6% to 16%, increasingly concentrated in the capital and technology-intensive products in which advanced economies have long specialised. Using bilateral trade data from BACI over 2002–2024, we document three facts about this "second" China shock. First, China's export basket has reallocated decisively toward more complex products and converged on the export structures of the EU and its high-income partners. Second, this convergence has been accompanied by widespread displacement of advanced economy exporters in third markets, concentrated in complex manufacturing. Third, the incidence is highly uneven: against a proportional benchmark that attributes to China only the losses mechanically implied by its growth, economies such as Germany and the United Kingdom lose far more market share than China's rise alone can explain. For Germany, roughly two-thirds of the loss is over-proportional, pointing to a home-grown competitiveness component. Much of the displacement that does track China's expansion, moreover, reflects its sheer size: counterfactuals in which a scaled-up Vietnam or India plays China's role generate strikingly similar losses. We argue that broad tariffs are poorly matched to this diagnosis and that the durable response is forward-looking investment in innovation.

Keywords: China, export competition, market shares, third markets, industrial policy
JELs: F13, F14, F60, O25

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* An interactive visual companion to this paper, with interactive figures and the underlying data, is available at https://julianhinz.com/research/competing_with_china_third_markets/ .

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1 Introduction

Over the last two decades, China's goods exports have grown more than seven-fold, from USD 471 billion in 2002 to USD 3.5 trillion in 2024, lifting its share of world exports from 7.6% to 16%. Its comparative advantage has also broadened from approximately 1,800 product categories to over 2,500 during this period.

What are the margins of this growth? What happened to other exporters along the way? Is China displacing advanced economies in third markets, and if so, where and by how much? We investigate these questions in this paper by analyzing over two decades of data on bilateral trade in goods. Comparing performance in third markets provides a useful benchmark, as import data are well covered in international trade statistics and allow competitiveness to be compared within the same market. By contrast, domestic sales are substantially more difficult to measure and compare across countries. In doing so, we contribute to the ongoing discussion on a potential 'second' China shock, driven by an expansion of China's net exports in capital- and technology-intensive manufacturing sectors.[1]

This is distinct from the first China shock of the 2000s that was characterized by the surge of labor-intensive consumer goods exports from China to the rest of the world. Prior research on this shock revealed that import competition with China had large effects on plant survival and local labor conditions in importing countries alongside heterogeneous firm responses, such as innovation and quality upgrading among surviving firms.[2] In addition, the shock also lowered costs for consumers and provided firms with access to cheaper intermediate inputs. As such, it improved the terms of trade of advanced importing countries. In contrast, the second China shock may adversely affect the terms of trade for advanced economies as Chinese exporters increasingly challenge their position in third-country markets.

Concerns surrounding this latest China shock also reflect the view that innovation depends on maintaining an advanced industrial base that, once eroded, is difficult to rebuild. The loss of such an industrial core may impair a country's ability to develop and commercialize new technologies in the future. More empirical evidence is needed to assess this claim. Nevertheless, understanding how China's export expansion has reshaped global trade patterns is of first-order importance. In particular, it is crucial to identify the products and markets in which Chinese exports have grown and to assess the extent to which this growth has displaced exports from advanced economies in third markets.

We contribute to the discussion by examining several aspects of Chinese export growth: the

[1] For a discussion of China Shock 2.0, see, for example, Tordoir and Setser (2026); Bayoumi and Gagnon (2026); de Soyres et al. (2026b).

[2] See Autor et al. (2013a); Dauth et al. (2014a); Pierce and Schott (2016); Bloom et al. (2016); Bai et al. (2025)

reallocation within China's own export basket, the convergence of its export structure with that of advanced economies and the differential effects of China's export growth across these economies. Throughout, we pay particular attention to Germany. Among advanced economies, Germany's export structure overlaps strongly with China's and, as we show, Germany has lost more ground in third markets than would be predicted by China's rise alone. Section 5.3 therefore examines the German case in greater detail and identifies the sectors in which competitive pressures from China have been most pronounced.

A theme that recurs throughout is the role of China's sheer *size*. Much of the displacement we document is what any very large, fast-growing exporter would have produced: in counterfactuals where a scaled-up Vietnam or India takes China's place, advanced economies lose almost as much (Section 5.5).

The remainder of the paper is structured as follows. Section 2 situates our analysis in the literature on the first and second China shocks. Section 3 describes the data and the measures we use. Section 4 documents how China's export profile has changed and how it has converged on those of advanced economies. Section 5 turns to displacement in third markets and its uneven incidence across advanced economies, with a closer look at Germany. Section 6 draws out the policy implications. Section 7 concludes.

2 Related literature

Our paper connects to two strands of work. The first studies the original "China shock" of the 2000s, when a surge of labour-intensive Chinese exports displaced domestic producers in advanced economies and reshaped local labour markets (Autor et al., 2013a; Dauth et al., 2014a; Pierce and Schott, 2016). This literature also documents heterogeneous firm responses, including innovation and quality upgrading among survivors (Bloom et al., 2016; Bai et al., 2025). Whereas this work centers on *import* competition in home markets, we focus on trade flows to *third* markets, where Chinese and advanced economy exporters compete against each other.

The second strand is the emerging discussion of a "second" China shock, driven by China's expansion in capital- and technology-intensive sectors (Tordoir and Setser, 2026; Setser and Tordoir, 2025; Bayoumi and Gagnon, 2026; de Soyres et al., 2026b). Recent contributions document the sectoral reorientation of Chinese trade and the growing similarity between China's export basket and those of advanced economies (de Soyres et al., 2025, 2026a; Schott, 2008), as well as the specific exposure of European industry (García-Herrero et al., 2018; Garicano, 2025; Beckett, 2025; Colijn, 2025). Recent firm-level evidence also highlights the heterogeneous impact of this second China shock. Using German customs data, Bodenschatz et al. (2026a) show that rising Chinese market shares reduce firms' export growth, quality and unit values, while Beltran et al. (2026) find that Chinese growth

shocks lower the revenues of foreign firms competing with Chinese producers but raise those of firms that sell to or source inputs from China.

We complement this growing evidence with a cross-country view. Using a transparent proportional benchmark, we quantify the uneven incidence of China's rise across advanced economies. We further decompose each country's loss of export market share into components that China's growth mechanically implies and that which reflects a broader erosion of competitiveness.

Methodologically, we draw on standard tools from the trade literature: revealed comparative advantage (Balassa, 1965), the Finger–Kreinin export-similarity index (Finger and Kreinin, 1979), and the product complexity index (Hidalgo and Hausmann, 2009). On the policy side, our reading of tariffs as a poorly targeted instrument echoes evidence on the costs of recent protectionism (Fajgelbaum et al., 2020) and arguments for conditional, time-limited support (Bora et al., 2025).

3 Data and measurement

Data. Our analysis uses the BACI database of the CEPII, which provides bilateral trade flows by exporter, importer, and HS 6-digit product, harmonised across reporters, for the years 2002–2024. The data cover roughly 5,000 HS6 products and 162 destinations. To smooth year-specific volatility, most comparisons contrast a three-year initial window (2012–2014) with the most recent three-year window (2022–2024); where we describe longer-run trends we use the full 2002–2024 span. Throughout, "third markets" for a given exporter exclude both China and the exporter's own domestic market, since domestic sales are not observed in trade data.

Export-structure indices. We summarise export baskets with three standard measures. Revealed comparative advantage follows Balassa (1965),

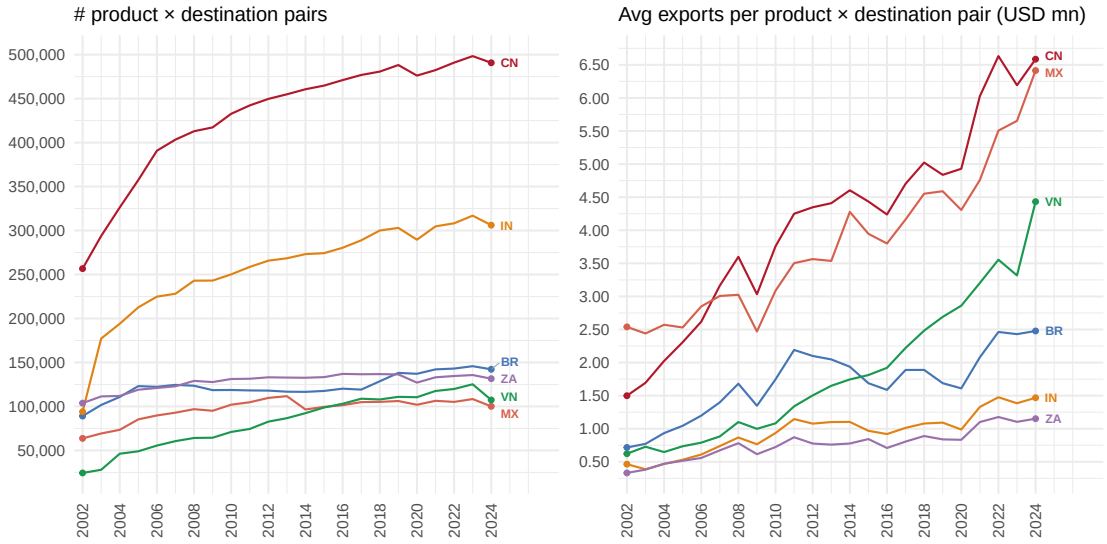
$$\mathrm{RCA}_{ip} = \frac{X_{ip}/X_i}{X_{wp}/X_w}, \tag{1}$$

where X_{ip} is country i's exports of product p, X_i its total exports, and w denotes the world; $\mathrm{RCA}_{ip} > 1$ indicates relative specialisation. Export similarity between two economies is the Finger–Kreinin index (Finger and Kreinin, 1979),

$$\mathrm{ESI}_{ij} = \sum_{p} \min(b_{ip},\, b_{jp})\,, \qquad b_{ip} = X_{ip}/X_i, \tag{2}$$

which ranges from 0 (disjoint baskets) to 1 (identical baskets). To capture sophistication we use the product complexity index (PCI) of Hidalgo and Hausmann (2009), which ranks products by the diversity and ubiquity of the economies that export them. Finally,

Figure 1: Export growth across emerging markets



Note: Source: BACI (CEPII), 2002–2024.

we classify products into capital, intermediate, and consumption goods using the PLAID broad-economic-categories concordance.

4 China's changing export profile

This section documents how the content of China's exports has changed over the past two decades. We first track the reallocation within China's own export basket and then show how its export structure has increasingly converged on those of advanced economies.

4.1 Tracking China's export profile

China has deepened its reach within the global trading network. Between 2002 and 2024, the number of destinations China supplies and the total range of products it exports have remained roughly stable, at around 162 countries and 5,000 HS 6-digit products respectively. What has changed is the intensity and reach of China within the network. Think of each unique combination of a product and a destination as a single export relationship, e.g. steel sold to Brazil or batteries sold to Germany. In 2002, China had 253,000 such export relationships. These nearly doubled by 2024, reaching 481,000. Moreover, each relationship has become far more valuable over the same period, with average annual exports per pair rising more than fourfold. This growth is unique relative to several emerging market economies such as Mexico, South Africa and Brazil (Figure 1).

China's growth is more than an expansion of its earlier export basket. China's export profile today is markedly different. We can track these changes precisely by ranking every product according to its share in the country's exports and comparing these rankings across time.

We find that the correlation of China's export basket with that of its own 2002 bundle has declined substantially. This implies that the products that dominate Chinese exports today are very different from those that were important Chinese exports in 2002. In contrast, the current export profiles of advanced economies like Germany, Japan, and the US is more similar to their initial export basket of 2002 (Figure 18 in Appendix).

The reallocation of China's exports across product categories follows a clear pattern. Electronics and machinery have substantially increased their shares while textiles, apparel, and household goods have declined in relative terms. This shift is clearly visible in Figure 2, which shows a systematic change in the composition of China's export basket between 2002 and 2024.

In contrast, other emerging economies largely increased their specialization in the product categories that already accounted for a substantial share of their exports in 2002. This pattern is particularly evident in agri-food products for countries such as Brazil, Chile and South Africa. Notable exceptions here are India and Vietnam, which have also experienced a clear shift in their export composition towards more advanced products such as electronics, chemicals and machinery. However, both economies' export baskets remain less diversified than China's.[3] The transformation in China has been considerably more broad-based. While its exports have shifted toward more technologically sophisticated goods, this reallocation has occurred across a wide range of product categories. As a result, China's export basket remains more diversified in comparison to other emerging market economies including Vietnam and India.

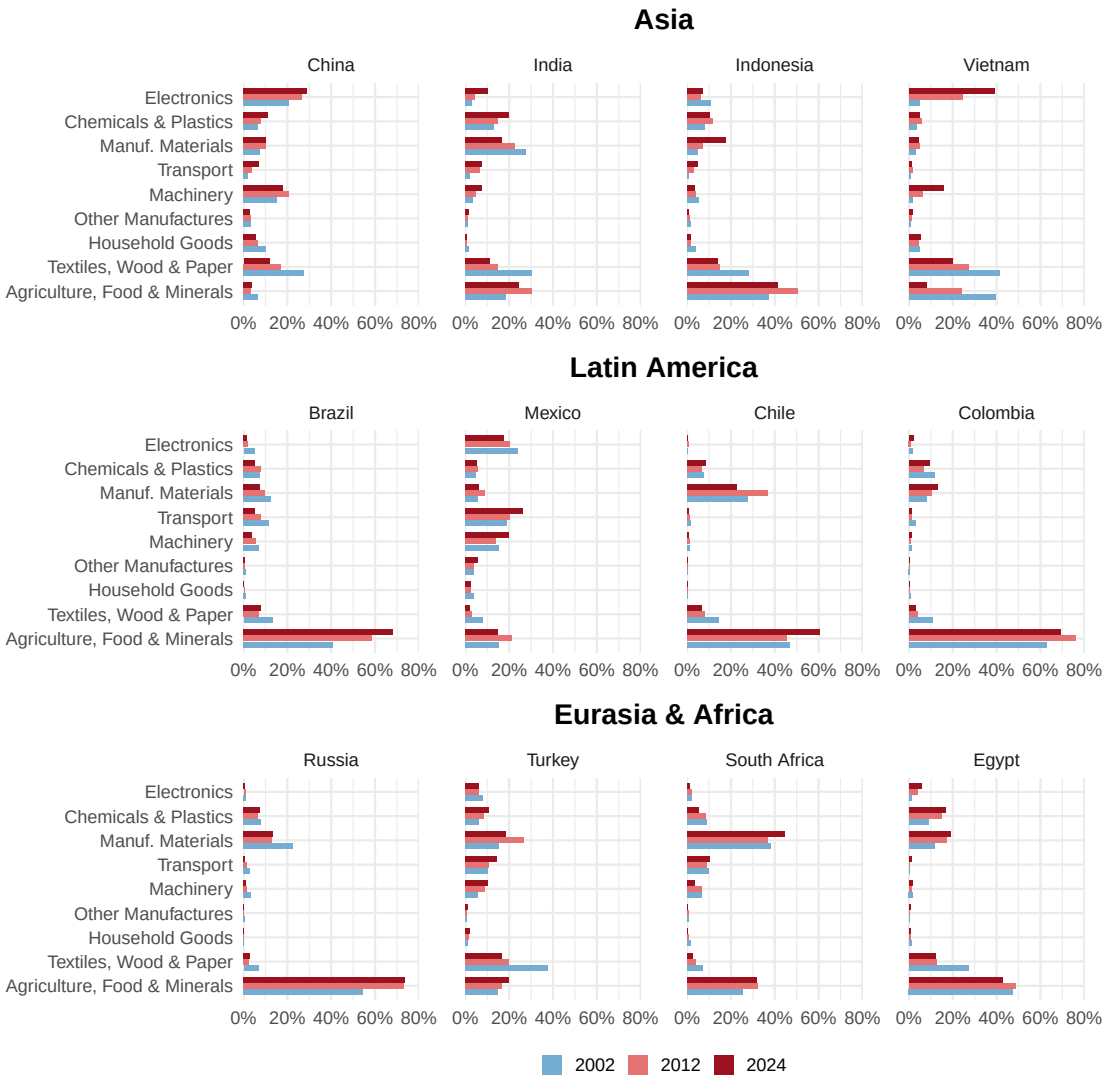
Broadly summarized, the composition of China's export basket has clearly shifted toward capital and intermediate goods and away from consumption goods in a manner that few other emerging markets have experienced in the last two decades. With this shift, China's share of global exports in capital goods has also increased to 26%, larger than the shares of Germany, Japan and the US combined which were the three largest exporters of capital goods worldwide in 2002 with a combined share of approximately 37% (Figure 4). The import side tells a complementary story. China's demand has shifted toward agri-food and mineral products, consistent with an economy that increasingly produces capital equipment domestically and imports the raw materials and food it requires (Figure 17 in Appendix).

4.2 China's convergence with advanced economies

While China has been upgrading, advanced economy export baskets have seen limited compositional change. Even as China's export basket moved decisively toward capital and intermediate goods and away from consumption goods, the export composition of major

[3]Based on the Herfindahl-Hirschman Index for exports in 2024: China (0.0120), India (0.0216), and Vietnam (0.0382). Higher values imply greater product-level concentration in export baskets.

Figure 2: Export composition of emerging markets over time



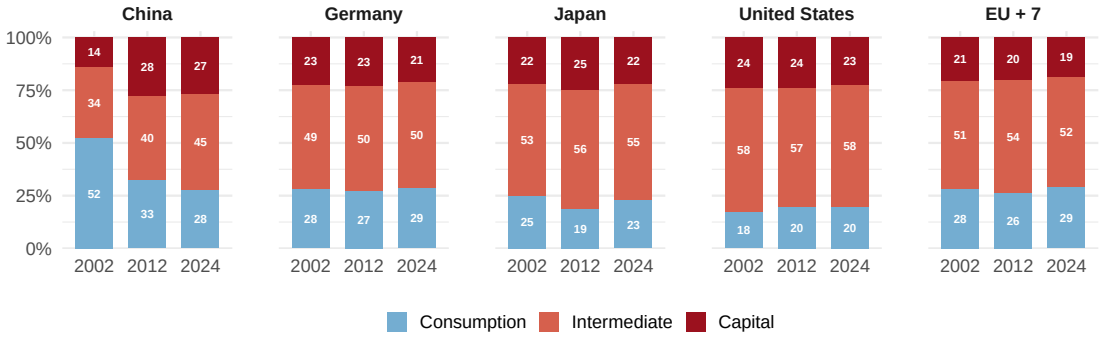
Note: Each bar shows a sector's share in the total goods exports of the respective economy in the indicated year. Sectors are broadly grouped by HS chapters: Agriculture, Food & Minerals (HS 01–27), Chemicals & Plastics (28–40), Textiles, Wood & Paper (41–67), Manufacturing Materials (68–83), Machinery (84), Electronics (85), Transport (86–89), Other Manufactures (90, 92, 93, 96), and Household Goods (91, 94, 95). Source: BACI (CEPII), 2002–2024.

economies such as Germany, Japan and the US has remained largely unchanged across these broad categories (Figure 3a). This stability also shows in the knowledge intensity of their export baskets, as measured by the Product Complexity Index (PCI).[4] The complexity profile of advanced economies' exports has barely moved over two decades, while China's has shifted markedly upward (Figure 3b).

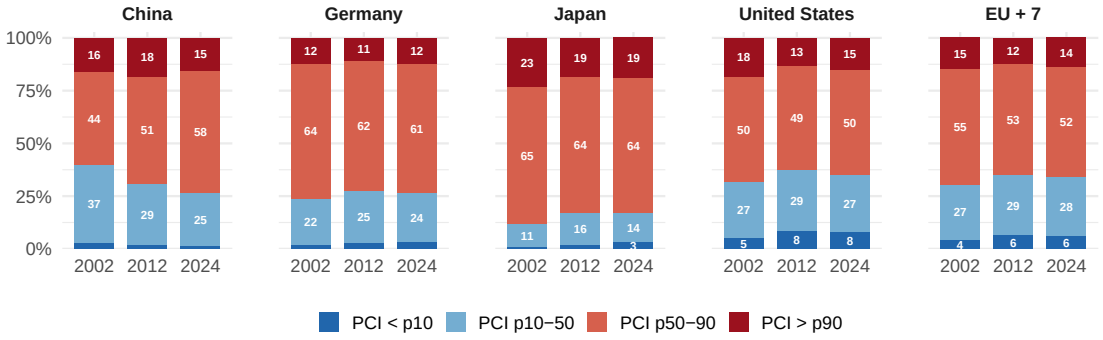
[4]The PCI of Hidalgo and Hausmann (2009) ranks products by the diversity and sophistication of the countries that successfully export them; complex products are exported by few economies which are themselves highly diversified.

Figure 3: Composition of export baskets over time

(a) Across broad economic categories

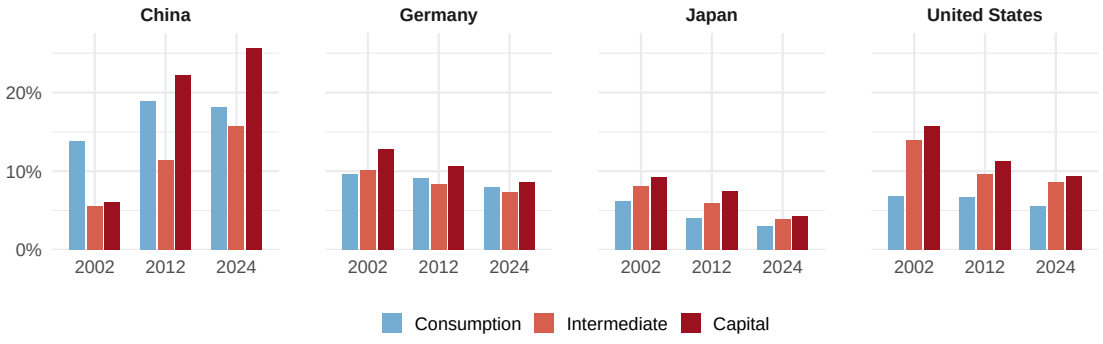


(b) Across levels of product complexity



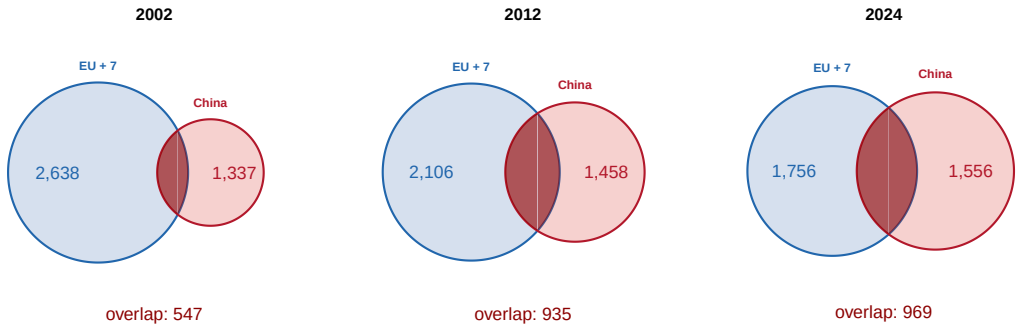
Note: Panel (a): Each economy's exports are classified into capital, intermediate, and consumption goods using the PLAID broad economic categories concordance. The figure then shows the share of each category in non-fuel exports of the economy across years. Panel (b): Each economy's exports are classified into various bands of the Product Complexity Index (PCI) where the top decile (PCI $>$ p90) denotes the most complex products and the bottom decile (PCI $<$ p10) corresponds to the least complex goods. The figure then shows the share of total exports falling in each PCI band.

Figure 4: Share in world exports



Note: The figure above shows each economy's share of world exports in consumption, intermediate and capital goods, as classified by the PLAID broad economic categories concordance.

Figure 5: Exclusive and shared comparative advantage in exports



Note: The figures above show products which are in the exclusive comparative advantage of the EU+7 (blue), of China (light red) and where both hold comparative advantage (dark red). Comparative advantage in HS 6-digit products is defined by the RCA index being greater than 1.

Fewer products remain in the exclusive comparative advantage of advanced economies. We compare China to a set of high-income economies, EU+7, which includes all EU members alongside Norway, Switzerland, the UK, the US, Canada, Japan and South Korea. For each of these countries, we define comparative advantage as residing in the products in which exports are relatively concentrated, as measured by the Revealed Comparative Advantage (RCA) index.[5] We then compare these products with those in which China has become relatively specialized in recent years. The results are presented in Figure 5.

The range of products in which the EU+7 holds exclusive comparative advantage has narrowed, while China's has expanded over the past two decades. By 2024, more than a third of the products the EU+7 specializes in are also products China specializes in, up from less than a fifth in 2002. Moreover, close to 20% of products in which the EU+7 currently holds exclusive comparative advantage may soon be within China's comparative advantage as well.[6]

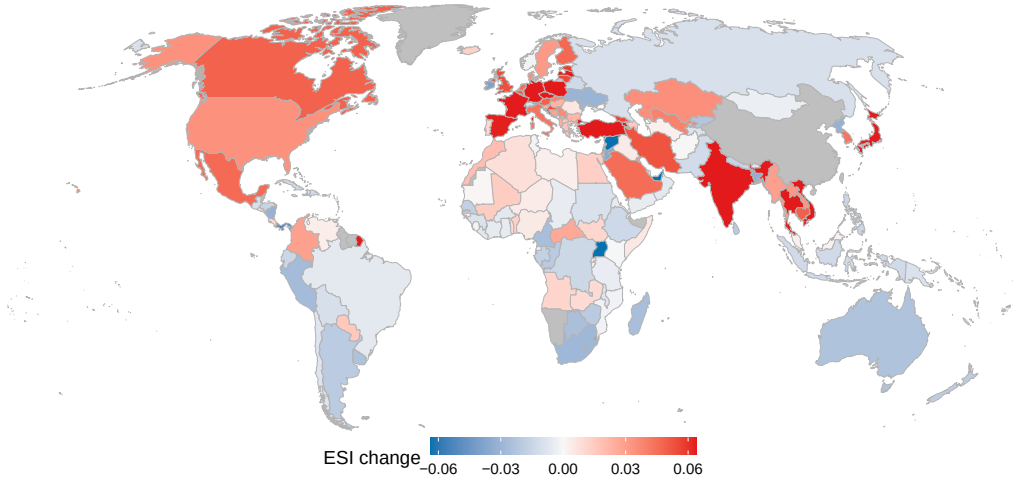
China's export basket is converging with that of advanced economies across multiple third markets. With China's growing export capabilities, the country's export basket has come to resemble those of advanced economies more closely. We track this using the Finger–Kreinin or Export Similarity Index (ESI), which measures the overlap in the export baskets of two economies, ranging from 0 (no overlap) to 1 (identical baskets).[7] Figure 6 shows which

[5] Following Balassa (1965), $\mathrm{RCA}_{ip} = (X_{ip}/X_i) \,/\, (X_{wp}/X_w)$: the share of product p in country i's exports relative to the product's share in world exports. An RCA above one indicates relative specialization.

[6] A product is considered to exhibit revealed comparative advantage for a country if its RCA exceeds one. To identify products in which China is close to sharing a comparative advantage with the advanced economies, we define the relevant set as those products for which China's current RCA exceeds 0.75.

[7] $\mathrm{ESI}_{ij} = \sum_p \min(b_{ip}, b_{jp})$, where b_{ip} is the share of product p in country i's total exports (Finger and Kreinin, 1979).

Figure 6: China's convergence with other exporters



Note: Change in the Export Similarity Index (ESI) between China and a country's total goods exports, comparing 2012 to 2024. The colors differentiate countries with increasing convergence (red) and divergence (blue) with China's exports. Source: CEPII BACI

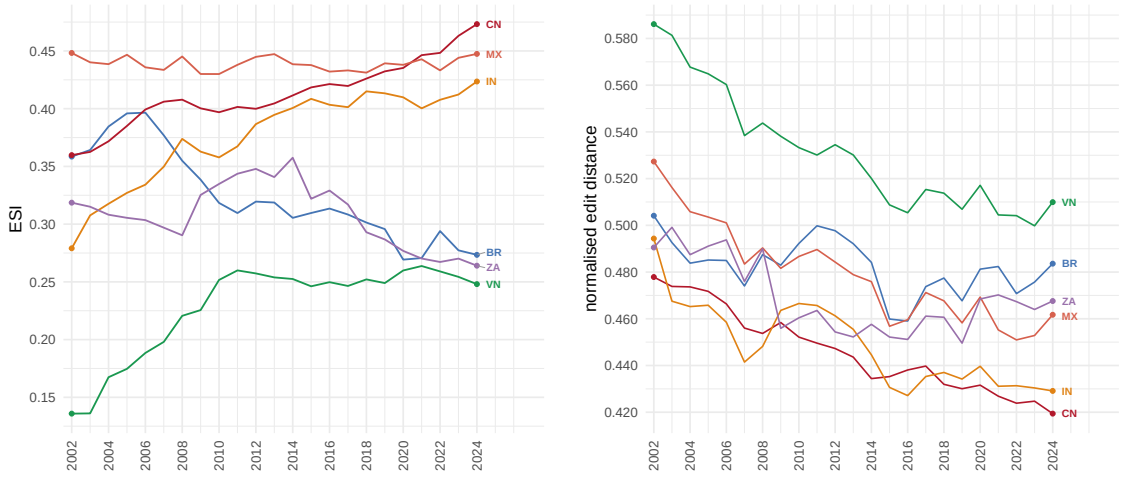
countries saw the strongest convergence (red) and divergence (blue) with China (gray) over the last decade. The results suggest that China is converging towards export baskets of economies across Europe and North America, Japan and South Korea. Several emerging markets including India, Vietnam and Turkey may themselves be moving closer to China's export profile as well. In comparison, Latin American economies and South Africa have, if anything, diverged, deepening their specialization in primary products.

China's convergence to EU+7 has been sustained over the last two decades. Both panels of Figure 7 confirm the same pattern but from different angles: the similarity of China's export basket with that of the EU+7 has risen steadily since 2002 (panel a), while the distance between China's revealed comparative advantage profile and that of the EU+7 has narrowed continuously (panel b).

China's export basket is yet to advance into the most complex products. While China's export bundle is increasingly similar to that of high-income economies, the share of the *most* complex products within its export basket has not changed. Rather, much of China's export reorientation has been away from goods with low complexity towards those with upper-middle complexity levels. More precisely, the share of products with below median complexity levels in China's exports fell from 40% in 2002 to 26% in 2024, while the share of products between the 50th and 90th complexity percentiles rose from 44% to 58%. In comparison, the share of high complexity products (PCI $>$ p90) has not grown within China's export basket.

Figure 7: Convergence with EU+7 in global exports

(a) Similarity with EU+7 export basket **(b)** Distance from EU+7 RCA profile



Note: Panel (a): For each economy, we compute the share of each HS6 product in its total exports and calculate the Export Similarity Index (ESI) against the pooled EU+7 export basket. Higher values imply greater similarity in export profiles. Panel (b): For each economy, we compute a binary vector indicating whether it holds a revealed comparative advantage (RCA $>$ 1) in each HS6 product. The normalised edit distance then measures the changes required to match to the EU+7 RCA vector. Lower distances imply greater overlap in RCA profiles. Source: BACI (CEPII), 2002–2024.

5 Displacement and its uneven incidence

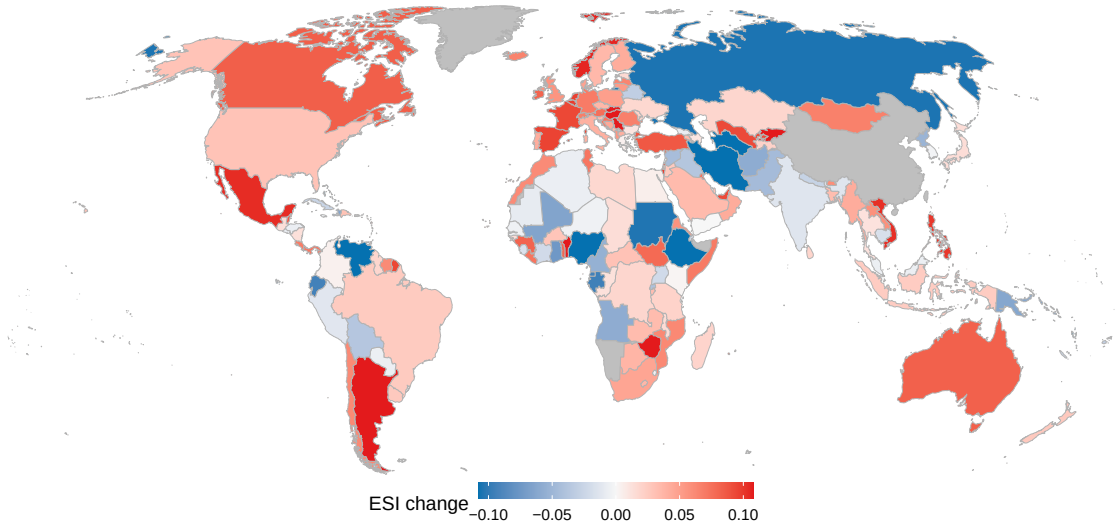
Having documented how China's export basket has changed, we now turn to the consequences for other exporters. We first establish that China's gains in third markets have come alongside losses for advanced economies, then show that the incidence of these losses is highly uneven across countries, and finally examine the German case in detail.

5.1 Displacement in third markets

China's exports are increasingly similar to those of advanced economies across multiple third markets spanning Europe, North America, South East Asia and Southern Africa. While China and EU+7 may export broadly similar products they may still be serving different destinations. To examine which markets are becoming increasingly contested, we therefore compute the ESI between China and the EU+7 bloc separately for each third market for 2012 and 2024. A rising index in a given market indicates that China and the EU+7 are supplying an increasingly similar product mix to the same buyers. Figure 8 shows that this convergence is relatively widespread across regions (in red).

China's growing convergence with the export basket of EU+7 has redistributed market shares across several sectors. So far, we have documented that Chinese exports have not only grown rapidly but have also expanded into new product-destination pairs and shifted towards more complex goods. Chinese export growth has important implications

Figure 8: Convergence with China in third markets



Note: Change in the Export Similarity Index (ESI) between China and the EU+7 bloc across markets, comparing 2012 to 2024. For each destination, the ESI measures the overlap between China's exports to that market and the bloc's exports to that market. The change in ESI is then plotted, showing markets with increasing convergence (red) and divergence (blue). For exports to EU+7 members, similarity is computed between China and the remaining bloc members (leave-one-out). Source: CEPII BACI

for competition in global trade. As China enters new product markets, it increasingly competes with countries that have long specialized in those products.

A useful way to illustrate this process is to examine the sectors in which China has gained market share. Panel (a) of Figure 9 plots the change in China's market share in third markets against the corresponding change in the combined market share (in percentage points) of the EU+7 economies—that is, all EU member states together with Norway, Switzerland, the United Kingdom, the United States, Canada, Japan, and South Korea.[8]

The figure reveals a striking negative relationship. Sectors in which China gained market share are typically those in which the EU+7 economies lost market share. A number of relatively complex manufacturing sectors are located in the upper-left quadrant, where China's market share increased while that of the EU+7 economies declined.

Importantly, this pattern is not a mechanical consequence of market shares summing to

[8]In this exercise, we consider only third markets outside both China and the EU+7 economies. These changes are computed by comparing exports over the 2012–2014 period with exports over the most recent three-year period available in the BACI data (2022–2024), thereby smoothing year-specific fluctuations.

one across exporters. While an increase in China's market share must necessarily be offset by declines elsewhere, there is no accounting reason why these losses should be borne disproportionately by advanced economies rather than by other exporters. The figure is therefore informative about two key dimensions of China's export expansion: (i) which countries are being displaced and (ii) which sectors are most affected.

Panel (b) complements this analysis with a growth rate view. While market shares are informative about the relative competitiveness of countries, they do not reveal how overall imports in those markets have evolved. A country may have lost market share in a third market, yet its exports to that market may still increase if total import demand grew. Whereas market shares provide information about relative competitiveness, export growth reflects how total exports to third markets have developed across sectors. As such, it helps us understand how displacement affects the overall level of production in the respective economies.

Here too, China's growth exceeded that of EU+7 for most sectors. Once again, the results reveal the composition of products in which China has gained relative to the EU+7. The largest increases are concentrated in more complex product categories, suggesting that China's export expansion has been driven not merely by growth in traditional sectors but by a growing presence in technologically sophisticated industries. This pattern is consistent with the broader shift in China's export basket toward more complex products documented in Figure 3.

5.2 Winners and losers

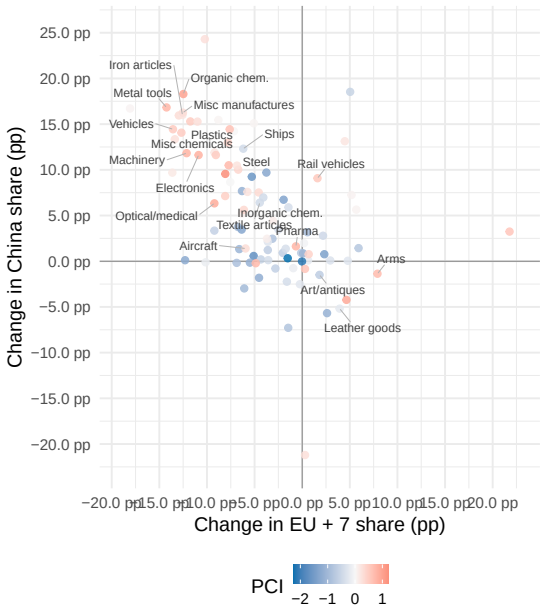
Our findings indicate that China's move toward more complex products, together with its export growth in these categories, has strongly affected advanced economies since a major competitor has emerged that is growing precisely in the product categories in which these countries specialize. A natural question that arises is whether all countries have been affected in the same manner and to what extent changes in market shares can actually be attributed to Chinese competition, rather than to broader shifts in countries' competitive positions.

The answers are unlikely to be uniform. Countries whose export structures differ substantially from China's are likely to be less exposed to Chinese competition, whereas countries whose export baskets increasingly overlap with China's are more vulnerable to displacement. Yet even among the latter group, outcomes can vary considerably. Some countries may have adapted more successfully to China's rise, while others may have experienced much larger losses than would be expected from China's expansion alone.

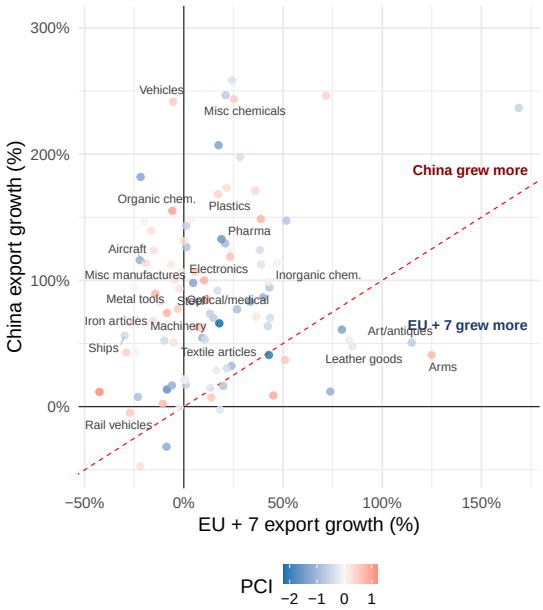
To examine this, we compare each country individually with China across third markets that now include *all* countries, including individual European countries, except for China

Figure 9: Competition in third markets

(a) Share of the pie: Change in market shares



(b) Growth: Change in total exports



Note: The figures above plot changes in market shares (a) and export growth (b) for China and the EU+7 bloc in third markets (excluding China and EU+7). These changes and growth rates are computed by taking a three year time window (2012-2014) and comparing it against the latest three year time window in BACI trade data (2022-2024) to smooth out any year-specific volatility. The same exercise at the HS6-product level is shown in Appendix Figures 19 and 20.

and the country's own domestic market. Note that this differs from the analysis in Figure 9 which shows competition between China and EU+7 as a bloc in other destinations that are neither China nor any of the EU+7 economies.

In a first step, to get a valuable benchmark of what one might expect to be lost due to Chinese growth, we construct a measure of *excess loss*. The intuition is straightforward. Given the observed growth of Chinese exports and the sectors in which this growth occurred, there is a benchmark decline in market share that all competing exporters would experience ceteris paribus. In other words, this benchmark measures the market share losses that would arise solely from China's expanding presence in global markets, assuming all other competitive forces remained unchanged. Specifically, we calculate the market share a country would be expected to lose if competition among all non-Chinese exporters remained unchanged, such that China captures market shares in proportion to each country's initial share of the third market net of China.[9]

Formally, consider a sector g and let s_{ig}^t denote exporter i's share of third market imports of g in window $t \in \{0, 1\}$, where 0 is the initial window (2012–2014) and 1 the final window (2022–2024); the third markets $\mathcal{D}_i$ exclude China and i's own market. Writing $\Delta s_{ig} =$

[9]More precisely, initial share of the import demand of third markets from all countries excluding China.

$s^1_{ig} - s^0_{ig}$ for the actual change in i's share and $\Delta s_{\mathrm{CN},g} = s^1_{\mathrm{CN},g} - s^0_{\mathrm{CN},g}$ for China's change, the proportional benchmark redistributes China's gain across all non-Chinese exporters in proportion to their initial shares of the non-China segment, so that i's benchmark (expected) change is

$$\widehat{\Delta s}_{ig} = -\,\Delta s_{\mathrm{CN},g}\,\frac{s^0_{ig}}{1 - s^0_{\mathrm{CN},g}}. \tag{3}$$

The *excess loss* is the gap between the actual and the benchmark change,

$$e_{ig} = \Delta s_{ig} - \widehat{\Delta s}_{ig}, \tag{4}$$

with $e_{ig} < 0$ flagging losses beyond what China's expansion mechanically implies. Aggregating to the country level with initial export-basket weights ω^0_{ig} (sector g's share in i's third market exports in the initial window),

$$\Delta s_i = \sum_g \omega^0_{ig}\,\Delta s_{ig}, \qquad \widehat{\Delta s}_i = \sum_g \omega^0_{ig}\,\widehat{\Delta s}_{ig}, \tag{5}$$

the ratio $\widehat{\Delta s}_i / \Delta s_i$ is the share of a country's loss attributable to China's rise—the "% China" reported in Figure 12—and the *excess-loss rate* is the share of sectors in which $e_{ig} < 0$.

Of course, this ceteris paribus exercise is a theoretical benchmark. The real world is not a ceteris paribus environment, and many factors evolve simultaneously. Nevertheless, the benchmark is useful in light of the common claim that the difficulties faced by some advanced economies are primarily the result of China's rise. Importantly, the benchmark *does not* take a position on the sources of China's growing competitiveness, whether these stem from productivity growth, industrial subsidies, exchange rate policies, or other factors. Instead, it takes the observed expansion of Chinese exports as given.

Against this benchmark, the differences across countries reveal informative patterns. They help us assess the extent to which losses can be attributed mechanically to China's export growth and the extent to which they reflect changes in countries' competitive positions relative to other non-Chinese exporters. In doing so, the analysis highlights that not all losses experienced by advanced economies can be attributed to China alone.

Under our benchmark, market share losses are proportional to countries' initial positions in third markets. Consequently, countries with larger initial shares are expected to experience larger absolute declines in market share. Germany, for example, experiences substantial declines in market shares under this benchmark given its large initial share in sectors subject to China's export expansion. The fact that this decline in market share is to be expected does not diminish the economic significance of these losses. Countries whose export structures overlap strongly with China's are precisely those most exposed to the rise of Chinese competition, as a large share of their export base is concentrated in markets

where China has gained most market shares.

Beyond these expected losses however, our objective is to identify whether the actual losses have been "excessive", that is, whether they exceed the decline in market shares that would be implied by a purely proportional reallocation resulting from Chinese export growth. It is important to note that this exercise does not allow us to determine which country lost market share to which competitor – so if they indeed lost to China or perhaps even more to another competitor. Instead, it should be interpreted as a thought experiment.

If a country's market share declines by more than its proportional share of the losses implied by China's export expansion, this indicates a deterioration in its own competitive position relative to other exporters. Such an outcome may arise because other countries were better at keeping up with Chinese competition and therefore retained a larger share of the market, because other countries gained market share at the expense of the country in question, or — most likely — because both mechanisms were at work simultaneously.

More generally, a decline in market share can be understood as a deterioration in a country's competitiveness. The analysis cannot distinguish whether this reflects weaker performance by the country itself or stronger performance by its competitors. However, since competitiveness is inherently a relative concept, both interpretations ultimately convey the same message: the country's position in international markets has weakened relative to that of other exporters.

Advanced economies have also been affected very differently by China's export expansion, and considerable heterogeneity exists even among European Union member states. We visualize the results in Figure 10, which plots for each HS 2-digit sector, the actual change in a country's third market share against the change predicted by the proportional benchmark.[10] Sectors located in the shaded region experienced losses that exceed those implied by China's export growth alone, with the share of scatter points falling in this shaded area being comparable across countries.[11] Figure 10 further reports this excess-loss rate for each economy, defined as the share of sectors in which a country experienced losses beyond those predicted by Chinese export growth. In Germany, for example, market share losses exceeded those predicted by Chinese export growth alone in more than 80% of sectors. Only the United Kingdom exhibits a higher share of sectors with excess losses. South Korea and Italy experience excess losses in less than half of their sectors by comparison.

In addition, Figure 10 reports the average change in market share, computed as a weighted

[10]When calculating third market shares, we exclude both China and the country's own domestic market, as domestic trade flows are not observed. All other markets are included.

[11]We highlight the share of sectors experiencing excess losses since absolute losses and predicted losses should be interpreted with caution when comparing countries. These naturally depend on the size of the economy and initial market shares — a one-percentage-point loss for Germany, for example, has very different implications than a one-percentage-point loss for Switzerland.

average across sectors using the sectors' initial share in export baskets of the respective economies as weights. The results reveal substantial differences across countries. Japan and Germany, for example, both highly export-oriented economies, lost almost two percentage points of third market share. By contrast, the United States and South Korea experienced considerably smaller declines. However, as discussed above, absolute changes in market shares should be interpreted with caution.

Therefore, to place these numbers into a more meaningful comparative perspective and to examine changes in countries' competitiveness from another angle, Figure 11 presents each country's share of the non-Chinese segment of third markets. The horizontal axis shows the country's initial share (over 2012–2014) of third market imports not supplied by China, while the vertical axis reports the percentage change in that share over time. Countries with negative values on the vertical axis hold a smaller share of the non-Chinese market today than they did a decade ago. At the same time, some countries with positive values on the vertical axis nevertheless experienced declines in overall third market shares.

Switzerland provides an example. As shown in Figure 10, Switzerland experienced a weighted decline of 0.22 percentage points in third market share. Because China's share of third markets increased substantially over the same period, Switzerland's share of the remaining non-Chinese market could increase even as its overall third market share declined. Hence, gaining market share net of China does not necessarily imply an increase in overall third market shares. Rather, it reflects an improvement in competitiveness relative to other non-Chinese exporters.

Taken together, Figures 10 and 11 provide valuable insights into the different margins along which countries lose or gain market position. Figure 10 showed that Germany and the United Kingdom exhibit high shares of sectors with excess losses; the weighted average of losses in Germany (1.98pp) is even substantially higher than that of the United Kingdom (1.07pp). Figure 11 further reveals that both countries also lost market share within the non-Chinese segment of third markets, indicating a deterioration in their competitive position relative to other exporters. At the same time, Germany's decline in market shares is only 7.5% while the United Kingdom's market share fell by roughly 25%.

Thus, while Germany's declining market shares indicate a loss of competitiveness in international markets, this deterioration was less pronounced than in the United Kingdom. Nevertheless, Germany experienced large absolute losses in market share because it had exceptionally large export shares. Even relatively modest declines in competitiveness therefore translated into substantial absolute losses.

Beyond the United Kingdom, several other advanced economies experienced larger *relative* market share losses than Germany, most notably Japan (-20.2%), Finland (-10.6%), and France (-11.4%), suggesting even greater declines in competitiveness. Sweden, Denmark,

and the Netherlands experienced losses of a similar magnitude to those observed for Germany.

Finally, Figure 11 highlights that a number of European countries actually improved their competitiveness and increased their share of the non-Chinese segment of third markets. Many of the more recent members of the European Union fall into this group. However, these gains are not limited to those economies. Advanced countries such as Switzerland, South Korea, Canada, and the United States also increased their market shares relative to other non-Chinese exporters.

5.3 The case of Germany

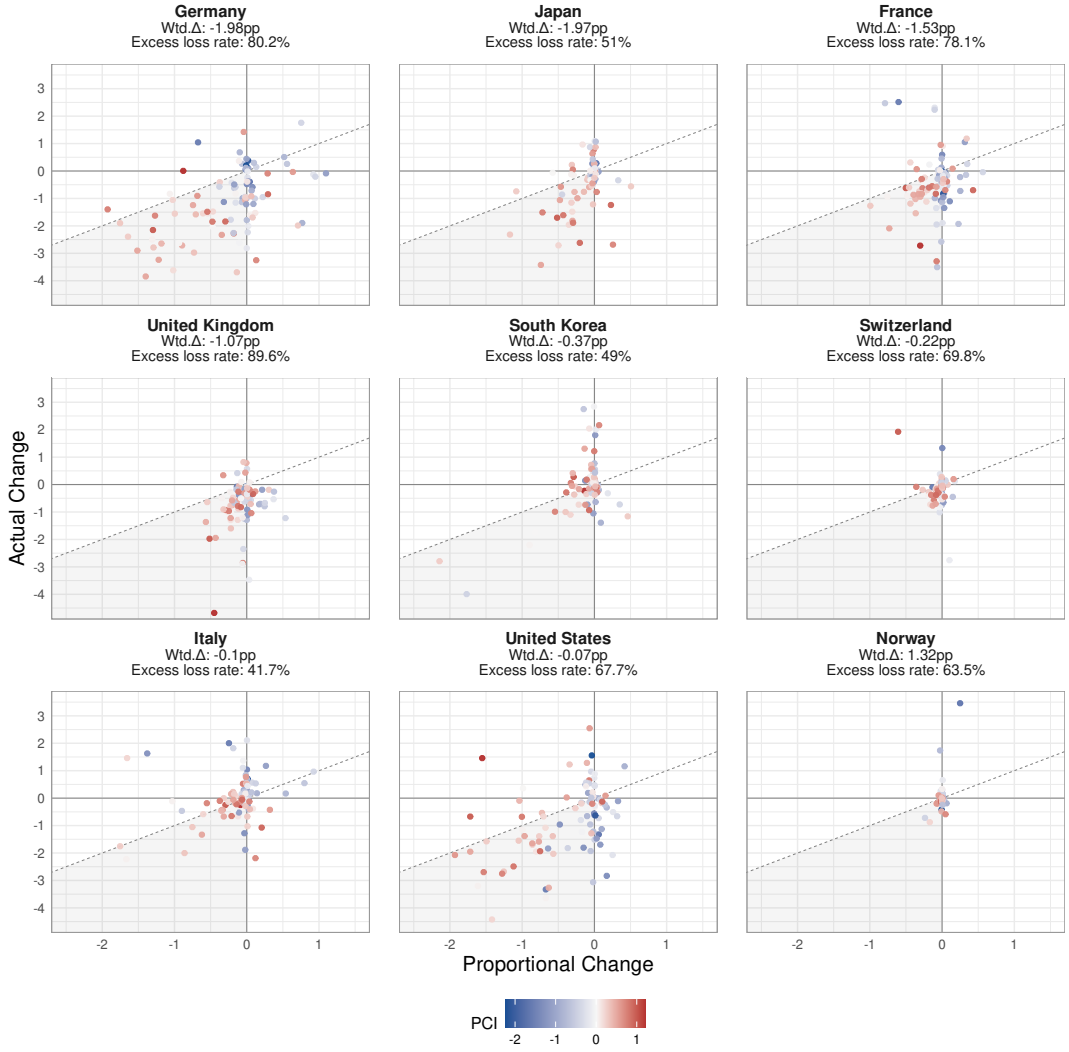
In this section, we take a closer look at the German case and examine how Germany has been affected by Chinese competition in third markets. As discussed above, it is impossible to disentangle whether these changes reflect a decline in Germany's competitiveness or stronger performance by competing exporters without detailed structural models. Ultimately, what matters is how Germany's position in international markets has evolved relative to that of other countries.

We examine the sectoral composition of Germany's excess losses in Figure 12. Vehicles, machinery, electronics and pharmaceuticals are among the sectors in which Germany experienced substantial declines in market shares—declines that are considerably larger than would be predicted by Chinese export growth alone. The table on the right reports the share of the observed market share decline that can be attributed to China's export expansion under the hypothetical benchmark introduced above.

Aggregating across sectors, Germany's third market share declined by 1.98 percentage points between the early-2010s and the early-2020s.[12] Of this decline, 0.61pp — about **31%** — is what the proportional benchmark attributes to China's rise; the remaining 1.36pp — about **69%** — is overproportional, i.e. reflects Germany's loss of ground *relative to the other non-Chinese exporters* of the same products. Consistent with the cross-country evidence presented above, the share of losses attributable solely to China's export expansion is even smaller for France (10%), the United Kingdom (10%), and Japan (22%).

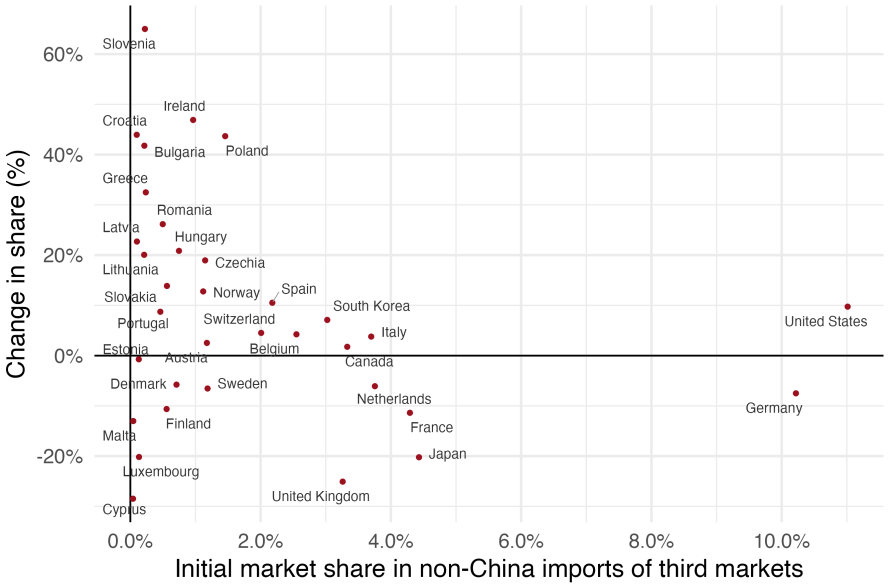
[12]Here, we sum across actual changes in market share for sectors, weighted by each sector's share in Germany's export basket to third countries in the initial period (2012-2014).

Figure 10: Excess loss of market share in third countries



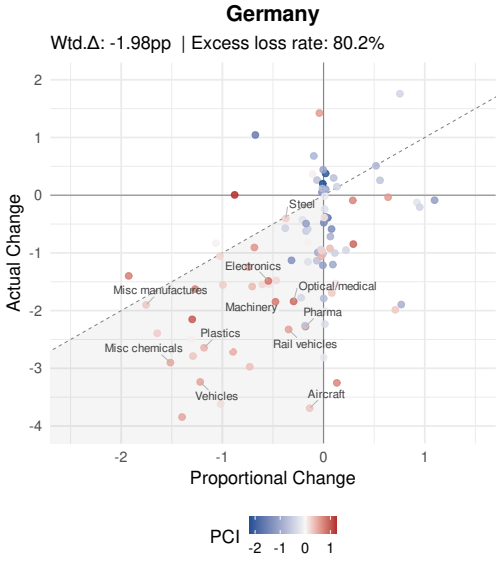
Note: The horizontal axis corresponds to the change in market shares implied by our theoretical benchmark. The vertical axis shows the actual changes in market shares. These changes are computed between two periods: initial (2012-2014) and final (2022-2024). The scatter points correspond to HS 2-digit sectors. The gray zones indicate sectors where actual market share losses have exceeded those implied by the benchmark (defined here as excess loss). Excess loss rate is the share of these HS 2-digit sectors which experience such excess loss. For each economy, the figure also reports the average change in market shares across sectors, weighted by the initial share of these sectors in country's initial export baskets. Source: BACI (CEPII).

Figure 11: Third market shares net of China



Note: Horizontal axis corresponds to the initial share of economies in third market imports from all origins excluding China, over an initial period spanning 2012-2014. The vertical axis shows the percentage change in these market shares between the initial and final period (2022-2024). Source: BACI (CEPII).

Figure 12: Excess loss of market share for Germany — by sector



Sector	Actual	Prop.	Excess	% China
Vehicles	-3.24	-1.22	-2.02	38
Machinery	-1.85	-0.48	-1.37	26
Electronics	-1.49	-0.55	-0.94	37
Pharma	-2.28	-0.18	-2.10	8
Plastics	-2.64	-1.18	-1.46	45
Optical/medical	-1.84	-0.30	-1.54	16
Aircraft	-3.69	-0.14	-3.55	4
Organic chem.	-2.15	-1.30	-0.85	60
Iron articles	-1.05	-1.02	-0.03	97
Steel	-0.41	-0.37	-0.03	92
All sectors (weighted)	-1.98	-0.61	-1.36	31

Note: Source: BACI (CEPII), 2012–2014 vs. 2022–2024. *Actual* is the observed pp change in Germany's third market share; *Proportional* is the loss in market shares that Germany would have experienced from China mechanically crowding out all non-China exporters proportionally; *Excess* is the residual, i.e. the difference between the actual and proportional market share changes. *% China* reports the share of the actual change in market shares that is driven by the mechanical crowding out from China's growth i.e. *Prop/Actual*. The bottom row is the weighted average across all sectors using Germany's 2012–2014 export shares.

5.4 Regional exposure

The analysis so far has measured displacement at the country level, focusing on realized changes in third market shares. This section expands the analysis along two further dimensions. First, it moves from countries to regions given that manufacturing activity is unevenly distributed within countries. The literature on the first China shock has also shown that the costs of import competition were concentrated in specific local labor markets (Autor et al., 2013b; Dauth et al., 2014b). Second, it asks which regions are most exposed to China's export expansion in third markets. The rationale for doing so is that a region may be exposed to heightened Chinese competition and still hold or expand its market share, if its exporters gain against other suppliers. Hence, the most exposed regions need not overlap with those experiencing the largest market share losses.

To capture exposure, we therefore construct a shift-share index that combines China's market share gains in third markets with the initial export basket of each European country and the industrial composition of manufacturing employment in its regions. The first two components draw on the BACI trade data used throughout the paper, the third on regional employment statistics from Eurostat. Overall, the index adapts the third market competition measure of Bodenschatz et al. (2026b) to a wider bloc of European exporters. Relative to Autor et al. (2013b), it differs in two respects. First, exposure arises in export markets rather than in the home market. Second, it is expressed as a change in market shares rather than in imports per worker.

Measure We calculate exposure for EU members, Norway and UK (EU+2) for whom Eurostat reports regional manufacturing employment. Consistent with Section 5.1, third markets are defined as all importers outside the EU+7 and China, denoted by the set $\mathcal{D}$. Throughout, X^t_{idp} denotes the exports of country i to destination d in HS 6-digit product p in window $t \in \{0, 1\}$. In each third market, China's share of the country's imports from all origins j outside the EU+2, and its change are as follows

$$s^t_{\mathrm{CN},dp} = \frac{X^t_{\mathrm{CN},dp}}{\sum_{j \notin \mathrm{EU+2}} X^t_{jdp}} \qquad \Delta s_{\mathrm{CN},dp} = s^1_{\mathrm{CN},dp} - s^0_{\mathrm{CN},dp} \tag{6}$$

These share changes are then assigned to each EU+2 exporter i. Let $\mathcal{P}_k$ denote the set of HS 6-digit products within manufacturing industry k reported in Eurostat (NACE Rev. 2 division). The country-industry shift averages the share changes of China over the product-destination pairs that i served in industry k, weighted by their initial exports

$$S_{ik} = \sum_{d \in \mathcal{D}} \sum_{p \in \mathcal{P}_k} \omega^0_{idp} \, \Delta s_{\mathrm{CN},dp} \qquad \text{where} \qquad \omega^0_{idp} = \frac{X^0_{idp}}{\sum_{d' \in \mathcal{D}} \sum_{p' \in \mathcal{P}_k} X^0_{id'p'}}. \tag{7}$$

Here, ω^0_{idp} is the share of dp in the initial exports of i across third markets in industry k. Finally, region r in country $i(r)$, with initial employment L^0_{rk} in manufacturing industry k, has exposure

$$E_r = \sum_k \lambda^0_{rk} S_{i(r)k} \qquad \text{where} \qquad \lambda^0_{rk} = \frac{L^0_{rk}}{\sum_{k'} L^0_{rk'}}. \tag{8}$$

Here, λ^0_{rk} is the share of industry k in the manufacturing employment of region r in the initial window. E_r is thus the average change in China's market share in third markets relevant to r, with markets weighted by their share in national exports and industries by their share in regional manufacturing employment.

Two properties of (8) determine its interpretation. First, variation across regions of the same country arises only from the industrial composition of employment, since S_{ik} is common to all regions of a country. Differences between countries, by contrast, also reflect the destinations and products each country serves. Second, the employment weights λ^0_{rk} are shares of manufacturing employment. The index therefore ranks regions by the composition of their manufacturing base, not by the weight of manufacturing in the total labor market.[13]

The measure is constructed using trade flows from BACI between the two time windows, 2012–2014 and 2022–2024. Since every quantity in (6) and (7) is a ratio within a window, no deflator is needed. HS 6-digit products are assigned to manufacturing divisions C10-C32 through the Eurostat CN–NACE correspondence, and products outside manufacturing are dropped.[14] Regional employment by division comes from the Eurostat Structural Business Statistics at the NUTS 2 level, averaged over 2012–2014 and harmonized to the NUTS 2013 classification. Since Eurostat suppresses confidential cells, we retain a region only if the divisions observed account for at least 75% of its manufacturing employment. The final sample covers 272 NUTS 2 regions in 28 countries.

We begin with the industries that drive the index. Table 1 reports the five NACE divisions with the largest China shifts, averaged across bloc countries. In line with the growth of China's exports documented in Section 4, capital-intensive industries are seen to be particularly exposed. These industry shifts further translate into substantial differences in exposure across regions (Figure 13, panel a). The median region faces a rise of 9.4 pp in China's third market share. Exposure is highest in countries like Germany (country mean of 12.6 pp) and Eastern European members such as Slovakia (16.5 pp), Czech Republic

[13] Eurostat Structural Business Statistics (SBS) report regional employment only for a subset of sectors (NACE sections B to N) prior to 2021. It therefore provides no measure of total regional employment.

[14] The correspondence refers to CN2022. Since NACE boundaries are stable across revisions, its eight-digit codes are truncated to their HS6 core and applied to HS 2002 codes. Codes missing from the correspondence take the division of their four-digit heading. Division C33 (repair and installation) contains no traded goods and is excluded.

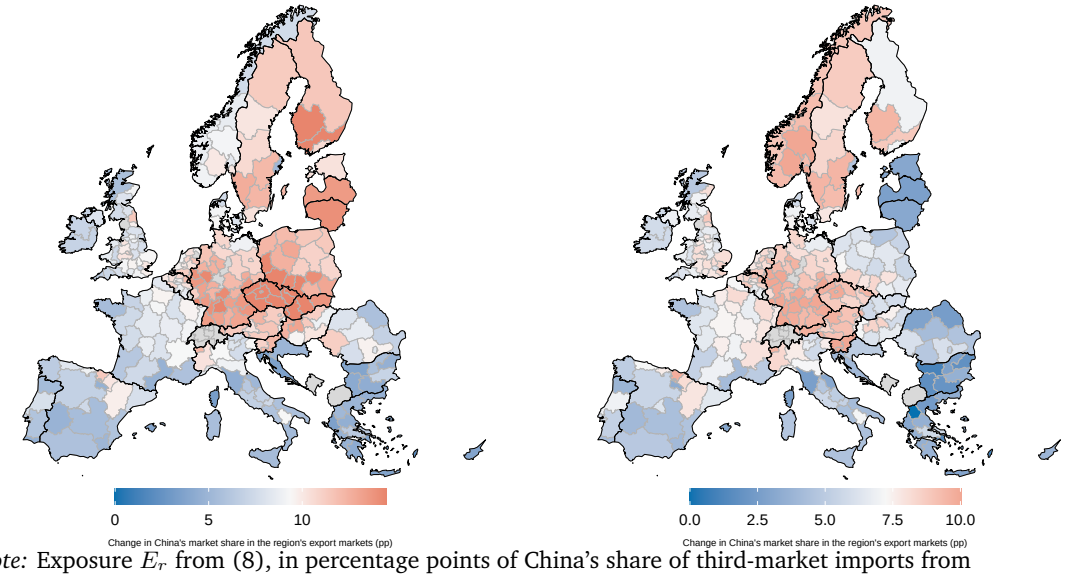
Table 1: Industries with the largest shifts in China's third market share

Rank	Industry	Change in China's share (pp)
1	Machinery (C28)	20.8
2	Motor vehicles (C29)	19.7
3	Electrical equipment (C27)	17.0
4	Paper products (C17)	15.1
5	Fabricated metals (C25)	15.1

Note: Change in China's share of third market imports from non-European origins between 2012–2014 and 2022–2024, by NACE Rev. 2 division. Country-industry shifts S_{ik} from (7), averaged across bloc countries without weights. Source: BACI (CEPII).

Figure 13: Regional exposure to Chinese competition in third markets

(a) All third markets **(b)** Excluding sanctioned markets



Note: Exposure E_r from (8), in percentage points of China's share of third-market imports from non-European origins, 2012–2014 to 2022–2024. NUTS 2 regions, 2013 boundaries. Panel (b) drops destinations subject to EU sanctions measures. Source: BACI (CEPII), Eurostat.

(15.8), Poland (12.7). Of all the regions in the top decile of exposure, seven are Czech, nine German, five Polish and four Slovak. Bratislavský kraj and Střední Čechy are the most exposed regions overall (Table 2). At the other end of the distribution, exposure is lowest in Southern and South-Eastern Europe such as Greece (4.2 pp) and Portugal (5.2 pp).

Within countries, differences in the industrial mix of employment produce rich heterogeneity in exposure to China's export expansion. In Germany, exposure ranges from 15.5 pp in Stuttgart to 9 pp in Mecklenburg-Vorpommern. Since S_{ik} is common within a country, these gaps reflect the weight of high shift industries such as machinery and motor vehicles in regional manufacturing employment.

Sanctioned markets Part of China's gain in third markets may reflect restricted access to European exporters due to sanctions measures. As a check, we drop destinations under EU

Table 2: Most exposed regions

All third markets		Dropping sanctioned markets	
Region	pp	Region	pp
Bratislavský kraj (SK01)	23.30	Stuttgart (DE11)	11.27
Střední Cechy (CZ02)	18.57	Vzhodna Slovenija (SI03)	11.18
Moravskoslezsko (CZ08)	16.80	Arnsberg (DEA5)	10.83
Severovýchod (CZ05)	16.46	Düsseldorf (DEA1)	10.77
Jihozápad (CZ03)	16.25	Saarland (DEC0)	10.74
Severozápad (CZ04)	16.19	Unterfranken (DE26)	10.52
Stuttgart (DE11)	15.55	Zahodna Slovenija (SI04)	10.51
Länsi-Suomi (FI19)	15.50	Karlsruhe (DE12)	10.33
Dolnoslaskie (PL51)	15.06	Köln (DEA2)	10.27
Slaskie (PL22)	14.88	Hedmark og Oppland (NO02)	10.23

Note: The ten NUTS 2 regions with the highest exposure E_r, in percentage points, for all third markets and after dropping destinations subject to EU sanctions regimes.

sanctions regimes and recompute (7) and (8) (Figure 13, panel b). Exposure falls by 5.2 points on average in Eastern European member states, with large reductions in Lithuania, Latvia and Slovakia. Bratislavský kraj drops from first to 41st place, with German regions now accounting for 18 of the 28 regions in the top decile, led by Stuttgart (11.3 points). This pattern suggests that a large part of the measured exposure of Eastern European regions arises in sanctioned markets which include Russia and Belarus.

Taken together, the regional evidence reveals a clear hierarchy. First, exposure differs substantially across countries, with Eastern Europe and Germany the most exposed and Southern Europe the least. Second, identification of the most exposed regions depends on the treatment of sanctioned markets. Once these are excluded, German manufacturing regions emerge as the most exposed within Europe.

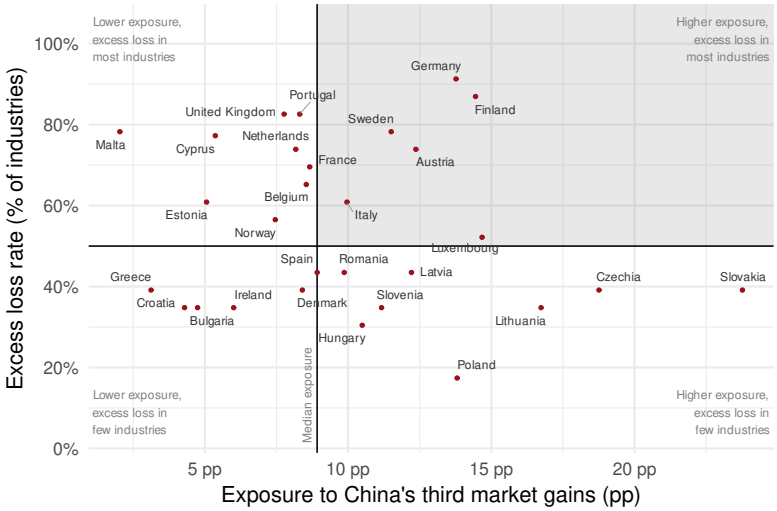
Exposure versus excess loss Exposure measures the competitive pressure from China's expansion, not whether exporters actually lost market shares. To compare the two, we compute exposure at the country level, averaging the industry shifts S_{ik} computed above with each industry's share in the country's initial exports to third markets (including sanctioned markets),

$$E_i = \sum_k \omega_{ik}^0 \, S_{ik} \qquad \text{where} \qquad \omega_{ik}^0 = \frac{\sum_{d \in \mathcal{D}} \sum_{p \in \mathcal{P}_k} X_{idp}^0}{\sum_{k'} \sum_{d \in \mathcal{D}} \sum_{p \in \mathcal{P}_{k'}} X_{idp}^0}, \tag{9}$$

and relate it to excess loss rates, recomputed for the same manufacturing industries in the same third markets and with the same industry weights.[15]

[15] In doing so, the precise excess loss rates differ from those reported under Figure 10, which are computed over all destinations except China and the country itself and across HS chapters instead of NACE manufacturing divisions.

Figure 14: Exposure and excess losses in third markets



Note: The horizontal axis plots country exposure E_i from (9), i.e. the industry shifts S_{ik} averaged with each industry's share in the country's initial exports to third markets. The dashed line marks the median exposure level for EU+2 nations. The vertical axis shows the excess loss rate, the share of manufacturing industries in which the country's third market share fell by more than the proportional benchmark of Section 5.2 implies. The shaded area marks above median exposure combined with excess losses in more than half of its industries.

The results in Figure 14 show that Germany, Finland, Sweden and Austria experienced above median exposure with excess losses in most of their industries. By contrast, other highly exposed countries such as Slovakia, Czech Republic and Poland saw lower excess loss rates. Conversely, the UK and France show high excess loss rates despite below median exposure. This suggests that high exposure has not translated uniformly into market share losses. Some countries experienced a deterioration in their market position relative to other non-Chinese exporters, both alongside strong competitive pressure from China and in its relative absence. Others maintained or even expanded their position against these competitors even under growing Chinese market shares.

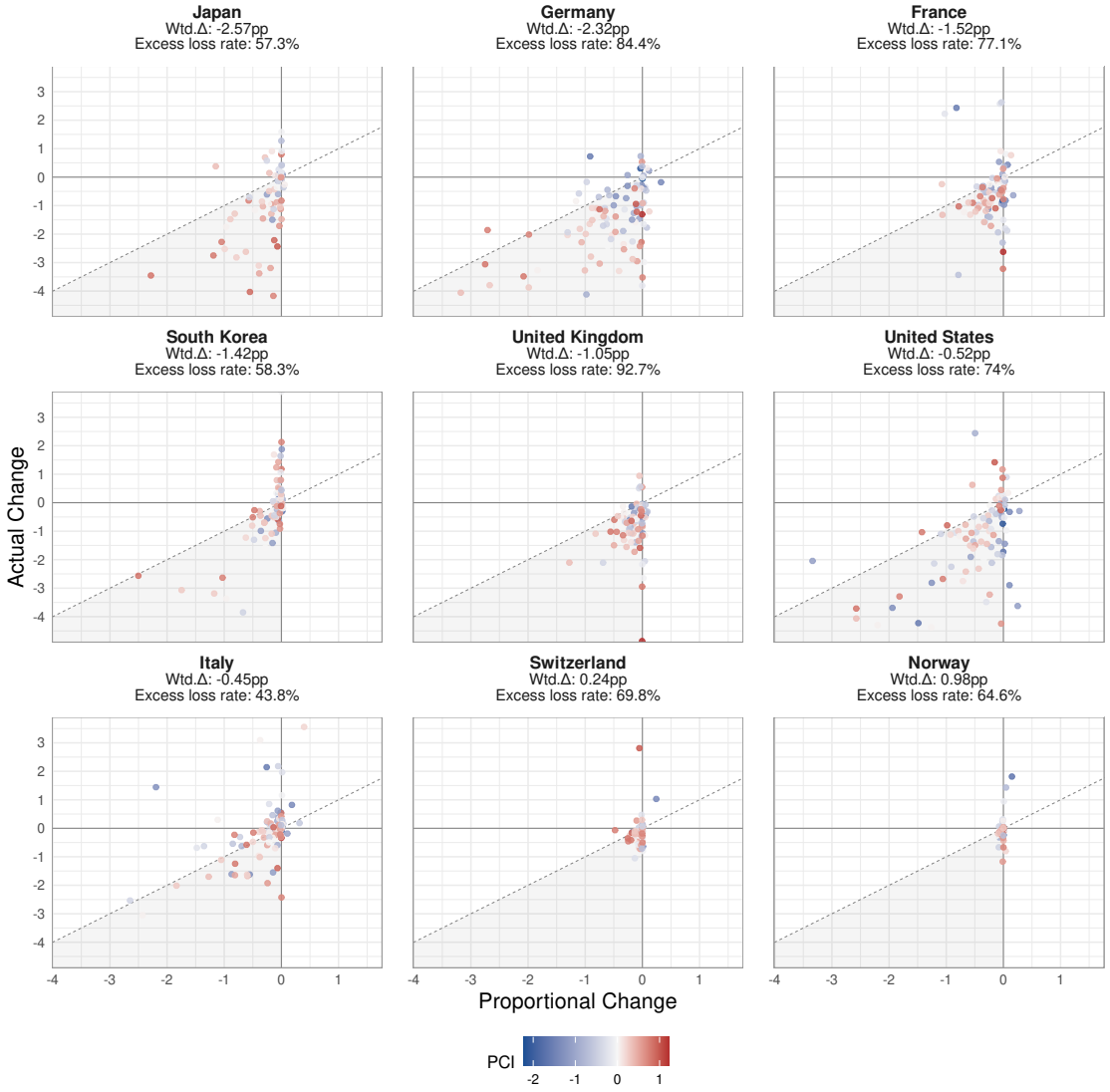
5.5 China, or its size?

A further question is how much of the third market displacement stems from China *specifically* and how much simply reflects the arithmetic of a large, fast-growing exporter crowding into shared markets. To gauge this, we redo the proportional benchmark exercise on two counterfactual worlds in which another emerging economy plays China's role. In the *scaled Vietnam* counterfactual we inflate Vietnam's product-by-destination flows by a constant factor that brings its end period exports up to China's, while symmetrically deflating China by the same factor such that total third market trade is approximately preserved and Vietnam takes China's place as the rising giant. The *scaled India* counterfactual is constructed identically with India as the anchor.

The patterns produced by a scaled Vietnam or India look remarkably similar to those

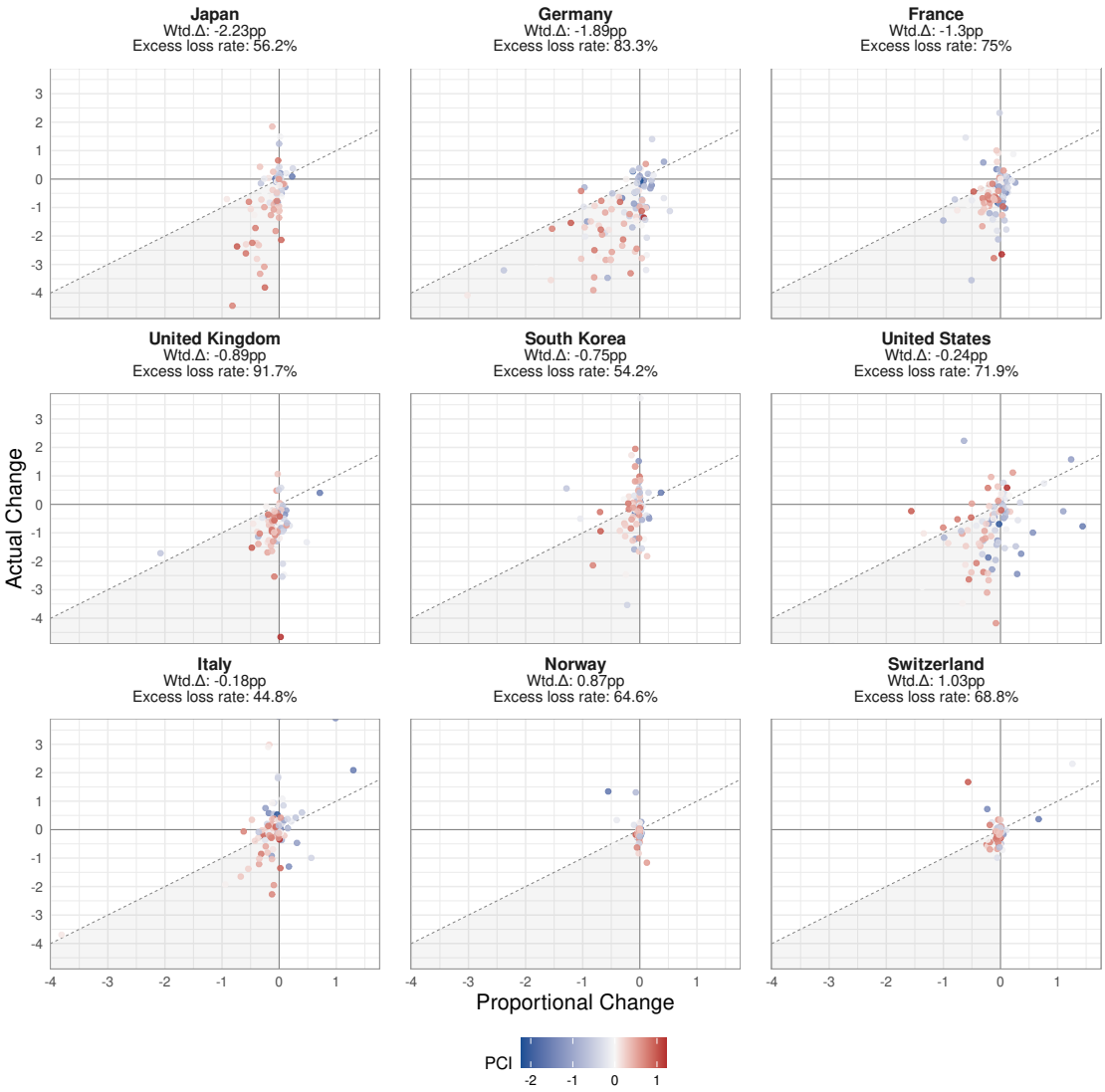
generated by China's actual growth (Figures 15 and 16). Excess loss rates for several EU+7 incumbents land within a few percentage points of the China benchmark—Germany at 84% and 83% under the scaled Vietnam and scaled India counterfactuals, against 80% in the actual data, for the United Kingdom at 93% and 92% in the counterfactuals, against 90% in the actual data. For the economies with the largest losses, the weighted percentage point shifts are also of comparable sign and magnitude. Much of what looks like a China-specific shock is therefore what *any* exporter of that size and growth could potentially produce. The counterfactual speaks to the pattern of displacement given China's scale, not to how China reached that scale. If exchange-rate policy or state support drove China's growth, they also drove the displacement documented here. This carries direct policy implications, to which we turn in Section 6.

Figure 15: Excess loss of market share, scaled Vietnam counterfactual



Note: Same construction as Figure 10 with Vietnam (rescaled to China's size) as the anchor and China (rescaled by the reciprocal factor) absorbing the symmetric adjustment.

Figure 16: Excess loss of market share, scaled India counterfactual



Note: Same construction as Figure 10 with India (rescaled to China's size) as the anchor.

6 Policy implications

The descriptive evidence assembled in this paper carries a clear message for the current policy debate. China's export growth is striking, broad-based, and increasingly directed at the products and markets on which EU+7 exporters, and Germany in particular, have relied. Commonly cited drivers of the surge include an undervalued exchange rate, heavy state support for priority industries and weak domestic demand in China (Bickenbach et al., 2024; International Monetary Fund, 2026; Bayoumi and Gagnon, 2026; Tordoir and Setser, 2026). Our descriptive evidence is consistent with these drivers but cannot apportion the surge between them and productivity growth. But the same evidence cautions against the conclusion that broad import protection is the appropriate response. Two findings matter

most. First, the displacement documented here is occurring across a swathe of sectors and third markets. Second, a substantial part of the losses of countries like Germany exceeds what China's rise alone would predict.

Blanket tariffs are poorly matched to the problem. Tariffs are unlikely to defend EU+7 positions in third markets. In some products (lithium-ion batteries and solar modules amongst others), Chinese cost advantages are now so large, and still growing, that any tariff designed to "level the playing field" would have to be implausibly high. Furthermore, across-the-board tariffs on Chinese goods would raise costs for domestic consumers and for firms that rely on Chinese intermediate inputs, invite retaliation, and put further strain on an already fragile multilateral trading system (Fajgelbaum et al., 2020). Chinese exports would also be increasingly redirected towards non-tariffing third markets, further increasing competitive pressure there. Where trade policy instruments are warranted, they should be targeted at well-defined cases of injury, with sunset clauses, and conditional on commitments by the protected firms to invest in the technologies on which future competitiveness depends (Bora et al., 2025). Protection granted without such conditions risks entrenching incumbents rather than restoring competitiveness in third markets. A separate objective, keeping productive capabilities on which European security depends, is outside the scope of this paper and calls for its own instrument, in line with Tinbergen's rule of one instrument per target (Tinbergen, 1952; Erhardt et al., 2026).

The diagnosis must include Europe's own weaknesses. If a large share of Germany's market share losses is overproportional — larger than China's expansion can account for — then part of the problem is made at home. There is obviously no single policy failure to blame. The lack of progress in deeper European integration hinders European firms in their search for capital and for upstream and downstream markets. For Germany, high energy costs may also be a prime suspect. They weigh on precisely the energy-intensive industrial sectors in which Germany has traditionally been strong, and they have risen sharply since 2022. The contrast on the supply side is stark with China. The country added roughly a Germany-sized electricity system to its grid in a single year.[16] Trade policy cannot fix these homemade issues, which rather require political will for deepening the single market and large-scale investment.

The durable response is forward-looking investment in innovation. China has spent two decades upgrading its export basket while the composition of advanced economies' exports has not matched pace. Defending yesterday's product portfolio is therefore not a strategy to secure future growth and competitiveness. The policy with the highest expected return is sustained, long-horizon investment in innovation through research funding, coordinated procurement and a deeper single market for capital and technology. Such investment has the additional advantage of securing European interests not only vis-à-vis China, but also

[16] See Our World in Data (2025).

against policy shifts in the United States and other countries.

The descriptive evidence presented here deliberately stops short of causal claims. Quantifying how much of China's rise reflects industrial policy and what an optimal European response should look like requires further structural analysis, which we pursue in ongoing work.

7 Conclusion

China's second export surge differs from its first in both content and incidence. Over 2002–2024 China's exports reallocated toward capital- and technology-intensive products and its export basket converged on those of advanced economies, bringing it into direct competition with the EU and its high-income partners in the very sectors they have long dominated. In third markets, this expansion has been mirrored by widespread losses for advanced economy exporters, concentrated in complex manufacturing.

The incidence of these losses is highly uneven. Measured against a proportional benchmark that credits China only with the displacement its growth mechanically implies, some economies—Germany and the United Kingdom in particular—lose far more market share than China's rise alone can explain, while others hold or improve their position relative to non-Chinese competitors. For Germany, around two-thirds of the third market loss is over-proportional, pointing to a competitiveness problem that is only partly about China. And even the part that does track China's expansion is, to a large extent, about its size rather than China specifically: a scaled-up Vietnam or India would have displaced incumbents almost as much.

The descriptive evidence here stops short of causal claims. It cannot, on its own, apportion China's rise between productivity, exchange-rate movements, and industrial policy, nor identify the welfare-maximising European response. Those questions require a structural model of production, trade, and policy, which we pursue in ongoing work. What the evidence does establish is a diagnosis with direct policy relevance: blanket tariffs are poorly matched to a shock that is broad-based, partly home-grown, and playing out in markets that tariffs do not reach, while the durable response is sustained investment in innovation and a deeper European single market.

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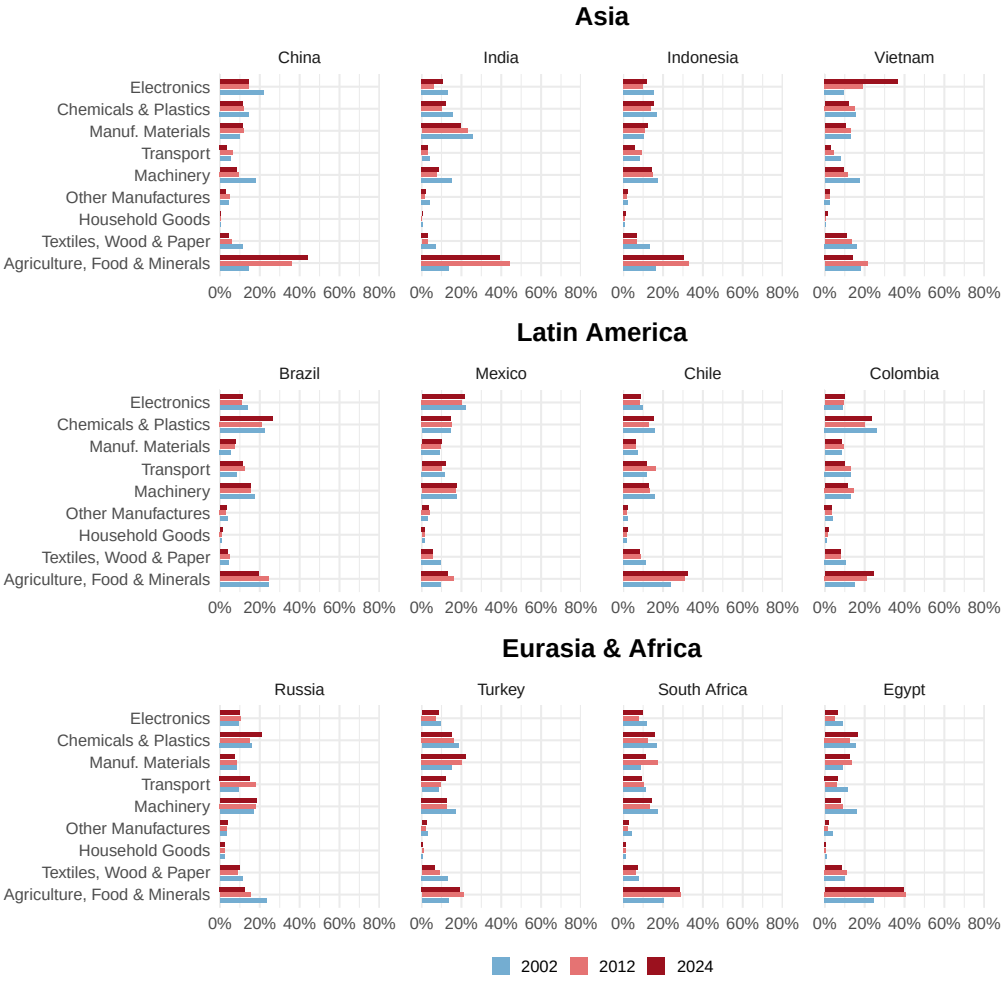
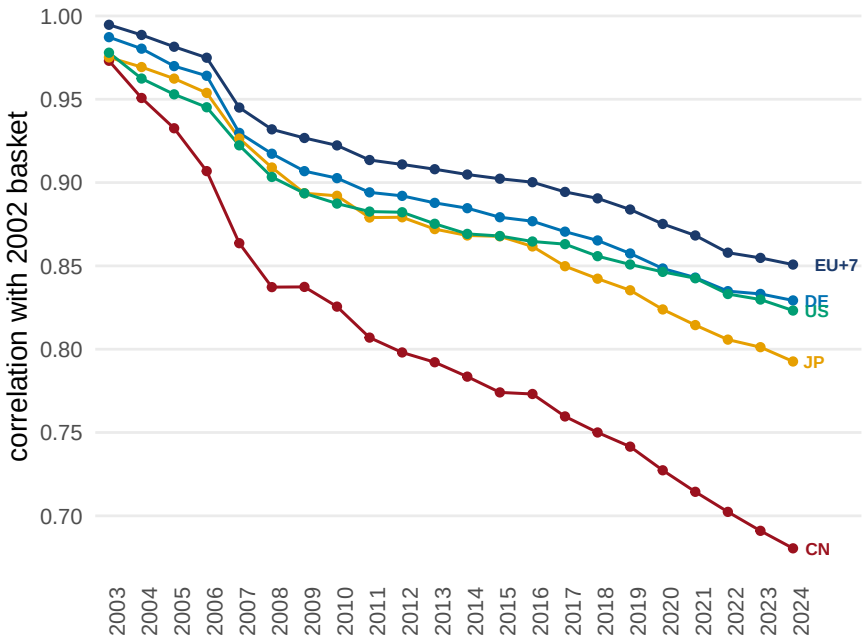
A Additional descriptives

Figure 17: Import composition of emerging markets over time



Note: Each bar shows a sector's share in the total goods imports of the respective economy in the indicated year. Sectors are broadly grouped by HS chapters: Agriculture, Food & Minerals (HS 01–27), Chemicals & Plastics (28–40), Textiles, Wood & Paper (41–67), Manufacturing Materials (68–83), Machinery (84), Electronics (85), Transport (86–89), Other Manufactures (90, 92, 93, 96), and Household Goods (91, 94, 95). Source: BACI (CEPII), 2002–2024.

Figure 18: How similar is the export basket over time?

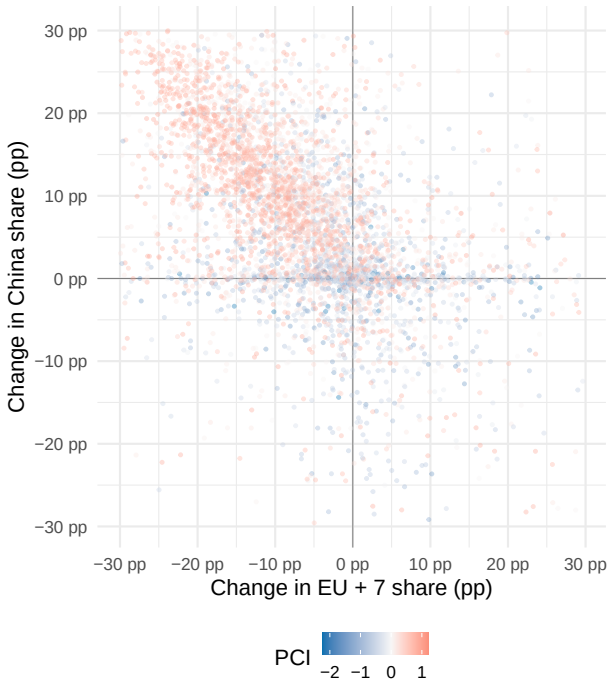


Note: For each economy, we compute the share of each product in total exports. The figure shows the Spearman rank correlation of these shares in a given year with the shares in 2002. These rank correlations are defined at the HS 6-digit product level due to data limitations. Changes in export composition at even deeper levels of product classifications are not readily constructed across a wide range of countries. Source: BACI (CEPII).

B Competition in third markets at the HS6-product level

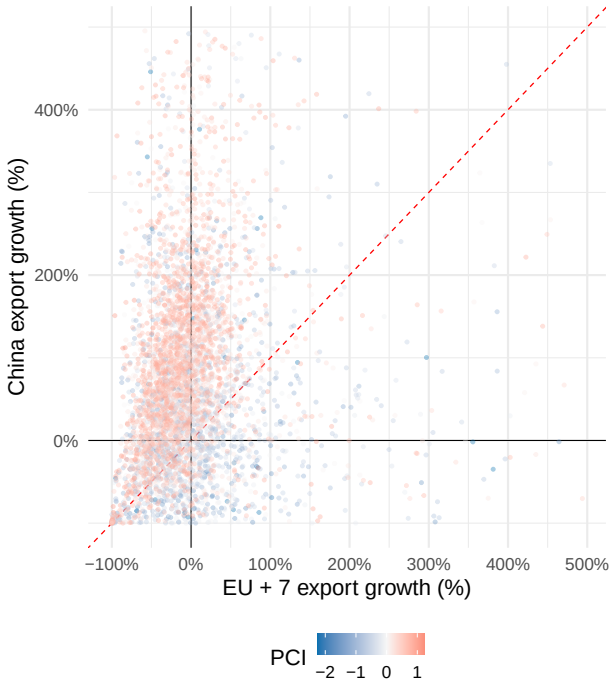
Figures 19 and 20 replicate Figure 9 at the HS6 product level. Each point is one of ∼5,300 HS6 products; colour reflects the HS2-chapter PCI inherited by each product.

Figure 19: Change in market shares in third markets, HS6 products



Note: HS6-product version of Figure 9, panel (a). Each point is one HS6 product; axes are clipped to ±30 percentage points. Source: BACI (CEPII), 2012–2014 vs. 2022–2024.

Figure 20: Export growth in third markets, HS6 products



Note: HS6-product version of Figure 9, panel (b). Axes clipped to $[-100\%, +500\%]$; HS6 products with zero initial trade for either China or the EU+7 dropped. Source: BACI (CEPII), 2012–2014 vs. 2022–2024.