

Competing with China in third markets

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Overview

- **China's export growth is increasingly concentrated in advanced manufacturing sectors.** Over the past two decades, China has expanded its presence not only in traditional industries but also in capital- and technology-intensive products, bringing it into direct competition with advanced economies in sectors where they have long specialized.
- **Advanced economies have lost market share to China in third markets.** Across a wide range of industries, China's gains in market share have been mirrored by losses among advanced economies. The strongest effects are observed in relatively complex manufacturing sectors such as machinery, vehicles, chemicals, and other technology-intensive products.
- **The impact of Chinese competition differs substantially across countries.** Some advanced economies have adapted more successfully to China's rise than others. While Germany, Japan, France, and the United Kingdom experienced significant losses in third markets, countries such as South Korea, Switzerland and the United States have maintained or even improved their position relative to other non-Chinese exporters even as they lose market shares in absolute terms to China's growth.
- **China's export expansion alone cannot explain all observed losses.** For many advanced economies, actual market share declines exceed what would be expected from China's export growth alone. This suggests that part of the deterioration reflects a loss of competitiveness relative to other exporters rather than displacement by China alone.
- **Germany stands out as particularly exposed.** Germany's export structure overlaps strongly with China's and it experienced some of the largest absolute losses in third markets. However, only around one-third of Germany's market share decline can be mechanically attributed to China's expansion, indicating that domestic and European competitiveness challenges also play an important role.

Keywords: China, export competition, third markets

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1 Introduction: The new China shock

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.

Advanced economies are increasingly concerned about the economic consequences of the rise of China. In this brief, we examine how different advanced economies have fared in the face of China's export expansion. In particular, we investigate the extent to which their economic losses can be attributed to China's rise and the extent to which they reflect a deterioration in competitiveness relative to other exporters, pointing to more home-grown challenges. 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

Concerns surrounding this latest China shock 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 this discussion by examining the differential effects of China's export growth across advanced 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 4 therefore examines the German case in greater detail and identifies the sectors in which competitive pressures from China have been most pronounced.

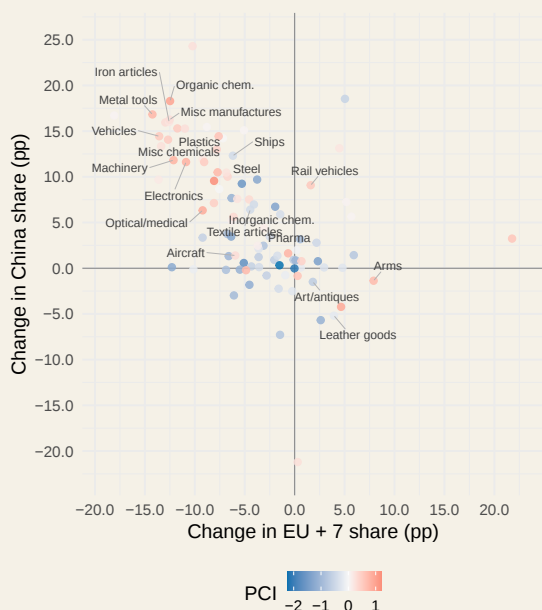
2 Displacement by China in third markets

Chinese export growth has important implications for competition in global trade. As China enters new product markets, it increasingly competes with countries that have long

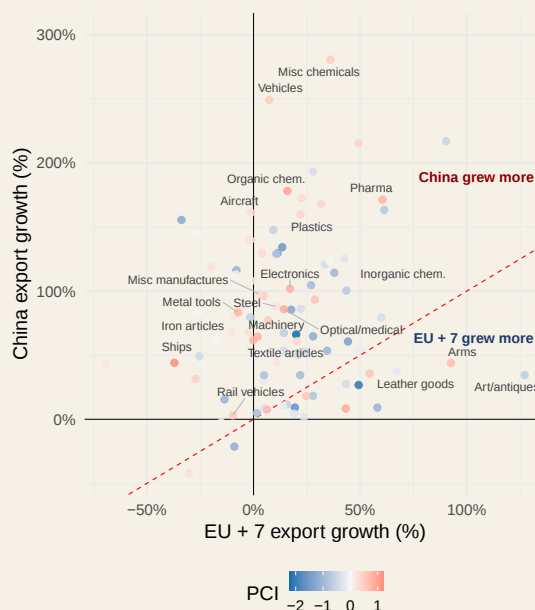
¹For a discussion of China Shock 2.0, see, for example, Tordoir and Setser (2026); Bayoumi and Gagnon (2026); de Soyres et al. (2026).

Figure 1: 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.

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 1 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.²

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.³

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

²In this exercise, we consider only third markets outside both China and the EU+7 economies. These changes are computed by comparing exports over 2012–2014 period with exports over the most recent three-year period available in the BACI data (2022–2024), thereby smoothing year-specific fluctuations.

³The complexity of sectors is based on the Product Complexity Index (PCI) of Hidalgo and Hausmann (2009) which 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.

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 2. 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 economies such as Germany, Japan and the US has remained largely unchanged across these broad categories (Figure 2a). This stability also shows in the knowledge intensity of their export baskets, as measured by the Product Complexity Index (PCI). The complexity profile of advanced economies' exports has barely moved over two decades, while China's has shifted markedly upward (Figure 2b).

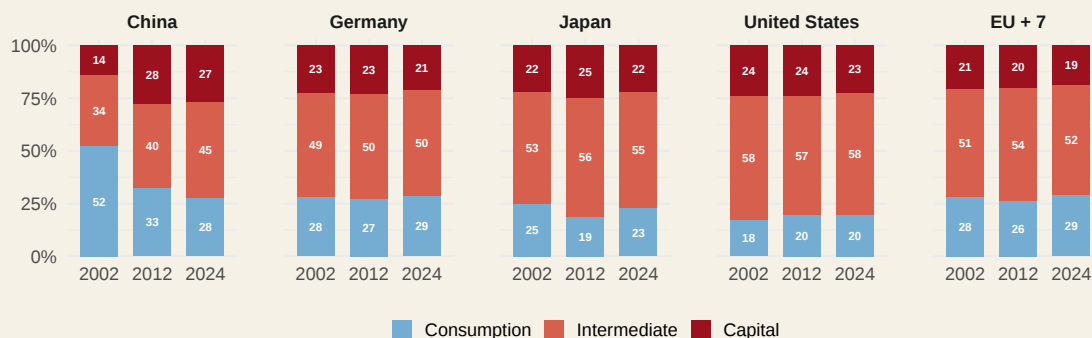
3 Winners and losers

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.

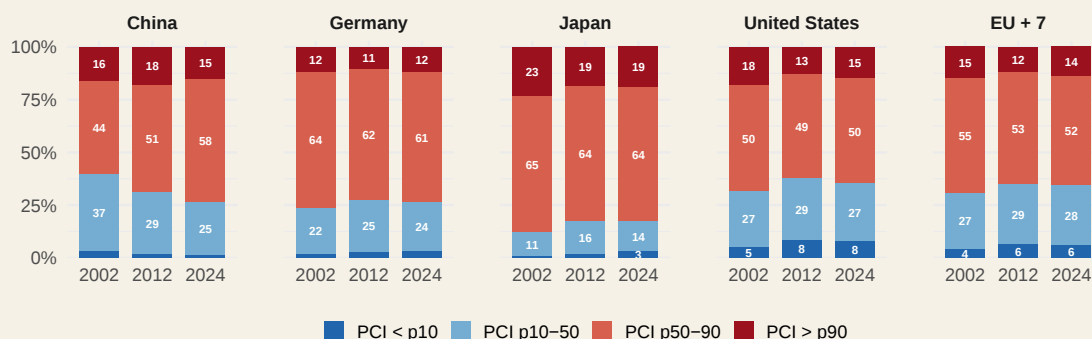
The answers are unlikely to be uniform. Countries whose export structures differ substantially from China's are likely to be less exposed to Chinese competition, whereas countries whose export baskets increasingly overlap with China's are more vulnerable to

Figure 2: 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 the least complex goods. The figure then shows the share of total exports falling in each PCI band.

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 and the country's own domestic market. Note that this differs from the analysis in Figure 1 which shows competition between China and EU+7 as a bloc in other destinations that are neither China nor any of the 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.⁴

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

⁴More precisely, initial share of the import demand of third markets from all countries excluding China.

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 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 3, 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.⁵ 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.⁶ Figure 3 further report 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.

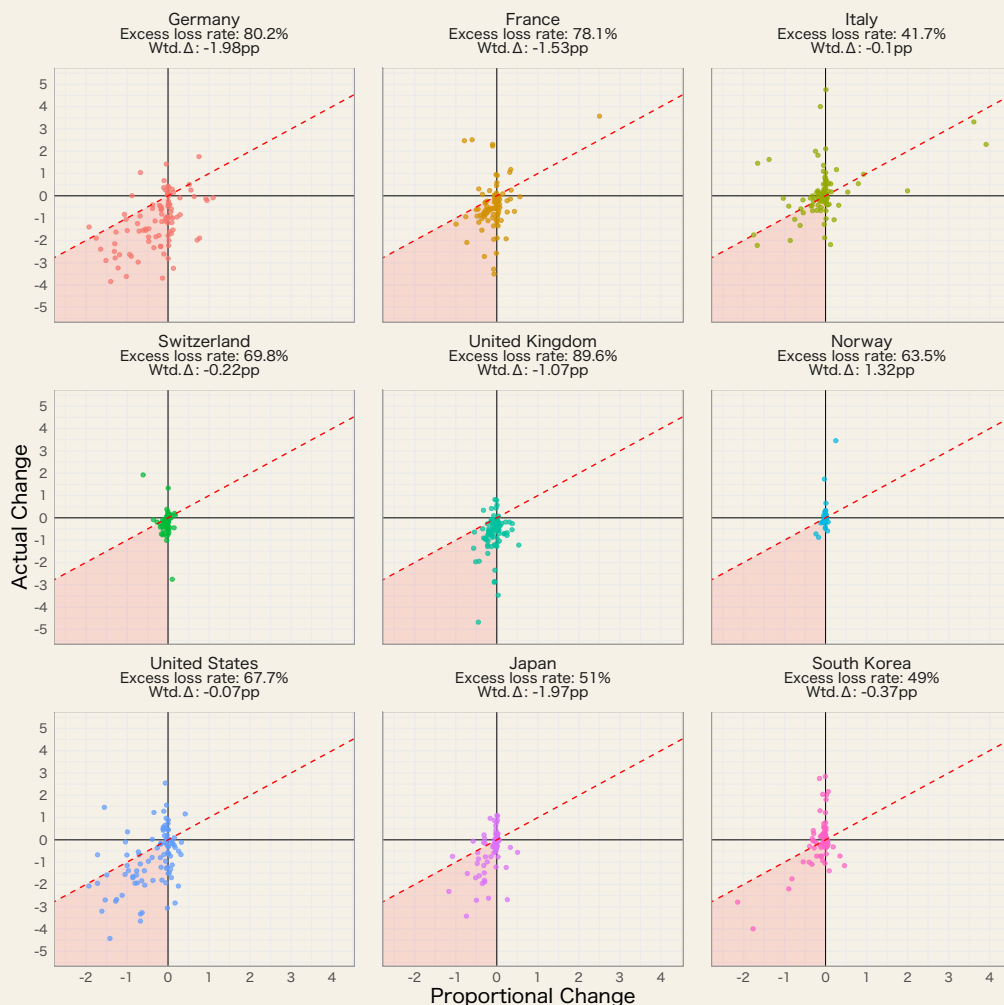
In addition, Figure 3 reports the average change in market share, computed as a weighted average across sectors using the sectors' initial share in export baskets of the respective economies as weights. The results reveal substantial differences across countries. Japan and Germany, for example, both 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 4 presents each country's share of the non-Chinese segment of third markets. The horizontal shows the country's initial share (over 2012–2014) of third market imports not supplied by China,

⁵When 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.

⁶We 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.

Figure 3: 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 red 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).

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 3, 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.

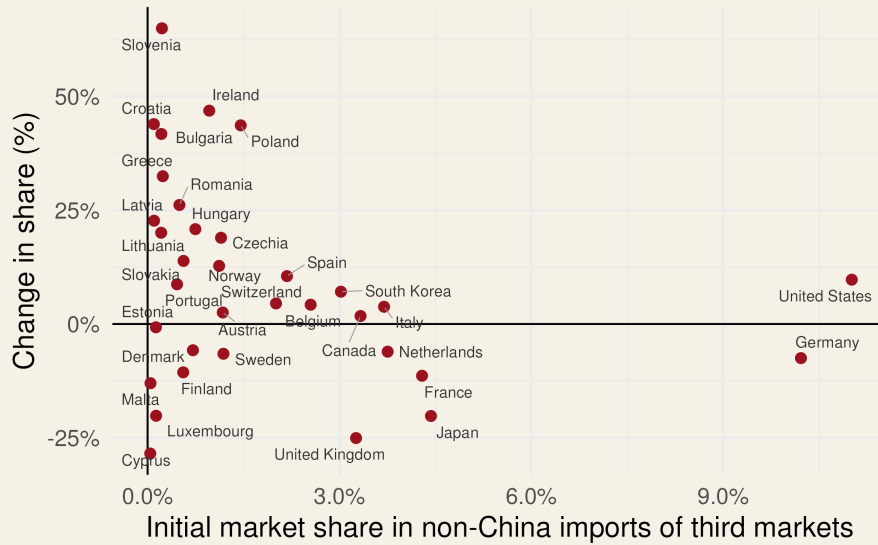
Taken together, Figures 3 and 4 provide valuable insights into the different margins along which countries lose or gain market position. Figure 3 showed that Germany and the United Kingdom exhibit high shares of sectors with excess losses, the weighted average of losses in Germany (1.98pp) is even substantially higher than that of the United Kingdom (1.07pp). Figure 4 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 4 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.

Figure 4: 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).

4 The case of Germany

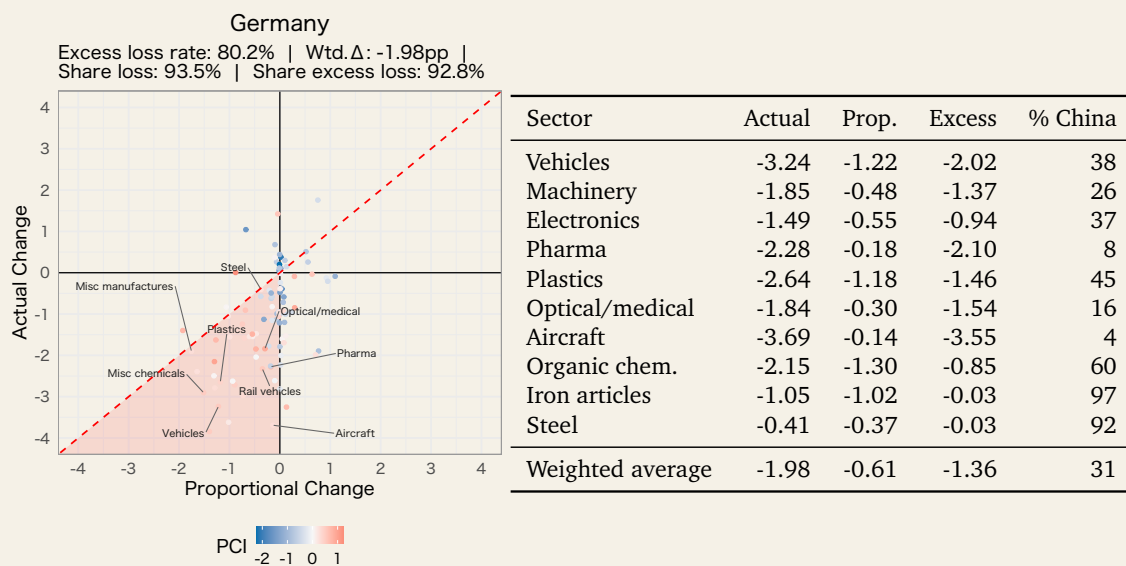
In this section, we take a closer look at the German case and examine how Germany has been affected by Chinese competition in third markets. As discussed above, it is impossible to disentangle whether these changes reflect a decline in Germany's competitiveness or stronger performance by competing exporters 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 5. Vehicles, chemicals, 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 left 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.⁷ 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

⁷Here, 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 5: Excess loss of market share for Germany — by sector



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. *Share loss*: Cumulate share of sectors in Germany’s initial exports that saw loss of market shares. *Share excess loss*: Cumulate share of sectors in Germany’s initial exports with disproportionate loss in market share.

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%).

5 Policy implications

The descriptive evidence assembled in this brief 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 in which EU+7 exporters, and Germany in particular, have relied on. 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.

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 search for capital and 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.⁸ 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 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.

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