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THE EFFECTS OF US TARIFFS ON ITALIAN FIRMS: AN EX-ANTE MICRO-LEVEL PERSPECTIVE

by Stefano Federico*, Fadi Hassan* and Giacomo Romanini*

Abstract

This analysis provides an ex-ante assessment of the potential effects of the 2025 US tariff shock on Italian firms, combining granular data on trade, firm balance sheets, and supply-chain linkages. First, we highlight some key specific features of the US tariff shock that can affect the impact on Italian firms. Then, we focus on three key mechanisms: (i) the direct effects on Italian exporters to the United States; (ii) the indirect effects on Italian suppliers of those exporters; and (iii) the trade deflection of Chinese exports displaced from the US to other world markets. We also find that, for direct exporters, the tariffs are expected to reduce profit margins by about 0.3 percentage points on average in the short run, with limited impact on firms' overall profitability. Most domestic suppliers have a low exposure to the US market through their customers, though a subset of highly exposed small firms may face sharper profit declines, potentially affecting local employment. Finally, trade deflection resulting from the redirection of Chinese exports displaced from the US market poses moderate, but non-negligible, risks for Italian exporters, concentrated in sectors that differ from those more directly exposed to US markets. Conversely, increased imports of intermediate goods from China could lower input costs for some Italian producers.

JEL Classification: F14, F32, F41.

Keywords: tariffs, exports, imports, profits, firms.

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1 Introduction

This study analyses how the recent increase in US tariffs is likely to affect Italian firms through different transmission channels. Using a rich set of granular data that combines customs records, business-to-business transaction data, and company balance sheets for 2023, we provide a detailed mapping of how the trade policy shock may propagate through Italian firms. We focus on three key mechanisms: (i) the direct effects on Italian exporters to the United States; (ii) the indirect effects on Italian suppliers of those exporters; and (iii) the trade deflection of Chinese exports displaced from the US to other world markets. The goal is to provide an ex-ante benchmark of the potential magnitude of these channels, measure their relative importance, and offer a reference point for macroeconomic models to assess the role of general equilibrium forces relative to the more immediate partial equilibrium effects that we estimate.

2 Specific features of the US tariff shock

The 2025 US tariff increase differs markedly from previous episodes of trade policy shocks. It is the first time in recent decades that a major advanced economy has raised tariffs across many partners and on a large set of goods. The US tariffs exhibit several defining features that shape their economic transmission and make their effects more difficult to estimate than in other trade policy episodes studied in the literature. These features include the multilateral scope of the tariff hike – with heterogeneous tariff rates across trading partners – the potential for substitution through domestic production in a large and diversified market, and the high-income nature of the tariff-imposing country.

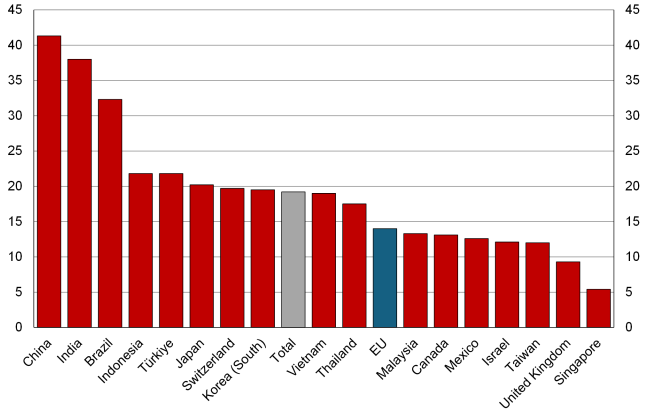
The first key feature concerns the multilateral nature of the shock: tariffs have been imposed on multiple trading partners simultaneously, reducing the scope for substitution across countries. As a result, the effects will depend not only on the level of tariffs faced by each country, but also on the extent to which these countries compete with one another in the US market – that is, on the similarity of their export structures. EU countries face an average effective (i.e. trade-weighted) tariff rate slightly below the mean of other advanced economies and well below the levels applied to several emerging markets (Figure 1). However, the degree of overlap between the export basket to the United States of Italy and that of emerging economies that have been subject to higher tariffs is limited. This is shown in the right-hand panel of Figure 1, which reports a scatterplot between the effective US tariff rate by main trading partner and the Finger-Kreinin similarity index on exports to the US relative to Italy, ranging from 0 (no overlap with Italy's export basket to the US) to 1 (identical structure to Italy's). This index captures only the similarity in the basket of products exported to the US, without accounting for differences in quality, price, or technological sophistication. For Italy, the index reveals an export composition very similar to other ad-

vanced economies — particularly France, Germany, and the United Kingdom — which face comparable tariff levels, thereby limiting the potential substitution of products from Italy with those from other countries.

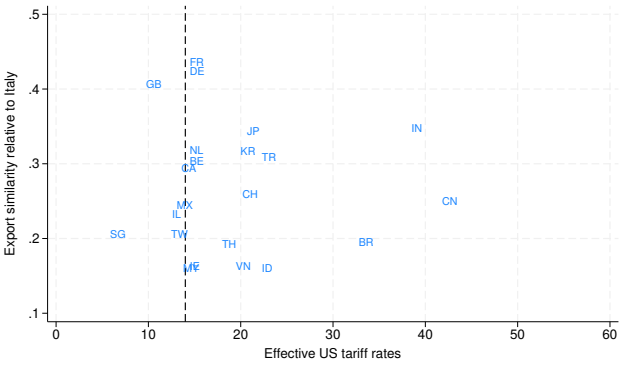
Tariff rates may also have non-linear effects on US imports, as countries facing larger increases may experience disproportionately stronger trade and output losses. Early evidence – albeit subject to important caveats related to front-loading effects, uncertainty about the actual implementation of measures and inventory adjustments – shows a significant adverse impact on imports from economies subject to higher tariff hikes, such as China, compared to a more muted impact on major euro-area exporters (Figure 2).

Figure 1: Effective US tariff rates and similarity in exports to the US

Effective US tariff rates on main trade partners
(per cent)



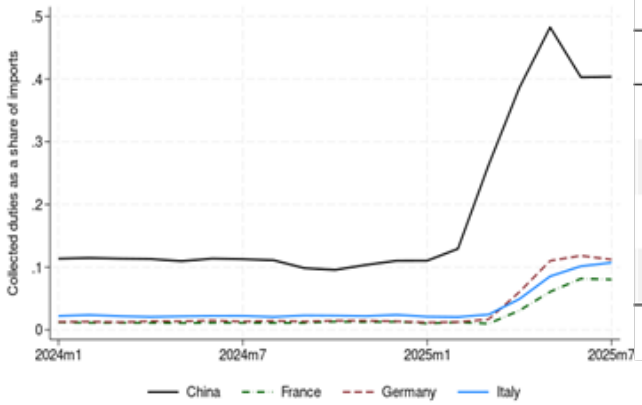
Relation between US tariff rates and similarity in exports to the US relative to Italy
(0–1 index on y-axis, per cent on x-axis)



Source: Effective US tariff rates are drawn from Banca d'Italia (2025). Export similarity is derived from authors' computations on CEPII data. The dashed line in the right panel represents the average EU effective tariff rate.

Figure 2: Collected duties and US imports by country

Collected duties relative to imports by country
(per cent)



US general imports by country
(USD billion)

	Apr-Jul		Jan-Mar	
Country	2024	2025	2024	2025
China	141.6	91.2	97.6	102.7
France	20.4	22.1	14.5	17.5
Germany	55.5	50.4	39.0	42.0
Italy	27.0	26.2	18.4	19.6
World	1,100.0	1,110.4	754.9	948.1

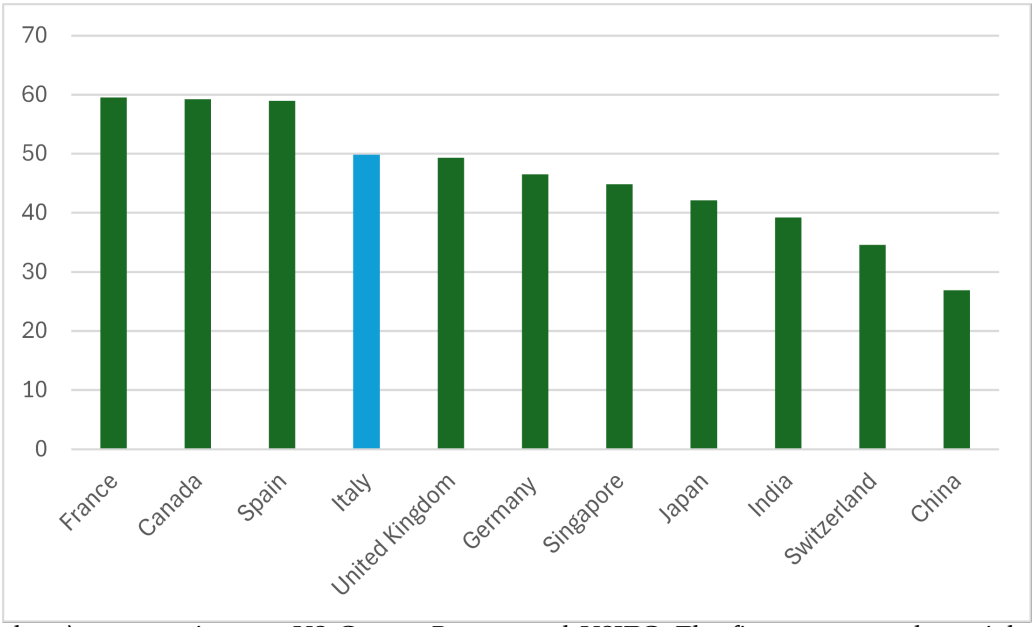
Source: Authors' computations on USITC.

While substitution opportunities across trading partners may be limited, import substitu-

tion through US-based production could become increasingly relevant. Another distinctive feature of this tariff episode concerns indeed the large and diversified nature of the US market, which hosts a broad domestic production base that could expand further through new investment and "tariff-jumping" FDI. To gauge potential import substitution, we combine data from the US Census Bureau and the USITC to compute for each sector the share of US absorption that is satisfied by domestic production.[1] Then, for each country we can compute the weighted average of US absorption that comes from domestic production given their exports' bundle. On average, Italian exports are concentrated in industries where US domestic producers already cover about 50 per cent of local absorption – broadly in line with other advanced economies (Figure 3) and below the average for US manufacturing, which is 67 per cent.

Figure 3: Average share of US domestic production in US absorption faced by exporting countries

(per cent)



Source: Authors' computations on US Census Bureau and USITC. The figure reports the weighted average of the domestic production share in total US absorption (i.e. the sum of domestic production and imports, minus exports) faced by a given exporting country. The weights correspond to each sector's share in the exporting country's total exports to the US. On average, Italian exports to the US face a 50 per cent US domestic production share on US absorption.

A final distinctive feature of the ongoing trade shock relates to the high-income nature of the US and to the fact that we are experiencing an episode of tariff hike. Standard elasticity estimates are typically derived from episodes of trade liberalization in emerging or developing economies (e.g. Fontagné et al., 2022), which may not accurately capture the behavior of consumers and firms for an episode of tariff increase in a high-income economy. This issue is particularly relevant for Italian exports, given their quality composition. We estimate that high- and medium-quality products account for 43 and 49 per cent of Italy's total

[1] Absorption is defined as domestic production, plus imports, minus exports.

goods exports to the United States, respectively.[2] In comparison with other major EU exporters, Italy's quality mix ranks slightly below France and Germany but above most other OECD and emerging economies. High-quality goods, which primarily target high-income consumers and leading firms, are expected to exhibit lower price elasticities.

Preliminary evidence from a bilateral gravity model linking changes in US imports from Italy at the product level between April–July 2025 and the same period in 2024 to changes in statutory tariff rates (controlling for product and year fixed effects) is consistent with this hypothesis. The results in Table 1 suggest that high-quality Italian exports exhibit lower price elasticities, consistent with the idea that affluent consumers and firms substitute less away from premium goods when tariffs rise. This evidence should, however, be interpreted with great caution, given short-run shipment lags, contract rigidities, exemptions, and uncertainty in tariff implementation. Overall, the findings suggest that product quality will matter for firms' exposure to the shock.

Table 1: Elasticity of US imports from Italy to change in tariff rates
(per cent)

	(1) All products	(2) High quality	(3) Medium quality	(4) Low quality
Tariff	−0.739***	−0.420	−1.225**	−1.303**
	(0.222)	(0.275)	(0.486)	(0.568)
HS6 fixed effects	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y
Observations	5,922	3,430	1,548	938
R-squared	0.967	0.965	0.972	0.951

Source: Authors' computations on USITC. We regress the log of US imports from Italy at the HS6 product-level in Apr–Jul 2024 and Apr–Jul 2025 on the statutory tariff rates in the corresponding periods, controlling for HS6 and year fixed effects. High-quality products are products for which Italy's export unit value on the US market is at least 20 per cent larger than the average unit value of its competitors.

3 Impact on Italian exporters to the US

To assess the impact on Italian exporters' sales and profit margins, we conduct a counterfactual simulation using granular customs data from the Italian Customs Agency for 2023, matched with company balance sheet data from Cerved for the same year. The analysis focuses on around 20,000 manufacturing exporters to the United States (excluding the energy sector), accounting for roughly 87 per cent of total recorded exports in official trade statis-

[2]We follow the economic literature which estimates quality based on the distribution of unit values per product-country. An exported product is considered to be: (a) 'high quality' if its unit value is at least 20 per cent higher than the average unit value of its competitors in the same market; (b) 'low quality' if its unit value is at least 20 per cent lower than the average; and (c) 'medium quality' in all the remaining cases.

tics. For these firms, exports to the US market represent about 5.5 per cent of total sales on average.

For each firm, we estimate the expected decline in US exports based on the commodity-specific tariff applied. The analysis is conducted at the firm-product level, linking each exporter to the specific HS6-level tariff applied to its products. For multi-product firms operating in several HS6 categories, individual tariff exposures are weighted by the corresponding export shares of each product in the firm's total sales to the United States.

We assume full pass-through of the tariff to export prices and a one-year price elasticity of -0.75, which is in line with historical estimates for Italy's aggregate exports.[3] This assumption implies that the 15 per cent tariff rate (50 per cent for steel and aluminium) – if entirely passed through to the final prices – would lead to a fall in sales to the United States by 11.25 per cent (37.5 per cent for steel and aluminium).

For each exporter, the expected decline in total revenues is derived from the share of US exports in the firm's overall sales. We then estimate the expected decline in profit margins relative to revenues, holding labour costs constant to capture short-run losses before any adjustment in employment. This represents a static, first-round impact, abstracting from firms' potential behavioural responses or broader general-equilibrium effects.

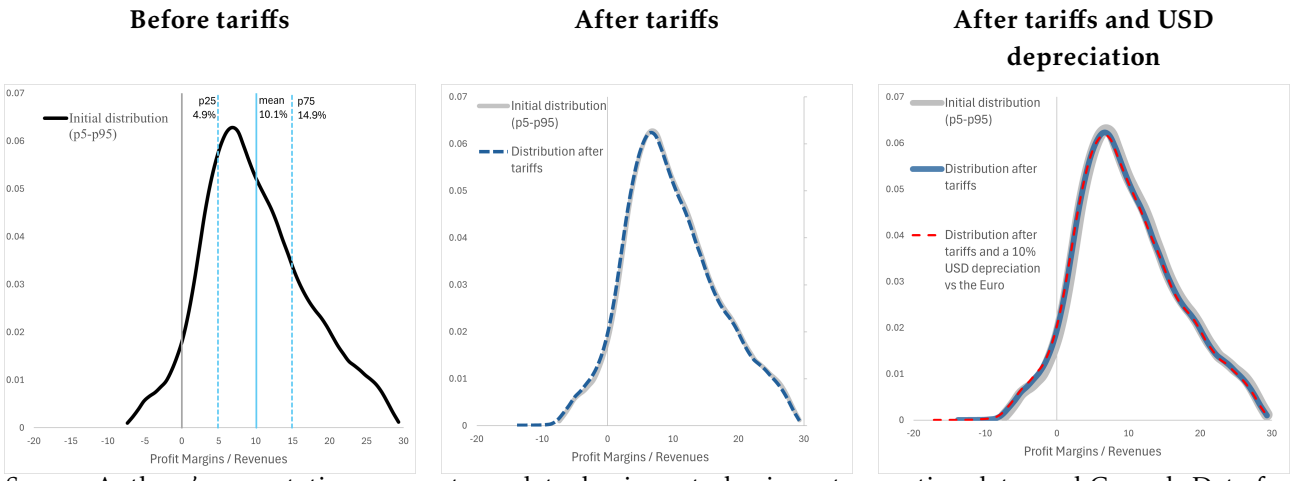
Finally, we also consider an alternative scenario which takes into account the additional shock arising from the 10 per cent depreciation of the US dollar against the euro. The impact of this depreciation depends on the currency of invoicing. We use firm-product data on currency invoicing for exports to the US and derive exchange rate pass-through rates from available estimates on Italian exporters to the US: exports denominated in euros experience complete pass-through to prices, while those invoiced in US dollars exhibit partial pass-through, estimated at 0.35 at a one-year horizon (Borin, Linarello, Mattevi, and Zevi, 2018).

Before the shock, the average profit margin of Italian exporters to the US is about 10.1 per cent of revenues, with an interquartile range between 4.9 and 14.9 per cent (left-hand panel of Figure 4). The US tariff hike would likely lead to a decline in profit margins by 0.3 percentage points for three-quarters of exporters, broadly in line with the average fluctuations of profits that these firms experienced over the last decade. The share of exporters with severe losses – defined as firms with profit margins below 8 per cent, the 5th percentile of the ex-ante distribution – could increase by 4.3 percentage points (middle panel of Figure 4). Finally, if we consider a 10 per cent depreciation of the USD relative to the euro on top of the tariffs, profit margins would decline by 0.5 percentage points for three-quarters of firms, and the share of exporters with severe losses would rise by 6.4 percentage points (right-hand panel of Figure 4). Even if the number of firms with severe losses is limited, they can ab-

[3] The price elasticity used in the simulation is consistent with the one in Bulligan, Busetti, Caivano, Cova, Fantino, Locarno, and Rodano (2017). We have also run the simulation using an elasticity of 1.5, which is consistent with a medium-long run adjustment, and the main message does not change.

sorb between 1 and 3 per cent of total employment in some provinces, increasing the risk of having some local hotspots more severely affected by the tariffs.

Figure 4: Gross profit margin distribution among Italian exporters to the US



Source: Authors' computations on customs data, business-to-business transaction data, and Cerved. Data for 2023. The x-axis shows the ratio of firms' gross profit margins to their revenues.

4 The impact on first-tier domestic suppliers

The recent US tariff increase is expected to affect not only Italian firms exporting directly to the United States but also their domestic suppliers. Leveraging invoicing business-to-business data for 2023, matched with customs records, we identify around 300 thousand domestic companies that provide inputs directly to Italian exporters to the US ("first-tier" suppliers). We focus on first-round supply chain relations rather than including additional rounds for various reasons. First, higher-order rounds often exhibit strong decay in propagation and, when it is sufficiently strong – as is standard when the Leontief inverse is well-behaved – direct and first-round effects already account for most of the network amplification (Acemoglu, Akcigit, and Kerr, 2016). Second, empirical evidence confirms this pattern: for Italian firms' revenue exposure to the United States, available estimates indicate that direct and first-round indirect exposure together explain more than two-thirds of total exposure (Borin, Conteduca, Leone, Mancini, and Zoi, 2025).

First-tier suppliers' indirect exposure to tariffs depends on two factors: (i) the share of the US market in the total turnover of their export-oriented customers, and (ii) the share of each supplier's turnover generated by those customers. For 80 per cent of suppliers, the exposure is less than 1 per cent of turnover (Figure 5).[4] Indirect exposure is more than 10 per cent for only about 5,400 first-tier suppliers (accounting for 1.7 per cent of total first-tier suppliers,

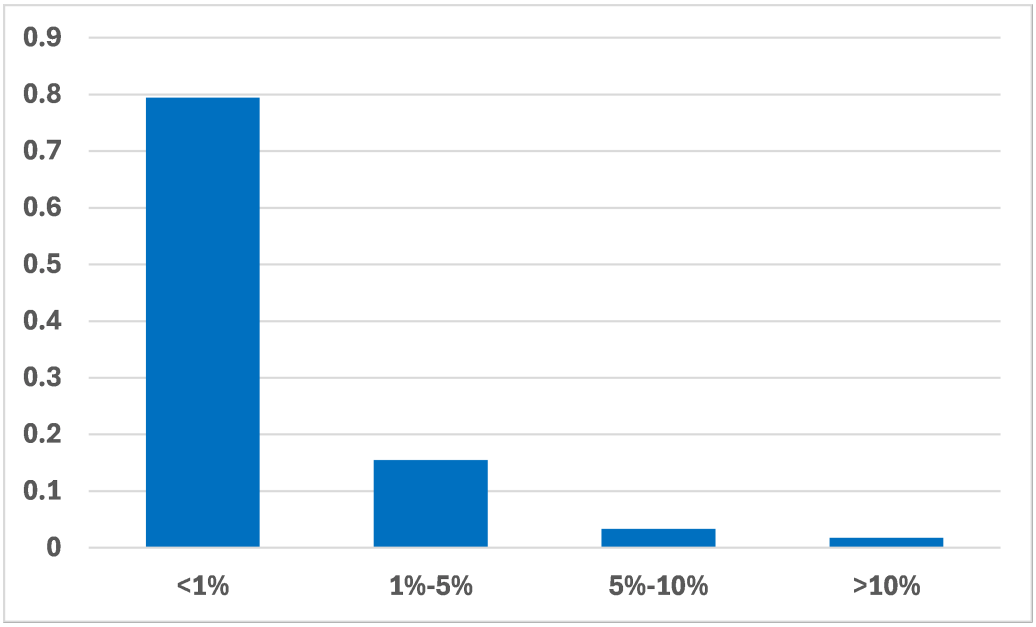
[4]In other terms, for these companies, assuming that the demand for intermediate inputs from exporting customers is distributed proportionally across all suppliers, even under a rather extreme scenario in which exports to the United States were to fall to zero, the decrease in turnover would be less than 1 per cent.

0.7 per cent of sales, 1 per cent of value added, and 1.2 per cent of employment), almost all of which are small firms. These firms' share of the total turnover of their respective sectors is generally limited. It is highest in the other transport equipment (5.5 per cent), metal products (3.9 per cent) and furniture (3.3 per cent) sectors. In some rare cases, the most exposed firms absorb a relatively significant share of employment at local level (4 to 9 per cent of total employees). For all suppliers, the gross profit margin as a ratio to revenue is 10 per cent on average (left-hand panel of Figure 6). Among suppliers with an exposure of more than 10 per cent, the margins are higher (equal to 12 per cent of revenues on average).

According to our simulations, the decrease in the profits of suppliers due to the imposition of the tariffs would be negligible on average, given the low indirect exposure, but could rise by 1.5 percentage points for suppliers with an exposure of at least 10 per cent (right-hand panel of Figure 6). The number of suppliers that would see their margins going from positive to negative is very limited, although a worsening of those margins could have non-negligible implications for some local labour markets.

Despite some possible difficulties at the local level, the indirect impact of the tariffs on the domestic supply chain of the firms exporting to the United States appears to be limited, thanks to a good diversification of sales by the supplier companies, as well as to sufficiently high profit margins. However, the negative effects of the tariffs on these firms may be amplified by other factors, including the exposure to tariffs of their foreign customers, the geographical reconfiguration of global value chains, and the impact of geopolitical tensions on exchange rates and on international demand.

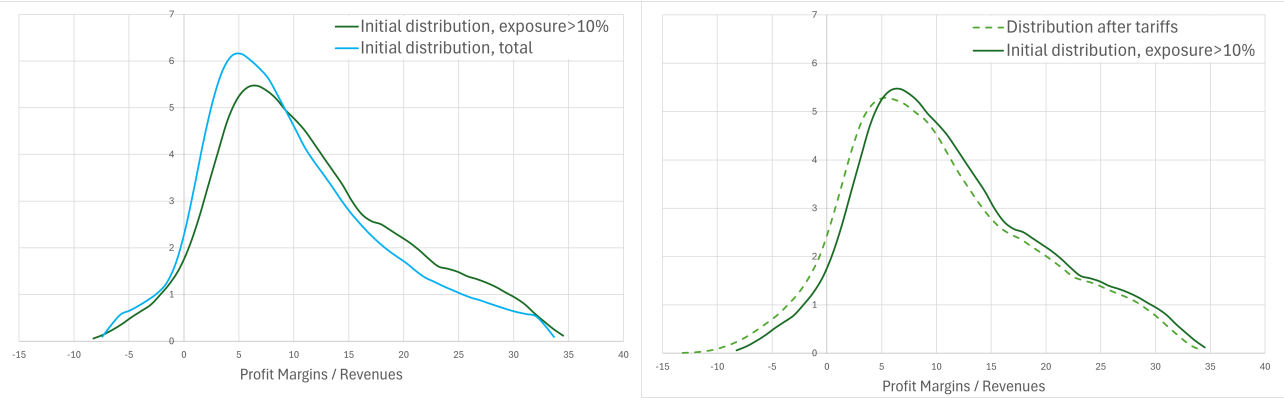
Figure 5: Distribution of the indirect exposure of the exporting firms' supply chains
(exposure as a share of suppliers' total revenues)



Source: Authors' computations on customs data, business-to-business transaction data, and Cerved. Data for 2023.

Figure 6: Gross profit margin of the suppliers of firms exporting to the United States
(per cent)

Before tariffs | **After tariffs (suppliers with an exposure greater than 10 per cent)**



Source: Based on customs data, business-to-business transaction data, and Cerved. Data for 2023. The x-axis shows the ratio of firms' gross profit margins to their revenues.

5 Trade deflection of Chinese exports

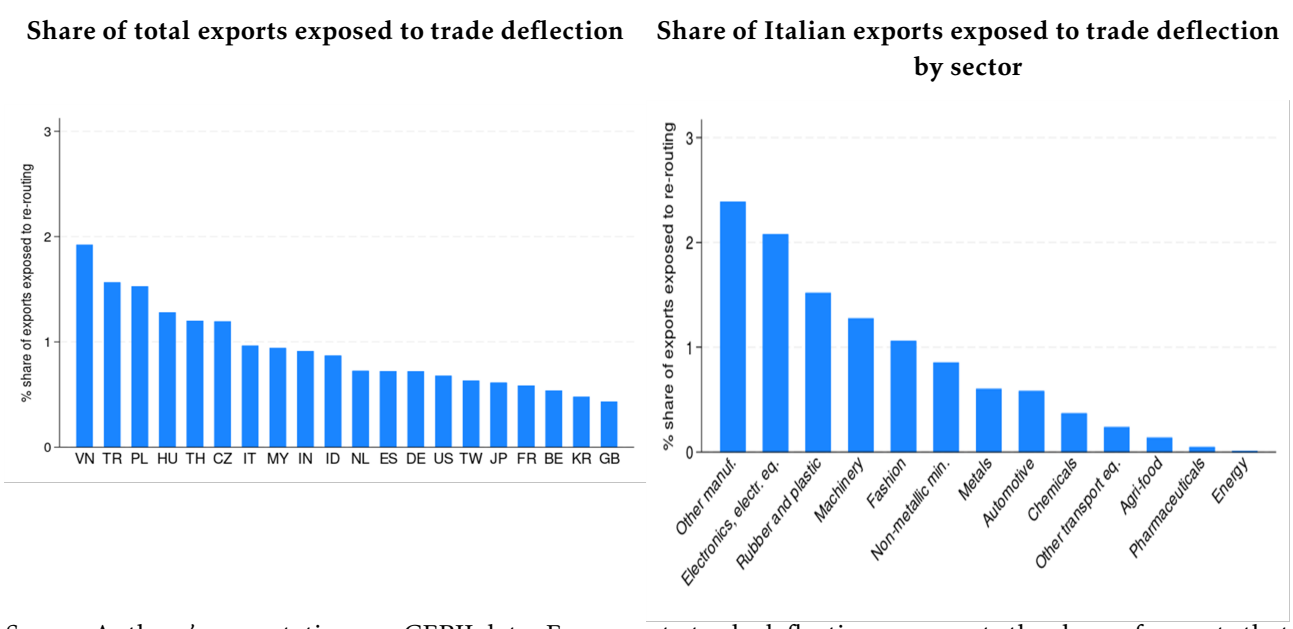
In addition to the direct effect on Italian exporters and the indirect effect on their domestic suppliers, the US tariff shock could also affect Italian firms through global spillovers, particularly via the reallocation of Chinese exports displaced from the US market. Using detailed product-level data on Chinese exports to the United States before the shock and the corresponding statutory tariff increases applied by the US, we first estimate the expected decline in Chinese exports to the US by product category.

We assume two alternative trade elasticities: a lower bound of −0.75, in line with Boehm, Levchenko, and Pandalai-Nayar (2023) and Boeckelmann, Emter, Gunnella, Klieber, and Spital (2025), and an upper bound of −2.5, consistent with estimates from the 2018–19 US–China trade war (Fajgelbaum, Goldberg, Kennedy, and Khandelwal, 2020). Under these assumptions, the fall in Chinese exports to the US would amount on an annual basis to approximately USD 90 billion using the lower-bound elasticity and up to USD 310 billion using the upper-bound elasticity (corresponding to a decline of about 20 and 70 per cent respectively). Given that Chinese exports to the US already declined by USD 50 billion between April–July 2025 and the same months of 2024, the actual elasticity likely lies between these two bounds.

For each product, we allocate the resulting "excess supply" of Chinese exports across other destinations proportionally to China's pre-shock export shares to those markets (defined as combinations of product and destination country), and further assume that, within each market, the excess supply of Chinese goods displaces foreign producers in proportion to their market share. The rationale is that existing export shares reflect structural factors – such as distance, tariffs, and gravity forces – that shape trade patterns and would also in-

fluence the redirection of displaced exports. Moreover, we take into account the similarity in product quality between Chinese goods imported by each destination market and the ones imported by the US. The implicit assumption is that countries that are importing from China products of quality similar to the ones imported by the US are more likely to absorb a higher share of deflection. This proportional allocation should be interpreted as a simplifying assumption that abstracts from country-specific demand growth or new market entry effects. Finally, the assumption that the excess supply of Chinese goods displaces foreign rather than domestic producers reflects the unavailability of internationally comparable data on domestic production at the product level, but at the same time is broadly consistent with standard trade models in which the elasticity of substitution across foreign suppliers is significantly higher than that between imported and domestically produced goods.

Figure 7: Export exposure to trade deflection of Chinese goods



Source: Authors' computations on CEPII data. Exposure to trade deflection represents the share of exports that would be displaced by the excess supply of Chinese exports in the upper-bound scenario. In the lower-bound scenario, the ranking is the same but the magnitude is about one-third of the exposure in the upper-bound scenario.

Using this approach, we can quantify the value of exports that would be displaced by the excess supply of Chinese exports as a consequence of trade deflection. For Italy, this would amount to 1 per cent of total exports of goods in the upper-bound scenario; this share is lower than in most emerging economies but among the highest within advanced economies (left-hand panel of Figure 7). Under the lower-bound elasticity, the share of exports displaced by the trade deflection effect falls to roughly 0.3 per cent. There is substantial sectoral heterogeneity: the most affected industries include other manufacturing (e.g. toys), electronics, rubber and plastics, and machinery (right-hand panel of Figure 7). Interestingly, the sectors most exposed to trade deflection are different from the ones more directly

exposed to US tariffs. For example, pharmaceuticals and other transport equipment rank among the sectors most exposed to US tariffs but face below-average exposure to trade deflection.

Our methodology estimates the extent of competition from deflected Chinese exports on foreign markets. However, the additional Chinese supply on the domestic market could also facilitate Italian producers in terms of the availability of cheaper inputs. Indeed, around 60 per cent of Italy's imports from China consist of intermediate and capital goods. Consequently, trade deflection could also generate a positive supply shock for Italian firms using these inputs, potentially lowering production costs in some sectors.

6 Concluding remarks

Our analysis suggests that, although Italy's exposure to the US market is significant, Italian firms could prove moderately resilient to the current wave of US tariffs. The direct impact is expected to remain limited, reflecting Italy's export composition – high-quality products with relatively low price elasticity – and the multilateral nature of the tariff increases, which limits the scope for trade diversion. Indirect effects on first-tier suppliers are likely to be concentrated among a small number of firms, while risks from trade deflection appear moderate overall but non-negligible in specific sectors.

However, heterogeneity across sectors and provinces remains an important source of vulnerability (Benecchi, Borin, Conteduca, Leone, Mancini, Modugno, Mongardini, Papini, and Zoi, 2025). Local clusters of export-oriented firms could face sharper disruptions, and interactions with concurrent shocks – including geopolitical tensions, exchange rate fluctuations, and the ongoing reconfiguration of global value chains – may amplify aggregate effects over time.

Continuous monitoring of these dynamics using granular firm-level and trade data will be essential to assess the ex-post effects of the tariffs and to track the propagation of related shocks across sectors and regions. Future work will also integrate these partial equilibrium estimates into a broader general equilibrium framework to better evaluate the macroeconomic implications and inform policy responses.

References

Acemoglu, D., U. Akcigit, and W. Kerr (2016). Networks and the macroeconomy: An empirical exploration. *Nber macroeconomics annual 30*(1), 273–335.

Banca d'Italia (2025). Economic Bulletin. n.3, October.

Benecchi, A., A. Borin, F. P. Conteduca, F. Leone, M. Mancini, L. Modugno, M. Mongardini, G. Papini, and P. Zoi (2025). Us tariffs and italian firms: mapping network exposure and early impact from survey data. Banca d'Italia, mimeo.

Boeckelmann, L., L. Emter, V. Gunnella, K. Klieber, and T. Spital (2025, July). China–us trade tensions could bring more chinese exports and lower prices to europe. ECB blog. ECB blog, July 30.

Boehm, C. E., A. A. Levchenko, and N. Pandalai-Nayar (2023). The long and short (run) of trade elasticities. *American Economic Review 113*(4), 861–905.

Borin, A., P. Conteduca, F. Leone, M. Mancini, and P. Zoi (2025). How global are local value chains? Banca d'Italia, mimeo.

Borin, A., A. Linarello, E. Mattevi, and G. Zevi (2018). Fluttuazioni del cambio e valuta di fatturazione: evidenze dalle imprese esportatrici italiane (household wealth in italy and in advanced countries). *Bank of Italy Occasional Paper* (473).

Bulligan, G., F. Busetti, M. Caivano, P. Cova, D. Fantino, A. Locarno, and M. L. Rodano (2017). The bank of italy econometric model: an update of the main equations and model elasticities. *Bank of Italy Temi di Discussione (Working Paper) No 1130*.

Fajgelbaum, P. D., P. K. Goldberg, P. J. Kennedy, and A. K. Khandelwal (2020). The return to protectionism. *The Quarterly Journal of Economics 135*(1), 1–55.

Fontagné, L., H. Guimbard, and G. Orefice (2022). Tariff-based product-level trade elasticities. *Journal of International Economics 137*, 103593.