

STUDY

Requested by the ECON committee

Monetary Dialogue Papers, March 2025



Unpredictable Tariffs by the US: Implications for the euro area and its monetary policy



EGOV
MONETARY POLICY

Authors:

Cinzia ALCIDI

Ignazio ANGELONI

Cédric TILLE



Unpredictable Tariffs by the US: Implications for the euro area and its monetary policy

Abstract

Were the US to impose large and lasting tariffs on its imports from the EU, the effect on the euro area (EA) would be substantial and far-reaching. We expect the direct impact to be inflationary in the US and contractionary on EA aggregate demand and output. The indirect impact through an appreciation of the dollar (partly already occurred) tends to transfer inflation from the US to Europe. The ECB should be mindful that both deflationary and inflationary influences may ensue, and be ready to adjust monetary policy promptly if necessary to maintain price stability.

This document was provided by the Economic Governance and EMU Scrutiny Unit at the request of the Committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 20 March 2025.

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

AUTHORS

Cinzia ALCIDI (CEPS)

Ignazio ANGELONI (IEP Bocconi and SAFE)

Cédric TILLE (Geneva Graduate Institute of International and Development Studies)

ADMINISTRATOR RESPONSIBLE

Ronny MAZZOCCHI

Giacomo LOI

Drazen RAKIC

Maja SABOL

EDITORIAL ASSISTANT

Adriana HECSER

LINGUISTIC VERSIONS

Original: EN

ABOUT THE EDITOR

The Economic Governance and EMU Scrutiny Unit provides in-house and external expertise to support EP committees and other parliamentary bodies in shaping legislation and exercising democratic scrutiny over EU internal policies.

To contact Economic Governance and EMU Scrutiny Unit or to subscribe to its newsletter please write to:

Economic Governance and EMU Scrutiny Unit

European Parliament

B-1047 Brussels

E-mail: egov@ep.europa.eu

Manuscript completed in March 2025

© European Union, 2025

This document was prepared as part of a series on "US Shift to Protectionism: Impact on the Euro Area Economy", available on the internet at:

<https://www.europarl.europa.eu/committees/en/econ/econ-policies/monetary-dialogue>

DISCLAIMER AND COPYRIGHT

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

CONTENTS

| | |
|---|-----------|
| LIST OF ABBREVIATIONS | 6 |
| LIST OF BOXES | 7 |
| LIST OF FIGURES | 7 |
| LIST OF TABLES | 7 |
| EXECUTIVE SUMMARY | 8 |
| 1. INTRODUCTION | 9 |
| 2. THE EU TRADE RELATION WITH THE US AND THE INTERNATIONAL CONTEXT | 11 |
| 2.1. The US tariff threat and the possible response by the EU | 12 |
| 2.1.1. US use of punitive tariffs: Can the EU retaliate? | 14 |
| 2.1.2. Trump's 2018-19 tariffs and their demise: a short history | 17 |
| 3. THE EFFECT OF TARIFFS AND TARIFF UNCERTAINTY: LESSONS FROM RESEARCH | 19 |
| 3.1. Research lessons on the impact of the 2018-2019 tariffs | 19 |
| 3.2. A general equilibrium view | 19 |
| 3.3. Impact of trade policy uncertainty | 24 |
| 3.4. Looking forward: the impact of the next wave of tariffs by the US | 25 |
| 4. THE IMPACT OF EXTERNAL CONDITIONS ON THE ECB MONETARY POLICY | 26 |
| 4.1. Does the ECB respond to the euro area's external balance? | 26 |
| 4.2. Is the ECB influenced by monetary policy in the US? | 28 |
| 5. THE IMPACT OF US TARIFFS ON THE EU AND ITS MONETARY POLICY: SOME REASONED CONJECTURES | 33 |
| 6. CONCLUSION | 35 |
| REFERENCES | 36 |

LIST OF ABBREVIATIONS

| | |
|--------------|--|
| ACI | Anti-Coercion Instrument |
| ECB | European Central Bank |
| EP | European Parliament |
| EA | Euro area |
| EU | European Union |
| GDP | Gross domestic product |
| GATT | General Agreement on Tariffs and Trade |
| NAFTA | North American Free Trade Agreement |
| QE | Quantitative easing |
| REER | Real Effective Exchange Rate |
| RoW | Rest of the World |
| US | United States |
| USD | US dollar |
| USMCA | US, Mexico, Canada (trade agreement) |
| VAT | Value-added tax |
| WTO | World Trade Organisation |

LIST OF BOXES

| | |
|---|----|
| Box 1: The WTO trade dispute system and its paralysis | 15 |
| Box 2: The EU Anti-Coercion Instrument | 17 |
| Box 3: Impact of tariffs through the exchange rate | 20 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1. Extra-EU export and import shares: US, China and the Rest of the World, in % | 11 |
| Figure 2. EU bilateral trade: EU-China and EU-US imports and exports of goods and services, EUR billion | 12 |
| Figure 3. EU imports of services from the US, by sector, EUR million | 16 |
| Figure 4. Steel (left panel) and aluminium (right panel) prices, US and global, in USD | 18 |
| Figure 5. Trade Policy Uncertainty Index | 24 |
| Figure 6. EA real interest rate (% , left scale) and trade balance (% of GDP, right scale) | 27 |
| Figure 7. Real interest rate (left scale, %) and Real effective exchange rate (right scale, index 2000=100) | 28 |
| Figure 8. Euro area and US: central bank rates and exchange rate | 29 |
| Figure 9. Inflation rates in the euro area and the US, in % | 30 |
| Figure 10. Short-term real interest differential and real effective exchange rate, euro area-US, in % | 31 |
| Figure 11. Short-term real interest rate differential and real effective exchange rate, euro area-US, in % | 32 |

LIST OF TABLES

| | |
|---|----|
| Table 1. US Tariffs since Trump's second term | 13 |
| Table 2. Overview of the retaliation measures against the US | 14 |
| Table 3: Conjectured effects of a tariff by the US on euro area exports | 33 |

EXECUTIVE SUMMARY

- Trade openness is a long-standing feature of transatlantic relations; therefore, **the impact on the euro area economy of any significant trade tariffs imposed by the United States (US) on its European Union (EU) imports would be substantial**, both for the area's economic structure and for its cyclical performance.
- **However, the nature and extent of any of those effects are very uncertain as of timing of this paper**, for three reasons: first, it is unclear what the US trade policy is actually going to be; second, the nature of the tariffs introduced may be selective (on specific products), or comprehensive (on all imports), with different effects; third, it is not certain in what form and to what extent there would be retaliation by partner countries, including the EU.
- **The World Trade Organisation (WTO) framework was substantially weakened** in recent years, leaving space for both the US to introduce significant and unjustified tariffs (comprehensive or selective) and for its trading partners, including the EU, to retaliate against such measures. This makes the end outcome of the process even more uncertain.
- **The theoretical and empirical literature on the effects of trade tariffs leads to three main conclusions.**
 - **in a "partial equilibrium" context** (i.e. without considering second-round effects via other economic variables such as the exchange rate), **a US import tariff is likely to drive up inflation in the US and have disinflationary and contractionary effects on its trading partner(s);**
 - however, **the domestic inflationary effect can be offset if the US dollar appreciates** (as it indeed has around the US elections, before retrenching lately). A dollar appreciation tends to "export" the inflationary impact of the tariff from the US to the Rest of the World (RoW), but the transmission of the exchange rate movement to prices is likely to be slower than the transmission of tariffs;
 - moreover, **trade policy uncertainty** (distinguished from trade policy *moves*) **is unambiguously contractionary on all trading partners.**
- As regards monetary policy, **we see no reason why the ECB strategy** (to be reviewed in 2025) **and operational framework should be changed.** The ECB should continue to pursue price stability, defined by a medium-term inflation of 2%, monitoring the outlook of headline and underlying inflation, mindful of the strength of monetary transmission.
- However, the **implications for the ECB's actual policy decisions** may well be altered significantly by the effect of the tariffs. In particular, **should they result in a sizeable demand gap in the euro area, GDP contraction and excessive disinflation, the ECB should promptly expand its policy** by lowering its deposit facility interest rate. On the contrary, **should a dollar appreciation export significant inflationary pressures in the euro area, the profile of policy rates would have to be lifted** to maintain price stability.

"Separate economic blocs, and all the friction and loss of friendship they bring with them, are expedients to which one may be driven in a hostile world where trade has ceased, over wide areas, to be cooperative and peaceful and where are forgotten the healthy rules of mutual advantage and equal treatment. But it is surely crazy to prefer that."

J.M. Keynes, 1945, as quoted by Eichengreen (1984)

1. INTRODUCTION

With rare and minor exceptions, trade openness has been a constant feature of transatlantic relations over the past eighty years. Gradually and steadily, trade integration has shaped the two economies by influencing consumers' choices, sectoral specialisation and modes of production. The influence has been especially important on the European economy, because of its smaller size and relative openness. Adding momentum to the process, bilateral trade surged in the last ten years; for each of the two economies, the other now ranks first in terms of bilateral export and import shares.

If this long-standing status quo were to change in any significant way, as the recent statements and actions of the new US administration suggest, the consequences for the structure and performance of the two economies, and the EU's especially, would be large. So would be the impact on their policies, including monetary policy.

However, the nature, intensity and speed of such changes are extremely hard to foresee at the time of writing this paper. There are three reasons for that.

First, we are still early in the process: **it is still unclear if the announcements coming from the new US administration reflect a genuine intention to change the norms of international trade on a sustained basis or are used instead to extract concessions** elsewhere in the negotiating space. If the latter were the case, the threats may end up not being carried out at all or to a much smaller extent. While this has appeared to be the case at times, the enforcement of some announced measures, along with the growing number of additional actions and retaliatory responses, suggests a more profound shift (see Tables 1 and 2 below).

The second dimension of uncertainty is on **whether the US may act through blanket tariffs** (uniform taxes on all imports, applied presumably against countries with which the US has a trade deficit – the EU being a prominent one), **or selective tariffs** (aimed at certain industries, for example to retaliate against perceived disparities or defend certain domestic producers – the recently announced tariffs on steel and aluminium are cases in point). The effects of the two can be very different; sectoral tariffs influence individual products and relative prices, whereas blanket tariffs affect the economy at large and the general price level and inflation. There are also cases in between; for example, sectoral tariffs that are sufficiently large and comprehensive also have macroeconomic effects.¹

The third **uncertainty factor regards the potential retaliation by trade partners**. Whatever the moves by the US may be, their effect will differ depending on whether and how other countries will respond. On the advisability to retaliate, views are divided; the economic impact is generally considered to be adverse on the retaliating country², but politically there may be no alternative to some response. This is the historical norm, as seen also after the tariffs imposed by the first Trump administration in 2018. And it is happening again. Canada, China and the EU have all implemented retaliatory measures, albeit using more targeted measures than the US and being ready to reverse them if the US changes course.

¹ Tariffs have material effects only if they are sizeable and cover all or a large number of goods; if they are in the order of a few percentage points, or are very selective, their effect is negligible for the economy as a whole (though they can harm specific sectors) and are lost within a myriad of other influences. Such was the case, for example, of the tariffs on steel and aluminium imposed by Trump in 2018, which included Europe (Rodrik, 2025).

² Again, see Rodrik (2025), and for the opposite view, Miran (2024).

Retaliation broadens the range of possible outcomes and policy effects, adding further complexity and uncertainty.

In this paper, we limit ourselves to examining some of the contingencies just described. For one, we consider only the economic consequences of tariffs, ignoring their possible ramifications on other policy domains. We do, however, consider the effect of trade policy *uncertainty* separate from trade policy *moves*. The two effects can be quite different.

We essentially concentrate on **blanket tariffs and their macroeconomic effects, first because they are more relevant** in the context of a dialogue between the European Parliament and the ECB, and also because we believe that, even if the US administration eventually opted to act only through sectoral tariffs, they would be sufficiently large to have macroeconomic effects, notably on aggregate demand and inflation in the euro area, especially if retaliated by the EU.

Thirdly and finally, we consider both the case in which retaliation by the EU takes place and the case in which it doesn't, without expressing a view on whether retaliation should or should not take place. We only indicate the likely consequences of the two cases.

The paper is structured in two parts. The first (sections 2 and 3) outlines the current state of affairs on trade, while the second (sections 4 and 5) focuses on implications for monetary policy.

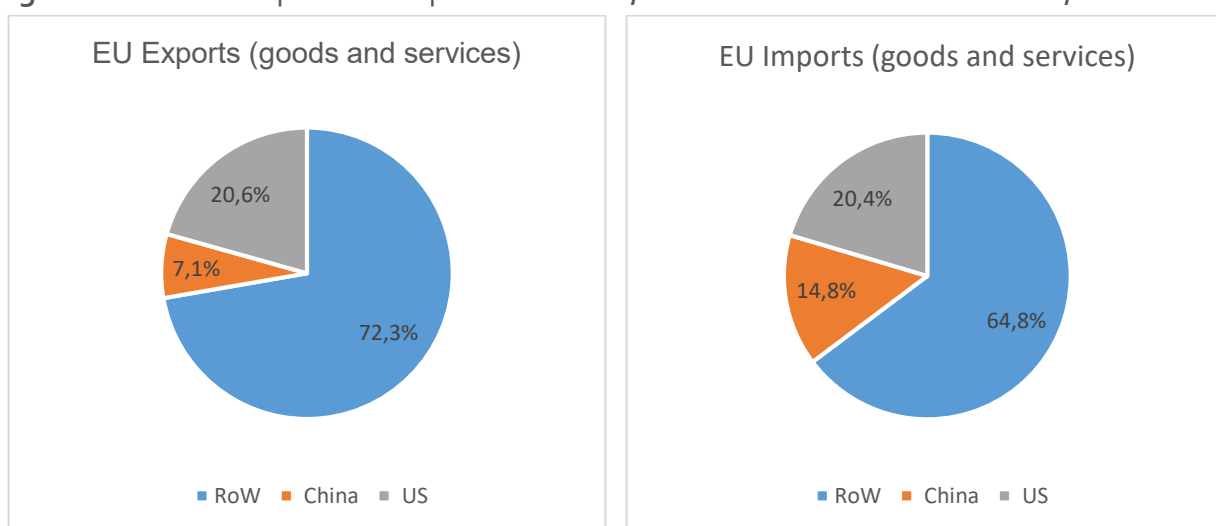
In particular, section 2 provides background information on bilateral trade relations between the US and the EU and offers a summary overview of relevant aspects of the WTO rules, including what can and cannot be done according to the rules, the appeal mechanisms and how these have been used in the past. The purpose is to assess the likelihood of an EU retaliation and its implications. Section 3 contains a review of the literature on the effects of tariffs, distinguishing between the direct and indirect impact of tariffs, as well as between tariff levels and tariff uncertainty. We also survey some very recent contributions which estimate the likely impact of future trade tariffs by the US. Section 4 looks back at the ECB's history to see how the central bank has reacted to international factors, including monetary policy in the US. Section 5 brings all these arguments together to offer a few reasoned conjectures on what the effects of the possible imposition of tariffs by the US on EU exports may be on both economies and on the respective monetary policies. Section 6 contains some concluding remarks.

2. THE EU TRADE RELATION WITH THE US AND THE INTERNATIONAL CONTEXT

The EU is one of the world's most open economies. For over half a century, trade has been a key driver of prosperity and the EU's primary tool for positioning itself as a global actor.

Despite its large internal market and the absence of trade barriers within the EU, extra-EU trade as a share of total (intra and extra) EU trade is very large, averaging just below 50%, though on a declining path. According to Eurostat, in 2023, it accounted for about 40% of the total EU trade. Extra-EU trade (imports plus exports) represented 31.2% of EU GDP, with EU exports to the rest of the world making up about 17% and imports slightly above 14%. The EU trades with almost all countries in the world and has more than 40 trade agreements covering about 80 countries. **Its main trading partners are the US and China**, which together account for 27.7% of EU exports and 35.2% of EU imports (**Figure 1**), followed by the UK and Switzerland.

Figure 1. Extra-EU export and import shares: US, China and the Rest of the World, in %



Note: Data shown refers to 2023.

Source: Eurostat.

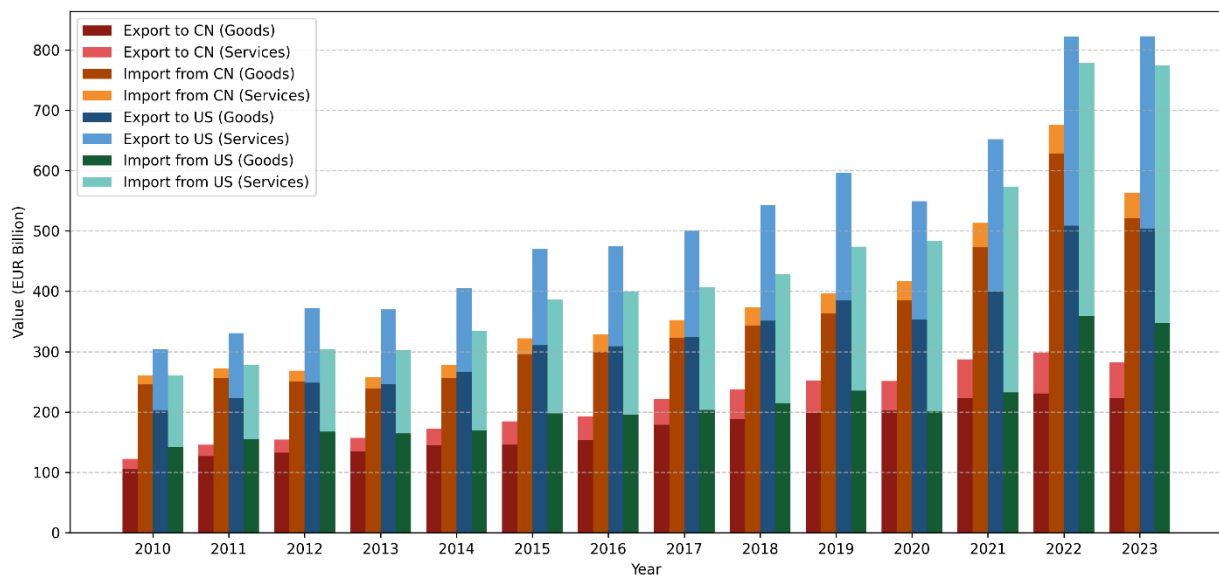
In recent years, escalating US-China trade tensions, Russia's invasion of Ukraine, and the US resort to multiple protectionist measures have severely weakened the multilateral trading system—undermining the very foundation of the EU's successful openness. With its high degree of trade integration and strong commitment to WTO principles, the EU now finds itself in a uniquely vulnerable position. What was once a strength—deep global trade integration—has, in some cases, turned into strategic dependencies that trade partners can exploit. Meanwhile, the erosion of WTO principles is creating an increasingly uneven playing field, making it harder for EU businesses to compete in global markets.

Over the last few years, China has been the primary focus of EU trade concerns. However, with the onset of the second Trump administration, attention has shifted to the US. **While the challenge with China has centred on imports** and in particular on securing access to essential goods – ranging from raw materials to value chain inputs – the key **concern with the US is access to export markets**.

Figure 2 offers a detailed view of EU trade with the US (blue and green bars) and China (brown and orange bars), presenting both exports and imports (left and right bars respectively) and distinguishing between goods (dark colours) and services (light colours). In 2023, **EU-US trade in goods and services reached EUR 1.6 trillion, more than doubling over the past decade** and coming to represent over 7% of world trade. As already pointed out in **Figure 1**, the US is the EU's largest export destination, with EU goods exports exceeding EUR 500 billion, far surpassing exports to China, which stood at around EUR 220 billion. The EU also exports significant services to the US (almost EUR 320 billion), but US service

exports to the EU are even larger (over EUR 420 billion).³ Despite the US administration’s stated goal of using tariffs to close the trade deficits, the reality is that in 2023, **the US enjoyed a service surplus vis-à-vis the EU of more than EUR 100 billion**. As a result, the **total EU goods and services surplus with the US** was negligible, amounting to EUR 48 billion in 2023, or 3% of total EU-US trade and about **0.3% of EU GDP**. In the same year, the EU overall current account surplus (which also includes labour and capital income net flows) vis-à-vis the US was larger than the trade surplus, but still small, amounting to EUR 85.6 billion. In comparison, the EU’s current account surplus vis-à-vis the UK was EUR 243 billion.

Figure 2. EU bilateral trade: EU-China and EU-US imports and exports of goods and services, EUR billion



Note: Data shown refers to the period 2010-2023.
Source: Eurostat.

2.1. The US tariff threat and the possible response by the EU

Since the start of his second term, President Trump has escalated threats to impose tariffs and other trade measures on all US partners, with multiple and sometimes incompatible objectives being mentioned: protecting national interest; reciprocating trade barriers by other countries; raising revenue for the US federal budget and addressing trade deficits.

The scope and form of these threats have been expanding and ranging from product-specific measures—such as the reintroduction of 25% duties on all imports of steel and aluminium, which were already imposed in 2018—to blanket tariffs—like the additional 25% ad valorem rate of duty on imports from Canada and Mexico, which was instated, put on hold for 30 days and then partially suspended under the USMCA⁴ trade agreement. By contrast, the 10% tariff on all Chinese imports was enforced, and an additional 10% was instated in March. **Table 1** offers an overview of Trump’s tariffs hyper activism.

³ EU’s imports of services from the US consist mainly of intellectual property services, telecommunication, financial services and travel; see below Figure 3.

⁴ The USMCA is a free trade agreement between the US, Mexico, and Canada that was signed in 2018 under the first Trump administration (it went into effect in 2020) to replace NAFTA, the pre-existing free trade agreement between the three nations. While many chapters of NAFTA remained unchanged, the new agreement contains changes pertaining to protection for intellectual property rights, labour and environmental concerns, dispute settlement and rules of origin for the automotive industry (including greater incentives for automobile production in the US and quotas for Canadian and Mexican automotive production). It was presented as a way to support high-paying jobs for Americans and grow the North American economy.

Table 1. US Tariffs since Trump's second term

| STATUS | Target COUNTRY | Description |
|--|--------------------------|--|
| Announced, February 1 | Canada, Mexico and China | Tariffs and end duty-free <i>de minimis</i> treatment of low-value packages from these countries |
| On hold for 30 days, 3 February | Canada and Mexico | Purpose: to secure borders and reduce trafficking |
| In effect 4 February | China | 10% on all imports and ends the <i>de minimis</i> |
| Announced, 13 March, planned for April | World | Reciprocal Trade and Tariffs Memorandum: A plan to counter nonreciprocal trading arrangements. |
| In effect March 4 | Mexico | 25% al imports |
| In effect March 4 | Canada | 25% on all imports, lower rate for energy |
| In effect March 4 | China | Additional 10% on all imports |
| Partially suspended 6 March | Canada and Mexico | Reprieve for goods that fall under the USMCA trade agreement |
| In effect March 12 | World | 25% aluminium and steel |
| Planned April | World | Unspecified tariff on agricultural products |
| Planned April | World | Unspecified tariff on foreign cars |
| Threatened 13 March | EU | 200% on EU alcohol |

Last update: 14 March 2025. Source: [Peterson Institute for International Economics](#), Financial Times, European Commission.

In addition, the US administration is considering country-by-country tariffs as retaliation against perceived tariff and non-tariff barriers imposed by trading partners. The threat of “reciprocal tariffs” announced on February 13 is a very significant one for the EU. The proposed “Fair and Reciprocal Plan”—essentially an “eye for an eye, a tariff for a tariff”⁵ approach promised during Trump's campaign—would impose levies on US imports from any country that maintains tariffs or trade barriers against the US. Among these barriers, the administration has singled out the EU's value-added tax (VAT) as an unfair trade practice alongside digital services taxes implemented or considered by several European countries. While VAT is generally regarded as trade-neutral—since it applies to all consumption, regardless of whether goods are imported or domestically produced—Trump's trade advisers argue that VAT systems function as an export subsidy, as EU companies receive rebates when selling abroad.

The Fair and reciprocal Plan signals a shift toward a system where broad tariffs are imposed and then negotiated bilaterally on a reciprocal basis.⁶ This approach represents a significant departure from the way tariffs have been structured and negotiated since the establishment of the General Agreement on Tariffs and Trade (GATT). Examples in this direction are already materialising. Canada, China and the EU have retaliated against the US, typically with tariffs applied to detailed lists of products, rather than across the board, to contain the impacts on the domestic economy. **Table 2** provides an overview. In the case of Canada, there have been situations (specifically the Ontario case) in which bilateral negotiations have led to concessions offered to the US.

⁵ See <https://www.france24.com/en/live-news/20250212-what-are-reciprocal-tariffs-and-who-might-be-affected>

⁶ See <https://www.atlanticcouncil.org/blogs/new-atlanticist/experts-react-what-does-trumps-reciprocal-tariff-announcement-mean-for-global-trade/>

Table 2. Overview of the retaliation measures against the US

| STATUS | COUNTRY retaliating | Description |
|--|---------------------|--|
| Announced, February 1 | Canada | Two rounds of tariffs targeting US exports, including orange juice, peanut butter, wine, spirits, beer, coffee, appliances, apparel, footwear, motorcycles, cosmetics, and pulp and paper. |
| Into effect, March 4 | Canada | 25% tariffs on C\$155 billion worth of imported goods from the US announced on February 1 |
| March 4 (into effect on March 10) | China | Tariffs on US soybeans, chicken, wheat, corn, and cotton products, sorghum, pork, beef, seafood, fruits, vegetables, and dairy products. Antidumping investigation into US optical-fiber products, 10 US companies being added to the unreliable entity list, 15 companies facing export controls, and a ban on imports of Illumina's gene sequencers. |
| March 12 (into effect on 1 April) | EU | Restore the EU's "rebalancing" tariff packages of 2018 (US iconic products) |
| March 12 (into effect by mid-April) | EU | Additional package of new countermeasures on US exports will come into force by mid-April (to be defined) |
| March 12 | Canada | 25 % on a list of US goods including steel products, aluminium products, tools, computers and servers, display monitors, sport equipment, and cast-iron products |
| Announced (10 March) and then suspended (11 March) | Canada | Ontario announced a 25% surcharge on electricity exports to Michigan, Minnesota and New York (in response to US tariffs on steel and aluminium), this was suspended after Trump threatened a 50% tariff on the country's aluminium and steel. |

Last update: 14 March 2025. Source: [Peterson Institute for International Economics](#), Financial Times, European Commission.

2.1.1. US use of punitive tariffs: Can the EU retaliate?

The US's growing use of the national security card to justify the **violation of WTO principles and the actions since 2018 to dismantle its dispute settlement have substantially reduced the WTO's powers and its credibility**. The blockage of the enforceability of the WTO dispute settlement mechanism (see **Box 1**) has led some affected countries to unilaterally adopt countervailing measures or attempt to negotiate bilaterally. Immediately after Trump's first tariff announcement, Canada and Mexico responded by announcing counter-tariffs but also started to negotiate on how to avoid the measures.⁷

The more aggressive US push for tariffs on all its trade partners and the changed global environment is leading to a different line of defence by those affected by US tariffs relative to what happened in 2018. Including on the EU side. In 2018, the EU responded to US tariffs on steel and aluminium with immediate retaliatory countermeasures. The response also included additional countermeasures to be imposed after three years (2021) if no settlement was reached. Eventually, a deal was struck under Biden and those tariffs have been put on hold until 31 March 2025. This implies that the EU could reinstate those retaliatory tariffs on US exports with little delay.

⁷ Canada, one of the largest exporters of aluminium in the US, amounting to about 0.8% of Canadian GDP, is trying to negotiate an exception to avoid US tariffs. A series of measures to secure the Canada-US border has been put in place to tackle illegal migration and fentanyl trafficking, in the hope of meeting Trump's concerns.

Box 1: The WTO trade dispute system and its paralysis

To open a trade dispute under the WTO, a member country must follow the Dispute Settlement Understanding process. The main condition to open a dispute (though not the only one) is a violation of WTO Agreements. A WTO member must believe that another member has violated, nullified, or impaired benefits under the WTO agreement. Typical cases are the imposing illegal tariffs or import restrictions, unfair subsidies distorting competition and discriminatory trade practices (e.g., favouring domestic producers).

The WTO dispute settlement process is made of several steps. First, the complainant requests consultations with the respondent, if no solution is found, a panel of experts is formed to examine the dispute and issue a ruling. Both parties can appeal to the Appellate Body Review which makes the final ruling. If the respondent loses, it must comply or face potential retaliation.

The Appellate Body is the highest authority in the WTO and consists of seven members, appointed by WTO members. Each member serves a four-year term, renewable once. They must be independent and impartial trade law experts. Appeals are reviewed by three randomly selected judges from the seven-member body. Any WTO member can veto a candidate by objecting to the selection. The United States has repeatedly used this power to block new appointments citing concerns about judicial overreach. This has resulted in a paralysis of the Body.

This followed the WTO dispute after the US Trump administration in 2018 imposed 25% tariffs on steel and 10% tariffs on aluminium imports, citing national security concerns. In response, the EU, China, Canada, Mexico, Norway, Russia, Switzerland and Turkey challenged the tariffs arguing for a violation of WTO rules, as the measures were protectionist measures disguised as national security protections. The WTO ruled against the US stating that the tariffs were not legitimate national security measures and a violation of the WTO commitments. However, the US rejected the decision, claiming that the WTO had no authority to judge national security matters. In 2018, the Trump administration used its veto power to block all appointments or reappointments to the seven-member Appellate Body. By 2019, there was no longer a quorum of three to hear appeals of panel decisions. This blockage effectively ended the enforceability of the dispute settlement mechanism. This position was maintained by the Biden administration which continued to defend that national security cannot be challenged at the WTO.

Aware of the weakening of the WTO, in 2019, the European Commission adopted a proposal to amend the Regulation concerning the exercise of the EU's rights for the application and enforcement of international trade rules ('the Enforcement Regulation')⁸. The purpose was to review the EU Enforcement Regulation for trade disputes and enable the EU to suspend or withdraw concessions or other obligations under international trade agreements in order to respond to breaches by third countries of international trade rules that affect the EU's commercial interests. The Regulation, which entered into force in 2021, empowers the EU to impose counter-measures in situations where EU trade partners violate international trade rules and block the dispute settlement procedures included in multilateral, regional and bilateral trade agreements, thus preventing the EU from obtaining final binding rulings in its favour.

Trade is a clear EU competence⁹ and the EU has different options in its trade toolbox. One approach to reducing the risk of a tariff war would be to concede to Trump's demands by lowering certain tariffs.

⁸ See <https://eur-lex.europa.eu/eli/reg/2021/167/oj/eng>

⁹ We abstract from the possibility that a US *stick-carrot strategy* aimed at dividing the EU may break the Union's trade policy arrangements. Though some political forces may be tempted to reap advantages through bilateral negotiations, especially if the UK will escape the tariffs as recently hinted by Trump, this remains for the moment a remote possibility. Such eventuality would risk the reintroduction of intra-EU barriers, leading to major economic disruption and a sharp recession in Europe.

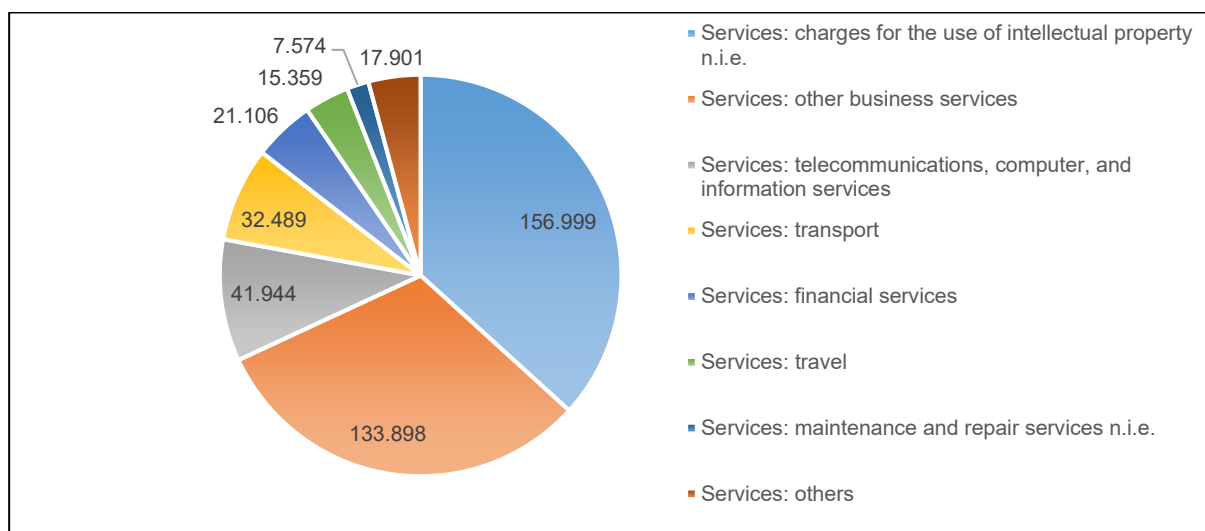
While the option of reducing the EU’s 10% tariff on cars to 2.5% (same level as the US tariff) as part of broader negotiations appeared as a possible option, it was never pursued, given Trump’s lack of openness to negotiations and other potential side effects.¹⁰

On March 6, the **EU announced retaliatory measures targeting iconic US goods** with more political than economic significance, as it did in 2018 (see the next subsection). This time, Trump’s reaction was immediate. He threatened the EU with a 200% tariff on EU alcohol (explicitly mentioning French champagne and wine). As in the case of Ontario, his purpose is to get concessions, but the attitude poses a serious risk of trade war escalation.

On the EU side, other options are on the table. While the EU runs a substantial trade surplus in goods with the US—making tariffs on goods potentially harmful to the EU economy—the trade deficit in services presents an opportunity for more impactful retaliation.

One option could be imposing a **digital services tax or a tariff on US service exports**. IT services provided by US Big Tech companies make up the largest share of US service exports to the EU (see **Figure 3**), making them a prime target for countermeasures. The EU could respond with restrictions on American consulting and financial firms, revoking intellectual property rights, tightening data flow regulations, or increasing digital taxes on US-based platforms. The extent to which this type of retaliation would damage the EU’s productive sector and reduce its productivity would need to be carefully assessed.

Figure 3. EU imports of services from the US, by sector, EUR million



Note: Data shown refers to 2023.

Source: Eurostat.

Despite the high degree of uncertainty and the many options available (see **Box 2**), it is important to reflect on the type of tariffs and the consequent EU response, as this is a major factor that will ultimately determine the economic impact on the euro area and the implications for monetary policy.

¹⁰ The EU imposes a standard import tariff of 10% on passenger cars originating from non-EU countries and supplementary tariffs, up to 38.1% apply to Chinese electric vehicles. It should be noted that under WTO rules, any tariff reduction must be applied equally to all trading partners. While lowering tariffs for the US might have a limited impact on the EU, extending the same reduction to China could be far more costly.

Box 2: The EU Anti-Coercion Instrument

The EU also has another tool available to defend its interests. Announced in December 2021 as part of the EU's broader trade policy to strengthen economic resilience and strategic autonomy, the Anti-Coercion Instrument (ACI) aims to deter or counteract measures by foreign governments that use trade and economic policies as leverage to influence EU policy decisions. Although broadly applicable, the instrument was designed in part as a response to situations like China's informal trade embargo on Lithuania in 2021 over Lithuania's engagement with Taiwan. In practice, the ACI allows the EU to respond swiftly to sudden tariffs, import restrictions, or investment bans targeting the EU or its member states for political reasons.

While US tariffs would not trigger the ACI, the latter could be deployed in case Trump would pressure the EU or one of its member states, for instance, Denmark into surrendering control over Greenland. While it is in the EU's interest to prioritise dialogue and negotiation to de-escalate tensions, countermeasures such as increasing customs duties on specific goods or services, imposing quotas or excluding US companies from public contracts in the EU are available options. One limitation of the ACI is that the process requires an agreement in the Council (qualified majority), which can lead to a substantial delay.

2.1.2. Trump's 2018-19 tariffs and their demise: a short history

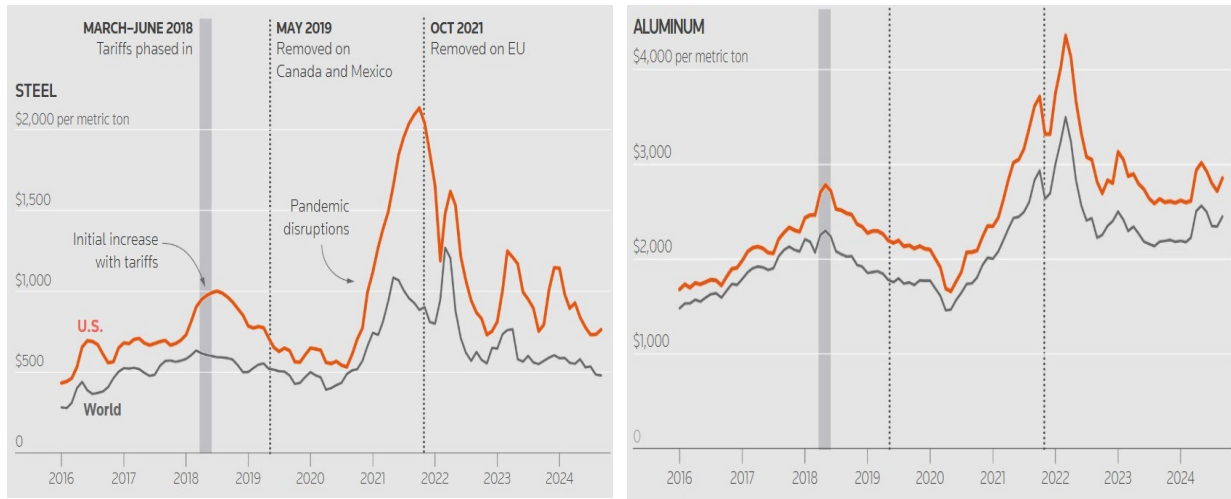
The tariffs decided by the US in 2018 were selective, targeting specific products, but significant in size. Specifically, in March of that year, tariffs of 25% on imports of steel and 10% on imports of aluminium were introduced. Some trading partners were given the option to negotiate bilateral deals. Some agreed to voluntary export restraints but the European Union, Canada, and Mexico did not and became subject to the tariffs starting in June 2018. The EU responded by opening a dispute with the WTO, joined by other countries, and imposing counter-tariffs.

The EU tariffs targeted politically and economically sensitive American goods with limited damage for the EU, including steel and aluminium products, agricultural products (e.g., orange juice, bourbon whiskey, peanut butter, and cranberries) and industrial goods (e.g., motorcycles and jeans).¹¹ The breadth of these countermeasures in terms of value was smaller than that of the tariffs imposed by the US – some USD 3 billion vs. USD 7 billion. These tariffs were implemented under WTO safeguard rules and aimed at pressuring the US to remove its restrictions.

The imposition of tariffs initially drove domestic steel and aluminium prices up by approximately 18% and 10%, respectively, before they began to decline due to various factors, including the pandemic (Chad and Russ, 2021). Despite this, US prices remained consistently higher than global levels (see **Figure 4**). Steel and aluminium production increased in the US by about 3 to 5%, but by the end of 2019, hundreds of companies across the US had filed nearly 100,000 requests for exemptions from the steel tariffs. In all, while analysts estimate that the 2018-19 tariffs may have resulted in 1,000 new jobs in steel production, they likely led to 75,000 fewer manufacturing jobs in firms reliant on steel or aluminium as input into production.

¹¹ The measure targeted iconic US brands such as Harley-Davidson, Jack Daniel's, and Levi's—symbols of American manufacturing — while having minimal impact on EU consumers.

Figure 4. Steel (left panel) and aluminium (right panel) prices, US and global, in USD



Source: [Reuters](#)

Eventually, the Trump tariffs were repealed by Biden in 2021 but replaced by other types of limitations, including quotas linked to historical export values and forms of voluntary restraints. From a free trade perspective, Biden’s regime was better than the preceding one but not ideal, also because administratively complex.

3. THE EFFECT OF TARIFFS AND TARIFF UNCERTAINTY: LESSONS FROM RESEARCH

This section reviews the main lessons from the rich body of research literature since the China-US trade tensions in 2018. We first focus on the direct impact of the tariffs imposed in that episode, with research pointing that **US tariffs led to higher prices** for US consumers and firms. As the contributions tend to focus on the industries involved (a “partial equilibrium” approach), we then broaden the view to also capture the indirect effect through other variables, such as exchange rates, (a “general equilibrium” approach). This is important as **tariffs can lead to exchange rate movements which dampen the direct impact** of tariffs. We also review the additional – and quite different – impact of **trade policy uncertainty**. We conclude with a review of recent empirical contributions that attempt to estimate the likely impact of the current phase of tariffs.

3.1. Research lessons on the impact of the 2018-2019 tariffs

The tariffs enacted by the US, along with the retaliatory moves, have been assessed at length. Amity, Redding and Weinstein (2019, 2020) look at granular evidence of import prices and quantities. They show that foreign (meaning, non-US) producers did not lower their prices in response to US tariffs but instead entirely passed them onto importing firms and consumers. This sizable increase in price led to a reduction of imported volumes, with the cost borne by US consumers through higher prices and reduced competition. Faigelbaum et al. (2020) find a similar impact on US consumers.

Cavallo et al., (2021) document an asymmetric pattern. While the tariffs imposed by the US were fully passed to US importers in the form of higher prices, US exporters absorbed some of the cost of higher foreign tariffs into their margins, a pattern mostly seen among US agricultural goods that cannot differentiate their products from foreign competitors.

Flaaen and Pierce (2019) assess the effect of the US tariffs across a broad range of industries. They find that while the protected industries saw some benefits, these were offset by cost – primarily due to more expensive inputs – in other sectors.

Among the goods affected by tariffs, steel has been particularly analysed. Hufbauer, Clide and June (2018) show that while US steel makers gain profits and increase employment, this is more than offset by losses in the industries that use steel. Cox (2022) takes a long-term view based on the steel tariffs that the US enacted in 2002-2003. She finds that this led to higher costs for firms using steel, and a loss of market share that did not revert once tariffs were undone.

3.2. A general equilibrium view

The partial equilibrium analyses just reviewed focus on the impact on specific industries, taking macroeconomic variables as given. While this approach is fine when tariffs are moderate in scope, it can be misleading when a broader range of trade flows is covered. In that case the tariffs will have effects beyond the targeted industries. In particular, since tariffs imply a competitiveness shock (as they are equivalent to a tax on imports), one can expect an endogenous reaction to other international prices, most notably the exchange rate.

General equilibrium considerations also help understand the logic of the trade policy views of the new US administration, which are well encapsulated in the following quote from the recently appointed chair of Trump’s Council of Economic Advisers, Stephen Miran: *“Tariffs provide revenue, and if offset by currency adjustments, present minimal inflationary or otherwise adverse side effects, consistent with the experience in 2018-2019. While currency offset can inhibit adjustments to trade flows, it suggests that tariffs are ultimately financed by the tariffed nation, whose real purchasing power and wealth decline.”* (Miran,

2024). Indeed, if general equilibrium effects via exchange rates and other variables are strong enough, they can lead to sizable offsetting movements.

Box 3 presents the results of a very stylized analysis of two open countries that consume both domestic goods and goods traded internationally. This analysis suggests that the relevant indirect effects can be quite substantial, especially through exchange rates. When a country enacts a tariff on imports, directly raising their price, this leads to an appreciation of its currency as an endogenous general equilibrium response to the improved terms-of-trade. The appreciation in turn reduces the price of imported goods, providing an offsetting effect. The impact on the exchange rate is even lower when some of the goods are used as input in production rather than consumption.

This offset effect, however, depends on a number of conditions. It requires first that the exchange appreciation indeed occurs. To some extent, this looks plausible looking at the appreciation of the dollar that has occurred after the November 2024 election, which might have been triggered by the expectation that tariffs would be imposed, as well as the immediate market reaction after the announcement of possible tariffs on the EU on February 26. It also requires that it promptly transmits to import prices. However, in addition, evidence suggests that import prices in the US tend to remain sluggish in dollars even when the exchange rate moves. It is therefore possible that tariffs are transmitted to import prices faster than exchange rate movements are, leaving the speed of transmission through the exchange ultimately as an empirical matter.

Box 3: Impact of tariffs through the exchange rate¹²

Tariffs affect the international allocation of demand across goods produced in different countries. This in turn impacts international relative prices, such as the exchange rate, leading to indirect effects that can be substantial.

We analyse this within a simple model that includes two countries (called Home and Foreign) and four goods: two that are traded internationally (one of which is produced in each country) and two that are consumed only in the country where they are produced. The purpose of this very simple framework is to highlight how the indirect effect through exchange rates affects the impact of tariff. We consider a situation where tariffs are permanent and all prices are flexible, so our analysis can be interpreted as a “steady state” approach, abstracting from any dynamics that occur in the short run when prices take time to adjust. We first present baseline results where outputs are given, and then discuss an extension where production uses imported inputs.

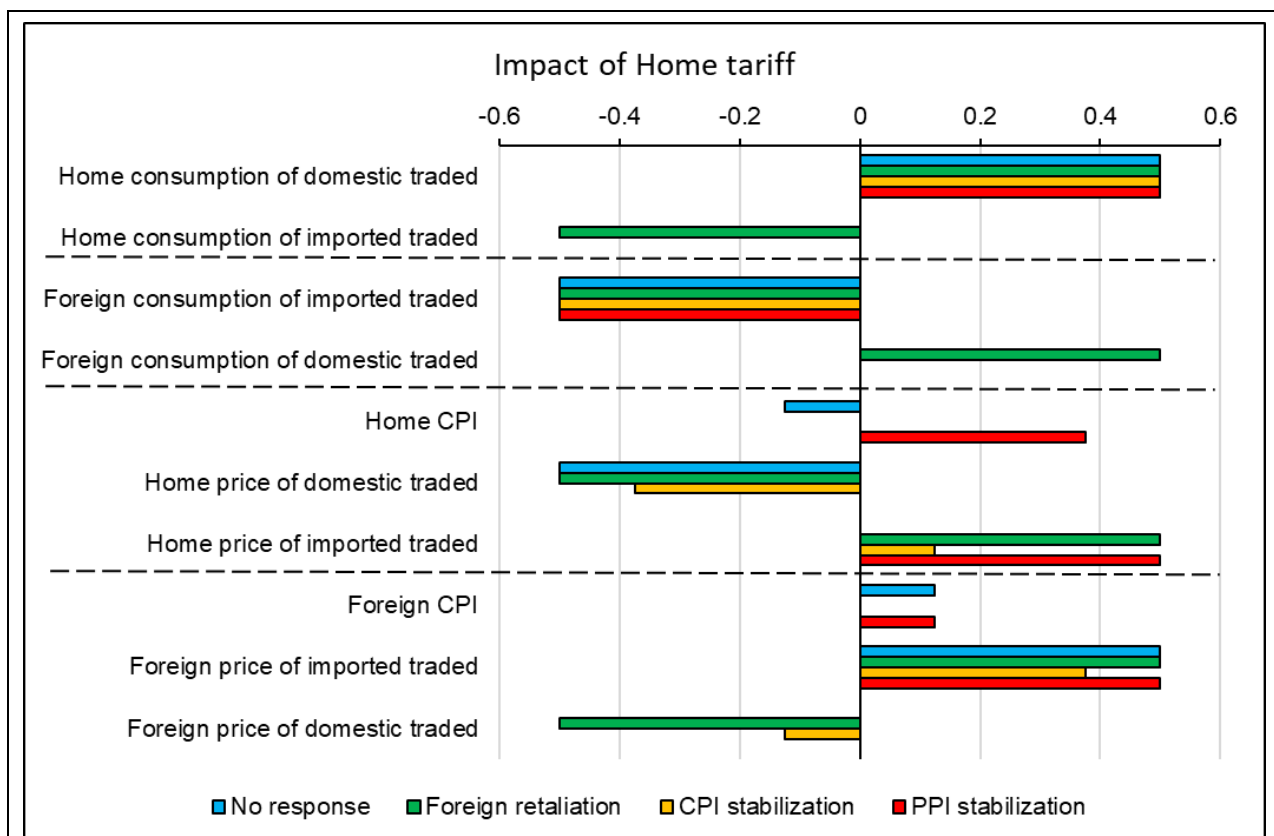
The imposition of a tariff by the Home country leads to an improvement of its terms-of-trade (a higher price for the traded good it produces than for the one it imports, before tariffs) and an appreciation of its currency both in real and nominal terms. Intuitively, the tariff raises the consumer price of the imported good in the Home country, leading the consumer there to shift demand towards the domestically made traded good. As the overall quantity of each good is set, this must be mirrored by a shift in the other direction by the consumer in the Foreign country, a shift that necessitates an increase in the price the Foreign consumer pays for the Home produced good (note that while the Foreign produced good is now cheaper for the Foreign consumer, the opposite is true for the Home consumer as the good is subject to a tariff when shipped to the Home country). This adjustment in prices is the improvement of the terms-of-trade, which translates into an appreciation of the currency through the adjustment of the trade balance. Specifically, the improvement in the terms of trade in the Home country raises the value of its exports above that of its imports, everything else equal. Rebalancing international trade flows requires an offsetting adjustment in the quantities of trade (a reduction of real Foreign imports and of Foreign consumption). World consumption then shifts towards the Home

¹² Please note that the technical features of the model are available upon request from the authors.

country, where the tariff has been enacted. This increase in overall Home consumption raises the demand for money and leads to an appreciation of the Home currency if the central bank does not react. The tariff thus ultimately moves the exchange rate, and this indirect effect can materially affect the overall impact because the appreciation of the Home currency reduces the Home price of the imported good, going against the direct effect of the tariff. While our reasoning is undertaken assuming unchanged production, Jeanne and Son (2021) obtain an appreciation via the central bank's reaction to a contraction in output.

We illustrate the effect of an increase of the Home tariff in the Figure below, looking at the impact of a 1 percentage point increase in the Home country's tariffs (the figure is done solely for illustration, and the numbers – which denotes percent changes, so 0.4 indicates a 0.4% increase – should not be seen as calibrated effect for the European economy). **We contrast four cases depending on the policy response:** an absence of response (blue bars), a retaliatory Foreign tariff (green bars), a monetary policy in both countries that stabilizes the consumer price index (yellow bars), and a monetary policy that stabilizes the producer price index, that is the price of domestic traded goods (red bars). Before turning to the figure, we point that regardless of the monetary policy reaction, the Home tariff improves the country's terms-of-trade and appreciates its currency in real terms. The nominal exchange rate also appreciates, but by less when the Home central bank takes an expansionary policy. A retaliatory tariff fully offsets the impact on the terms-of-trade and real exchange rate.

The top half of the Figure shows the impact on the various components of the consumption basket, while the bottom half presents the effect on prices. The Home tariff always leads to a reallocation of consumption of the Home made good, away from the Foreign consumer towards the Home consumer. The Home tariff lowers the price paid by the Home consumer for the domestic traded good, and raises the price paid the Foreign consumer for that same good. The tariff is thus deflationary in the country where it is enacted (Home) as the exchange rate movement more than offsets the direct impact of the tariff on the import price, and inflationary in the other country (Foreign). Surprisingly, the price paid by the Home consumer for the imported good does not change, even though it is that very good that is subject to a tariff. While the direct effect of the tariff is to raise the price, but this is offset by the indirect effect through the appreciation of the Home currency which lowers import prices.



Monetary policy can stabilize prices, aiming either for the CPI (yellow bars) or the domestic producer price index (red bars). In either case **the Home central bank takes an expansionary stance**, especially when it wants to stabilize the domestic PPI which has been lowered by the tariff. The central bank can, however, not achieve full stabilisation, which simply reflects the fact that a tariff leads to a movement in the relative price of various goods within a country that is hard to offset through an aggregate policy such as monetary policy. Specifically, if central banks stabilize the overall consumer price index (yellow bars in the Figure), they do not stabilize each component. The Home central bank takes an expansionary stance which limits the appreciation of the Home currency, and the decrease in the price of the domestic traded good in the Home country. The policy also translates in an increase in the price of the imported traded good in the Home country, as well as in the price of the non-traded good (not shown for brevity).

The analysis above assumes that the production of the various goods is in the form of set endowments. However, trade consists largely of goods that are not intended to be directly consumed, but instead used as inputs in the production of other goods. We therefore consider an extension where the production of each traded good relies on a given labor amount, as well as domestic and imported traded goods used as inputs. **The presence of imported intermediate goods opens another transmission of tariffs through the cost of production** of firms. Our model however points that **the conclusions of the analysis are robust to the inclusion of imported inputs**, and if anything even magnified. Tariffs do raise the cost of producing traded goods, which translates in an equal reduction of output in each country. This reduction in the supply of good is fully match in a reduction of the demand for the goods for use as inputs. There is therefore no adverse impact on the quantity of goods available for consumption overall. There is however an impact on the allocation of that same quantity of consumption across countries. Specifically, **the presence of intermediate inputs amplifies the nominal and real exchange rate movements**. The stronger appreciation of the Home currency, compared to the baseline case, to a larger decrease in the Home price level, and a larger increase in Home consumption and the expense of the Foreign country. Another consequence is that the stabilization of either CPI or PPI requires a larger monetary expansion in Home and a larger contraction in the Foreign country.

The appreciation of the dollar as a result of tariffs is specifically discussed by Miran (2024), who points to the depreciation of the Chinese renminbi during the 2018-2019 tariff tensions. The exchange rate effect similarly features in the simulations of McKibbin and al. (2024). Looking beyond the US-EU interaction, the exchange rate movement opens another channel through which US tariff policy could affect other countries, including the ones that are not targeted by the tariffs. Given the prominent role of the dollar in international financial transactions, a broad appreciation of the currency translates into more challenging funding conditions for many emerging economies, increasing global financial risks. Furthermore, the countries who have opted to peg their currency to the dollar would face an appreciation vis-à-vis non-US trade partners that could deteriorate their external balances (Brooks 2025).

Several papers have assessed the macroeconomic impact of tariffs using richer settings than the one presented in **Box 3**. Boer and Rieth (2024) analyse the impact of tariffs in a two-country general equilibrium model. They find that a country implementing a tariff experiences an appreciation of its exchange rate and an improvement of its terms-of-trade, consistent with our simple framework. Initially, the tariff lowers the producer price index, but raises the overall price index. This inflationary pattern reflects that the tariff acts as an adverse supply shock by making imported inputs more expensive and reducing production. Furceri et al. (2018) analyse a broad panel of countries and also find that tariffs lead to an exchange rate appreciation and a contraction in economic activity.

Jeanne and Son (2024) analyse the effect of a tariff on the exchange rate, both theoretically and in light of the experience of the US-China trade war. Their framework considers that prices react with a delay, and that the central bank stabilises the CPI inflation. They show that a tariff on imports is partially offset by an appreciation of the currency, with the calibration of the model indicating a 30% offset. Tariff raises the local demand for the domestic good, as consumers switch away from imports, but reduces the supply (unlike in **Box 3**) as expensive imports reduce the purchasing power of labour. The appreciation of the currency results to rebalance the market for the domestic good. The extent of the exchange rate adjustment depends on the reaction of the central bank (which raises the interest rate), on whether the tariff is expected or not and on the sensitivity of trade flows to prices (with a larger appreciation when imports are price sensitive). They show that news pointing to a future increase of US tariffs leads to a rapid appreciation of the dollar.

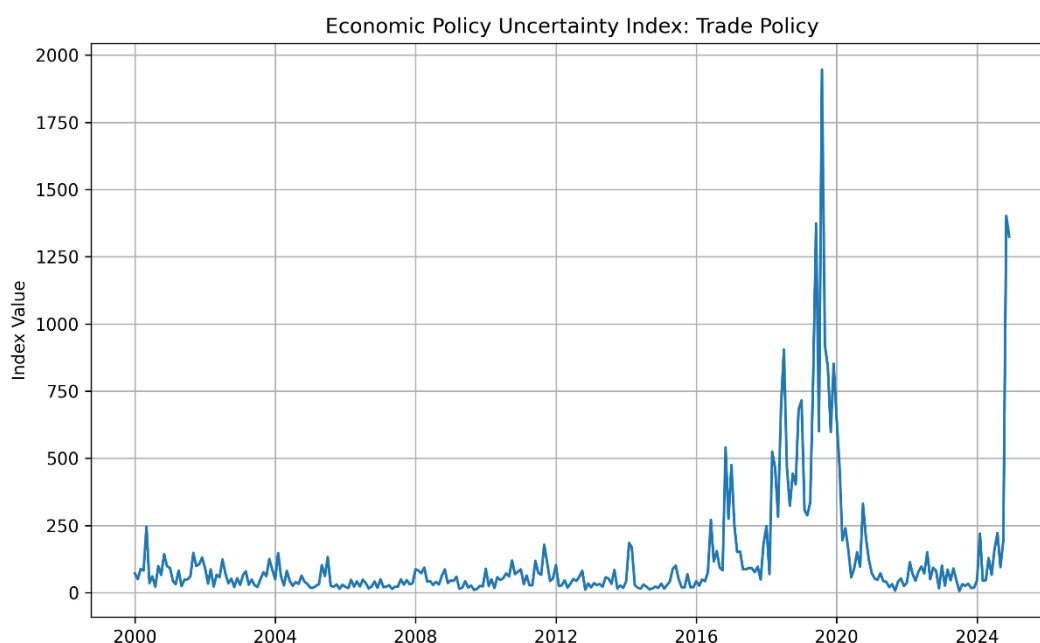
Bergin and Corsetti (2024) assess the monetary policy dimension following a tariff in a more complex setting that includes global value chains, which opens an additional channel as an import tariff raises the cost of imported inputs and weighs on domestic economic activity. They first point out that a tariff should not be seen as just a usual adverse supply shock. The reason is that a supply shock raises the price of an exporter, leading him to want to increase its sale price. A tariff, on the other hand, raises the price that the exporter's foreign customer faces, leading the exporter to want to lower the sale price to absorb part of the tariff in his margin. As monetary policy should aim at stabilising the producers' sale price, where the price friction is, a tariff calls for an expansionary policy in the country that suffers the tariff, while a supply shock calls for a contractionary policy. This stabilisation of producer prices is efficient, even if it leads to volatility in the consumer price index. The authors show that when all countries adopt tariffs, the central bank should take an expansionary stance to limit the downward pressure on producer prices. If only one country adopts a tariff on imports, the optimal policy mix is a contractionary monetary policy in that country (as it experiences inflation and higher GDP) and an expansionary policy abroad (where consumer inflation increases and GDP contracts), a policy mix that appreciates the currency of the country where the tariff takes place. The optimal policy pattern in that richer model (tighter monetary policy in the country imposing a tariff) differs from the simple setting of **Box 3** because the presence of imported inputs raises the inflationary consequence of the tariff in the country that imposes it.

3.3. Impact of trade policy uncertainty

The impact of *trade policies* should not be confused with that of *trade policy uncertainty*, in other words of the *lack of knowledge* of what trade policy is going to be. The two act through different channels and have different effects. That said, there can be a link between the two, because certain trade policy actions and the announcements thereof can also increase the uncertainty about future trade policy moves. This link seems to be particularly relevant now, as already explained in the introduction.

Trade policy uncertainty has substantially increased under the Trump administrations, past and present, as shown by the uncertainty index of trade policy which has now surged back to the heights seen during the US-China tariff tensions (**Figure 5**). The implementation of tariffs in 2018-2019, and in the current phase, has taken place in a context of substantial uncertainty surrounding trade policy. Importantly, the figure shows that trade policy uncertainty currently stands at a level not too distant from that of 2019.

Figure 5. Trade Policy Uncertainty Index



Source: FRED.

Trade policy uncertainty is a particular case of general uncertainty, a phenomenon studied extensively in the economic literature²³. Most empirical analyses have found that uncertainty is contractionary: as uncertainty increases, economic agents tend to reduce spending especially on investment (see for example the seminal work of Bloom, 2007). The effect of trade uncertainty is no different. Caldaro and al. (2020) find that firms most exposed to uncertainty about trade policy opt to reduce their investment, a pattern also documented by Hassan and al. (2019) in a broader context. It is conceivable that the contractionary effect of this type of uncertainty is symmetric, i.e. they affect both trade partners.

Correa and al. (2024) find that uncertainty also affects bank lending. In uncertain times, banks step back from lending to firms that have a geographical and / or sectoral export pattern making them exposed to potential future tariffs. This “wait and see” attitude of lenders in a context of uncertain tariff policy adds to the challenges faced by exposed firms, in the form of tighter funding conditions.

²³ We ignore here the distinction between risk and uncertainty, emphasised by Keynes and others, and simply consider uncertain as synonymous of absence of deterministic knowledge.

Adding to complexity, policy uncertainty may also affect trade and economic performance through indirect channels. For example, Boer and Rieth (2024) find that heightened uncertainty in a country's policy weakens its currency, and worsens its terms-of-trade, while an actual tariff has the opposite effect. Uncertainty also raises both producer price and consumer price inflation.

3.4. Looking forward: the impact of the next wave of tariffs by the US

This section contains a short summary of empirical estimates of the effects of tariffs potentially imposed by the second Trump administration. Some of them precede the November 2024 election, and are based on information that emerged during the campaign; others are more recent and reflect first steps or announcements of the new administration.

McKibbin et al. (2025) estimate that Canada and Mexico are particularly exposed to US tariff policy. A 25% tariff on these two countries lead to a moderate GDP contraction in the US (less than 0.3%), but sizable ones in Canada (-1% of GDP) and especially in Mexico (between -1.5 and -2%) which has few options for reorienting its exports. The imposition of 10% tariffs on China – with retaliation – would lower US GDP by less than 0.1% and Chinese GDP by 0.2%. CBO (2024) estimates that a 60% tariff on China and 10% on other countries would reduce US economic activity by 0.6%. NIESR (2024) finds a larger effect of the same tariff package, with US GDP contracting by 1.3% to 1.8%.

Barbiero and Stein (2025) consider the inflationary impact. They estimate that tariffs on Canada and Mexico can add between 0.5 and 0.8 percentage points to US inflation. This reflects the presence (directly or not) of imported goods in the US consumption baskets, of which they account for 10%.

Saussay (2024) considers the impact of a tariff package of 10% on all countries, 60% on China, and 100% on all car imports. The recessionary impact is sizable for the US and China (-0.64% and -0.686% of GDP, respectively) but much more moderate for Europe overall (-0.11%). Within Europe, Germany would be more affected due to its exposure to automobile tariffs.

Caixabank (2024) notes that European exposure to US tariffs is quite heterogeneous across European countries, with Ireland being particularly exposed, and sectors, with a large orientation of the chemical and equipment industries towards the United States.

4. THE IMPACT OF EXTERNAL CONDITIONS ON THE ECB MONETARY POLICY

We now turn our focus to the implications for monetary policy. We first consider the extent to which the ECB has historically reacted to external conditions in this section, and then wrap up the arguments by presenting some “reasoned conjectures” on the potential effect of US tariffs on the ECB monetary policy in the next section.

To preview our conclusions in this section, we find that external influences, such as the balance of payments and the exchange rate, have exerted little or no direct influence on the ECB monetary policy in the recent years – meaning, separate from their indirect influence via domestic conditions¹⁴. Moreover, a change seems to have taken place around the time of the global financial crisis. In particular, there were significant co-movements between the policy rates in euro area and the US in the early years of the euro, with a lag suggesting that the ECB tended to follow the monetary policy by the Fed. By contrast, after the global financial crisis the two monetary policies have shown a clear tendency towards “decoupling”.

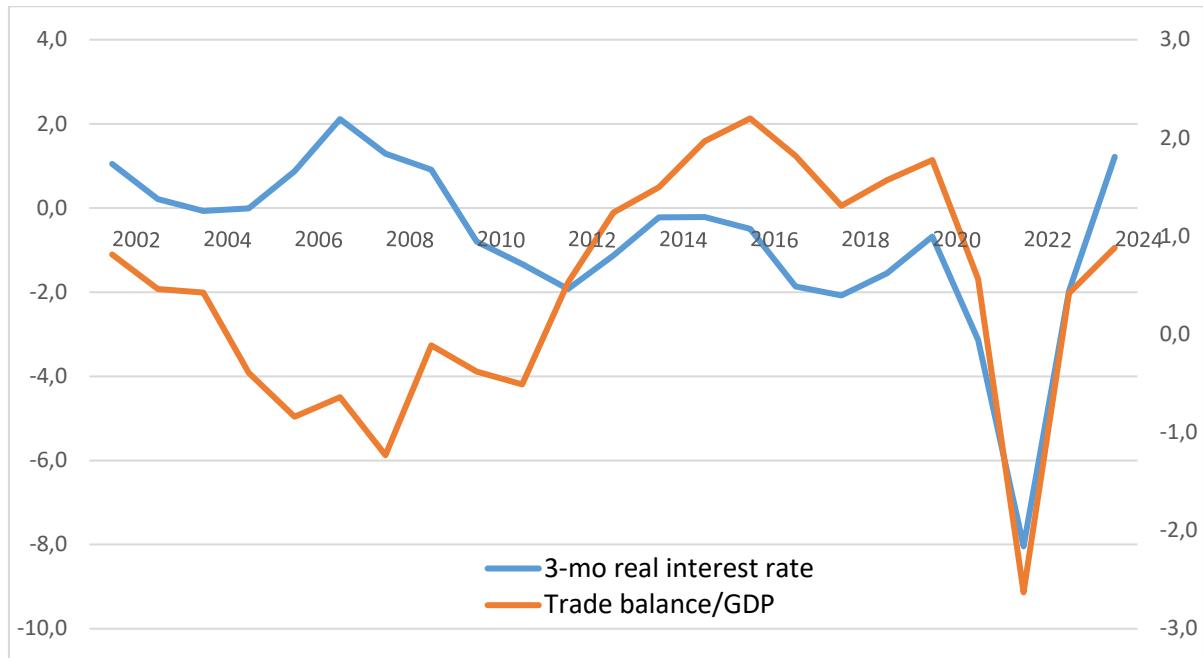
4.1. Does the ECB respond to the euro area’s external balance?

In principle, there is no reason why economic conditions in the rest of the world, like trade and exchange relations with the rest of the world or foreign countries’ monetary policies, should have an influence on the ECB monetary policy. The goals and instruments of the ECB as described in the Treaty make no reference to the external environment as a factor affecting the ECB policies. Monetary policy is geared to price stability, a domestic condition. The so-called “secondary objectives” mentioned in Art. 127 & 3 of the Treaty also pertain to domestic conditions. This is, however, an oversimplification. If the outside environment affects domestic economic conditions, as to some extent it does because the euro area is open to the rest of the world, external conditions influence the ECB indirectly. The influence can even become direct in this case if the ECB anticipates the effect of the external factors and acts upon them pre-emptively. Once expectations are factored in, direct channels of influence are always hard to distinguish from indirect ones.

As a first pass at the data, we examine at whether monetary policy was affected by two key variables that measure the euro area’s external balance, namely the trade balance (goods only) and external competitiveness (proxied by the real exchange rate). The trade balance is preferable to the current balance for our purpose because focus of the US administration and rhetoric normally focused on defending US goods producers – manufacturers especially – from foreign competition.

Figure 6 shows the trade balance between the euro area and the rest of the world (% of GDP, red line and right vertical scale), and the stance of ECB policy in the form of the 3-month money market rate deflated by HICP inflation, in % (blue line, left vertical scale). While the 3-month money market rate is not directly controllable by the central bank, it is a meaningful measure of the policy stance including also the expectations of policy changes over the next quarter.

¹⁴ As the ECB had repeatedly noted, for example, exchange rate changes are not cause of policy adjustments per se, but only to the extent they change the prospects for price stability in the medium term. That said, the ECB monetary policy was more sensitive to the exchange rate in the early years of the euro than it has been in the more recent times, as shown later on in this section.

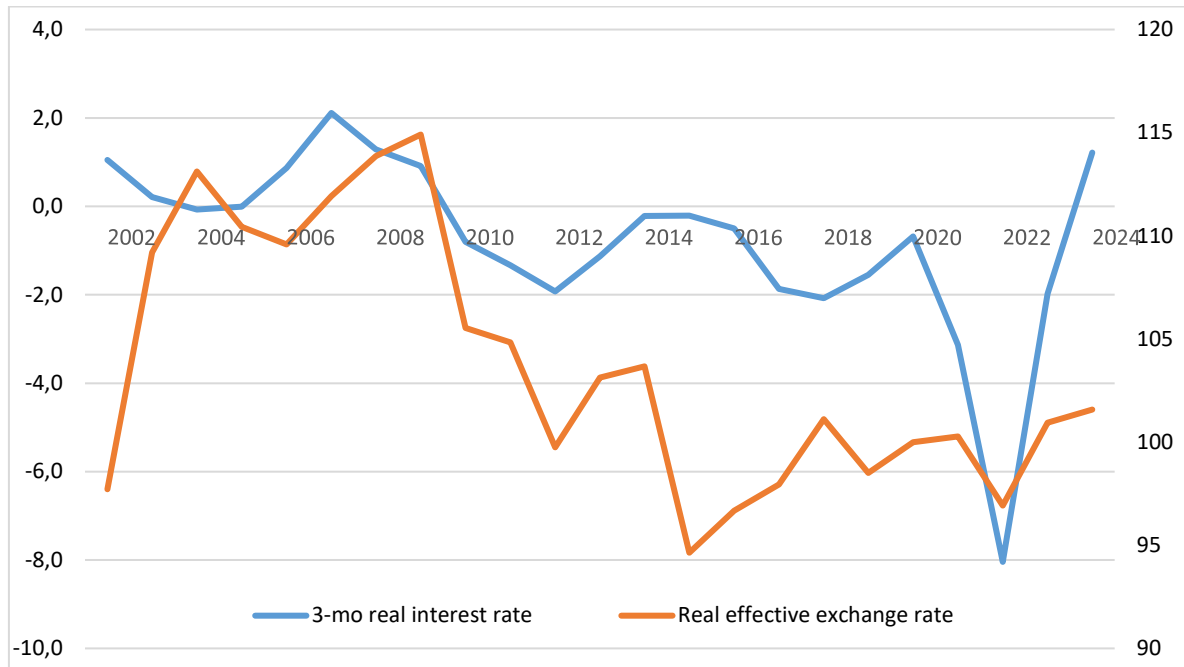
Figure 6. EA real interest rate (% , left scale) and trade balance (% of GDP, right scale)

Source: AMECO and FRED.

Figure 6 suggests that a change may have taken place in the relation between these variables, around the time of the global financial crisis (2007-2008). The increase in the real interest rate in 2004-2006 was matched by a worsening of the trade balance, with the changes reverting in subsequent years. The worsening of the external balance may have been a factor behind the monetary policy tightening (more explanations below). In the second period, particularly after 2012 (the year of Draghi's "whatever it takes speech"), the correlation between changes and higher levels of the real rate are associated with (more) positive trade balances. The sharp drop in 2022 is spurious as trade was disrupted in that year by the sanctioning regime following Russia's invasion of Ukraine and the real interest rate collapsed due to the increase in inflation. Nonetheless, a positive association is visible also outside that year, which may be rationalised by the existence of a reverse causation, or the influence of third factors. One possibility is that the deflationary risks emerged after the global financial crisis may have caused both low inflation (hence high real rates) and a slowdown of imports relative to exports, hence an improvement in the trade balance. The year 2024 would represent the end of both tendencies.

Figure 7 shows again the 3-month real rate (blue line, as in Figure 5) along with the real effective exchange rate (red line, right vertical axis, expressed so that an increase is a depreciation of the euro). Both variables are expressed in real terms using the consumer price index. The relation here is much less clear than in Figure 5. There is some indication of a downward trend, with substantial fluctuations around it. A decline of the real interest rates (more expansionary policy) is matched by a gradual appreciation of the euro (interrupted, however, after 2015).

Figure 7. Real interest rate (left scale, %) and Real effective exchange rate (right scale, index 2000=100)



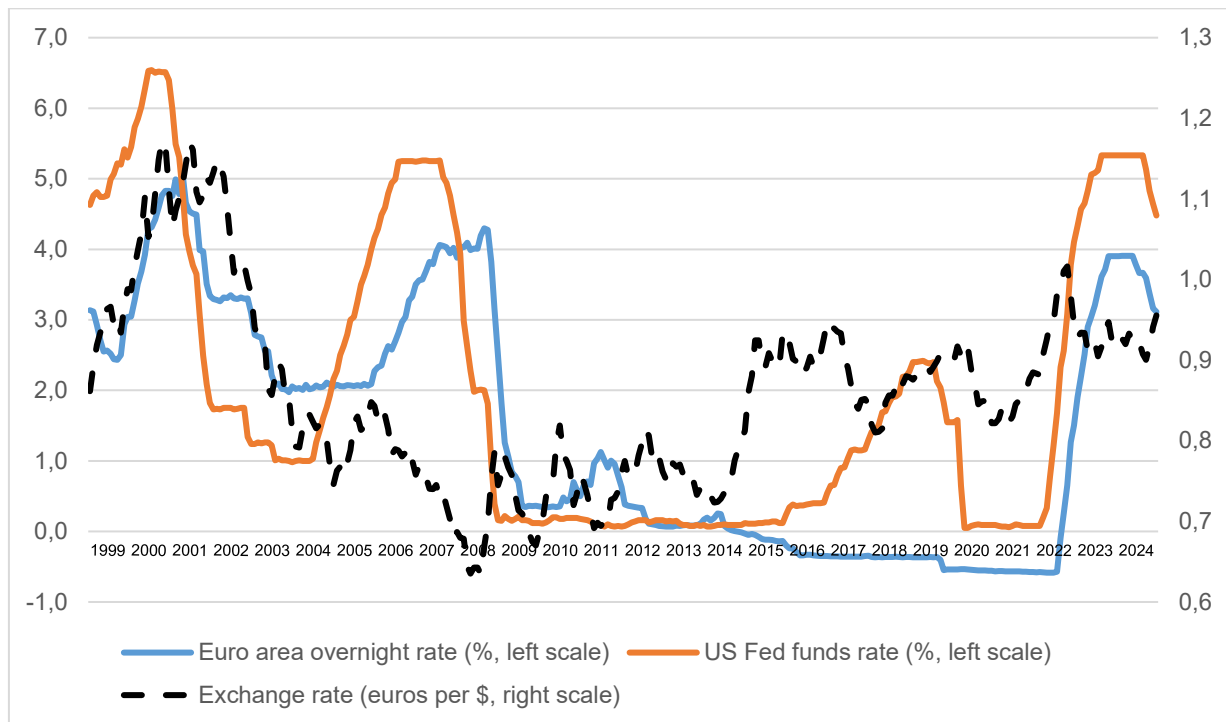
Source: FRED.

All in all, the two Figures suggest that external factors did not exert a systematic effect on euro area monetary policy and conditions, especially in the more recent period. Though, with a caveat which is represented by the fact that in most of this period, nominal interest rates in the euro area were constrained by the “effective lower bound”. The interest rate therefore does not constitute a sufficient proxy of the policy stance, which was influenced by an additional factor: the liquidity supply under quantitative easing, or QE³⁵.

4.2. Is the ECB influenced by monetary policy in the US?

While **Figure 6** and **Figure 7** focused on the policy stance of the ECB alone, **Figure 8** compares its policy stance with that of the Fed, as the exchange rate reflects the combination of the two. Specifically, the Figure displays the policy rates of the Fed (red line) and the ECB (blue line), along with the nominal exchange rate between the euro and the dollar (with an increase indicating a depreciation of the euro). It reveals a number of interesting insights.

³⁵ As explained in Angeloni (2024), when the short-term interest rate is bound by its effective lower bound, and QE is used to expand monetary policy further, the actual monetary policy stance is a complex combination of the interest rate level and other “unconventional” monetary policy actions (asset purchases, forward guidance). What can be said for certain in that situation is that the stance is more expansionary than portrayed by the short-term interest rate alone.

Figure 8. Euro area and US: central bank rates and exchange rate

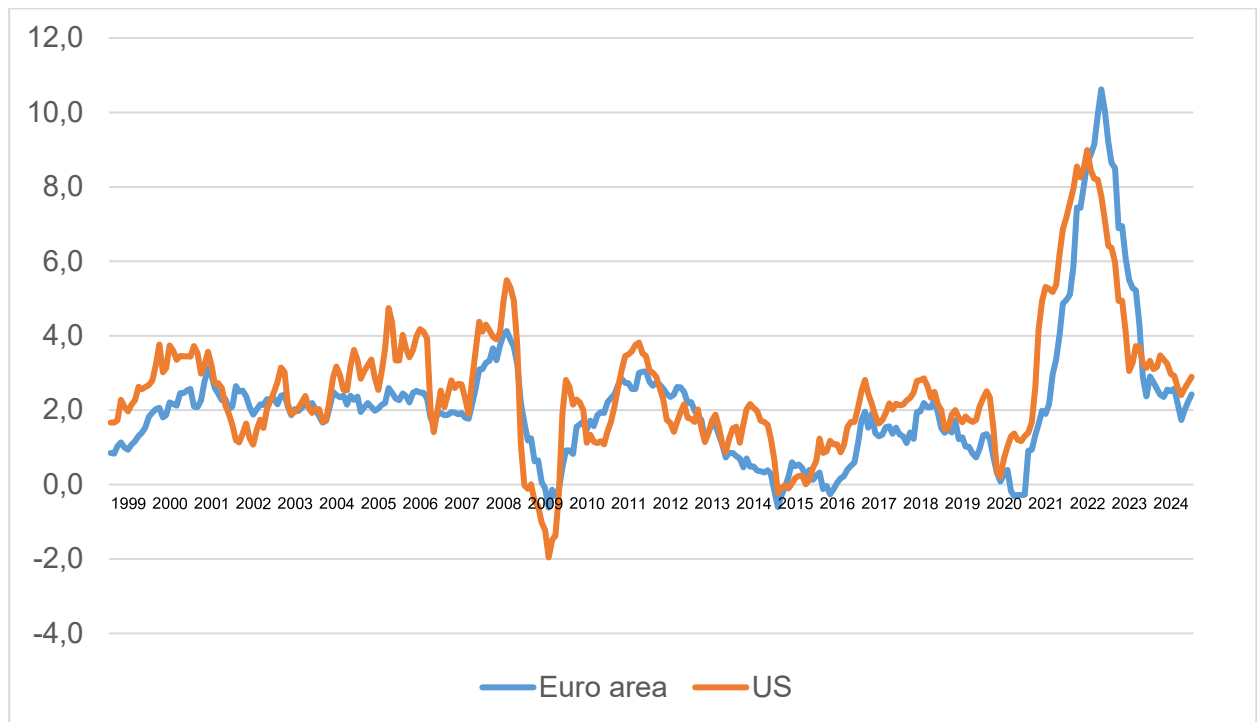
Source: FRED.

The period from the start of the euro (1999) to, roughly, the global financial crisis is characterised by large interest rate fluctuations in both areas, with rate adjustments by the ECB systematically following the Fed's by a few months. The weakness of the euro after 2000, which caused significant concern in the Eurotower (Hartmann and Smets, 2020), was countered by raising the euro interest rate above the US Federal funds rate. In 2007-2008 the ECB seems to have underestimated the risk of the impending crisis, hence allowing its interest rate to climb further, before cutting precipitously in the autumn of 2008, after the Lehman failure.

In the subsequent period, the relationship changed: euro area monetary policy started decoupling from the US one. While the Fed started a multi-year period of near-zero rates, keeping the value of the dollar down, the ECB initially raised rates in the summer of 2011, but subsequently brought them back down after the euro area was hit by the euro sovereign crisis. After 2014, the decoupling became more marked in the opposite direction: the Fed tightened sharply until 2019, whereas the ECB brought rates below zero and kept them negative for several years. In 2019, the US-euro area interest differential reached a historical peak at 2.79%. The euro started depreciating again, starting a trend which essentially lasted until today.

In the COVID-19 pandemic period, the ECB kept its policy (deposit facility rate) rate at minus 0.5%, whereas the Fed funds rate stayed always above (but close to) zero. After inflation increased in the two areas in 2021 (Figure 9), the ECB mirrored the movements of the Fed's rate again, but with a lag and at a much lower level. Although in this period the two interest rates comoved to a large extent, we judge that the decoupling phase continued, with monetary policies in both areas geared exclusively on domestic conditions (inflation in particular) and likely also due to different estimates of the neutral rate and assessments about the appropriate stance of policy.

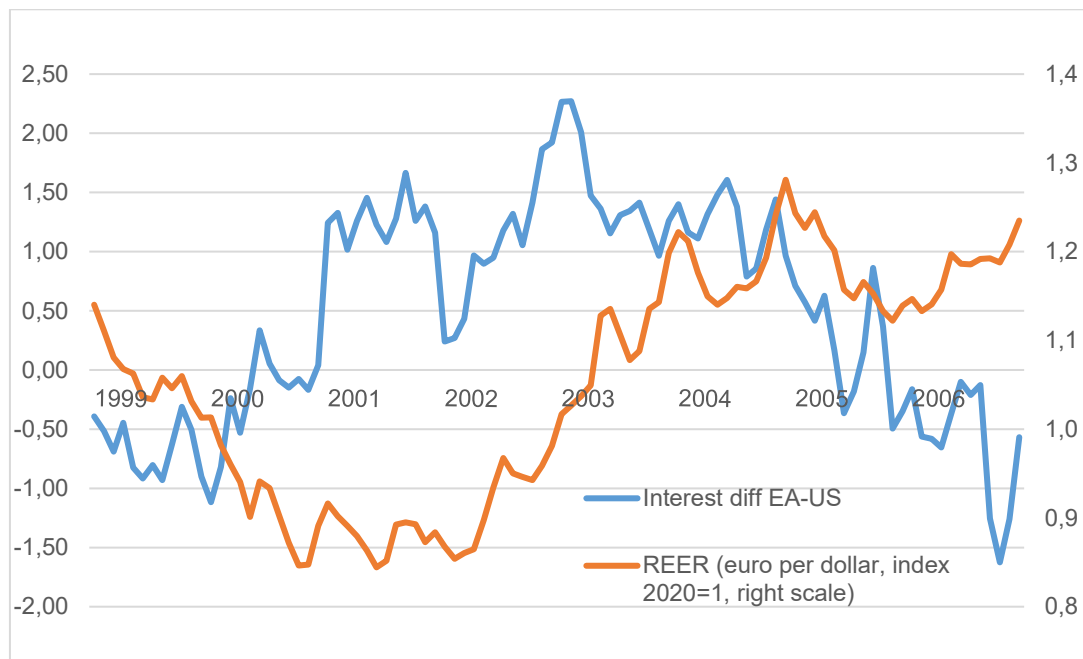
Figure 9. Inflation rates in the euro area and the US, in %



Source: FRED.

All in all, the data confirm the earlier assessment that the global financial crisis marked a break in the relation between the policy conducted by the two central banks, with a lesser role attributed to external factors in influencing ECB policy.

Figure 10 and **Figure 11** take a closer look of the relative policy stance and competitiveness. The former is measured by the difference between the euro area and US 3-months real interest rates (blue line, with an increase indicating a higher interest rate in the euro area). Competitiveness is measured by taking the real effective exchange rate (REER) in each area, and computing the ratio of these (red line, with an increase indicating a worsening of European competitiveness as the euro appreciates by more in real terms against the euro area trading partners than the dollar does against American trading partners).

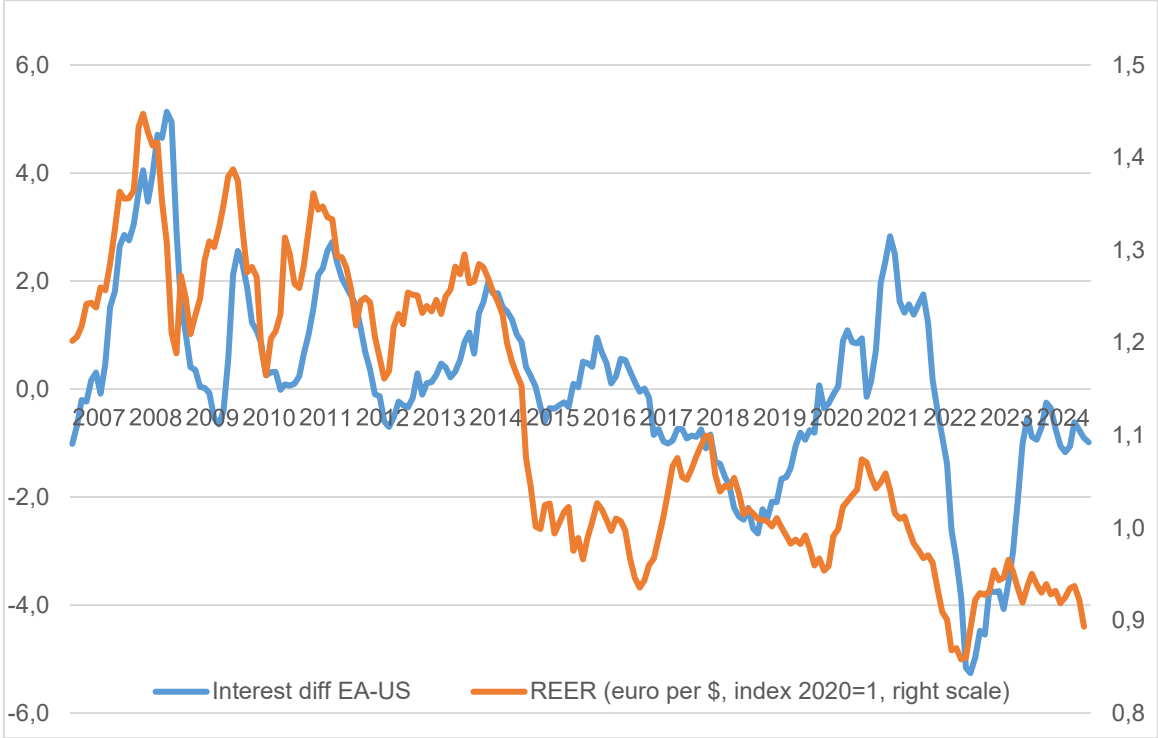
Figure 10. Short-term real interest differential and real effective exchange rate, euro area-US, in %

Note: Real 3-month interest rate euro area-US differential. Period refers to the pre-global financial crisis.

Source: FRED.

In the pre-crisis period (Figure 9) an improvement of the euro area competitiveness due to an appreciation of the dollar is followed with some lag by a tightening of monetary policy (this the link between exchange rate developments and monetary policy is described in Hartmann and Smets 2018 and Angeloni 2024). This cycle comes to a conclusion around 2005-2006 when the relative competitiveness of the two areas returns to the initial level. The relation is quite different after 2007 (Figure 10). First, fluctuations of the real interest differential are much larger (range of oscillation over 10%) than in the first period (around 4%), denoting more decoupling. Second, the relation between the two curves becomes positive: ECB policy tightens when euro area competitiveness worsens. One conjecture is that causality may have been inverted, going from monetary policy to exchange rate and competitiveness. However, there are major deviations from this pattern. After 2015, the dollar appreciation preceded the post-crisis tightening of US monetary policy which was not followed by the ECB: the ECB maintained its rates below zero in this period. After the COVID-19 pandemic, the relation is still positive but with large fluctuations.

Figure 11. Short-term real interest rate differential and real effective exchange rate, euro area-US, in %



Note: Real 3-month interest rate euro area-US differential. Period refers to post-global financial crisis.

Source: FRED

To conclude, our examination of the data suggests that external factors have played a decreasing role in the formulation of ECB policy over the years. A turning point seems to have been marked by the financial and euro sovereign crisis. Before, especially in the early years of the euro, the ECB was responsive to changes in external conditions. In particular, the dollar’s appreciation in 2000-2002 seems to have been an important influence. After 2011-2012 the ECB focused exclusively on domestic conditions – the risks of recession and deflation until 2022, and the rise in inflation thereafter. In this latter period, causality may have been rather reversed, running from monetary policy to the exchange rate and external competitiveness.

5. THE IMPACT OF US TARIFFS ON THE EU AND ITS MONETARY POLICY: SOME REASONED CONJECTURES

Our survey of the literature and analysis in section 3 suggest that a key factor determining the possible impact of the US potential tariffs is the effect it may have on the exchange rate. From the viewpoint of US importers, a tariff is equivalent to a depreciation of the dollar: imports become more expensive due to the tax accruing to the government. If the dollar appreciates in response to it, the effect is compensated and domestic importers experience a lesser increase in costs or none at all. In this case, it is foreigners who face an increase in the cost of all imports (due to the depreciation of the domestic currency). For this reason, one can say that the inflationary effect of the tariff is “exported”.

Econometric estimates of the possible effects of Trump 2.0 tariffs, reviewed above in this paper, are in line with this result: a new tariff or an increase of an existing one by the US tends to appreciate the dollar. Plausibly, the appreciation of the US dollar already observed since the presidential election (early November 2024) was due also to the expectations of new tariffs, even though other factors may have contributed as well.

Besides the Fed response, the final impact will depend, as mentioned already, on whether the foreign country (euro area in this case) retaliates. To a first approximation, the effects of the “counter-tariff” are symmetric and opposite, so that the final effect is the combination of the effects of the initial action and the counteraction(s). Changes in output (negative) and inflation (positive) normally cumulate in both countries.

Table 3 offers a concise exposition of some reasoned conjectures of the effects of a US tariff on the euro area and the US economy, depending on whether the US dollar appreciates and to what extent (low or high), and on whether there is retaliation by the EU.

Table 3: Conjectured effects of a tariff by the US on euro area exports

| | Euro Area | | | | | US | | | | |
|---|---------------|--------------|-------------------|-------------|----------------|---------------|------|-------------------|-----------------------|-----------------------|
| | Trade balance | GDP | REER | Inflation | Interest rates | Trade balance | GDP | REER | Inflation | Interest rates |
| No retaliation, little or no NER effect | Worsens | Down | Mild depreciation | Down mildly | ? | Improves | Up | Mild appreciation | Up | Up |
| No retaliation, significant NER effect | ? | Falls mildly | Depreciation | Up | Up | ? | ? | Appreciation | Mildly up or constant | Mildly up or constant |
| Retaliation, little or no NER effect | ? | Down | ? | Up | Up | ? | Down | ? | Up | Up |

Notes: NER: nominal exchange rate, REER: Rear effective exchange rates.

Source: Authors' elaboration.

The first row refers to the case in which there is little or no exchange rate effect and no retaliation. One expects the euro area trade balance to worsen in this case, or its surplus to shrink, and the euro area GDP to decline because foreign demand declines. If the nominal exchange rate is essentially unchanged, the euro area real exchange rate depreciates gradually and marginally, due to the increase of US inflation. We would expect the increase in euro area inflation to be small in this case. The ECB may reduce interest rates to contrast the decline of aggregate demand, but any such change should be mild. The divergence of monetary policy (measured by nominal short-term rates) between the US and euro area would increase in this case, because of the interest rate rise by the Fed not being matched by a similar increase in the euro area.

If the US tariff leads to a significant nominal appreciation of the dollar (second row), the effect on the trade balance and euro area GDP becomes more uncertain, as demand shifts from the US to the euro area dampens the first-round effect. By contrast, the upward effect on euro area inflation is more significant, leading the ECB to raise interest rates. The divergence of monetary policy relative to the US is reduced in this case, as the nominal interest differential between the two areas narrows.

In the third row, the tariff is followed by retaliation by the EU. We conjecture that in this case, there would be little or no effect on the exchange rate (or better: the effect is hard to predict, maybe leading to exchange rate volatility), because any potential initial appreciation of the dollar is counterbalanced by the effect of the retaliation. However, the possibility of a “trade war” would increase uncertainty on both future trade policies and monetary policy moves. The effect of uncertainty is unambiguously contractionary in both areas, probably more in the euro area because of its greater openness coupled with economic and financial fragility (lower growth, financial fragmentation, institutional constraints and perhaps also geopolitical risk). The impact of tariffs applied by both areas would be inflationary in both areas. Risk aversion would reduce the propensity of investors and consumers to spend. Stagflation would lead to a deteriorated economic scenario in both areas, more than in either case considered earlier.

6. CONCLUSION

The reader expecting clear-cut predictions and prescriptions on how the ECB should act, reactively or even pre-emptively, may be disappointed at this stage, as no definite indications can be given, lacking sufficient information on the nature and extent of US trade policy actions and the prospective retaliation by trading partners, including the EU itself.

Based on theory and experience especially that of the tariffs imposed in 2018 by the first Trump administration we can nonetheless make specific points. It appears reasonably certain that the direct impact effect would be inflationary in the United States, and contractionary and deflationary in Europe. This conjecture however may be disproved if the US dollar appreciates significantly, as some theories predict and as indeed it happened in recent months. In this case, the inflationary effect of the US would be exported and the euro area may experience an inflationary shock. Such effect would of course be compounded in case the EU decided to retaliate in response to the US actions.

We judge the monetary policy strategy of the ECB, which consists of targeting a medium-term inflation rate of 2% with symmetrical tolerance up and down, based on (quoting President Lagarde) an *“assessment of the inflation outlook in light of the incoming economic and financial data, the dynamics of underlying inflation and the strength of monetary policy transmission”*, as still adequate in the foreseeable circumstances. The ECB should be mindful of the risk of both upward and downward shocks to inflation, and be ready to respond timely to maintain price stability in the medium term.

REFERENCES

- Amity, Mary, Stephen J. Redding, David E. Weinstein (2020). "Who's Paying for the US Tariffs? A Longer-Term Perspective", AEA papers and proceedings 110 <https://www.aeaweb.org/articles?id=10.1257/pandp.20201018>
- Amity, Mary, Stephen J. Redding, David E. Weinstein (2019). "The Impact of the 2018 Tariffs on Prices and Welfare", Journal of Economic Perspectives 33(4) <https://www.aeaweb.org/articles?id=10.1257/jep.33.4.187>
- Angeloni, Ignazio (2024). "Assessing the ECB's monetary policy stance by comparing tightening cycles"; paper submitted to the European Parliament for the ECB Monetary Dialogue, November. [https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA\(2024\)760266](https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA(2024)760266)
- Barbiero, Omar, and Hillary Stein (2025). "The impact of tariffs on inflation", Federal Reserve Bank of Boston Current Policy Perspective 25-2. <https://www.bostonfed.org/publications/current-policy-perspectives/2025/the-impact-of-tariffs-on-inflation>
- Bergin, Paul, and Giancarlo Corsetti (2024). "The macroeconomic stabilization of tariff shocks: What is the optimal monetary response?", Journal of International Economics 143 <https://www.sciencedirect.com/science/article/pii/S0022199623000442>
- Bloom, Nicholas (2007). "The effect of uncertainty shocks", NBER Working Paper n. 02138, September. https://www.nber.org/system/files/working_papers/w13385/w13385.pdf
- Boer L. and M Rieth (2024) The Macroeconomic Consequences of Import Tariffs and Trade Policy Uncertainty, IMF Working Paper No. 2024/013 <https://www.imf.org/en/Publications/WP/Issues/2024/01/19/The-Macroeconomic-Consequences-of-Import-Tariffs-and-Trade-Policy-Uncertainty-543877>
- Boeters S. and G. Meijerink (2024) Effects of US Import Tariffs on the Dutch and European Economy CPB November 2024, <https://www.cpb.nl/sites/default/files/omnidownload/CPB-publication-effects-of-American-import-tariffs-on-the-Dutch-and-European-economies.pdf>
- Bown Chad P. and Katherin Russ (2021). "Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade", Peterson Institute for International Economics, November. <https://www.piie.com/blogs/trade-and-investment-policy-watch/2021/biden-and-europe-remove-trumps-steel-and-aluminum>
- Brooks, Robin (2025). "Big changes are coming for dollar and emerging markets", Financial Times, November 12 <https://www.ft.com/content/c9617ae5-8b8d-450d-a45f-6e3b539225a9>
- Caixabank (2024). "Exposure of the European economy to a US tariff hike" note. <https://www.caixabankresearch.com/en/economics-markets/activity-growth/exposure-european-economy-us-tariff-hike>
- Caldara, Dario, Matteo Iacoviello, Patrick Molligo, Andrea Prestipino, and Andrea Raffo (2020). "The economic effects of trade policy uncertainty," *Journal of Monetary Economics*. <https://www.sciencedirect.com/science/article/abs/pii/S0304393219302004>
- Cavallo, Alberto, Gita Gopinath, Brent Neiman, and Jenny Tang (2021). "Tariff Pass-Through at the Border and at the Store: Evidence from US Trade Policy", *American Economic Review – Insights* 3(1), pp. 19-34. <https://www.aeaweb.org/articles?id=10.1257/aeri.20190536>

- CBO (2024). "Effects of Illustrative Policies That Would Increase Tariffs", report to Congress <https://www.cbo.gov/system/files/2024-12/61112-Tariffs.pdf> Results based on trade elasticities from the following paper: <https://www.aeaweb.org/articles?id=10.1257/aer.20210225>
- Correa, Ricardo, Julian di Giovanni, Linda S. Goldberg, and Camelia Minoiu (2024). "Trade Uncertainty and U.S. Bank Lending"; Federal Reserve bank of New York Staff Report n.1076 https://www.newyorkfed.org/research/staff_reports/sr1076
- Cox, Lydia (2022). "The Long-Term Impact of Steel Tariff on U.S. Manufacturing", mimeo, Harvard University https://economics.princeton.edu/wp-content/uploads/2022/06/cox_steel_20220601.pdf
- Eichengreen, Barry (1984). "Keynes and Protection". *The Journal of Economic History* 44(2), pp 363-373, <https://www.jstor.org/stable/2120714?seq=1>
- Fajgelbaum, Pablo, Pinelopi Goldberg, Patrick Kennedy, and Amit K Khandelwal (2020). "The Return to Protectionism". *The Quarterly Journal of Economics* 135(1), pp. 1–55, <https://academic.oup.com/qje/article/135/1/1/5626442>
- Flaaen, Aaron, and Justin Pierce (2019). "Disentangling the Effects of the 2018-2019 Tariffs on a Globally Connected U.S. Manufacturing Sector", Federal Reserve Board Finance and Economics Discussion Series 2019-086 <https://www.federalreserve.gov/econres/feds/files/2019086pap.pdf>
- Furceri, Davide, Swarnali Ahmed Hannan, Johnathan Ostry, and Andrew Rose (2018). "Macroeconomic Consequences of Tariffs" CEPR discussion paper 13389 <https://cepr.org/publications/DP13389>
- Gunnella V. and L. Quaglietti (2019) "The economic implications of rising protectionism: a euro area and global perspective" ECB Economic Bulletin, Issue 3/2019. https://www.ecb.europa.eu/press/economic-bulletin/articles/2019/html/ecb.ebart201903_01~e589a502e5.en.html
- Hartmann, P. and Smets, F. (2018). "The first twenty years of the European Central Bank: monetary policy"; ECB Working Paper Series n 2219, December. <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2219.en.pdf>
- Hassan, Tarek A, Stephan Hollander, Laurence van Lent, Ahmed Tahoun (2019). "Firm-Level Political Risk: Measurement and Effects" *The Quarterly Journal of Economics* 134(4). <https://academic.oup.com/qje/article-abstract/134/4/2135/5531768?redirectedFrom=fulltext&login=false>
- Hufbauer, Gary Clide, and Euijin Jung (2018). "Steel Profits Gain, but Steel Users Pay, under Trump's Protectionism", PIIE. <https://www.piie.com/blogs/trade-and-investment-policy-watch/steel-profits-gain-steel-users-pay-under-trumps>
- Jeanne, Olivier, and Jeongwon Son (2024). "To what extent are tariffs offset by exchange rates?", *Journal of International Money and Finance* 142. <https://www.sciencedirect.com/science/article/pii/S0261560624000020#:~:text=ln%20all%20case%2C%20the%20exchange,tariff%20on%20exports%20depreciates%20it.>
- McKibbin, Warwick, and Marcus Noland (2025). "Trump's threatened tariffs projected to damage economies of US, Canada, Mexico, and China", PIIE brief <https://www.piie.com/blogs/realtime-economics/2025/trumps-threatened-tariffs-projected-damage-economies-us-canada-mexico>
- McKibbin, Warwick, Megan Hogan, and Marcus Noland (2024). "The international economic implications of a second Trump presidency", PIIE working paper 24-20. <https://www.piie.com/publications/working-papers/2024/international-economic-implications-second-trump-presidency> Simulations at: <https://camadashboards.shinyapps.io/TrumpPolicies/>

- Miran, Stephen (2024). "A User's Guide to Restructuring the Global Trading System", Hudson Bay capital. https://www.hudsonbaycapital.com/documents/FG/hudsonbay/research/638199_A_Users_Guide_to_Restructuring_the_Global_Trading_System.pdf
- Rodrik, Dani (2025). "What tariffs can and can't do; The Project Syndicate, January. <https://www.project-syndicate.org/commentary/trump-has-wrong-concept-of-tariffs-by-dani-rodrik-2025-01>
- Saussay, Aurélien (2024). "The economic impacts of Trump's tariff proposals on Europe" LSE policy insight. <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2024/10/Economic-impacts-of-the-Trump-Tariff-Proposals-on-Europe.pdf>

Were the US to impose large and lasting tariffs on its imports from the EU, the effect on the euro area (EA) would be substantial and far-reaching. We expect the direct impact to be inflationary in the US and contractionary on EA aggregate demand and output. The indirect impact through an appreciation of the dollar (partly already occurred) tends to transfer inflation from the US to Europe. The ECB should be mindful that both deflationary and inflationary influences may ensue, and be ready to adjust monetary policy promptly if necessary to maintain price stability.

This document was provided by the Economic Governance and EMU Scrutiny Unit at the request of the Committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 20 March 2025.
