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US protectionist policies and its effects on Europe

Transmission channels and ECB's monetary policy response since 2016

Author : Elise Delvaux

Thesis Director : Yuliya Rychalovska

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Université catholique de Louvain - Economics School of Louvain - Place Montesquieu 3, 1348 Louvain-La-Neuve

Université de Namur – Economics School of Namur – Rempart de la Vierge 8, 5000 Namur

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Elise Delvaux
25/05/2026

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TABLE OF CONTENTS

I. INTRODUCTION 7

II. LITERATURE REVIEW 10

1. Paradigm shift: from traditional protectionist policies to the new Trump policies 11

1.1. Traditional protectionist policies: theoretical foundations and macroeconomic costs 11

1.2. Paradigm shift: Trump policies 12

2. Transmission channels 14

2.1. Financial channel 14

2.2. Expectation channel 15

2.3. Exchange rate and price channel 16

3. Spillover effects and European vulnerability 18

4. Trade policy and monetary policy 19

4.1. Trade-off between output and inflation 19

4.2. Central bank communication and credibility 20

5. Fed vs BCE: current differences between the two central banks 21

5.1. Fed response 21

5.2. ECB response 22

6. Summary of the literature review 23

III. EMPIRICAL STUDY 24

1. Data 24

2. Event study 25

2.1. Introduction 25

2.2. Selection of events 26

2.3. Methodology 27

2.3.1. Cumulative abnormal returns 27

2.3.2. Regressions 27

2.4. Results and interpretations *27*
2.4.1. CAR results *27*
2.4.2. Combined regression results *29*
2.4.3. Separate regression results *30*
2.5. Link with the literature review *30*

3. BVAR analysis **31**
3.1. Introduction *31*
3.2. Methodology *31*
3.3. Baseline model *32*
3.3.1. Sub-sample analysis *33*
3.4. The financial channel *35*
3.5. The expectations channel *35*
3.6. Transmission to the real economy *36*
3.7. Monetary policy response *37*
3.8. Link with the event study *37*

IV. CONCLUSION **38**

1. Implications **39**

2. Limitations **39**

3. Recommendations and future research **40**

V. BIBLIOGRAPHY **41**

VI. ANNEXES **49**

LIST OF TABLES

Table 1 : Events 26
Table 2 : CAR results 28

LIST OF FIGURES

Figure 1: Baseline model full sample 33
Figure 2: Baseline model subsample (2000-2016) 34

LIST OF ANNEXES

Annex 1: Data description 49
Annex 2: Combined regression results 50
Annex 3: Separate regression results 52
Annex 4: Baseline model (full sample) 53
Annex 5: Baseline model subsample (2000-2016) 54

I. INTRODUCTION

In recent years, the global economic environment has changed a lot with the return of protectionism and a shift towards what is increasingly referred to as a “geoeconomics” era. Trade policy that was used to shape by multilateral agreements and stable rules, has now become a strategic instrument of economic power. The return of aggressive tariff policies, particularly under the presidency of Donald Trump, illustrates this shift and raises important questions about the functioning of the international economic system.

These changes are not only a question of trade flows. In fact, modern protectionist policies create complex macroeconomic effects that go far beyond traditional price changes. What is different about them is that they lead to a high level of uncertainty in the global economy by combining tariff measures with frequent announcements, threats and reversals. As a result, these policies affect not only trade volumes but also financial markets, expectations and ultimately real economic activity. These developments represent a major external shock for open economies (such as the European economies) because they are highly integrated into global trade and financial systems.

In this context, central banks face a new sort of challenge. Trade policy shocks are different from standard macroeconomic shocks because they can create both inflationary pressures (through higher import prices and exchange rate movements) and contractionary effects on demand (due to uncertainty and decreasing confidence). This creates a complex policy dilemma for the European Central Bank (ECB) which must balance price stability and the need to support economic activity in an increasingly volatile global environment.

Although literature examines the effects of protectionism and uncertainty, important questions remain about how these shocks propagate in the European economy and how they influence monetary policy. In fact, understanding both the immediate and longer-term effects of trade uncertainty shocks on inflation expectations, economic activity and monetary policy is essential for policy purposes. While immediate market volatility may not require a strong policy response, more persistent effects may have more implications for growth or welfare. Furthermore, those shocks put central banks in a difficult place because they combine inflationary pressures with weaker demand. Therefore, understanding the transmission mechanism of these shocks is essential to determine whether central back should react or simply

look through those shocks. Moreover, identifying whether these shocks behave primarily as supply or demand shocks is important to determine which monetary policy reaction would be the most appropriate. In fact, if the nature of the shock is misinterpreted it could lead to an excessive reaction whether it is restrictive or accommodative.

Knowing this, the research question of this thesis is the following: to what extent do US protectionist policies, particularly since the beginning of Trump's first administration, generate spillover effects on the European economy and how does the ECB adjust its monetary policy in response to these shocks? More specifically, this thesis seeks to identify the transmission channels through which trade policy uncertainty affects financial conditions, expectations and real economic activity, analyzes the ECB's response and whether it has evolved over time.

To answer this question, we use two methods in our empirical study. We start by conducting an event study using daily data to capture the immediate reactions of financial markets to major political and trade related events. After that, we implement a Bayesian Vector Autoregression (BVAR) framework using monthly data to analyze the dynamic and more persistent effects of trade uncertainty shocks on the European economy. This model helps us understand the transmission of shocks over time and evaluate the response of the ECB.

The structure of the thesis is the following: the first section presents a literature review that examines the evolution of protectionist policies, the main transmission channels of trade shocks, the spillover effects of protectionist measures and the implications for monetary policy. The empirical analysis will be presented in the second section. It begins with the event study and then moves on to the BVAR analysis. Finally, the last section concludes by summarizing the main findings, discussing their implications and outlining the limitations of the study as well as directions for future research.

The results of this thesis give us several important insights. First, the event study shows that financial markets react immediately to trade related announcements, through increases in market volatility and, in some cases, increases in credit spreads. However, these short-term reactions do not systematically translate into immediate changes in monetary policy expectations. That is when the results of our BVAR analysis come into play by revealing a transmission mechanism over the medium term. We show that trade uncertainty shocks lead to

a tightening of financial conditions, a decline in inflation expectations and in economic activity. In response to these changes, the monetary policy of the ECB becomes more accommodative.

Most importantly, our findings suggest that trade shocks have evolved. While the pre-2016 trade tensions appear to have had limited effects, more recent shocks are characterized by a stronger and more persistent transmission through the financial and expectations channels. This suggests that new protectionist policies act less as traditional supply shocks and more as demand driven disruptions which changes both their macroeconomic impact and the monetary policy response.

II. LITERATURE REVIEW

The global economy is currently facing profound changes, marked by the return of protectionism and fundamental questioning of the free-trade rules that have governed for decades. According to Lagarde (2025), we are no longer dealing solely with standard economic dynamics but rather with "geoeconomics" (which can be defined as "the interplay of international economics, geopolitics and strategy" (Schneider-Petsinger, n.d.)). Park (2025) warns us that unilateral decisions by the United States threaten to collapse the World Trade Organization (WTO) system. He even says that "if this global tariff war persists and expands, the world economy risks diving into a severe recession such as the one of the Great Depression of the 1930s" (Park, 2025).

This shift is somewhat paradoxical given that the United States now accounts for only 10% of global trade and faces higher competition from Europe and Asia (Robinson & Thierfelder, 2024). Nevertheless, with Donald Trump's second term, the US administration is aggressively accelerating their protectionist measures. These measures are anchored in a mercantilist view where trade deficits are viewed as net financial losses (Sukar & Ahmed, 2019) and thus justify the use of "national security" to protect domestic industries (Zafar, 2025).

For central banks, this changing environment represents a new challenge. Tariffs are no longer simple microeconomic distortions, they are macroeconomic shocks that impact both aggregate supply and demand. In fact, tariffs generate inflation by raising the cost of imported goods (Amiti et al., 2019) and create uncertainty that discourage corporate investment (Metiu, 2021). Moreover, because the United States now acts as a net exporter of inflation (Nguyen et al., 2024) and because international trade is heavily done in dollars (Dominant Currency Pricing (DCP)), any appreciation of the US currency leads to inflationary pressures in Europe (Jouvanceau et al., 2025).

The objective of this literature review is to understand this modern protectionist shock and its transmission channels. We will see how, under the Trump administration, trade policy evolved from standard commercial issues into a massive uncertainty shock, leading to a structural divergence in monetary policy. On the one hand, the Federal Reserve (Fed) seeks to "look through" tariff-driven inflation to protect employment (Waller, 2025); on the other hand,

the ECB finds itself trapped between increases in both prices and financial risks (Schnabel, 2025; European Central Bank, 2025).

1. Paradigm shift: from traditional protectionist policies to the new Trump policies

1.1. Traditional protectionist policies: theoretical foundations and macroeconomic costs

Historically, economic theory acknowledges that a large nation could theoretically maximize its revenues by imposing an "optimal tariff". Martinez Garcia and Sposi (2025) calculate that the United States could impose tariffs of up to 70% to maximize revenues, but subject to a strict caveat: this holds only if trading partners do not retaliate. As soon as countermeasures are put in place, this optimal rate collapses to around 30%. This may partly explain the logic of the Trump administration: it bets on the size of the US market to impose its terms, hoping that trading partners will either not dare to retaliate or will be unable to do so effectively.

We can also note that protectionism can take many forms. Traditional tariffs are not the only available instrument. Marcinkiewicz and Piekutowska (2020) refer to "neo-protectionism", a modern form of trade restriction that operates through sanitary rules, technical requirements, or environmental regulations rather than border taxes. This creates an interesting asymmetry in the current trade conflict: on one side, the tariff-based protectionism of the United States; on the other, the more subtle and regulatory protectionism of Europe.

In practice, regardless of the instrument used, the literature consistently demonstrates that protectionism fails to achieve its stated objectives. The main argument put forward by defenders of tariffs is that they protect domestic employment. Their logic is quite simple, they say that if you tax foreign goods, consumers will shift their demand toward domestic products, which would stimulate local industries and create jobs. However, Li and Whalley (2021) show that this reasoning is rather "wishful thinking". Their analysis shows that tariffs raise the prices of manufactured goods but rather than simply substituting between domestic and foreign products, consumers adjust their behavior more broadly and shift their spending toward services. As a result, overall demand for manufactured goods declines and manufacturing employment does not increase, it may even fall. Furthermore, there are costs to these policies. Armella and Conti

(2020) estimate that each job "saved" in the US washing machine sector through tariffs costs American consumers approximately $820,000 in the form of higher prices. This makes protectionism a pretty inefficient instrument to support employment.

Beyond the employment argument, the broader macroeconomic costs of protectionism are well documented. While trade flows are not too affected by some trade barriers, the accumulation of restrictions ultimately weighs on potential growth (Gregori, 2021). Dizioli and van Roye (2018) even call trade wars a "lose-lose" game: in virtually all their modeled scenarios, both the initiating country and its trading partners suffer welfare losses. This is also discussed by Bonk and Larkou (2025), who argue that protectionism destroys economic value with the same efficiency that free trade once created.

A further constraint on the effectiveness of protectionism is provided by the Lerner symmetry. Felbermayr et al. (2024) explain that taxing imports ultimately amounts to taxing one's own exports. By raising the real exchange rate and domestic production costs, protectionism erodes the competitiveness of domestic exporters. This is in fact a boomerang effect that is systematically underestimated by politicians.

Finally, it is worth mentioning the inflationary dimension of these policies. Alvarez and Yilmazkuday (2026) propose an empirical rule of thumb: roughly 10% of the value of a tariff feeds directly into domestic inflation. Furthermore, these measures change behaviors. Yilmaz and Bulut (2025) talk about profit-driven inflation: they explain that some firms take advantage of the increase in prices due to tariffs to raise their profit margins. This behavioral aspect means that the real inflationary effect of protectionism can be greater than the one that comes from its direct price effect.

1.2. Paradigm shift: Trump policies

The trade policies implemented under the Trump administration cannot be fully understood through the classical framework described above. Recent literature presents them as a profound regime shift that is characterized not only by the scale and speed of the measures adopted, but and most importantly by the strategic deployment of uncertainty as a policy instrument.

Unlike historical episodes where trade barriers were introduced through relatively predictable and institutionalized processes, the Trump era reintroduced a high degree of uncertainty into the global trading system (Zafar, 2025; Kim, 2025). Handley and Limão (2017) formalize this mechanism through the concept of the "option value of waiting": because firms must incur sunk costs to enter foreign markets, the simple threat of future protectionism (even in the absence of actual tariff increases) can be sufficient to discourage exports and delay corporate investment. In this sense, policy uncertainty acts as a tax on trade.

Metiu (2021) empirically confirms this mechanism by showing that announcements of US trade restrictions trigger significant contractions in production and investment among trading partners well before any actual implementation of the tariffs. These anticipatory effects are mainly due to a collapse in business confidence rather than by actual cost increases. Furthermore, we see that this uncertainty materialized immediately after the November 2016 election well before any tariff was legally implemented (Bui et al., 2025) and was continuously amplified by medias and social networks (Metiu, 2021). More recently, Kaczmarek et al. (2025) and Cocozza and Gallo (2025) also showed that the aggressive tariff announcements of April 2025 generated similar rapid reactions in financial markets which reinforces the idea that communication is a key transmission mechanism.

A critical distinction must be made between the first and second Trump administrations. In 2018-2019 protectionist measures were characterized by targeted, sector-specific tariffs (ie. on steel, aluminum and Chinese goods). However, the 2025 measures represent what Park (2025) calls an "all-front tariff war": a universal 10% tariff on all US imports, complemented by higher reciprocal duties, combined with explicit threats against traditional allies including the European Union. Felbermayr et al. (2024) also explains that this protectionist turn is not a temporary anomaly but a durable trend towards protectionism in the US supported on a bipartisan level.

By transforming protectionism into a weapon of psychological destabilization, the Trump administration transformed the nature of trade shocks. They were once a frictional supply shock and now they become big uncertainty-driven demand disturbances. Nevertheless, while announcements generate immediate and substantial volatility, the most persistent

macroeconomic consequences emerge when these measures are legally implemented (Bonk & Larkou, 2025).

2. Transmission channels

2.1. Financial channel

The financial markets are the firsts to respond when a trade shock occurs. They react to the uncertainty provoked by threats of protectionist measures before legal measures are actually implemented and before goods are actively stopped at the borders. The literature shows that announcements of US trade policies lead to an immediate rise in global financial volatility and a reallocation of portfolios towards safe-haven assets.

Empirical evidence highlights the speed and severity of this financial reaction. Kaczmarek et al. (2025) document an average decline of more than 7% in global stock indices in the very days following US tariff announcements. Bui et al. (2025) further explain that the firms that were most exposed to the trade policy experienced significantly more negative stock returns immediately following the 2016 US presidential election, well before the actual first tariffs. More recently, Cocozza and Gallo (2025), as well as Kaczmarek et al. (2025), confirmed that the aggressive tariff announcements of April 2025 triggered similar instantaneous shock in financial markets.

What is also worth noting is that we observe the mechanism through which uncertainty translates into higher credit risk at a microeconomic level. Wisniewski and Lambe (2015) demonstrate that political uncertainty propagates from the macro level to individual firms and show a significant reaction of credit default swap spreads (CDS) to policy risk shocks. Strikingly, they estimate that changes in political uncertainty account for approximately 25% of the forecast error variance of CDS spreads in Europe. The underlying transmission mechanism is formalized by Kang et al. (2024), who show that higher economic policy uncertainty leads to greater information asymmetry between firms and external capital providers. As the external environment becomes less predictable, bond investors struggle to determine the firm's quality and thus demand a bigger risk premium. Furthermore, it is even more complicated for firms because they face harsher financing conditions and struggle to get bank loans or access to bond markets as well as lower cash flows, all of which affect the solvency of firms and raise their default risk (Kang et al, 2024).

We also learn that this credit market tightening is not independent of the volatility in equity markets. Ozdagli (2019) provides empirical evidence of this connection, showing that trade war news events that move the VIX by one percentage point are associated with an increase in high-yield spreads of approximately 3.5 basis points, a decline in long-term treasury yields and a fall in stock prices. They estimate that three quarters of the increase in high-yield spreads during the 2018-2019 trade conflict is explained by "news about the trade war" and "that the financial market impact is driven primarily by changes in risk premia" (Ozdagli, 2019).

Beyond equity markets, trade tensions have a big effect on credit conditions by increasing the risk premia of countries. In fact, "international political uncertainty increases the risk premium required by global bond investors, which leads to higher government bond yields" (Huang et al., 2015).

Finally, this financial tightening creates systemic risk for the global economy. The Financial Stability Review of the ECB of November 2025 warns us about the risk faced by the European banking sector due to their exposure to tariff-sensitive firms. Consequently, an external trade shock can quickly become a domestic credit crunch. Indeed, if banks restrict lending due to heightened trade risks it would affect domestic demand and corporate investment which would validate the initial market panic which may lead to a macroeconomic contraction.

2.2. Expectation channel

Closely linked to the financial response is the expectations channel, which represent what the economic agents think is going to happen. The central finding in this literature is that trade policy uncertainty acts as a macroeconomic shock, capable of decreasing production and altering prices purely through the anticipation of future changes in trade relations.

Handley and Limão (2017) discuss the theory behind this channel. They explain how trade policy uncertainty acts as a tax on trade. In fact, because firms have a certain amount of costs to enter a market, they will wait to export their products or to invest in the hope that uncertainty will decrease. Metiu (2021) further explores this topic by explaining that announcements of American trade restrictions led to significant decreases in production, investments and exports between trading partners due to a decline in business confidence. The author also notes that this

uncertainty is amplified by medias, as the countries more exposed to US announcements in the media experienced stronger anticipatory economic contractions (Metiu, 2021). This amplification mechanism reaches its most direct form in the context of Donald Trump's use of social media as a policy instrument. Burggraf et al. (2019) demonstrate that individual tweets from the American president generate statistically significant effects on financial markets: they find that Trump tweets cause stock prices to fall and the VIX to rise. This evidence is consistent with the argument that the expectations channel works through signals and threats rather than through legally implemented measures. This means that a simple announcement or even a social media post can be enough to trigger anticipatory adjustments in financial markets well before there are any legal foundations to this announcement.

Finally, the impact of uncertainty on inflation is also linked to the expectations channel. Traditionally, uncertainty was considered to be deflationary due to its depressing effect on demand. However, recent literature challenges this idea. Sanyal (2025) created a model that showed that firms raised their prices due to the uncertainty about future tariffs in order to build a safety buffer against the potential increase of future costs. This mechanism creates a link between uncertainty and inflation. Furthermore, Beckmann and Czudaj (2026) explain that during periods of weakly anchored expectations, greater uncertainty raises inflationary pressures as firms apply higher precautionary markups.

2.3. Exchange rate and price channel

The final major transmission mechanism includes the adjustment of prices through global value chains and the role of the exchange rate.

Contrary to the simplified view that tariffs only affect final consumer goods, Costinot and Rodríguez-Clare (2014) demonstrate that the integration of intermediate goods into trade models significantly amplifies the aggregate losses generated by protectionism. Tariffs break the "input-output loop" that usually generates productivity gains and usually raises the cost of production across all sectors. Moreover, Amiti et al. (2019) found an almost complete "pass-through" of the 2018 US tariffs into domestic prices, showing that foreign exporters did not lower their prices. Instead, the tax was fully absorbed by domestic firms and consumers. Furthermore, these tariffs altered the behavior of protected domestic firms, allowing them to opportunistically raise their own markups. Because many countries are involved in the creation

of value of many modern products, bilateral tariffs end up indirectly penalizing domestic firms integrated into these complex supply chains (Armella & Conti, 2020).

Traditionally, for open economies, the exchange rate acts as a stabilizer where a depreciation of the currency restores export competitiveness after a negative shock. Ferrari et al. (2020) show that US-initiated trade tensions triggered an appreciation of the US dollar and a depreciation of EMEs currencies. This could be seen as a "flight-to-safety" effect toward the American dollar. Alstadheim et al. (2021) explains that the exchange rate is still a primary transmission channel for external shocks, particularly for exporters of raw materials. Their study shows that central banks do not allow the exchange rate to float freely as a stabilizer but that they adjust the interest rates so that they can counter the exchange rate volatility and stabilize domestic inflation.

Another interesting topic to discuss is the Dominant Currency Pricing (DCP) paradigm. In fact, as Jouvanceau et al. (2025) explain a massive share of international trade is invoiced in US dollars. This means that if there is a depreciation of the euro, it will lead immediately to an increase in the cost of imports invoiced in dollars while giving small competitive gains for the European exports. As a consequence, rather than boosting demand, the exchange rate imports inflation. Moreover, the movements in exchange rates are showing new trends. As Caputo and Pedersen (2020) explain, shocks to the country risk premium are now the main drivers of real exchange rate dynamics. Corsetti et al. (2023), on their part, note that friction-driven capital flows lead to big exchange rate misalignments.

Furthermore, trade policy uncertainty also fundamentally alters the volatility of exchange rates. Huynh et al. (2023) find that trade policy uncertainty is a significant driver of exchange rate volatility and that "the volatility connectedness between exchange rates and trade policy uncertainty is found to be stronger than the return connectedness". In other words, trade conflicts do not simply shift the value of a currency against another, but they make the exchange rate itself unpredictable. Another problem is that exporters and importers have to price their contracts in a really uncertain environment with high currency risk. This volatility dimension further supports the argument that the exchange rate channel may no longer be a stabilizer but rather an amplifier of external shocks.

3. Spillover effects and European vulnerability

The transmission channels analyzed in the previous section need to be understood in a broader context. In fact, because of the size of the US economy, the dominant role of the dollar and the deep integration of global value chains, US protectionist measures generate significant international spillovers that extend well beyond bilateral trade relationships and the euro area is particularly exposed to them.

A mechanism is through trade volumes and value chains. Bekkers (2019) shows that whenever we are in a scenario where the US are more isolated from international trade, trading partners suffer durable productivity losses because the input-output linkages that create efficiency gains are broken. Moreover, as the euro area relies on imported intermediate inputs and because it is well integrated into transatlantic production networks, it facilitates the transmission of shocks. As a consequence, US trade shocks lead to higher production costs, even for firms without direct commercial link with the United States.

Beyond this mechanism, the euro area has specific vulnerabilities that limit its capacity to absorb these shocks. The most fundamental is institutional. In fact, member states cannot rely on nominal exchange rate adjustment at the national level because of their adhesion to the eurozone which leaves the decisions to the ECB. This means that the entire burden of adjustment falls on prices, wages and quantities for European countries. Furthermore, we have to discuss the fiscal fragility. Egan and Roche (2025) show that protectionism tends to aggravate public deficits because there are weaker tax revenues and because governments face pressure to support the affected sectors. Henry and Venditti (2024) further explain that this dynamic can become self-reinforcing for highly indebted countries and trigger a self-fulfilling financial crisis. This risk is even stronger in a monetary union where fiscal policy remains national. Moreover, the literature also discuss that these spillovers are heterogeneous within the European Union. Autor et al. (2013) show that the sectors most exposed to international competition and trade shocks, particularly manufacturing, are also those where adjustments are most costly and persistent. This internal heterogeneity significantly complicates the conduct of a single monetary policy.

Finally, Schuler and Sun (2022) explain that external demand shocks should theoretically lead to an accommodative monetary response. However, this conflicts directly with the

inflationary dimension of trade shocks (ie. the pass-through into import prices and the potential de-anchoring of expectations). This tension between the demand-side logic of easing and the supply-side logic of tightening is precisely the stagflationary dilemma that the ECB is facing and we will discuss it now.

4. Trade policy and monetary policy

The transmission channels and the spillover effects analyzed above raise a fundamental question for central banks: how should monetary policy respond to a trade shock? Unlike traditional macroeconomic shocks that lead to easing or tightening of the monetary policy, trade policies combine the inflationary effects of supply shocks with the recessionary effects of demand shocks which creates a complex dilemma.

4.1. Trade-off between output and inflation

In standard monetary policy theory, the response (whether it is accommodative or contractionary) is determined by whether it is a supply or demand shock. A negative demand shock typically calls for an easing of the monetary policy whereas an inflationary supply shock should be dealt with with a tightening of the monetary policy. Tariffs act both as a negative supply shock because they raise production costs and import prices and, at the same time, reduce demand (due to lower purchasing power of households) and corporate investment.

This combination places central banks in a stagflation-type dilemma. Lim and McNelis (2007) show that in an open economy with terms-of-trade shocks, the central bank faces a direct trade-off between stabilizing inflation or output. In theory, strict inflation targeting maximizes aggregate welfare but this happens at the expense of greater output volatility. This shows the real economic cost that open economies face when they have to face trade shocks.

Reacting mechanically to tariff-driven inflation can make the crisis worse. In fact, Jouvanceau et al. (2025) explains that under strict consumer price inflation (CPI) targeting, a central bank is asked to tighten the monetary policy in response to higher import prices, which worsens the contraction in economic activity without fundamentally solving the external supply problem. They suggest that targeting alternative measures, such as domestic producer price inflation (PPI), could help with the crisis. Moreover, raising interest rates to fight tariff inflation

can trigger a “price puzzle”. As Lagoa (2014) explains “an increase in the interest rate may raise production costs in the short run, thereby increasing prices”.

4.2. Central bank communication and credibility

The appropriate monetary policy when facing trade uncertainty depends on the central bank’s credibility and its ability to manage expectations. In this context of high uncertainty, the capacity of the central bank to appropriately communicate becomes a crucial policy instrument.

The literature has shown that strong institutional credibility is a great way to deal with the inflationary effects of uncertainty. In fact, if inflation expectations are well anchored by a credible central bank, then uncertainty shocks will have a much smaller impact on realized inflation (Beckmann and Czudaj, 2026). Nevertheless, credibility does not solve the tradeoff problem completely. Campos et al. (2025) indicate that an aggressive reaction of the central bank to imported inflation (to protect its credibility) can lead to a significant decrease in economic activity and a worsening of the debt-to-GDP ratio.

As a consequence, this means that for central banks, managing expectations through forward guidance and effective communication is really important. On this topic, Fadda et al. (2025) explain how the communication of central banks directly impacts the markets’ reaction. They find that “a higher communication of Surprise (ie. “unexpected developments or heightened risks compared to the central scenario”) is associated with a higher likelihood of policy inaction or ease whereas a higher incidence of Confirmation (ie. “a continuity of what policymakers expected to be the most likely scenario”) is associated with a higher likelihood of a tighter policy stance” (Fadda et al., 2025). This shows us how complicated it can be for central bank to take the right decision when they face high uncertainty.

Finally, it is interesting to discuss how current central banks’ decisions can be influenced by the psychological burden of earlier decisions. Tatar and Wieland (2025) note that the ECB can be subject to a specific bias. In fact, because the ECB reacted quite late during the post-pandemic inflation crisis (models and forecasts were not giving signals that the ECB should raise their interest rates), it can now be tempted to tighten the monetary policy too much or for too long in order to not repeat past mistakes. This further shows how complicated it can be for the ECB to credibly fight against inflation while also looking to have a stable economy when

traditional models or forecasts struggle to correctly predict what is going to happen due to the high uncertainty.

5. Fed vs BCE: current differences between the two central banks

The protectionist measures that we see today originates in the United States however, as we discussed before, its macroeconomic consequences are distributed unevenly across the globe. Recent central bank speeches reveal a divergence in how the Federal Reserve of the United States and the European Central Bank react to this shock, leading to different priorities and monetary policy trajectories.

5.1. Fed response

On the US side, the starting point is a relatively favorable macroeconomic position. On the eve of the inauguration of Donald Trump's second term in January 2025, Christopher Waller (2025) emphasizes that the US economy rests on "solid footing": inflation has declined substantially, the labor market is slowing down but still remains close to full employment and the Fed has enough policy space to adjust its stance flexibly. This initial situation partly explains why the Fed approaches the escalation in trade tensions through a lens of cyclical management rather than as a defensive response to an externally imposed shock.

In the spring of 2025, when the tariffs started multiplying, the Fed's narrative quickly became about the expectations channel. Kugler (2025) noted that trade policy uncertainty reached levels higher than those observed in 2018 and explained that the main inflationary risk is not the import prices per se, but the possibility of a de-anchoring of expectations.

This sets the stage for Christopher Waller's speech in June 2025. In "The Effects of Tariffs on the Three I's," he argued that tariffs are essentially a one-off level shift in prices rather than a persistent inflationary dynamic. The Fed should therefore "look through" the headline price increase (as long as expectations remain anchored) and focus on the recessionary impact of tariff shocks on demand and purchasing power. Waller is even willing to support rate cuts in order to prevent an over-tightening of financial conditions. This orientation is confirmed in autumn 2025 by Philip Jefferson. In fact, during his speech at the Helsinki conference, Jefferson supported the declines in rates.

5.2. ECB response

The European Central Bank has responded quite differently. The ECB has considered the Trump shock as an external shock combining imported inflation, geopolitical uncertainty and financial risks from the early stages of the trade escalation. This is set in a fragile context where multilateral cooperation is breaking down. Hoekman & Puccio (2019) tell us that the European Union long played a bridging role within the international trading system, attempting to reconcile the concerns of developing countries and advanced economies within the WTO. Ahearn (2003) explains that in the early 2000s, despite trade disputes, the United States and the EU still cooperated actively. The contrast with the Trump era is striking: this cooperation falls apart, leaving Europe exposed and isolated in the face of unilateral measures.

In this context, Isabel Schnabel's speech in May 2025 marks an explicit doctrinal tightening. In "Keeping a steady hand in an unsteady world," she argues that the Phillips curve has become steeper and more unstable. This means that, unlike the Fed, the ECB cannot simply "look through" tariff-driven inflation, otherwise inflation expectations could become de-anchored. The call to maintain a "steady hand" suggests that the ECB will have to accept slower growth in order to maintain its anti-inflation credibility.

Christine Lagarde further discuss this in the fall of 2025. In "Trade wars and central banks: lessons from 2025," she acknowledges the shift toward a geoeconomic logic in which trade becomes a weapon. She notes that US tariffs reduced euro area exports to the United States by around 9% (which accounts for nearly 66 billion euros) and admits that Europe now finds itself "on the receiving end" of the conflict. This is a major conceptual break. The ECB can no longer view trade policy as a simple exogenous shock but needs to include geopolitical and institutional variables into their diagnosis.

Philip Lane's speeches at the end of 2025 and at the beginning of 2026 illustrate internal tensions within the ECB. In December 2025, Lane recalls the 2% inflation target and that not all inflationary shocks are alike. If tariff-driven inflation corresponds to a one-off price level adjustment followed by weaker demand, then an excessive monetary response would be counterproductive. In January 2026, he explained that monetary policy alone is not enough and that a more resilient financial architecture (such as with the completion of the banking union) would help the monetary policy be more effective.

6. Summary of the literature review

The literature surrounding modern trade policies demonstrates that the global macroeconomic landscape has undergone a big shift. Under the Trump administration, protectionism evolved from an inefficient supply-side friction into an uncertainty-driven demand shock. Rather than simply affecting the prices of physical goods at the border, modern trade threats operate primarily through the financial and expectations channels ultimately forcing central banks into complex stagflationary dilemmas.

The literature has examined protectionism, uncertainty and financial market reactions broadly, but few studies focus on the euro area and on how the nature of shocks evolved overtime. This study aims to bridge this gap and contribute to the literature by combining an event study and a BVAR analysis to capture both the short-term reactions and the medium-term macroeconomic transmission of trade uncertainty shocks. It also aims to understand the shift in the transmission of the shocks by comparing the pre-2016 era with the current one.

III. EMPIRICAL STUDY

This section provides an empirical assessment of the effects of trade policies implemented under Donald Trump, their impact on the European economy and the response of the ECB. Based on the literature review presented before, this analysis aims to identify the transmission channels through which protectionist policies affect financial markets, expectations, real economic activity and ultimately the monetary policy in Europe.

Our empirical strategy is a combination of two complementary approaches. First, an event study using daily data is conducted to see the immediate reactions of financial markets to major tariff announcements and political events. This approach allows us to observe the short-term responses of variables such as market volatility, financial spreads and exchange rates. Second, a Bayesian Vector Autoregression (BVAR) framework is conducted using monthly data to examine the dynamic and more persistent effects of trade uncertainty shocks on the European economy, as well as the monetary policy response.

Together, these methodologies provide a comprehensive analysis on how US protectionist policies transmit to Europe and how our monetary authorities respond. The following sections present the data, methodology and results for each approach.

1. Data

Our study relies on a combination of daily and monthly macroeconomic and financial data to analyze the impact of trade uncertainty and tariff announcements on short-term and medium-term time horizons. The dataset is constructed to capture the main transmission channels identified in the literature, namely financial conditions, expectations, exchange rate dynamics, real economic activity and monetary policy.

Trade uncertainty is measured using the US Trade Policy Index created by Baker, Bloom & Davis (2016). This index captures fluctuations in trade uncertainty based on newspaper coverage and will be used as our exogenous shock in our analysis. We also use market volatility measured by the VIX index to determine the daily trade uncertainty. Macroeconomic variables include industrial production, obtained from Eurostat, as a proxy for real economic activity and inflation measured by the Harmonized Index of Consumer Prices (HICP) from the ECB. Inflation expectations are proxied by the ECB Survey of Professional Forecasters (SPF),

specifically the 12-month ahead HICP expectations. We also used European exports to the US, proxied by US imports from the European Union which we obtained from the US Census Bureau.

Financial conditions are captured with two indicators. First, the ICE BofA Euro High Yield Option-Adjusted Spread to measure credit risk and financial stress. Second, the 1-year Overnight Indexed Swap (OIS) rate as a proxy for market expectations of future monetary policy. In fact, OIS rates are primarily driven by expectations of central bank target rate changes (Sundaresan et al., 2016). The EUR/USD exchange rate, obtained from the FRED, is also used to analyze the exchange rate channel. Daily inflation expectations are proxied by the 5-year, 5-year forward inflation-linked swap (5y5y ILS). Finally, the monetary policy stance is captured using the ECB main refinancing operations (MRO) rate. However, during the periods where policy rates were constrained by the zero-lower bound (ZLB), the MRO rate is complemented by the shadow rate measured by Wu and Xia (2017), which provides a more accurate representation of the effective stance of monetary policy under unconventional measures. In fact, it is measured as "the coherent summary of monetary policy: the shadow rate is the federal funds rate when the ZLB is not binding; otherwise, it is negative to account for unconventional policy tools" (Wu & Zhang, 2019).

As previously mentioned, the analysis combines different data frequencies depending on the method. Daily data is used in the event study to capture immediate financial market reactions to specific political and trade-related announcements. However, we use monthly data in our BVARs to analyze the dynamic transmission of uncertainty shocks over time. When necessary, data is transformed (for instance in logarithms or growth rates) to ensure stationarity and comparability across variables. You will find a table summarizing all data, their sources and frequencies in the annex 1.

2. Event study

2.1. Introduction

The objective of this section is to identify the short-term impact of political and trade-related announcements associated with Donald Trump. In this context, an event study using daily data allows us to understand the market reaction to specific announcements.

2.2. Selection of events

To conduct this analysis, we identified 14 major political and trade-related events between 2016 and 2026. These events are grouped into categories (elections, tariff increases, decreases and legal actions) to assess whether different types of announcements generate different market responses.

Table 1 : Events

Date	**Event**	**Type**
08/11/2016	Trump Election (1st term)	Election
20/01/2017	Trump Inauguration (1st term)	Inauguration
01/03/2018	Steel & Aluminum tariffs announced	Tariff rise
31/05/2018	Canada, Mexico and the EU become subject to tariffs	Tariff rise
06/07/2018	China retaliation tariffs enter into force	Tariff rise
05/05/2019	Trump Tweet: China escalation (via Twitter/X)	Tariff rise
05/11/2024	Trump Election (2nd term)	Election
20/01/2025	Trump Inauguration (2nd term)	Inauguration
01/02/2025	Tariffs on Canada, Mexico & China (“national emergencies”)	Tariff rise
02/04/2025	Liberation Day: universal tariffs + reciprocal tariffs	Tariff rise
09/04/2025	90-day pause announced	Decrease
04/06/2025	Trump doubled tariffs on steel and aluminum (25% to 50%)	Tariff rise
17/01/2026	Trump threatened tariffs up to 25% on 8 EU countries	Tariff rise
20/02/2026	Supreme Court ruled the tariffs illegal	Legal action

2.3. Methodology

The analysis of our event study relies on high-frequency daily data to capture short-term market reactions to the different events presented above. The selected variables include indicators of financial market conditions, exchange rates, expectations and ECB monetary policy. Specifically, market volatility is measured using the VIX index, financial conditions are proxied by the Euro High Yield spread (ICE BofA) and the exchange rate is represented by the EUR/USD rate obtained from the FRED databases. In addition, three variables are used to capture monetary policy and expectations: the ECB main refinancing operations (MRO) rate, the 1-year Overnight Indexed Swap (OIS) rate as a proxy for policy expectations and the 5-year, 5-year forward inflation-linked swap (5y5y ILS), which reflects daily inflation expectations.

2.3.1. Cumulative abnormal returns

For each event, we compute the 5-day variation of each variable. This allows us to measure the magnitude and direction of the market's reaction in the short term.

2.3.2. Regressions

To test whether these variations are statistically significant and not merely normal market noise, we estimate OLS regressions using two specifications.

First, a combined regression that groups events into categories. The regression equation is the following:

$$\Delta Y_i = \beta_0 + \beta_1 dummy_{rise,i} + \beta_2 dummy_{decrease,i} + \beta_3 dummy_{election,i} + \varepsilon_i$$

where ΔY_i represents the 5-day variation of the financial variable.

Secondly, we estimate separate regressions of selected events in order to evaluate their individual effects. The regression equation is: $\Delta Y_i = \beta_0 + \beta_1 dummy_{event,i} + \varepsilon_i$

2.4. Results and interpretations

2.4.1. CAR results

The following table presents the 5-day variations for each variable across our 14 events.

Table 2 : CAR results

Event	**Spread**	**Exchange (EUR/USD)**	**MRO**	**VIX**	**OIS**	**ILS 5y5y**
Trump Election (1st term)	0.039	-0.018	0.000	**-6.602**	0.005	0.058
Trump Inauguration (1st term)	-0.101	0.004	0.000	-0.540	0.007	0.026
Steel/Alu tariffs announced	0.061	0.005	0.000	**2.278**	-0.003	-0.014
Steel/Alu extended to EU	0.012	0.004	0.000	-0.832	-0.002	0.044
China retaliation tariffs in force	-0.179	0.008	0.000	-2.610	-0.001	-0.003
Trump Tweet (China escalation)	0.211	0.001	0.000	3.412	-0.004	-0.021
Trump Election (2nd term)	0.014	-0.009	0.000	**-6.026**	-0.030	0.024
Trump Inauguration (2nd term)	-0.071	0.014	0.000	-1.011	-0.003	-0.012
Tariffs Canada/Mexico/China	0.047	-0.006	-0.083	0.032	-0.004	-0.020
Liberation Day	**0.449**	0.016	0.000	**17.273**	-0.020	-0.031
90-day pause	0.189	0.029	0.000	**-10.730**	-0.020	-0.003
Steel/Alu doubled to 50%	-0.178	0.004	0.000	-1.092	-0.018	0.011
Tariff threats on 8 EU countries	0.054	0.003	0.000	1.288	0.002	0.024
Supreme Court: illegal tariffs	-0.053	-0.004	0.000	-1.095	N/A	-0.010

A first inspection of the results highlights the VIX as the most reactive variable. The "Liberation Day" shock triggered a massive surge in market fear (+17.27 points), while the "90-day pause" provided significant relief (-10.73 points). We also notice that the spread jumped

by nearly 45 basis points (+0.449) on Liberation Day, indicating severe tension on financial markets.

In contrast, the EUR/USD exchange rate displays relatively limited variations, suggesting that exchange rate adjustments remain moderate in the short run.

Finally, monetary policy variables (MRO, OIS and inflation expectations) show minimal short-term variation across most events. This could suggest that financial markets do not expect immediate adjustments in the ECB's policy stance in response to isolated political announcements.

2.4.2. Combined regression results

To test the statistical significance of these observations, we grouped the events into three categories: tariff rises (dummy_rise), tariff decreases (dummy_decrease) and elections (dummy_election). You can see the results of these regressions in the annex 2.

The regression results confirm that the VIX reacts significantly to several categories of events. Increases in tariffs are associated with higher volatility, while decreases correspond to a reduction in market uncertainty. Elections also appear to reduce volatility maybe because the market finally knows what to expect.

For the exchange rate, only decrease events show a statistically significant effect, suggesting that easing trade tensions may lead to a temporary appreciation of the euro.

By contrast, no statistically significant effects are identified for the spread in the combined regression. Similarly, monetary policy variables remain non-significant across all event categories.

Overall, these results indicate that while financial markets react to trade-related news, particularly through volatility, these reactions do not systematically translate into immediate adjustments in expectations regarding monetary policy or inflation.

2.4.3. Separate regression results

Because the combined regression dilutes the impact of major shocks by averaging them with minor ones, we isolate five key events to assess their specific impact. Please see the results of those regressions in annex 3.

The most striking finding is the behavior of the Spread during "Liberation Day". While the combined regression showed no general reaction to tariffs, isolating this specific event yields a highly significant spike in the spread ($p = 0.0004$). This proves that while European markets may ignore minor trade announcements, the implementation of massive, universal tariffs directly targeting Europe was priced in as an immediate and severe threat.

The "90-day pause" confirms the relief observed earlier, highly significant for both the volatility (VIX) decline ($p < 0.001$) and the Euro appreciation ($p = 0.0016$).

Analyzing the elections separately shows that the 2024 one appears to generate a much more significant drop in uncertainty ($p = 0.055$) than in 2016.

Finally, across all isolated events, even Liberation Day, the ECB variables (OIS, MRO) and inflation expectations (ILS 5y5y) remain non-significant. This supports the view that the ECB is not expected to react immediately to political announcements.

2.5. Link with the literature review

Overall, our results are consistent with what we discussed in the literature. The strong reaction of the VIX confirms that modern trade shocks propagate through uncertainty rather than through immediate price increases (as the inflation expectations did not react). Financial markets therefore appear to react first (with changes in volatility) which is consistent with the idea that the current protectionist measures operate more as demand shocks. We also see that (due to the lack of immediate reaction of the ECB) central banks respond to real macroeconomic impacts rather than to announcements. Finally, we also confirm the current importance of announcements and communication with the significant reactions to major announcements such as Liberation Day.

3. BVAR analysis

3.1. Introduction

While the event study in the previous part showed the immediate financial panic /relief due to specific trade announcements, macroeconomic fundamentals do not adjust overnight. Industrial production, international trade volumes and central bank policy rates adjust more gradually.

To understand how trade uncertainty propagates from financial markets into the real economy over time, we transition to a lower-frequency (monthly) macroeconomic framework. By estimating Bayesian Vector Autoregression (BVAR) models, we can analyze how an uncertainty shock propagates over time and observe the ultimate response of the European Central Bank (ECB).

3.2. Methodology

To investigate the transmission mechanisms of trade uncertainty shocks, several Bayesian Vector Autoregression (BVAR) specifications were estimated, differing in variable ordering and in the inclusion of key financial and macroeconomic indicators. These alternative specifications aim to capture the different theoretical channels discussed in the literature, namely the financial channel, the expectations channel and the propagation to the real economy and monetary policy.

Before presenting the results of our models, it is important to discuss the use of BVARs. In fact, traditional VAR models are highly flexible due to their rich parameterization which allows them to capture complex dynamic relationships between macroeconomic variables. However, those models often lead to overfitting and large uncertainty in forecasts. This limitation provides key motivation to use BVAR models instead who deal with the issue by adding prior information into the estimation process which tends to produce more stable estimates and better forecasts (Karlsson, 2012). For our models, we used the Minnesota prior. This key idea behind this prior is to apply “a harder shrinkage towards zero for longer lags, reflecting the prior notion that more distant observations are less influential” (Karlsson, 2012).

Regarding the ordering of the variables of our baseline model, we organized them from most exogenous to most endogenous. This means that they are ordered based on how quickly

they are expected to react to the shock. Financial markets come first (the exchange rate and the OIS reacting almost immediately to new information). Inflation expectations adjust quickly too and come right after. Then comes the real economy with industrial production reacting more slowly. Finally, the ECB policy rate is placed last with the idea that the Central Bank sets its rate after observing everything else.

3.3. Baseline model

Our main model is the following (see below and annex 4):

Uncertainty → Exchange rate → OIS → Inflation expectations → Production → Policy rate

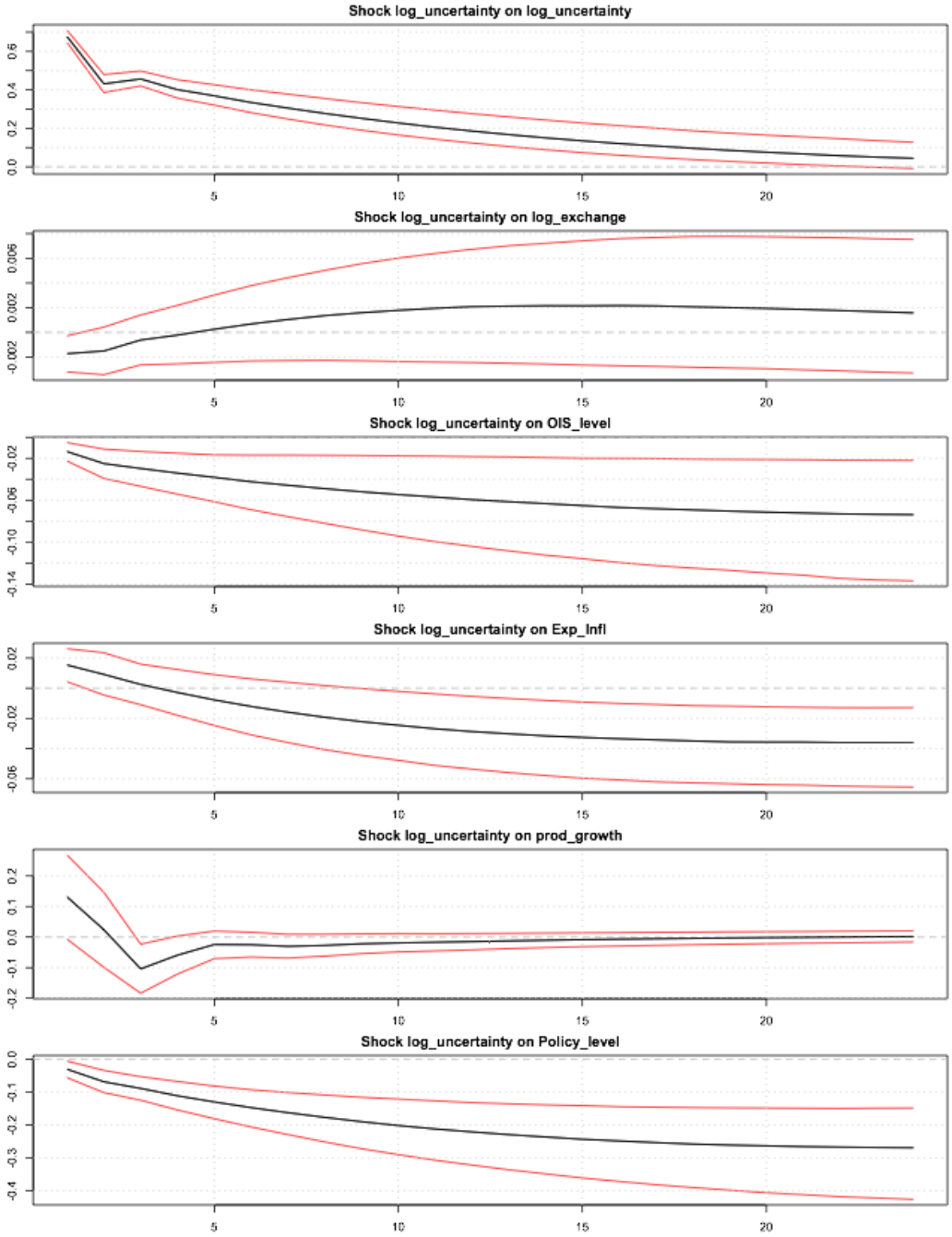
The results reveal a clear and coherent transmission mechanism in the full sample. Following a positive uncertainty shock, the exchange rate does not show a significant response, but financial markets react immediately. In fact, OIS rates decline significantly and persistently, indicating that financial markets anticipate a more accommodative monetary policy. This reaction highlights the importance of forward-looking financial expectations in the transmission process.

This adjustment in financial expectations is accompanied by a gradual decline in inflation expectations, which becomes statistically significant after approximately ten months. This suggests that economic agents revise their expectations downward in response to increased uncertainty, consistent with a deterioration in the expected economic outlook.

These effects subsequently propagate to the real economy. Production growth declines following the shock, confirming that uncertainty has contractionary effects on economic activity. Finally, the policy rate decreases significantly, reflecting a monetary policy response aimed at counteracting the negative impact of uncertainty.

Overall, this specification provides strong evidence of a sequential transmission mechanism where uncertainty shocks affect financial expectations, which in turn influence inflation expectations and real economic activity, ultimately leading to monetary policy accommodation. This baseline model suggests that trade uncertainty shocks act as demand-side shocks where inflation and real activity go in the same direction which supports what we found in the literature review.

Figure 1: Baseline model full sample

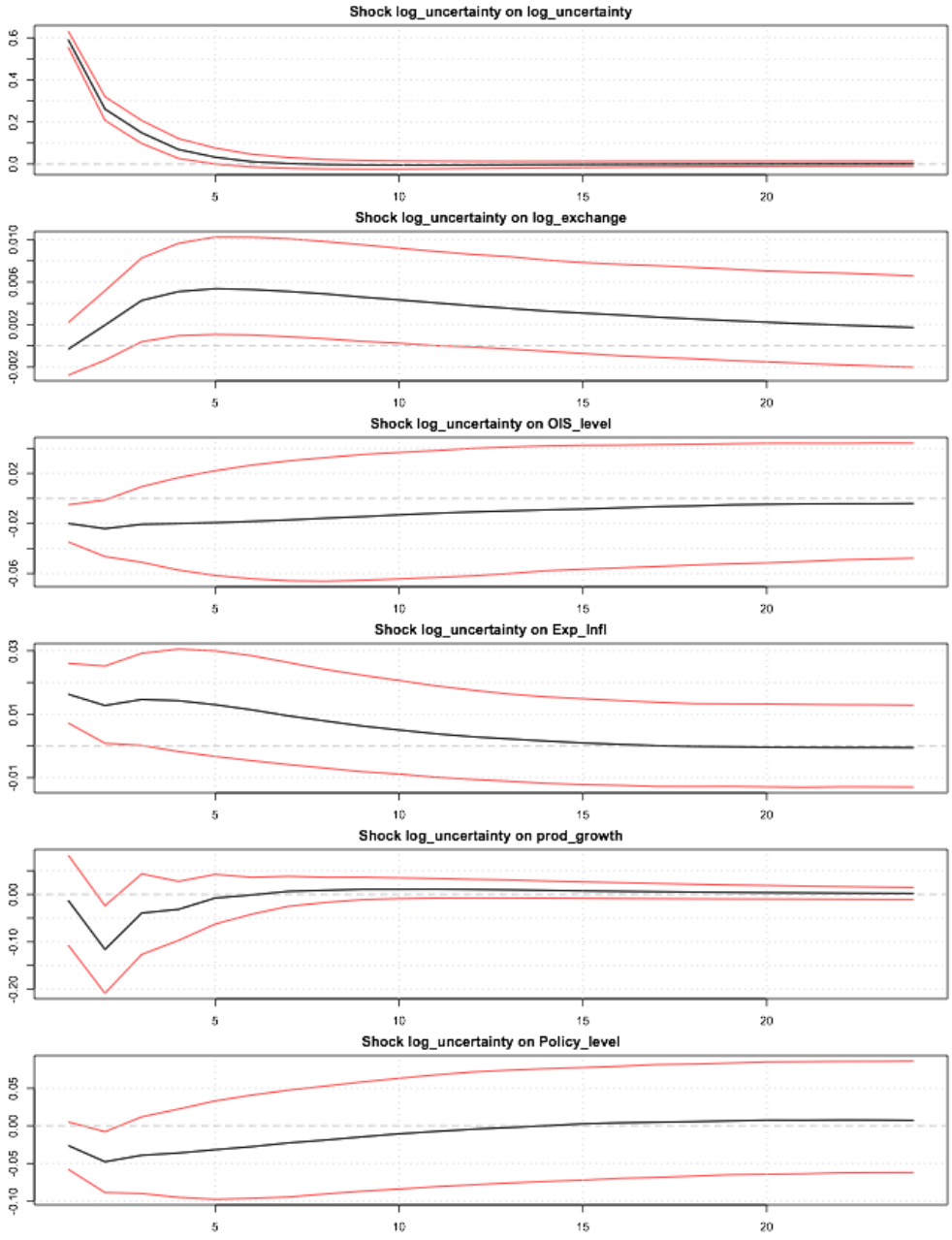


3.3.1. Sub-sample analysis

The comparison with the pre-2016 period reveals a clear difference (see below and annex 5). In the 2000-2016 subsample, the responses of OIS rates, inflation expectations and the policy rate are not statistically significant. Despite some movement in the exchange rate, no coherent transmission mechanism emerges.

This contrast suggests that the effectiveness of the expectations channel has strengthened over time. In the more recent period, financial markets appear to incorporate uncertainty shocks more efficiently and monetary policy reacts more systematically to their macroeconomic consequences. A potential explanation for this evolution could be that the nature of trade shocks has changed since 2016. In fact, previously, trade tensions were perceived as temporary and sector specific. Now, Trump has introduced a much higher degree of uncertainty due to his repeated threats and reversals. This operates directly through the expectations. As a result, financial markets can have adapted, becoming more sensitive to trade uncertainty shocks and more likely to anticipate weaker growth and an accommodative monetary policy.

Figure 2: Baseline model subsample (2000-2016)



3.4. The financial channel

To further investigate the financial channel, we analyzed how uncertainty is affecting financial markets before reaching the real economy. Other models were estimated using both spreads and OIS rates to capture different aspects of this channel. Overall, across our models, we observe that trade uncertainty led to tighter financial conditions. The models using spreads lead to an increase of the spreads for the first few months and the models using OIS rates saw them decreased significantly.

These results show how financial markets act as the first responders of trade uncertainty shocks. Interestingly, the OIS response demonstrate how agents not only ask for higher premiums but also anticipate an economic slowdown that will ask for an accommodative monetary policy.

In contrast, during the pre-2016 subsample, the behavior of the financial channel shows a different dynamic. While credit spreads still show an increase (which is actually more persistent than in the full sample, lasting up to 15 to 20 months depending on the model) the statistical significance is weaker, with the lower confidence bound resting closer to zero. More importantly, when looking at the OIS for this earlier period, there is no significant reaction in rate expectations. This suggests that before 2016, trade uncertainty did create financial "noise" and frictions (a prolonged but weak increase in risk premiums), but this tightening was contained within financial markets. Because these financial tensions did not threaten to affect the broader real economy, investors never priced in a systemic crisis and therefore did not anticipate any accommodative rescue from the ECB.

3.5. The expectations channel

The expectations channel is examined through the response of 1-year inflation expectations. We observe, in the full sample, that after an uncertainty shock, inflation expectations decrease and that decrease is significant after 10 months. This downward expectation of future inflation confirms that trade shocks are interpreted by agents as demand-driven events that threaten to slow down the whole economy.

However, when we compare those results with the pre-2016 sub-sample, we see that inflation expectations increase and there is no deflationary trend. This suggests that since Trump took office, the market psychology has fundamentally changed. While historically, trade shocks were seen as minor, inflationary supply chain nuisance, today it is viewed as threat to aggregate demand.

We thus notice a change of shock type. Before 2016, they appear to be temporary supply shocks creating limited volatility without significantly affecting expectations about growth or monetary policy. Now, those shocks act more as persistent demand shocks. They affect the confidence and the financial conditions through the expectations and financial channel and reduce inflation expectations as well as economic activity. This shift has important implication for the monetary policy. As these new shocks push inflation expectations and the economic activity in the same direction, there are no trade-off compared to temporary supply shocks. This means that the ECB can face stronger pressure to ease the monetary policy in order to stabilize the financial conditions and support demand which may explain the more aggressive reaction that we observe in the full sample.

3.6. Transmission to the real economy

We then analyzed how trade uncertainty shocks were able to affect the real economy and the industrial production growth. In fact, the response of production growth provides clear evidence of the real economy transmission.

In the full sample, the freeze in financial markets and the drop in inflation expectations successfully transmit to the real economy and leads to a slight decline in production growth and exports.

In the pre-2016 period, this effect is less visible; exports show no significant or clear reaction and the effect on production growth is also less evident. This could lead us to conclude that prior to 2016, the European real economy was relatively not affected by US trade shocks whereas the current, tariff-heavy environment affects more our industrial activity.

3.7. Monetary policy response

A defining characteristic of the full sample is the systematic aggressive decline in the actual ECB policy rate after an uncertainty shock. In the full sample, this response is both strongly negative and highly statistically significative.

In contrast, the response pre-2016, the response from the ECB is muted and lacks statistical significance. This could be because the shocks in that period did not structurally affect inflation expectations and the real economy which could lead the ECB to "look through" the shock. Nowadays, because the shock affects both demand (with inflation expectations) and output (with production growth), the ECB is forced to have a more proactive response.

3.8. Link with the event study

Finally, we incorporate the VIX in our models to test the impact of global financial volatility and to compare our findings with the results of our event study.

When we introduce the VIX in our BVAR models, the variable did not show strong, significant effect in the full sample or in the sub-sample. These results do not necessarily contradict the results of our event study. In fact, our event study captures the immediate reaction of a shock where the VIX increase a lot because the market panics within days of a tariff announcement. However, the BVAR results capture more persistent macroeconomic dynamics.

IV. CONCLUSION

This thesis looked at the macroeconomic impact of US protectionist policies on the euro area, with a focus on the transmission channels of trade uncertainty and the monetary response of the European Central Bank. We tried to understand both the immediate financial reactions and the more persistent macroeconomic effects of trade policy shocks by using an event study as well as a BVAR analysis.

The results highlight several key findings. First, trade related announcements tend to create strong and immediate reactions in financial markets, notably through increased volatility and, in some cases, spreads. However, these short-term reactions do not always translate into immediate changes in monetary policy expectations. The BVAR analysis nevertheless suggests the presence of a consistent transmission mechanism over the medium term. Trade uncertainty shocks lead to tighter financial conditions, lower inflation expectations and a slight contraction in real economic activity. In response, monetary policy appears to become more accommodative, as reflected by the systematic decrease in policy rate.

One of the main findings of this thesis is that the nature of trade uncertainty shocks seems to have changed over time. Before 2016, trade tensions mainly behaved as relatively limited supply-side frictions, with no significant transmission to real activity or monetary policy. On the other hand, in the post-2016 period, trade uncertainty operates as a contractionary demand shock. It triggers financial market reactions, lowers inflation expectations, reduces economic activity and leads to a systematic easing of monetary policy. This may reflect the growing role of financial markets and expectations in modern economies where uncertainty can influence investment and consumption before trade measures really affect prices.

Interestingly, the results do not provide evidence of the traditional policy trade-off between inflation and output. Instead, uncertainty shocks tend to affect inflation expectations and economic activity in the same direction, which supports the interpretation of these shocks as demand driven.

Finally, the analysis shows that the relevance of certain variables depends on the time horizon considered. The event study shows strong short-term reactions of the exchange rate and market volatility, but these variables do not play a consistent or significant role in our BVAR.

This difference suggests that short-term market reactions and medium-term macroeconomic adjustments are different and so we should interpret the results of our two methods in a complementary way and not think that they are contradictory.

1. Implications

These findings have important implications for monetary policy in the euro area. First, they emphasize that central banks should pay close attention to the financial and expectations channels when analyzing the impact of trade policy shocks. Since uncertainty shocks can influence confidence and financial conditions rapidly, their effects may happen before there are visible changes in inflation or real activity. This also means that central banks should pay attention to trade uncertainty and geopolitical risk variables as well as to the volatility with indicators such as the VIX. It could be important for central banks to include such variables in their models when determining their monetary policy.

Second, the demand-driven nature of recent trade uncertainty shocks suggests that a pure focus on inflation may be insufficient or even counterproductive. In fact, when both inflation expectations and economic activity decline, an accommodative monetary policy may be justified despite the presence of temporary price pressures linked to tariffs.

Finally, the results highlight the increasing importance of communication and credibility in monetary policy. In today's environment (characterized by high uncertainty) managing expectations is a key policy tool to stabilize both financial markets and the real economy.

2. Limitations

Despite its contributions, this study has several limitations. Firstly, while trade uncertainty, financial conditions and expectations are complex concepts, we had to rely on proxies for our empirical analysis. Those proxies may not fully capture the complexity of these concepts and so, alternative measures could potentially lead to different results.

Second, the identification of shocks in the BVAR framework depends on model specification choices, such as variable ordering. Although we tested several models, our results are still conditional to these assumptions.

Third, our analysis focuses only on Europe as a whole and not on specific countries. This means that we did not account for the heterogeneity across member states and for the specificities of each country. Due to this heterogeneity, the transmission of trade shocks could vary from one country to another and so our results could not be relevant for some countries.

Finally, while the event study approach is useful to capture short-term reactions, we have to be careful about the causal effects because financial markets can be influenced by multiple factors at the same time.

3. Recommendations and future research

Future research could take this further and create analyses that could go in several directions. First of all, it could be interesting to investigate how trade shocks affect different European economies. This could be achieved with some country-specific analyses. It could also be interesting to understand which country is most affected or if the ECB takes its decisions by focusing more on some countries compared to others. For instance, we could investigate if and how the effect of trade shocks in Germany is more taken into account by the ECB than the effects in Ireland.

Secondly, further work could use other measures of trade uncertainty within specific sectors in order to better understand the microeconomic aspects of the transmission mechanisms.

Finally, a deeper analysis of the role of central bank communication could reveal how expectations are formed and adjust in periods of high uncertainty. It would be immensely valuable to understand this mechanism because we are in a context where expectations play a central role in the transmission of trade shocks.

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VI. ANNEXES

Annex 1: Data description

Variable	Definition	Source	Frequency	Use
Trade uncertainty	U.S. Trade Policy Uncertainty Index	Baker, Bloom & Davis	Monthly	BVAR
Industrial production	Industrial production index (2021 = 100)	Eurostat	Monthly	BVAR
Inflation	HICP annual rate (%)	ECB	Monthly	BVAR
Inflation expectations	12-month ahead HICP expectations (SPF)	ECB survey of Professional Forecasters	Monthly	BVAR
Spread	ICE BofA Euro High Yield OAS	FRED	Daily / monthly	Event study & BVAR
OIS rate	1-year Overnight Indexed Swap	Bloomberg	Daily / monthly	Event study & BVAR
Exchange rate	EUR/USD	FRED	Daily / monthly	Event study & BVAR
Exports	US imports from the EU	US Census Bureau	Monthly	BVAR
Market volatility (VIX)	VIX Index	FRED	Daily / monthly	Event study & BVAR
ILS 5Y5Y	5y5y Inflation-linked swap	Bloomberg	Daily	Event study
Policy rate	ECB MRO Rate / Wu & Xia Shadow Rate	ECB / Wu & Xia	Daily / monthly	Event study & BVAR

Annex 2: Combined regression results

Variable	Coefficient	Std. Error	t-value	p-value
dSpread				
dummy_rise	0.01389	0.01503	0.92394	0.35554
dummy_decrease	0.00201	0.04242	0.04745	0.96216
dummy_election	-0.00424	0.02123	-0.19958	0.84181
dExchange				
dummy_rise	0.00117	0.00083	1.39681	0.16250
dummy_decrease	0.00743	0.00235	3.15417	0.00161**
dummy_election	0.00004	0.00118	0.03234	0.97420
dMRO				
dummy_rise	-0.00515	0.00409	-1.25781	0.20849
dummy_decrease	0.00006	0.01154	0.00548	0.99562
dummy_election	0.00006	0.00578	0.01096	0.99126
dVIX				
dummy_rise	0.44332	0.21708	2.04222	0.04116*
dummy_decrease	-3.57439	0.61263	-5.83449	0.00000***
dummy_election	-0.61231	0.30661	-1.99704	0.04585*
dOIS				

dummy_rise	-0.00057	0.00266	-0.21311	0.83125
dummy_decrease	-0.00329	0.00751	-0.43833	0.66116
dummy_election	-0.00072	0.00376	-0.19025	0.84912
dILS_5y5y				
dummy_rise	-0.00005	0.00027	-0.18436	0.85373
dummy_decrease	-0.00134	0.00349	-0.38361	0.70128
dummy_election	0.00579	0.00492	1.17632	0.23950

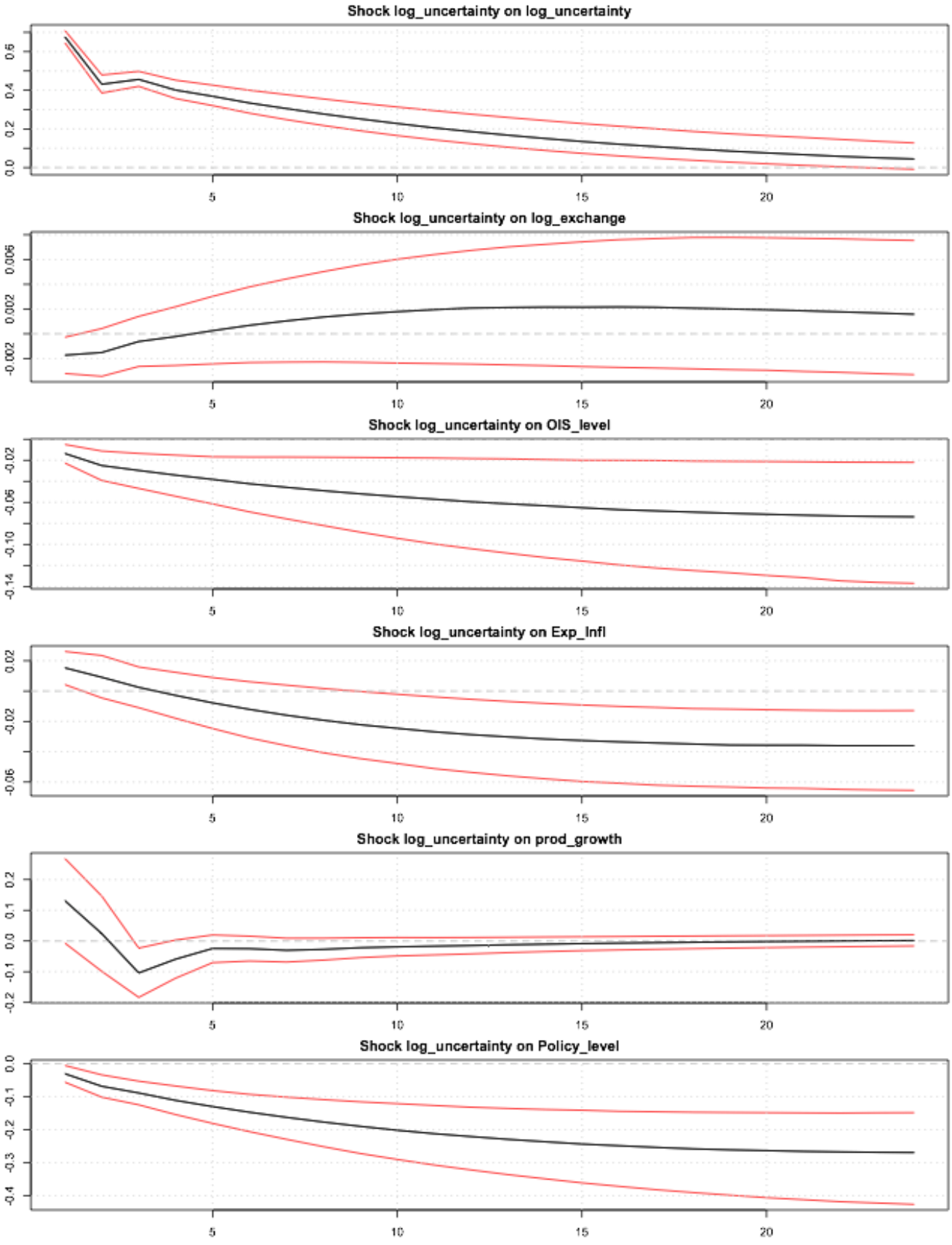
*(Significance codes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$)*

Annex 3: Separate regression results

Event	Variable	Coefficient	p-value
Liberation Day (02 Apr 2025)	dSpread	0.15038	0.0004***
	dExchange	0.00185	0.4323
	dMRO	9e-05	0.9938
	dVIX	4.20481	0.0000***
	dOIS	-0.00328	0.6617
	dILS	-0.00531	0.5891
90-day pause (09 Apr 2025)	dSpread	0.00195	0.9633
	dExchange	0.00742	0.0016**
	dMRO	9e-05	0.9938
	dVIX	-3.57508	0.0000***
	dOIS	-0.00328	0.6617
	dILS	0.01445	0.1417
Trump Election 2016	dVIX	-0.75664	0.2178
	All others	~ 0.000	> 0.10
Trump Election 2024	dVIX	-1.17357	0.0559*
	All others	~ 0.000	> 0.20
Tariff threats 8 EU	dVIX	-0.03619	0.9530
	All others	~ 0.000	> 0.30

*(Significance codes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$)*

Annex 4: Baseline model (full sample)



Annex 5: Baseline model subsample (2000-2016)