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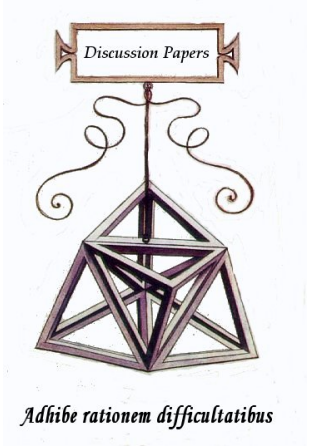

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Political instability and international trade in the European Union: A network-based approach

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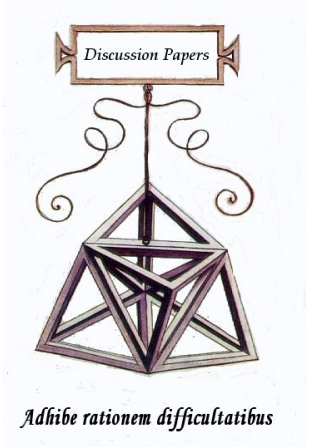

Giovanni Carnazza, Paolo Liberati, Agnese Sacchi

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Keywords: political instability; trade diversification; network analysis; geopolitical dependency; EU countries

JEL CLassification: D74; D85; F10; F50

Political instability and international trade in the European Union:

A network-based approach

Giovanni Carnazza [(*)]

Paolo Liberati [(**)]

Agnese Sacchi [(***)]

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There will be nothing peripheral about trouble on the periphery.

(The Economist, 18 July 2013)

1. Introduction

Results from the recent World Values Survey suggest that in 2022, many countries will continue to suffer from political instability (for instance, difficulties in improving democratic practices). Without institutional and wide-ranging reforms, such venting of public anger risks degenerating into recurrent disruption to political stability, as pointed out by the Economist Intelligence Unit (2022). Overall, the average score in the 2022 Democracy Index continues to be weighed down by civil conflict and chronic instability in many countries belonging to Africa, Europe, Latin America, and Asia. Accordingly, it appears relevant to investigate the determinants of political instability, which can assume different dimensions and are likely to occur also in advanced economies, including the European Union (EU hereafter) countries nowadays (e.g., Jong-A-Pin, 2009; Guiso et al., 2024).[1]

Among others, some economic factors, such as long-term recessions, increased unemployment ratios, and high levels of inflation, have been traditionally detected as potential threats to political stability. Recent studies also highlight the importance of additional factors that are not exclusively related to the economic dimension but refer to other spheres such as the quality of institutions, the role of demography and geography, the extent of social disparities, and the migration policies (Annett, 2001; Blanco and Grier, 2009; Goldstone et al., 2010; Algan et al., 2017).

[1] The former examines the multidimensionality of political instability using twenty-five political instability indicators in an Exploratory Factor Analysis and finds that political instability has four dimensions: politically motivated violence, mass civil protest, instability within the political regime, and instability of the political regime. The latter studies the spiral of populism in Europe as an example of political instability by investigating the direct and indirect role of economic insecurity shocks on the demand for populism in Europe.

Recently, some scholars pointed out the implications that energy resources and dependence on oil can have in terms of political stability, by showing that oil dependency constitutes a serious threat to political stability in both importing and exporting countries (Gong et al., 2022; Cappelli et al., 2023; Mignon and Saadaoui, 2024). In this context, the role of international trade also matters; a different concentration of imports could be detrimental to political stability to the extent that a significant part of imports mainly come from politically unstable countries and are poorly diversified. Indeed, in international trade, import diversification represents an important aspect, making a country less vulnerable to foreign supply shocks (Colantone and Stanig, 2018a; Cai et al., 2023).

In this paper, we consider the possible interaction between these two elements – import diversification and political instability – by empirically analysing how the degree of trade diversification adjusted for the political instability of non-EU exporting countries would affect the domestic political instability in 27 EU countries observed on an annual basis during the period 1999-2021. To this purpose, we adopt a network-based approach and build a novel geopolitical dependency index, thus contributing to the recent literature on measuring geopolitical risk around the world (e.g., Caldara and Iacoviello, 2022; Caldara et al., 2022).

From a methodological viewpoint, our novelty consists in integrating an existing and well-known country- and year-specific measure of political (in)stability into a network analysis to examine its impact across European countries. Accordingly, a geopolitical dependency index is built by interacting the share of imports from each non-EU exporting country with its own level of political instability (see also Cappelli et al., 2023). This index would measure the potential transmission channel of political instability from non-EU exporting countries to EU importing countries.

We enrich the literature on the determinants of national political instability and the effects of international trade within a network-based approach to the EU framework. Our analysis

sheds new light on how higher trade openness could be associated with greater political instability. Unlike the traditional literature (e.g., Goldstone et al., 2010; Nayef and Willoughby, 2017) that usually relies on a single and simple measure of openness – i.e. the sum of imports and exports as a share of GDP -, we properly assess the impact of trade when the import diversification of a country is linked to the political instability of the exporting countries it trades with. In this way, we also contribute to the debate on the recent increase in trade and geopolitical tensions with concerns about national security (Autor et al., 2020; Goldberg and Reed, 2023).

Our results confirm that trade relations do not contribute to domestic political instability if imports from the rest of the world are sufficiently diversified and come from politically stable countries. On the contrary, low levels of import diversification, combined with high levels of political instability in exporting countries, can represent a transmission channel of increasing domestic political instability. Therefore, the risk of importing political instability through international trade increases when either trade concentration or the import share from more politically unstable non-EU countries also increases. Additional evidence suggests that the EU membership may act as a shield against the spread of instability originating in non-EU exporting countries.

Furthermore, given the relevance of the United States (US hereafter) and China among the non-EU exporting countries for European economic activity (Du et al., 2017; Colantone and Stanig 2018b; Fusacchia, 2020; Lee et al., 2023; Freund et al., 2023), we test how our main results would change when China and the US are among the top three exporting countries. We find evidence that the probability of importing political instability may decrease when the US are among the top three trade partners, while it does not change when China is in that same position. An outcome that highlights the potentially different role played by the two countries in affecting trade and political tensions in EU countries.

The rest of the paper is organized as follows. Section 2 describes the theoretical background, including how we measure domestic political instability and build a novel geopolitical dependency index. Section 3 presents the empirical analysis and Section 4 provides the main results with some robustness checks and additional evidence on the role of the EU membership. Section 5 investigates the role of China and the US for trade and political instability in the EU framework. Finally, Section 6 briefly concludes.

2. Theoretical background: The geopolitical dependency

2.1 How to measure political instability

The issue of how to measure political instability has been addressed by the literature using either a one-dimensional index (Perotti, 1996; Alesina et al., 1996) or a multidimensional perspective, although this literature has not reached a consensus as to the appropriate number of dimensions (Jong-A-Pin, 2009). Since the aim of our analysis is to disentangle the impact of political (in)stability, we choose to limit the dimensions used to build our index. To this purpose, among the six broad dimensions of governance provided by the Worldwide Governance Indicators,[2] including *voice and accountability*, *political stability and absence of violence/terrorism*, *government effectiveness*, *regulatory quality*, *rule of law*, and *control of corruption*, we focus on "*political stability and absence of violence/terrorism*" as the most direct and proper indicator.

This item measures the likelihood of political instability and/or politically motivated violence, including terrorism. It assumes both negative and positive values, with higher values corresponding to better outcomes, and has the advantage of covering a long time span and being comparable across different countries. It ranges approximately from -2.5 (weak political

[2] For more technical information about the Worldwide Governance Indicators, see Kaufmann et al. (2010).

stability) to +2.5 (strong political stability). For our purposes, we decide to invert the sign and to normalise the index from 0 (strong political stability or weak political instability) to 1 (weak political stability or strong political instability). For this reason, we rename the new indicator *political instability* (*PI*).[3]

Figure 1 shows the average, maximum and minimum values of the index for (a) the European Union and (b) the rest of the world. As expected, EU countries are characterised by both a lower political instability, on average, and a lower range of variation than the rest of the world; the latter feature provides support to our choice of ruling out intra-EU trade as a driver of political instability.

[Figure 1 here]

Some descriptive statistics on the domestic political stability of each EU country over the years 1999-2021 are reported in Table 1. They reveal a certain degree of heterogeneity across countries. On the one hand, Spain, Greece, Romania, and Bulgaria show, on average, the highest values of *PI*, followed by France, Italy, and Latvia. On the other hand, Sweden, Ireland, the Netherlands, and Austria show the lowest values of *PI*, calculated as averages over the whole period.

[Table 1 here]

Given this picture, we use the *PI* variable to define a new geopolitical risk for the EU countries, defined as the threat, realization, and escalation of adverse events associated with

[3] The few missing values have been interpolated, limiting the minimum and maximum values between 0 and 1.

violence, terrorism, and any tensions among states that might affect the stability course of international relations (see also Caldara and Iacoviello, 2022), by weighting for the level and concentration of imports from the rest of the world. Accordingly, we adopt a network-based approach applied to the EU framework as described in the next section.

2.2 The European International Trade Network

The European international trade network is conceptualised using complex network theory, where countries all over the world represent the *nodes* and trade flows between countries are the corresponding *links*. Complex network theory allows using specific indicators for analysing the structural characteristics of our network. In traditional analysis of complex networks, one of the most important problems is related to the identification of the importance of nodes (i.e., countries). Network centralities can be assessed through several methods aiming to capture different network structures. In this study, we preliminarily focus on degree centrality to describe the trade network between European countries and the rest of the world, and to take into account the potential transmission mechanism of political instability from exporting countries to the EU, we use the Herfindahl-Hirschman concentration index (HHI), commonly used in economics and finance to measure the level of competition or concentration within a market (Newman et al., 2006).

Degree centrality measures the direct connections between nodes in a network: in particular, in-degree centrality denotes the total number of inflow links, while out-degree centrality is based on outflow links. In- and out-degree centralities generally serve as fundamental indicators that are commonly employed as an initial stage in network analysis (Wasserman and Faust, 1994). Degree centrality can also assign weights based on the importance of a node, in our case being the corresponding monetary value of the trade flow. This element defines the size of the network link, with inflow or outflow indicating whether a node imports or exports goods. Being

mainly interested in identifying a potential transmission mechanism of political instability through imports, we focus our attention on the import side of the network. Since EU countries are characterised by low political instability, we exclude intra-EU trade and focus on the extra-EU international trade. Formally, being n the overall number of non-EU countries, the weighted in-degree centrality (wID) of country/node i can be defined – for each year t – as follows:

$$wID_i = \sum_{j=1}^{n} w_{ji} = \sum_{j \neq i} w_{ji} \quad (1)$$

where w_{ji} is the weight of the link (i,j).[4] In particular, i represents the focal importing country, while j defines the $n - 1$ non-EU exporting neighbours. In other words, the weighted in-degree centrality measures the number of links that other countries have initiated with the country i, weighted for their corresponding monetary amounts. In this way, those countries with high weighted in-degree centrality scores can be considered as market hubs, as it signals that exports from many countries represent a relevant monetary value.

Using chord diagrams, we show graphically the weighted in-degree of the European international trade network, considering the 27 member countries and the rest of the world as shown in Figure 2. In 2021, Germany, the Netherlands, Italy, and France represent the countries whose trade relations weigh most heavily among European partners: in terms of imports and exports, respectively 21.9% and 29.1% for Germany, 15.2% and 8.6% for the Netherlands, 10% and 11.1% for Italy, and 9.5% and 10.3% for France. Among them, France is the only country that experienced the most significant reduction in its trade relations with the rest of the world (-4.9% for imports and -6.2% for exports). On the contrary, some countries (i.e., Eastern European countries, the Netherlands and Spain) have experienced an increase of the relative

[4] The connection between country i and itself (w_{ii}) does not exist. Consequently, Equation (1) can be written in both ways.

weight within total extra-EU trade. The European international trade network is characterised by an overall balance between extra-EU exports and imports over time: in terms of value, imports from the rest of the world into the EU tend to be perfectly balanced with exports from the EU to the rest of the world. In 2021, imports from the rest of the world in EU countries accounted for 50.3% of total extra-EU bilateral trade, worth around 5 trillion dollars (Table A1 in the Appendix).

[Figure 2 here]

Then, we quantify the diversification level of imports through the HHI. The identification of specialisation in international trade is comparable to a similar issue in industrial organisation, that is the need for a theoretical and empirical measure of market power. In this regard, the Herfindahl-Hirschman Index (HHI) represents a typical example.[5] In a trade framework, the HHI can be applied both to the export and to the import side (Magee and Magee, 2008). As before and for the same reasons, we focus only on imports and on extra-EU trade, leaving out the trade relations within the EU.

In our network, the weights of each link now represent the market shares (MS). This implies that the sum of the incoming links to country i is equal to 100%. More precisely, let n be the number of all worldwide non-EU partner countries, the HHI of a certain EU country i (HHI_imp) is calculated – for each year t – by squaring and summing the market shares of imported trade by partner countries j as follows:

[5] The index has been developed independently by the economists Hirschman and Herfindahl. Hirschman (1945) presented the index in his book, while Herfindahl (1950) presented it in his unpublished doctoral dissertation. More details about the background of the index can be found in Hirschman (1964).

$$HHI\_imp_i = \sum_{j \neq i} MS_j^2 \quad (2)$$

where MS_j represents the market share of exporting country j to importing country i.

As well known, the HHI gives much heavier weight to countries with large market shares than to countries with small shares because of squaring the market shares and ranges from a maximum value of 10,000 in which one country has 100 per cent of the market (monopolistic situation) to the minimum value of 0 which occurs when a purely competitive market exists with infinite countries with small market shares.[6] However, market concentration represents only one side of the coin. In our view, as explained above, it is also important to take into account the level of political instability of the exporting countries. This issue may be addressed by using a geopolitical dependency index (Cappelli and Carnazza, 2023), which implies a modified version of the previous equation, as follows:

$$HHI\_imp\_PI_i = \sum_{j \neq i} MS_j^2 \cdot PI_j \quad (3)$$

where PI_j represents the political instability of the exporting country j. It is worth noting that HHI_imp_PI maintains the same meaning of HHI_imp: values close to 10,000 suggest the presence of a monopoly in the international trade market, while values close to 0 a fully

[6] To be more precise, the HHI_i ranges from $10{,}000/n$ to 10,000, reaching its minimum when all exporting countries are characterised by the same market share and its maximum in a monopolistic scenario. If the number of exporting countries tends to infinity, then the lower bound approaches zero. Moreover, as the number of countries under consideration increases, the sensitivity of the index to an increase in sample size decreases. Normalisation of HHI (HHI^n) has been suggested in the literature, resulting in a normalised version that ranges from 0 to 10,000, irrespective of the number of countries in the market (Rotundo and D'Arcangelis, 2014):

$$HHI_i^n = (HHI_i - 10{,}000/n)/(1 - 10{,}000/n) \quad (4)$$

Since we are considering countries all over the world, n is high enough to make the difference between the two indices (HHI and HHI^n) negligible. Results with HHI^n are robust and are available upon request.

competitive international market.[7] To make the results easier to read, we normalise both the *political instability* (PI) and the HHI adjusted for political instability (HHI_imp_PI) from 0 to 100.

In order to take into account the level of political instability in non-EU exporting countries (PI_j), we decide to split Equation (3) by introducing – for each year t – an arbitrary watershed equal to the median value of the index: on the one hand, countries whose political instability is greater than 0.5 ($PI_j > 0.5$) are considered unstable countries (*unstable*); on the other hand, countries characterised by a coefficient lower than 0.5 ($PI_j < 0.5$) are labelled as stable countries (*stable*). This distinction is based on the intuition that the strongest impact on domestic political instability could come from trade with countries already characterised by high levels of political instability. Accordingly, we can derive the following:

$$HHI\_imp\_PIu_i = \sum_{j \neq i} MS_j^2 \cdot PIunstable_j \quad (5)$$

$$HHI\_imp\_PIs_i = \sum_{j \neq i} MS_j^2 \cdot PIstable_j \quad (6)$$

3. The empirical analysis: model and variables

3.1 The baseline model

As a preliminary step, we check for stationarity to avoid the possibility that non-stationary variables, while independent, could be highly correlated only because of their trend (Granger and Newbold, 1974). In this regard, we implement the Fisher-type Augmented Dickey-Fuller

[7] In any case, the direct comparison between the two indices should be taken with caution. The two indicators assume, in fact, the same value if and only if all the *j* countries from which country *i* is importing are characterised by maximum political instability. This extreme case is practically impossible, which always places *HHI_imp_PI* below *HHI_imp*.

(ADF) test (Choi, 2001), also allowing for the subtraction of the mean from the series to mitigate the impact of cross-sectional dependence; both versions of the test confirm the stationarity of the variables of interest.[8]

The analysis is based on annual data for 27 countries belonging to the EU observed over the period 1999-2021, where domestic political instability (PI) is mainly regressed against the degree of import diversification adjusted for the political instability of non-EU exporting countries (HHI_imp_PI). Our network includes more than 175 non-EU countries and 27 EU countries. The estimation procedure is based on a Generalized Least Squares (GLS) estimator controlling for panel specific autocorrelation structure ($AR1$) and heteroskedastic and correlated error structure to deal with cross-sectional dependence possibly leading to endogeneity and inconsistent estimates.

Thus, for each European country i, we have the following equation:

$$PI_{i,t} = \alpha + \beta HHI\_imp\_PI_{i,t-1} + \boldsymbol{\delta}' \boldsymbol{X}_{i,t-1} + \gamma_i + \lambda_t + u_{i,t} \quad (7)$$

where α is the constant term, β is the coefficient associated with the main regressor HHI_imp_PI and $\boldsymbol{X}_{i,t-1}$ is a set of control variables (described below), both included at time $t-1$ to alleviate potential reverse causality issues (Reed, 2015; Bellemare et al., 2017), γ_i represents country fixed effects (to control for unobserved time-invariant country characteristics), λ_t stands for time fixed effects (to deal with possible exogenous common shocks in a specific year) and u_{it} is the error component.

It is reasonable to assume that the political instability of the 27 EU countries could affect somehow the political instability of other countries, including those not belonging to the EU,

[8] Results are not reported and available upon request.

involved in international trade relations. This is likely to occur mostly for intra-EU trade, whose mutual trade is very high and likely subject to contagion effects due to the geographic proximity. On the other hand, it is possible to highlight at least two counter-arguments for non-EU countries. First, excluding intra-EU trade from the international trade network allows us to overcome this channel of endogeneity with certainty. Second, concerning the extra-EU international trade network, the political instability of a single EU country can hardly spread outside the European boundaries through the trade channel, given the geographical distance and the generally small share of its exports compared to the overall imports of a foreign country. More generally, the effects related to the propagation of shocks within a large international network are likely to be negligible (Jaimovich and Panizza, 2007), limiting the potential endogeneity concerns in our case.

The sign of β is particularly important in our analysis, as it quantifies the impact of the geopolitical dependency index on domestic political instability: on the one hand, if β is positive, a decrease in import diversification in country i and/or an increase in exporting countries' political instability ($j \neq i$) lead to an increase in internal political instability; on the other hand, if β is negative, increased domestic political stability results from an increase of import diversification and/or a decrease of political instability in exporting countries.

Equation (7) can be further developed, by splitting the geopolitical dependency index according to the observed level of external political instability of non-EU exporting countries. Accordingly, we have:

$$PI_{i,t} = \alpha + \beta_1 HHI\_imp\_PIu_{i,t-1} + \beta_2 HHI\_imp\_PIs_{i,t-1} + \boldsymbol{\delta}' \boldsymbol{X}_{i,t-1} + \gamma_i + \lambda_t + u_{i,t} \quad (8)$$

where β_1 is the coefficient associated with the geopolitical dependency index where the exporting countries are observed as politically unstable (HHI_imp_PIu), while the estimated

coefficient β_2 captures trade relations with politically stable countries (HHI_imp_PIs), as derived from Equations (5) and (6).

3.2 Control variables

Regarding control variables, our model includes some demographic, macroeconomic and fiscal control variables, which are added by a group. More in detail, among demographics, we consider the age dependency ratio that is, the ratio of the sum of the younger population (under age 15) and elderly population (age 65 and over) to the working-age population (age 15-65). As for macroeconomics, both the unemployment ratio (measured by the number of unemployed as a percentage of the labour force) and the inflation rate (based on the harmonised index of consumer price, HICP) represent short-run variables that are able to capture the impact of the business cycle. In this set of control variables, the debt-to-GDP ratio is also included to capture those fiscal factors potentially affecting domestic political instability in the context of the European fiscal framework.

Considering the existing literature on the determinants of political instability, these control variables have been included. First, age dependency and population growth aim to capture the impact of non-working generations (young and old) on domestic political instability. In this regard, the empirical research by Urdal (2006) shows a significant and positive relationship between the size of the youth population and political instability. Concerning macroeconomic determinants, scholarly literature typically suggests that increased levels of economic growth reduce the likelihood of political instability (Alesina et al., 1996). Moreover, several studies have examined the positive link between inflation and political instability (Aisen and Veiga, 2006; Blanco and Grier, 2009). Finally, since high debt-to-GDP ratio makes contractionary fiscal policies more likely (Eyraud et al., 2017), it could also increase popular dissatisfaction and political tensions due to restrictive government policies.

We also include some variables on the political and legislative spheres characterising different EU countries (Carnazza et al., 2023). The first variable (*elect*) refers to the election domain, considering the date of election of the national parliament (lower house).[9] Since the size and the weight of the largest opposition party may also be relevant, we include a variable based on appointed and elected seats ($oppseat$). These variables come from two main sources: the Comparative Political Data Set (CPDS), which provides a collection of political and institutional country-level data suited for cross-national, longitudinal, and pooled time series analysis (Armingeon et al., 2023), and the Database of Political Institutions (DPI), which includes institutional and electoral data in a comparative political economy framework (Cesi et al., 2021). Descriptive statistics of all variables used in the empirical analysis are reported in Table 2.

[Table 2 here]

4. Political instability and international trade: main results

Results when estimating Equation (7) are reported in Table 3. When considering the more parsimonious model (i.e. without control variables) with country and year fixed effects (column 1), the main regressor (HHI_imp_PI) is positive and statistically significant. This result is robust to the inclusion of different groups of control variables, which are added from columns (2) to (5). This means that trade diversification matters when it comes to importing political instability: according to our index, domestic political instability increases as import diversification decreases and/or as the political instability of non-EU exporting countries

[9] If there were two elections in a year, the date of the second is given.

increases. Therefore, concentrating imports from very politically unstable countries makes a country extremely prone to importing high levels of political instability.

[Table 3 here]

This result is in line with the idea that trade may become a potential spreader of shocks, at least in the case of socio-economic shocks such as violent conflicts and political instability. In this regard, trade diversification may indeed reduce the risk of importing political instability; on the other hand, as confirmed by our results, when depending on a small number of exporting countries, the economies are more likely to suffer from an increase of political instability (Humphreys, 2005; World Trade Report, 2021). This result is particularly important when considering that trade diversification is not always possible (as in the case of energy products or raw materials) or may not be desirable because of deteriorated political relationships.

Our analysis seems to support the idea that free trade may not be a sufficient condition for political stability; rather, political stability may be the consequence of an environment in which governments try to rationally address the impact of trade, including the possibility of trade with 'allies' and avoid trading with potential 'enemies' or unstable countries (Moon, 2000). The relevance of this factor is confirmed by results in Table 4, where we use *HHI*, which is not adjusted for the political instability of non-EU exporting countries. The estimated coefficients are still positive and statistically significant in all specifications, but they show a lower magnitude compared to those in Table 3. This result suggests that the political instability of non-EU exporting countries may act as a negative externality on trade, reducing its alleged positive effect on national economies.

[Table 4 here]

Regarding control variables, the impact is the same in Tables 3 and 4. First, our estimates highlight a positive correlation between demographic variables (i.e. population growth and age dependency ratio) and domestic political instability as shown by the existing literature (e.g., Urdal, 2006). The intuition is that youth bulges are particularly associated with an increasing risk of internal armed conflict and violence due to a lower opportunity cost for this share of the population. Moreover, it is more likely that population growth amplifies the heterogeneity of preferences and interests, giving rise to more internal political instability.

Second, as expected, the unemployment rate and inflation play an important role in fuelling domestic political instability. At the same time, real GDP growth tends to reduce those dynamics providing support to the fact that generalised increases of income may weaken political tensions. On the other hand, weak economic performance might represent a significant driver of political instability for at least two main reasons. First, when income levels are low (or declining), the opportunity cost for individuals to engage in protests or rebellion diminishes (Grossman, 1991; Collier and Hoeffler, 2004). Second, adverse economic conditions exacerbate deprivation, intensifying political instability as citizens perceive their government as inept (Ellingsen, 2000).

Finally, fiscal and political controls do not seem to have a statistically robust impact on domestic political instability. An intuition is that trade flows do not significantly change following changes in the debt-to-GDP ratio the outcome of the elections, or the relevance of opposition parties; if trade flows do not change, the indirect impact on political instability is minimised.

4.1 Splitting the sample

To provide support to our main results, we split HHI_imp_PI for unstable exporting countries (i.e., with *PI* higher than 0.5) and stable exporting countries (i.e., with *PI* lower than 0.5) by estimating Equation (8). Results in Table 5 show that while the baseline model shows no significant differences, the statistical significance of the coefficient associated with HHI_imp_PIs disappears when introducing control variables from columns (2) to (5). At the same time, the significance of the coefficient in the case of unstable countries is persistent in all models (HHI_imp_PIs). This means that increasing import concentration from highly politically unstable countries significantly affects domestic political instability, compared to what happens when trade occurs with more politically stable countries. In this latter case, as expected, the risk becomes negligible, which suggests that strengthening trade relations with already highly unstable countries would potentially lead to more internal instability. Put in other words, this may suggest that the beneficial effect of free trade depends on the countries to trade with; when trade develops (or *must* develop) with politically unstable countries, a negative externality must be endured, potentially reducing the beneficial effect of trade on internal stability.

In its extreme versions, the positive impact of trade would vanish in all those cases in which the political instability of the trading countries gives rise to disruption of trade flows. Thus, there may exist a sort of by-trade 'spatial correlation' of political instability that does not necessarily manifest itself only between neighbouring countries; it can transcend physical borders, for example, through the breakdown of global value chains or because of the dependence on natural resources, eventually leading to a slowdown of economic growth.

[Table 5 here]

4.2 The EU membership

At this point, an interesting question to ask is whether the EU membership can protect the domestic political instability of member states from the impact of a decrease in import diversification and/or an increase in the political instability of non-EU exporting countries. In other words, we try to measure whether the risk of importing political instability in the European countries may be different before and after their joining the EU. Indeed, not all countries entered the EU at the same time, and this might have led to different reactions to domestic political instability when trading with different non-EU countries (Barbier-Gauchard and Mazuy, 2018).

To deal with this issue, two complementary country- and year-specific dummy variables have been created: i) if in a certain year t, a country does not belong to the EU, the first dummy variable qualifies that country as non-EU member, assuming values equal to 1; ii) the second dummy variable characterizes EU membership by assigning a value of 1 to those countries that are part of the EU in a certain year t. To estimate the diversified impact of participation (or new entry) in the EU, we interact the main regressor with the two dummy variables.

Results from estimating the baseline models when adding these two interactions between the main regressor and the two dummy variables are shown in Figure 3, reporting the coefficient measuring the impact of trade in the two groups. The bar associated with the estimated coefficients of HHI_imp_PI if a country belongs to the EU in a given year is smaller than the estimated coefficients on the same regressor if a country does not belong to the EU in a given year. Thus, it emerges that belonging to the club of EU member states reduces the external risk of importing political instability.[10] Note also that this finding is robust across the different specifications of the model, depending on the presence of control variables as included in the previous tables.

[10] The table is not reported and available upon request.

[Figure 3 here]

In a nutshell, this would signal that the EU membership may act as a shield against the spread of instability originated in non-EU exporting countries.

5. The role of the United States and China

A further element to consider in the analysis is that when considering non-EU exporting countries, it may not be reasonable to assume that their possible political instability has the same weight as the domestic political instability of EU countries. In particular, the weight may depend on the size of countries in terms of total trade. On the other hand, it has also been shown that the greatest contribution to increased domestic political instability comes from already politically unstable countries. In this context, it is worth considering both aspects, focusing on the role played by Chinese and US imports in total extra-EU imports. Given their significant contribution to international trade flows, this role may be more relevant than that of other countries.

Indeed, imports from China and the US accounted, on average, for more than 25% of total non-European imports over the period 1999-2021 (Figure A1 in the Appendix). Even more relevant is the fact that an inverse trend characterizes the two countries: on the one hand, China experiences a sharp increase in its export share towards EU countries (from 5.3% in 1999 to 21.9% in 2021); on the other hand, the share of US significantly reduces (from 15.7% in 1999 to 10.5% in 2021). Moreover, looking at their political instability over time (Figure A2 in the Appendix), it emerges that values of *PI* for China are always higher compared to those for the US during the observed period; in the last years (i.e. after 2018), the political instability of both countries shows an upward trend.

Therefore, it seems particularly important to focus on the role of the US and China in influencing the overall effect of import concentration adjusted for their political instability to check whether trading with these countries might alter the results so far obtained. To this purpose, we consider the combined effect of these two countries' political instability and trade share on the domestic political stability of EU countries.

Operationally, we introduce a different specification of our main regressor (HHI_imp_PI) in Equation (3), which considers the US and China alternatively through the interaction with a country- and year-specific dummy variable. Specifically, the first dummy variable is constructed for the US, taking the value of 1 if the US is one of the top three exporting countries in a given year and for a given European country ($dummy\_US\_top3$); the second dummy variable is constructed in the same way, but for the China ($dummy\_China\_top3$). Then, we can isolate those HHI_imp_PI values where trade from the US and China plays an important role in the potential transmission mechanism of political instability in EU countries. Our objective is to understand whether the impact on domestic political instability is different – compared to the overall estimated value of our main regressor – if we isolate those years in which the US and China exported more to the European countries. The two new regressors, interacting alternately with the two dummy variables for each year *t*, can be defined as follows:

$$HHI\_imp\_PI_i\_US\_top3 = HHI\_imp\_PI_i \cdot dummy\_US\_top3 \quad (9)$$

$$HHI\_imp\_PI_i\_China\_top3 = HHI\_imp\_PI_i \cdot dummy\_China\_top3 \quad (10)$$

Estimation results are reported in Table 6 (when including the US among the top three exporting countries) and Table 7 (when including China among the top three exporting countries). When considering the US among the top three trade partners (Table 6), the estimated

coefficients associated with the new main regressor – given by the sum of HHI_imp_PI and $HHI\_imp\_PI\_US\_top3$, when statistically significant – are lower than the estimated coefficients referred to the baseline model in Table 3. The opposite result is obtained when China belongs to the top three exporting countries (Table 7): when summing the coefficients HHI_imp_PI and $HHI\_imp\_PI\_China\_top3$ (if statistically significant), it emerges either a greater concentration of imports or a greater political instability in non-EU exporting countries (or both) compared to what emerges in the baseline model in Table 3. This means that what happens in China might significantly lead political instability of those European importing countries trading mostly with it.

[Table 6 here]

[Table 7 here]

The previous insights are well depicted in Figure 4, which summarizes the estimated coefficients associated with the main regressor and the alternative inclusion of the US and China among the top three exporting countries by visually comparing the different effects. When focusing on trade from the US, the impact of import concentration and increased political instability in exporting countries relative to domestic political instability in EU countries is reduced. From an economic viewpoint, this could imply that trade from the US positively affects domestic political instability, as its significant presence in the international trade network reduces the impact of the geopolitical dependency index.

On the other hand, having China as a top exporter in the overall network leads to a significantly higher coefficient and a wider effect of trade concentration adjusted for the political instability of exporting countries. This is particularly effective for specification in column (5), which represents the most comprehensive model with all controls included,

suggesting that China, ultimately, plays a significant role in affecting domestic political instability in the EU framework.

In conclusion, this outcome makes clear that the role of China and the US in the international trade network may have different impacts on the transmission mechanisms related to external political tensions on domestic political instability. Once again, trade relations with countries that are already highly politically unstable can also increase the risk of importing political instability.

[Figure 4 here]

6. Concluding remarks

Our analysis highlights that it is crucial to assess geopolitical risks to maintain economic and political stability within the EU and that trade may not be beneficial by itself. We shed new light and complement the economic literature on the impact of international trade and political stability (Goldstone et al. 2010; Nayef and Willoughby, 2017), by considering the essential interaction between the degree of import diversification of any given country and the political instability of the exporting countries it trades with.

By following this approach, our results confirm that trade relations can shrink domestic political instability if imports from the rest of the world are not very concentrated and come from more politically stable countries. The case of the US and China shows that not all trade is the same trade and that when trade comes with countries that are classified as more politically unstable, there is a sort of negative externality represented by the import of political instability.

Possible policy implications from those findings are that EU countries should diversify their trade relations and engage more with politically stable partners to mitigate the risk of importing political instability from abroad. Another longer-term perspective is that European countries

should engage in investing in those production lines that may weaken their economic dependence on specific countries and specific products and tradable goods. Of course, there is no advantage to investing in producing goods that are not vital for the European economy. Yet, some products (for example, some energy sources or semiconductors) for which a relaxation of trade dependence, which might not be convenient now, could be more relevant in the future.

Finally, further research should be thus devoted to exploring other dimensions than trade, such as direct foreign investments and economic aid, to understand and assess their impact on domestic political stability (see Aiyar et al., 2024). Additionally, longitudinal analyses post-2021 could be provided to examine the evolving nature of trade-political instability relationships amidst global changes.

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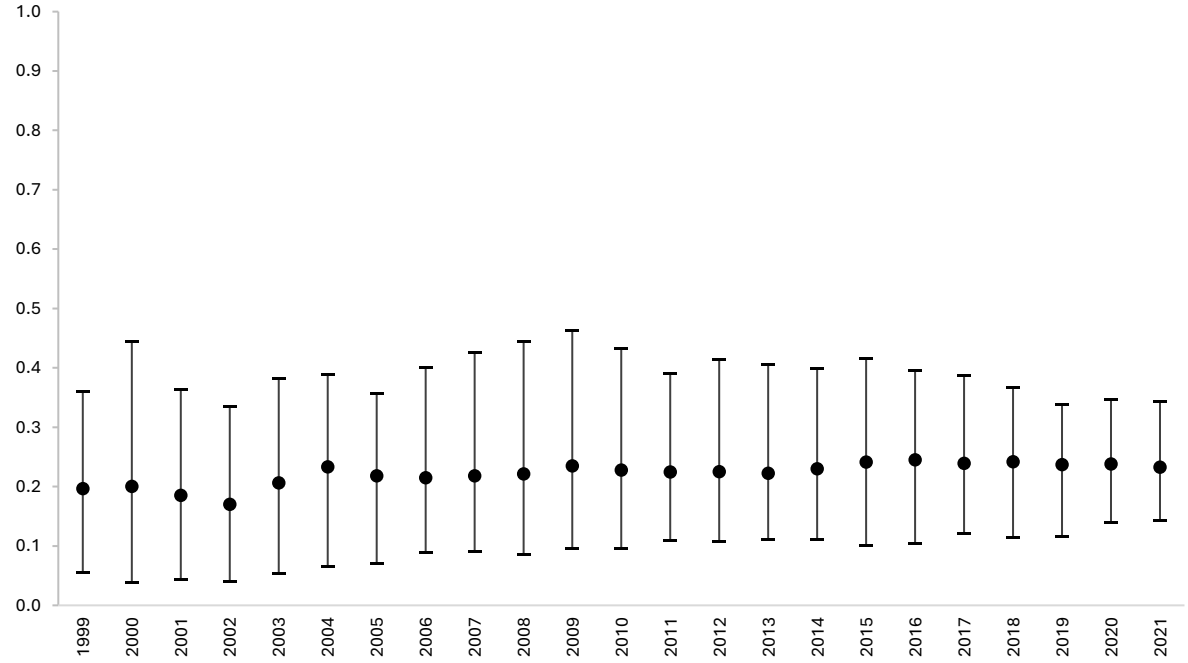
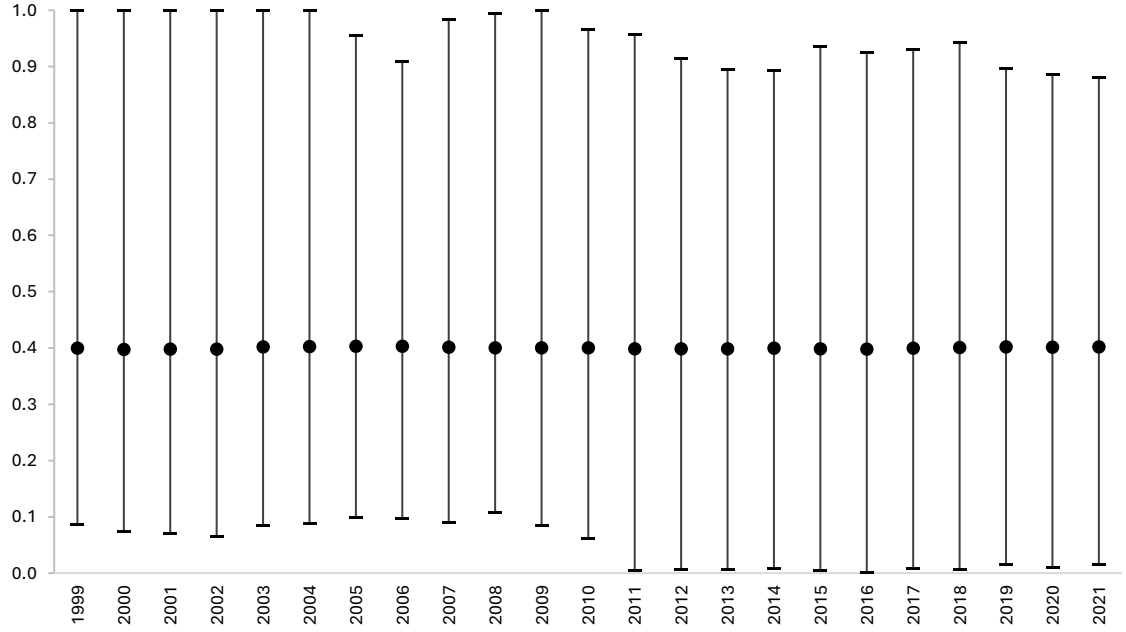
Figures

Figure 1 – Political instability (*PI*)

(a) European Union



(b) Rest of the world

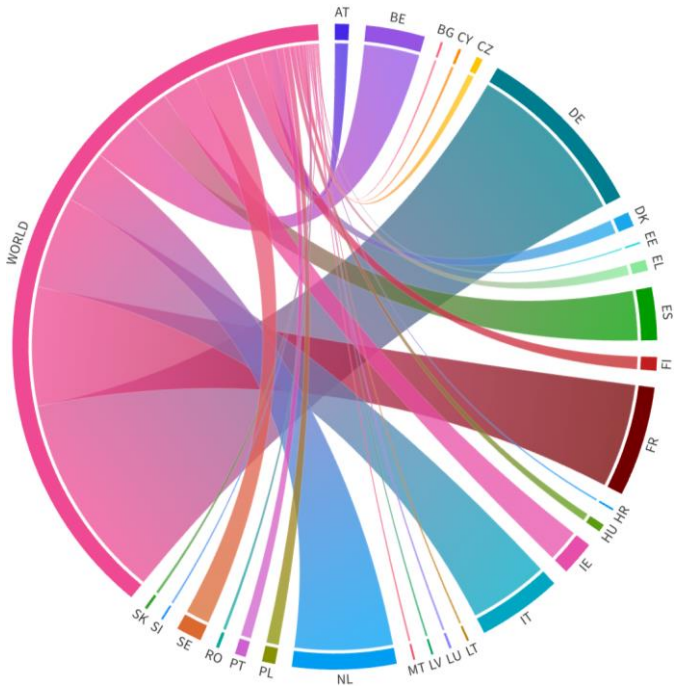


Note: the round markers indicate the average value of political instability, while the two extremes represent the maximum and minimum values. The index goes from 0 (strong political stability or weak political instability) to 1 (weak political stability or strong political instability).
Source: own elaborations on Worldwide Governance Indicators

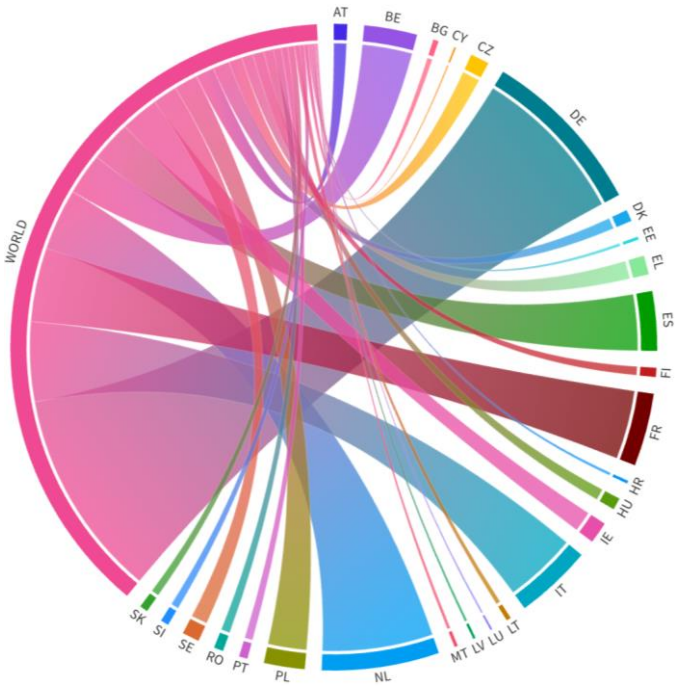
Figure 2 – Chord diagrams: Total trade from the import perspective

European Union vs Rest of the world

1999

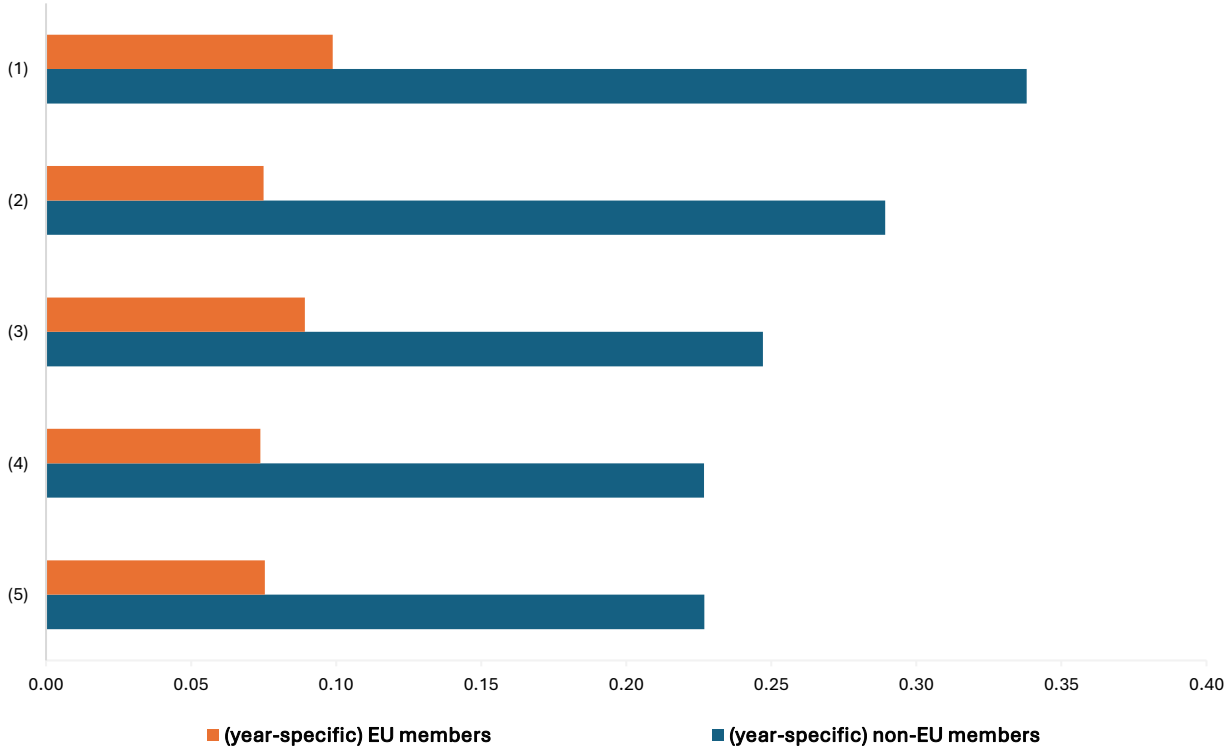


2021



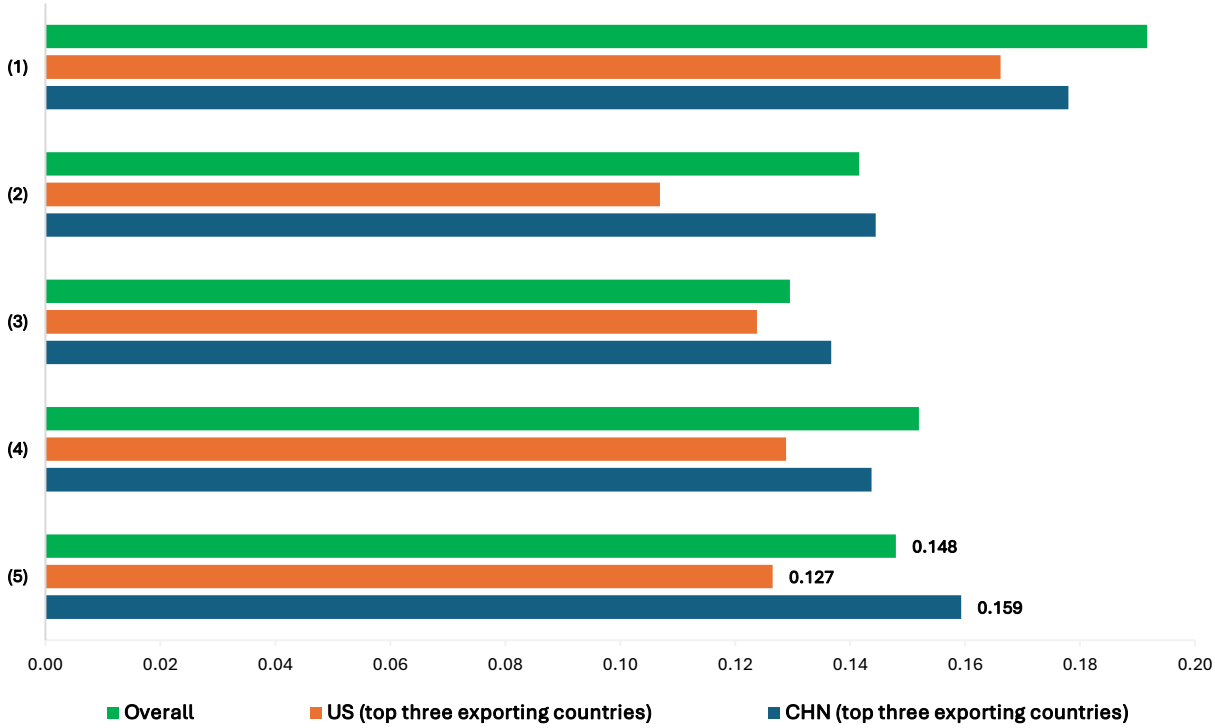
Note: individual nodes are represented by circular segments, whose length identifies the relative weight of a country in the overall total of non-EU trade from the import perspective. Interconnections between countries are depicted by chords, whose thickness or width is proportional to the magnitude of the relationship being accounted. We only consider imports of European countries from the rest of the world and export of European countries to the rest of the world (i.e., extra-EU trade).
Source: own elaborations on OEC data

Figure 3 – Political instability and trade diversification: The role of the European Union



Note: we compare the estimated coefficients associated with HHI_imp_PI if a country belongs to the EU or not in a given year t. Numbers (1), (2), (3), (4) and (5) refer to the different specifications depending on the presence of control variables as included in Table 3.

Figure 4 – Political instability and trade diversification: The role of the US and China



Note: we compare the estimated coefficients associated with the main regressor (*HHI_imp_PI*) in Table 3 (*Overall*) and in Tables 6 (*US in the top three exporting countries*) and 7 (*China in the top three exporting countries*). Numbers (1), (2), (3), (4) and (5) refer to the different specifications depending on the presence of control variables as included in Table 3.

Tables

Table 1 – Political instability by EU country (1999-2021)

EU countries	*Mean*	*Max*	*Min*
Austria	0.16	0.22	0.11
Belgium	0.22	0.30	0.13
Bulgaria	0.31	0.37	0.26
Croatia	0.26	0.34	0.22
Cyprus	0.28	0.33	0.25
Czechia	0.20	0.31	0.16
Denmark	0.17	0.21	0.08
Estonia	0.24	0.26	0.20
Finland	0.11	0.21	0.04
France	0.29	0.39	0.20
Germany	0.21	0.26	0.10
Greece	0.33	0.42	0.21
Hungary	0.21	0.27	0.13
Ireland	0.16	0.21	0.07
Italy	0.27	0.32	0.17
Latvia	0.27	0.33	0.18
Lithuania	0.23	0.29	0.17
Luxembourg	0.10	0.14	0.06
Malta	0.14	0.19	0.07
Netherlands	0.17	0.22	0.04
Poland	0.25	0.34	0.17
Portugal	0.18	0.24	0.10
Romania	0.34	0.44	0.27
Slovakia	0.21	0.27	0.16
Slovenia	0.19	0.24	0.13
Spain	0.35	0.46	0.26
Sweden	0.15	0.19	0.09

Note: The index goes from 0 (strong political stability or weak political instability) to 1 (weak political stability or strong political instability).
Source: own elaborations on Worldwide Governance Indicators

Table 2 – Descriptive statistics

Variable	Definition	Mean	Std. Dev.	Source
PI	Political instability	22.17	7.75	World Bank (*Worldwide Governance Indicators*)
HHI_imp_PI	HHI on the import side adjusted for political instability	5.17	3.87	Own elaborations on OEC (*Observatory of Economic Complexity*) / World Bank
HHI_imp_PIu	HHI on the import side adjusted for political instability of politically unstable countries	17.92	12.95	Own elaborations on OEC / World Bank
HHI_imp_PIs	HHI on the import side adjusted for political instability of politically stable countries	4.68	2.18	Own elaborations on OEC / World Bank
HHI_imp_PI_US_top3	HHI on the import side adjusted for political instability if the US are among the top three exporting countries	1.80	2.79	Own elaborations on OEC / World Bank
HHI_imp_PI_China_top3	HHI on the import side adjusted for political instability if China is among the top three exporting countries	4.06	3.83	Own elaborations on OEC / World Bank
age dependency	Age dependency (0-14 / 65+)	49.73	4.61	AMECO
pop_growth	Population growth rate	0.23	0.86	AMECO
unemp_rate	Unemployment rate	8.48	4.11	AMECO
inflation	Inflation (HICP)	2.6	3.65	Eurostat
realGDPpc_growth	Real GDP growth rate per capita	2.27	4.02	World Bank
Δdebt_ratio	Change in debt-to-GDP ratio	0.97	5.81	AMECO
elect	Election event (date of election of national parliament = 1; 0, otherwise)	0.26	0.44	CPDS (*Comparative Political Data Set*)
oppseat	Largest opposition party (number of seats)	66.27	54.52	DPI (*Database of Political Institutions*)

Note: the analysis is based on annual data from 27 EU countries observed over the period 1999-2021 with 621 observations.

Table 3 – Political instability and trade diversification: A geopolitical approach

Dependent variable	*Political Instability (PI)*				
Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Estimator	**GLS**	**GLS**	**GLS**	**GLS**	**GLS**
Main regressor					
l.HHI_imp_PI	0.192 ***	0.142 ***	0.130 ***	0.152 ***	0.148 ***
	[0.008]	[0.018]	[0.016]	[0.015]	[0.015]
Demographic controls					
l.age dependency		0.420 ***	0.493 ***	0.482 ***	0.485 ***
		[0.041]	[0.038]	[0.028]	[0.029]
l.pop_growth		0.427 ***	0.578 ***	0.595 ***	0.610 ***
		[0.052]	[0.056]	[0.046]	[0.048]
Macroeconomic controls					
l.unemp_rate			0.274 ***	0.281 ***	0.278 ***
			[0.018]	[0.013]	[0.013]
l.inflation			0.161 ***	0.173 ***	0.169 ***
			[0.019]	[0.019]	[0.020]
l.realGDPpc_growth			-0.052 ***	-0.043 ***	-0.042 ***
			[0.011]	[0.011]	[0.011]
Fiscal controls					
l.Δdebt_ratio				0.010	0.011
				[0.006]	[0.007]
Political controls					
l.elect					0.043
					[0.031]
l.oppseat					-0.003 ***
					[0.001]
Constant	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Number of observations	594	594	594	594	594
Number of countries	27	27	27	27	27
Time period	1999-2021	1999-2021	1999-2021	1999-2021	1999-2021
Wald chi^2	***	***	***	***	***

Note: ***, **, * denote significance at 1%, 5% and 10% level, respectively. GLS = Generalised Least Squares (controlling for panel-specific AR1 autocorrelation structure, heteroskedastic and correlated error structure). The prefix *l.* stands for one lag.

Table 4 – Free trade diversification

Dependent variable	***Political Instability (PI)***				
Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Estimator	**GLS**	**GLS**	**GLS**	**GLS**	**GLS**
Main regressor					
l.HHI_imp	0.055 ***	0.031 ***	0.048 ***	0.048 ***	0.045 ***
	[0.011]	[0.009]	[0.012]	[0.009]	[0.009]
Demographic controls					
l.age dependency		0.466 ***	0.513 ***	0.513 ***	0.518 ***
		[0.034]	[0.037]	[0.031]	[0.031]
l.pop_growth		0.407 ***	0.651 ***	0.611 ***	0.632 ***
		[0.047]	[0.088]	[0.051]	[0.052]
Macroeconomic controls					
l.unemp_rate			0.318 ***	0.297 ***	0.294 ***
			[0.022]	[0.014]	[0.014]
l.inflation			0.182 ***	0.176 ***	0.173 ***
			[0.017]	[0.019]	[0.020]
l.realGDPpc_growth			-0.067 ***	-0.052 ***	-0.050 ***
			[0.015]	[0.012]	[0.012]
Fiscal controls					
l.Δdebt_ratio				0.010	0.010
				[0.007]	[0.007]
Political controls					
l.elect					0.055 *
					[0.032]
l.oppseat					-0.003 ***
					[0.001]
Constant	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Number of observations	594	594	594	594	594
Number of countries	27	27	27	27	27
Time period	1999-2021	1999-2021	1999-2021	1999-2021	1999-2021
Wald chi^2	***	***	***	***	***

Note: ***, **, * denote significance at 1%, 5% and 10% level, respectively. GLS = Generalised Least Squares (controlling for panel-specific AR1 autocorrelation structure, heteroskedastic and correlated error structure). The prefix *l.* stands for one lag.

Table 5 – Political instability and trade diversification: Splitting the sample

Dependent variable	***Political Instability (PI)***				
Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Estimator	**GLS**	**GLS**	**GLS**	**GLS**	**GLS**
Main regressors					
l.HHI_imp_PIu	0.068 ***	0.050 ***	0.045 ***	0.044 ***	0.045 ***
	[0.004]	[0.006]	[0.006]	[0.006]	[0.006]
l.HHI_imp_PIs	0.045 ***	-0.012	0.021	0.020	0.017
	[0.013]	[0.019]	[0.024]	[0.024]	[0.023]
Demographic controls					
l.age dependency		Yes	Yes	Yes	Yes
l.pop_growth		Yes	Yes	Yes	Yes
Macroeconomic controls					
l.unemp_rate			Yes	Yes	Yes
l.inflation			Yes	Yes	Yes
l.realGDPpc_growth			Yes	Yes	Yes
Fiscal controls					
l.Δdebt_ratio				Yes	Yes
Political controls					
l.elect					Yes
l.oppseat					Yes
Constant	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Number of observations	594	594	594	594	594
Number of countries	27	27	27	27	27
Time period	1999-2021	1999-2021	1999-2021	1999-2021	1999-2021
Wald chi^2	***	***	***	***	***

Note: ***, **, * denote significance at 1%, 5% and 10% level, respectively. GLS = Generalised Least Squares (controlling for panel-specific AR1 autocorrelation structure, heteroskedastic and correlated error structure). The prefix *l.* stands for one lag. Control variables are the same included in Table 3.

Table 6 – Political instability and trade diversification: The role of the United States

Dependent variable	***Political Instability (PI)***				
Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Estimator	**GLS**	**GLS**	**GLS**	**GLS**	**GLS**
Main regressors					
l.HHI_imp_PI	0.214 ***	0.158 ***	0.177 ***	0.175 ***	0.172 ***
	[0.013]	[0.021]	[0.019]	[0.016]	[0.016]
l.HHI_imp_PI_US_top3	-0.048 ***	-0.051 ***	-0.053 ***	-0.047 ***	-0.046 ***
	[0.009]	[0.013]	[0.014]	[0.008]	[0.008]
Demographic controls					
l.age dependency		Yes	Yes	Yes	Yes
l.pop_growth		Yes	Yes	Yes	Yes
Macroeconomic controls					
l.unemp_rate			Yes	Yes	Yes
l.inflation			Yes	Yes	Yes
l.realGDPpc_growth			Yes	Yes	Yes
Fiscal controls					
l.Δdebt_ratio				Yes	Yes
Political controls					
l.elect					Yes
l.oppseat					Yes
Constant	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Number of observations	594	594	594	594	594
Number of countries	27	27	27	27	27
Time period	1999-2021	1999-2021	1999-2021	1999-2021	1999-2021
Wald chi^2	***	***	***	***	***

Note: ***, **, * denote significance at 1%, 5% and 10% level, respectively. GLS = Generalised Least Squares (controlling for panel-specific AR1 autocorrelation structure, heteroskedastic and correlated error structure). The prefix *l.* stands for one lag. Control variables are the same included in Table 3. The main regressor is based on Equation (9) and it is used to estimate Equation (7).

Table 7 – Political instability and trade diversification: The role of China

Dependent variable	*Political Instability (PI)*				
Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Estimator	**GLS**	**GLS**	**GLS**	**GLS**	**GLS**
Main regressors					
l.HHI_imp_PI	0.222 ***	0.144 ***	0.137 ***	0.166 ***	0.159 ***
	[0.023]	[0.021]	[0.022]	[0.020]	[0.021]
l.HHI_imp_PI_China_top3	-0.044 ***	-0.001	-0.016	-0.022 *	-0.019
	[0.011]	[0.014]	[0.015]	[0.013]	[0.013]
Demographic controls					
l.age dependency		Yes	Yes	Yes	Yes
l.pop_growth		Yes	Yes	Yes	Yes
Macroeconomic controls					
l.unemp_rate			Yes	Yes	Yes
l.inflation			Yes	Yes	Yes
l.realGDPpc_growth			Yes	Yes	Yes
Fiscal controls					
l.Δdebt_ratio				Yes	Yes
Political controls					
l.elect					Yes
l.oppseat					Yes
Constant	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Number of observations	594	594	594	594	594
Number of countries	27	27	27	27	27
Time period	1999-2021	1999-2021	1999-2021	1999-2021	1999-2021
Wald chi^2	***	***	***	***	***

Note: ***, **, * denote significance at 1%, 5% and 10% level, respectively. GLS = Generalised Least Squares (controlling for panel-specific AR1 autocorrelation structure, heteroskedastic and correlated error structure). The prefix *l.* stands for one lag. Control variables are the same included in Table 3. The main regressor is based on Equation (10) and it is used to estimate Equation (7).

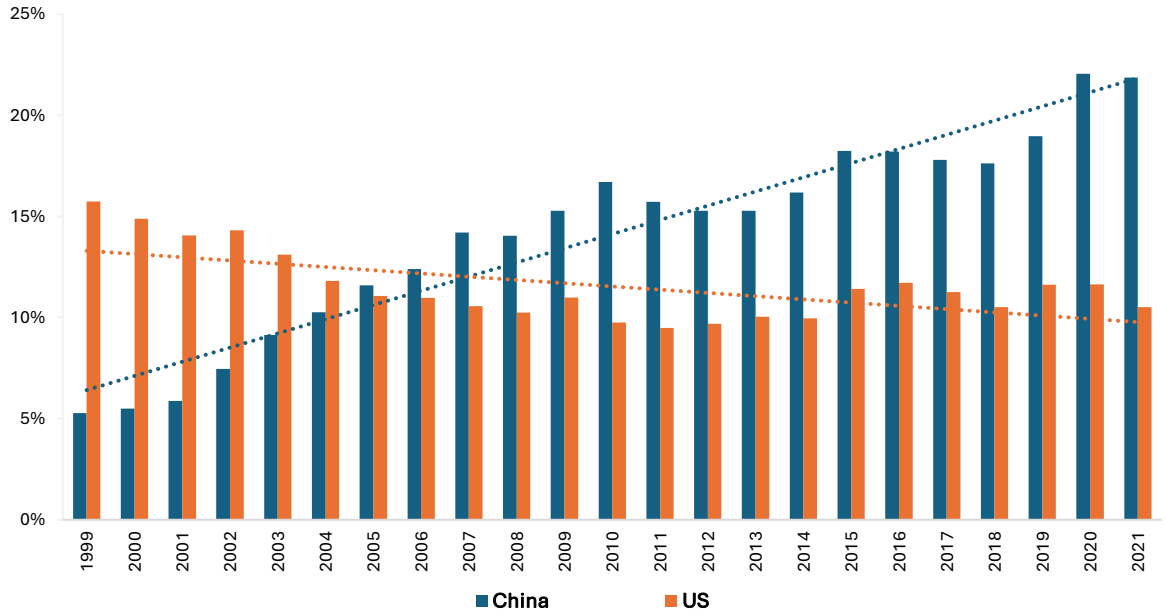
Appendix

Table A1 – Total trade between the EU and the rest of the world (% share on total)

EU countries	1999		2021		Δ	
	Rest of the world		Rest of the world		Rest of the world	
	Imports	Exports	Imports	Exports	Imports	Exports
Austria	1.8%	2.2%	1.7%	2.5%	-0.1%	0.3%
Belgium	7.7%	7.1%	6.9%	5.8%	-0.8%	-1.3%
Bulgaria	0.3%	0.2%	0.7%	0.6%	0.4%	0.3%
Croatia	0.2%	0.2%	0.4%	0.3%	0.1%	0.1%
Cyprus	0.4%	0.1%	0.2%	0.1%	-0.2%	0.0%
Czechia	0.9%	0.6%	2.4%	1.9%	1.6%	1.3%
Denmark	1.9%	2.5%	1.5%	2.3%	-0.4%	-0.1%
Estonia	0.2%	0.2%	0.4%	0.3%	0.2%	0.2%
Finland	1.8%	2.4%	1.2%	1.5%	-0.6%	-0.9%
France	14.4%	16.5%	9.5%	10.3%	-4.9%	-6.2%
Germany	23.2%	28.7%	21.9%	29.1%	-1.4%	0.4%
Greece	1.4%	0.6%	2.5%	1.6%	1.0%	1.0%
Hungary	1.0%	0.7%	1.5%	1.4%	0.5%	0.7%
Ireland	4.5%	4.8%	2.8%	5.3%	-1.7%	0.5%
Italy	11.1%	12.9%	10.0%	11.1%	-1.1%	-1.8%
Latvia	0.3%	0.1%	0.3%	0.3%	0.1%	0.2%
Lithuania	0.3%	0.2%	0.6%	0.7%	0.3%	0.6%
Luxembourg	0.3%	0.2%	0.2%	0.2%	-0.1%	0.0%
Malta	0.3%	0.2%	0.4%	0.1%	0.2%	-0.1%
Netherlands	13.6%	7.3%	15.2%	8.6%	1.6%	1.3%
Poland	1.7%	0.9%	5.3%	3.3%	3.6%	2.5%
Portugal	1.4%	0.9%	1.1%	0.9%	-0.4%	0.0%
Romania	0.4%	0.4%	1.2%	1.1%	0.8%	0.7%
Slovakia	0.4%	0.2%	1.0%	0.9%	0.7%	0.7%
Slovenia	0.3%	0.2%	1.1%	0.6%	0.8%	0.4%
Spain	6.9%	5.0%	7.7%	5.8%	0.8%	0.8%
Sweden	3.3%	4.8%	2.2%	3.4%	-1.1%	-1.4%
	100%	100%	100%	100%		

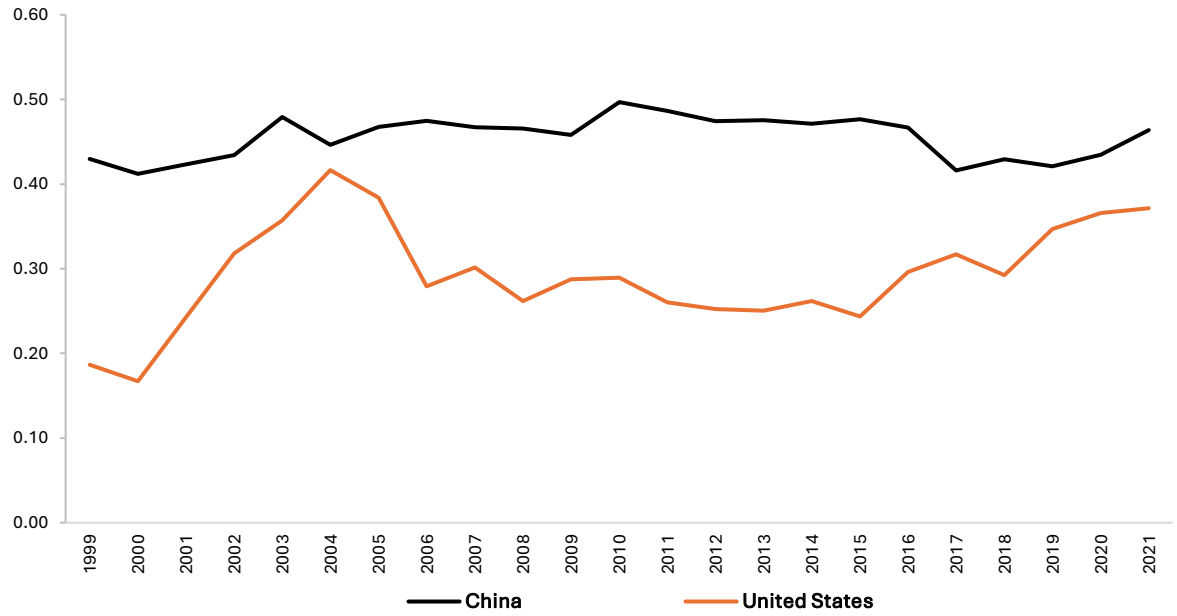
Note: if the total import from the rest of the world is 100, the column 'imports' shows the % share absorbed by each European country in 1999 and 2021. The same interpretation applies to the export side from EU countries to the rest of the world.
Source: own elaborations on OEC data

Figure A1 – Share of Chinese and US imports (% of total non-EU imports)



Source: own elaborations on OEC data

Figure A2 – Political instability in the United States and China



Source: own elaborations on Worldwide Governance Indicators