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Mapping Global Debt: A New Measure of Currency Dominance and Uncertainty Shock Effects*

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Abstract

We study currency dominance in global portfolio debt, focusing on the US dollar and the euro. Our key contribution is the Dominance Ratio (DR), a new indicator that refines the measurement of currency internationalisation by excluding debt held by the regions issuing those currencies (the US for dollars, the Euro Area for euros). Using the DR, we find that the internationalisation of the dollar and euro evolves slowly and remains unaffected by short-term uncertainty shocks. However, these shocks affect the geographical distribution of dollar and euro debt. Trade policy uncertainty reduces euro concentration, increasing relative dollar concentration, whilst geopolitical risk shocks diminish both absolute and relative dollar concentrations, particularly when adjusted for currency scale using the DR.

JEL Classification Numbers: E4, F21, F34, F41, F51, G1

Keywords: currency dominance, dollar, euro , portfolio debt, uncertainty shocks

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1 Introduction

We examine currency dominance in global portfolio debt, focusing on the US dollar and the euro. The US dollar and euro are the currencies that are the most commonly used for the denomination of international debt securities. Existing approaches to assessing currency internationalisation involve calculating the ratio of cross-border assets and liabilities denominated in a specific currency to GDP, adapting measures like the International Financial Integration (IFI) indicator. This method is simple and allows for broad country coverage. However, these approaches do not fully capture internationalisation, understood as the currency usage outside its issuing jurisdiction, because they include the US and Euro Area countries as both issuers and holders of financial positions denominated in their own currencies. This inclusion blurs the degree of currency internationalisation.

A key contribution of this paper is the proposed Dominance Ratio (DR) measure. This refined approach assesses currency internationalisation by explicitly excluding debt liabilities held by the currency's issuing jurisdiction, specifically the US for dollars and the Euro Area for euros. We achieve this exclusion by leveraging detailed bilateral data disaggregated by currency from sources such as the BIS International Debt Statistics, the Securities Holding Statistics (SHS), and the Treasury International Capital (TIC) system, which provide country-, sector- and currency-specific breakdowns. The construction of the DR index involves subtracting the portfolio debt liabilities held by countries that issue the respective currencies from the total portfolio debt liabilities of each country in the sample.

We explore the factors associated with this measure of currency dominance and assess how the measure itself and the geographical concentration of dollar and euro debt are affected by uncertainty shocks. Our empirical strategy involves a four-step approach. The first three steps build on our proposed new measure to assess the relative internationalisation of the dollar and euro. We find that the relative internationalisation of the dollar and euro is slow-moving and unaffected by short-term uncertainty shocks. However, we reveal that these shocks do impact the geographical concentration of dollar and euro debt. For instance, trade policy shocks lead to a decline in euro concentration, increasing relative dollar concentration via the euro channel, while geopolitical risk shocks reduce absolute and relative dollar concentration, particularly when accounting for the international scale of dollar-denominated debt. Global uncertainty and financial market shocks tend to increase absolute dollar concentration.

The structure of this paper is organised as follows. Section 2 presents Stylized Facts regarding currency dominance in global portfolio debt. Section 3 outlines our Empirical Strategy, detailing the four distinct steps taken in the analysis. Section 4 examines the cross-country distribution of currency dominance using our Dominance Ratio and its relationship with key conditioning factors. Section 5 conducts a medium-term analysis to explore the association between the Dominance Ratio and macro-financial and open-economy variables over a ten-year window. Section 6 investigates the short-term dynamics of the Dominance Ratio in response to various uncertainty shocks. Section 7 concludes the empirical analysis by assessing how these uncertainty shocks specifically impact the geographical concentration of dollar and euro international debt stocks. Finally, Section 8 presents the conclusions and some policy implications.

2 A New Measure of Currency Dominance

One way to assess the relative importance of currencies in international finance is by adapting the well-known International Financial Integration (IFI) indicator, originally introduced by Lane and Milesi-Ferretti (2003), to the measurement of currency dominance. This approach involves calculating the ratio of cross-border assets and liabilities denominated *in a specific currency* to GDP. It is used in Lane and Shambaugh (2007, 2010) and Bénétrix et al. (2015, 2020, 2023), among others. Specifically, the international financial indicator for a currency such as the US dollar is defined as the sum of cross-border assets and liabilities denominated in dollars divided by the country's GDP.

This method is simple and allows for broad country coverage. However, it does not fully capture internationalisation when defined as the currency usage outside its issuing jurisdiction. The reason for this is that when calculating dollar or euro internationalisation, this approach would include the US and Euro Area countries as both issuers and holders of financial positions denominated in their own currencies. This blurs the degree of currency internationalisation, understood as its usage by foreign countries.

One of the key contributions of this paper is to innovate along this dimension. To that end, we propose a refined approach using detailed bilateral data disaggregated by currency. Our contribution lies in excluding the US and the Euro Area as issuers and holders of securities denominated in their own currencies. We achieve this by leveraging data from sources such as the BIS International Debt Statistics, the Securities Holding Statistics (SHS), and the Treasury

International Capital (TIC) system. These data sources provide country- and currency-specific breakdowns.

Unfortunately, due to data constraints, this indicator cannot be computed for the full international investment position. Our analysis is limited to measuring currency internationalisation in portfolio debt only.

Since our country sample is mainly composed of emerging and developing economies, the currency of denomination in portfolio debt is particularly relevant. Unlike foreign direct investment (FDI) and portfolio equity, which are typically issued in domestic currency, portfolio debt liabilities are more often denominated in foreign currencies. This makes the analysis of currency dominance in portfolio debt more revealing than in other components of the international investment position (IIP). From a financial stability perspective, FDI and net portfolio equity flows tend to be relatively stable over the business cycle, reflecting a degree of inherent risk-sharing between investors and issuers. In contrast, debt flows are generally more procyclical, increasing during economic upswings and retreating during downturns. This procyclicality, coupled with the prevalence of foreign-currency denomination, can heighten vulnerabilities in emerging and developing economies, further underscoring the importance of studying currency dominance in portfolio debt.(Brunnermeier et al., 2012; Goldstein, Jiang, & Ng, 2017; Avdjiev, Hardy, Kalemli-Özcan, & Servén, 2022; Bertaut, Bruno, & Shin, 2025)

The construction of this new data set follows a straightforward approach. For each of the 87 countries included in our study, we aggregate portfolio debt liabilities across all counterparty countries. From that total, we then subtract the holdings of countries issuing the respective currencies. For example, to measure the degree of euro internationalisation associated with Turkey, we subtract from its total debt liabilities denominated in euro the holdings by euro area countries. Similarly, for Turkey's dollar-denominated liabilities, we subtract US holdings. We repeat these steps in all 87 countries in our sample to then aggregate these totals by currency.

2.1 Stylized Facts

2.1.1 Time series

The US dollar and euro are the currencies that are most commonly used for the denomination of debt securities. For our sample, gross stocks increased from just over $8.2 trillion in 2013 to almost $11.1 trillion in 2021. Approximately 80% of this was denominated in dollars or euros.

Figure 1 presents the total debt liabilities for the 87 countries listed in Table A.3. In addition, it presents different breakdowns to help visualise the importance of the US as a dollar holder and the euro area as a euro holder. Our approach enables us to refine the analysis of currency internationalisation by excluding the jurisdictions that issue these currencies.

The geographical distribution of euro- and dollar-denominated liabilities reveals a stark contrast. More than half of all euro-denominated liabilities are concentrated within the Euro Area, highlighting the euro's primarily regional influence. In contrast, only about one-third of US dollar liabilities are held domestically, underscoring the dollar's extensive global usage beyond US borders. These patterns illustrate how geography shapes the euro's regional dominance while reinforcing the dollar's role as a truly global currency.

While dollar values are very informative to gauge the extent of currency internationalisation, this approach does no account for the size of the issuing countries, which is relevant for cross-country comparisons. Following the literature using the IFI indicator, Figure 2 reports the previous information scaled by the groups GDP.

A similar pattern emerges from this approach. Approximately 55% of euro-denominated portfolio debt liabilities are associated with Euro Area countries. Between 2013 and 2022, euro-denominated debt liabilities exhibited a slight downward trend, which became more pronounced from 2020 onward. This decline was primarily driven by Euro Area countries reducing their holdings. However, the volume of euro-denominated liabilities held by non-Euro Area countries remained relatively stable. This suggests that different factors may influence holdings depending on whether a country is an issuer of the euro or not.

In contrast, dollar-denominated liabilities followed a different trajectory. They showed a steady upward trend from 2013 to 2020, with a brief decline in 2021 before continuing to grow. Notably, unlike the euro, approximately 70% of dollar-denominated liabilities are held outside the United States, reinforcing the dollar's stronger position as a global currency compared to the euro.

To fully assess international currency dominance, it is crucial to account for differences based on country type. The factors influencing portfolio debt holdings and currency denomination vary across advanced economies, financial centers, and emerging or developing countries. These factors may include risk diversification, international borrowing needs, development finance, and other country-specific considerations.

Figures 3, 4, and 5 illustrate the role of the euro and dollar in portfolio debt across different country groups. As expected, their importance, trends, and short-term dynamics vary. In advanced economies, both euro- and dollar-denominated liabilities have increased slightly as a share of GDP. The proportion of euro-denominated debt has remained relatively stable outside the Euro Area, whereas the dollar's role has expanded among advanced economies outside the U.S. The extent of euro internationalisation in non-Euro Area advanced economies aligns with broader trends in the full sample, with about 37% of euro-denominated liabilities held by these countries.

The trends for emerging markets and developing countries as debt issuers align with previous findings, but some key differences emerge. First, approximately 49% of their euro-denominated liabilities are held by non-Euro Area countries. This suggests that when focusing on emerging and developing countries as debt issuers, the euro's role as an international currency becomes relatively more significant.

Second, the relative importance of dollar-denominated liabilities for these countries—both including and excluding the U.S. as a counterparty—follows a similar pattern to previous observations. However, the trend is much more pronounced than in advanced economies. While dollar-denominated liabilities for emerging and developing countries have grown substantially since 2013, the degree of dollar internationalisation (as indicated by the proximity between the dashed and continuous lines in the figure) has remained relatively stable.

Examining financial center countries as issuers of liabilities reveals two key insights. First, the use of the euro as a denomination currency for these liabilities has declined as a share of their GDP. Second, despite this decline, the relative importance of euro-denominated liabilities with non-Euro Area countries has increased compared to those with Euro Area countries. This suggests that from the perspective of financial center countries, the degree of euro internationalisation has risen over the analyzed period.

Additionally, the issuance of dollar-denominated liabilities by financial center countries has shown a steady upward trend, with only a slight decline in the degree of dollar internationalisation from 2021 onward.

This section highlights the dominant position of the US dollar and the euro in the realm of portfolio debt liabilities, collectively representing approximately 80% of total issuance between 2013 and 2023. A crucial distinction emerges in their geographical distribution and role:

the euro is primarily a regional currency, with more than half of euro-denominated liabilities concentrated within the Euro Area, while the dollar functions as a truly global currency, with roughly 70% of dollar-denominated liabilities held outside the United States. Over the period, the dollar debt issuance as a share of group GDP increased, contrasting with a slight downward trend observed in euro-denominated debt liabilities as a share of group GDP, particularly among Euro Area countries.

2.1.2 Geography

Next, we examine the geographic distribution of portfolio debt liabilities by categorising countries into subgroups: financial centers (FC), emerging and developing economies (EMEDEV), Africa and the Middle East (AFME), Latin America and the Caribbean (LATAM), Asia and the Pacific (ASIA), Europe, non-European developed countries, and European developed countries.

Figure 6 presents the breakdown of portfolio debt liabilities in the last quarter of 2022, categorised in four groups: (1) US dollar-denominated liabilities held by the US; (2) US dollar-denominated liabilities held outside the US; (3) Euro-denominated liabilities held outside the Euro Area and (4) Euro-denominated liabilities held within the Euro Area.

The similar sizes of the blue and orange areas highlight the Euro Area's strong role as holder of euro-denominated debt securities. This study focuses primarily on the green and orange areas, which represent the internationalisation of the dollar and the euro beyond their issuing regions.

Figure 6 reveals that financial centers issue a significant portion of US dollar-denominated debt. The second-largest proportion of dollar-denominated debt positions is linked to non-European advanced economies (Australia, Canada, Israel, Japan and Korea).

For euro-denominated liabilities, financial centres are the most important issuers of euro-denominated debt, with the United Kingdom playing a key role. Following financial centre countries, advanced economies hold the highest share of euro-denominated debt liabilities. Among emerging markets, the euro is particularly influential in European countries.

Figure 7 provides a similar visualisation, but separately for government and private sector issuers. It highlights notable differences between the two sectors. Governments in emerging and developing economies play an active role in issuing dollar and euro debt to countries

outside the US and Euro Area. This is particularly evident in Figure 7a, where it is shown that emerging countries in Europe issued the highest amount of euro-denominated debt to non-Euro Area countries. Figure 7b illustrates the allocation of portfolio debt liabilities issued by the private sector, which follows a similar pattern to the overall distribution. This suggests that the private sector has a greater influence on the overall portfolio debt allocation than governments. Financial centers play a crucial role in issuing dollar-denominated debt. Although financial centers also issue a substantial amount of euro-denominated debt, this trend is primarily driven by the United Kingdom, which serves as a central hub for euro-denominated debt positions.

Our analysis reveals that financial centers issue a significant portion of both dollar- and euro-denominated debt liabilities. Specifically, the United Kingdom plays a key role for euro-denominated debt issued by financial centers. Beyond financial centers, advanced economies hold a substantial share of these liabilities, with non-European advanced economies being the second-largest proportion for dollar-denominated positions. Governments in emerging and developing economies are active in issuing dollar and euro debt to countries outside the US and Euro Area, particularly European emerging countries for euro-denominated government debt. Examining the sector breakdown reveals notable differences. However, the private sector's issuance pattern is similar to the overall distribution, indicating its greater influence compared to government issuance. Financial centers are crucial for dollar-denominated private sector debt, with the United Kingdom driving the trend for private sector debt denominated in euro within financial centers.

3 Empirical Strategy

The empirical analysis is based on a four-step strategy. First, we put the focus on the cross-country distribution of currency dominance and its relation with some key conditioning factors. Second, we turn to the medium term analysis (a ten-year window) to uncover how currency dominance is associated with relevant macro-financial and open-economy variables used in the related literature.[1] Third, we turn the attention to how the Dominance Ratio's short-term dynamics are affected by uncertainty shocks. Finally, we study how the previous shocks impact

[1]We follow Eichengreen, Mehl, and Chitu (2018), Arslanalp, Eichengreen, and Simpson-Bell (2022), Iancu et al. (2022), Emter, McQuade, Pradhan, and Schmitz (2024) and Chinn, Frankel, and Ito (2024, 2025) among others suggesting exchange rate regime, trade with the currency issuer country, trade invoicing in the currency, the currency's share of reserve and debt denomination, etc as relevant conditioning factors for our analysis.

the geographical concentration of dollar and euro international debt stocks.

The first three steps of our empirical strategy build on a proposed new measure to assess the relative internationalisation of the dollar and euro as currencies used for the denomination of portfolio debt issued and held by foreign countries. More precisely, we focus on all countries excluding the US for dollar-denominated debt and the euro area for euro-denominated debt. We call this new indicator the "Dominance Ratio" and defined it as follows:

$$DR_{it} = \frac{PDL^{USD}_{it,nUS}}{PDL^{EUR}_{it,nEA} + PDL^{USD}_{it,nUS}}.$$

$PDL^{USD}_{it,nUS}$ are portfolio debt liabilities denominated in dollars vis-à-vis all countries excluding the US. $PDL^{EUR}_{it,nEA}$ are debt liabilities denominated in euros vis-à-vis all countries excluding euro area members.

4 Currency Dominance Distributions (*Step 1*)

As a first pass, we present the cross-country cumulative distribution of our currency dominance indicators. We classify countries in two groups using relevant conditioning factors related to finance, gravity and trade.

Within the *Finance Block*, we consider how the euro and dollar are used as the anchor currency or main central bank reserve currency. Anchor currency classification is based on the contributions by Ilzetzki, Reinhart, and Rogoff (2019) and Ilzetzki, Reinhart, and Rogoff (2022). According to their classification, the domestic currency must be within a narrow band against a candidate anchor currency. Reserve currency, by contrast, is based on the most important reserve currency based on data from Ito and McCauley (2020) and Chinn, Ito, and McCauley (2022).

These two conditioning factors are of course related with each other. Countries that peg their currencies to the dollar or euro hold sizable amounts of reserves in those currencies. However, a peg is not a necessary condition for central banks to have large amounts of reserves denominated in those currencies. Countries without a peg, have sizable amounts of reserves in those currencies too, in particular in dollars as shown by Ito and McCauley (2020) and Chinn et al. (2022).

Nominal anchors and the currency composition of central bank reserves are relevant for

studying currency dominance in portfolio debt liabilities. Central bank reserve currencies heavily influence the currency in which external debt is denominated. When a central bank holds reserves in a given currency, this makes their international liabilities in that currency easier to manage. In addition, central banks often invest in highly rated debt securities in those currencies, such as U.S. Treasury bonds and German bunds, which directly influences the demand and yields of those assets. High demand from central banks can lower the yields of such securities, which indirectly benefits private and public borrowers who can issue debt in these currencies at lower costs.

Figure 8 reports our currency dominance metric taking these conditioning factor into account. We report these for two sets of countries. In panel (a) we split our country sample by anchor currency. In panel (b) we split them according to the most important reserve currency.

In line with expectations, dollar importance in central banks is strongly linked with the Dominance Ratio. Countries with US dollar as the anchor currency exhibit a DR distribution skewed toward the high-end tail. Almost all countries in this sample show at least 90% of their total dollar-euro portfolio liabilities denominated in dollars. This is not surprising. Interestingly, the DR distribution in countries with euro as their nominal anchor is spread across the entire 0 to 1 domain, meaning that countries with central banks targeting euro as their anchor currency would still have a large exposure to the dollar on their debt liabilities. A similar picture emerges for central bank reserves. Countries where dollar is the most important reserve currency, have a very large dominance ratio indicator. As for the case classifying countries based on anchor currencies, the importance of euro (in this case as reserve currency) is not strongly linked with an exposure to the euro in the portfolio debt liabilities.[2]

Within the *Trade Block*, we consider the sum of exports and imports vis-à-vis the US relative to the sum of exports and imports vis-à-vis the Euro Area, as well as the sum of exports and imports invoiced in dollars relative to euros. The geography of trade measure aims at capturing the importance of the US relative to the Euro area as a trade counterpart. We compute this indicator using data from the IMF's Direction of Trade. The relative importance of dollar and euro in trade invoicing is based on data from Boz et al. (2022).

[2]It is important, however, to interpret these results with caution, taking explicit account of how our dominance ratio is constructed. Our scope is to study the degree of true internationalisation of the dollar and euro. To that end, we exclude countries issuing these currencies as holders of these liabilities. Therefore, these results, do not necessarily mean that these countries would exhibit a currency mismatch, as we are not considering liabilities in euros held by euro area countries.

The motivation to include these conditioning factors is based on the literature studying currency dominance in international trade and finance. Coppola, Krishnamurthy, and Xu (2023) report that there is a causal link between currency dominance in finance invoicing and currency dominance in trade. According to their model, if firms finance themselves in the dominant currency, invoicing their trade in the dominant currency is cost-minimising. Another example of this link is the work by Chahrour and Valchev (2022) and Gopinath and Stein (2021). These papers present a causal link from dominance in trade invoicing to dominance in finance. More precisely, when firms invoice their export in dollars, they become more certain about their next period's dollar revenue. This makes borrowing in dollars safer. These papers also report an "invoicing-feedback mechanism". An increase in the demand for safe dollar claims reduces the dollar-denominated borrowing cost, which makes dollar invoicing in trade more attractive. Since firms benefit from operating with the same collateral as their trade counterparties, there is also a complementary mechanism among firms.

In line with the above, Figure 9a provides evidence of complementarities between trade invoicing and the currency choice in debt issuance. Countries with higher trade invoicing in dollars show a higher proportion of international liabilities denominated in dollars.

Finally, the *Gravity Block* includes relative geographical distance as a conditioning factor. This is measured by how much closer a country is to the US relative to the Euro Area. The US and Euro area have deep, liquid financial markets, particularly for debt securities. Countries closer to these issuers have better access to these markets due to lower transaction costs, shared financial infrastructure, and regulatory familiarity.

Figure 10 shows that countries which are relatively closer to the US exhibit very high dominance ratios. By contrast, the dominance ratio distribution for countries which are relatively closer to the euro area is more spread across the 0-1 domain, with a big concentration of countries (approximately 70% of them) with very high proportions of dollar denominated debt. This suggests that relative distance is not a relevant conditioning factor to disentangle dollar versus euro dominance. However, once other conditioning factors are included as in the subsequent section, relative distance can play a role.

5 Currency Dominance in the Medium-term (*Step 2*)

To assess how the Dominance Ratio is associated with key correlates in the medium-term, we run a simple linear regression model with the DR indicator as the dependent variable and the factors previously introduced as the explanatory variables.[3]

More precisely, we estimate

$$DR_{it} = \beta_1 \mathbf{Finance}_{it} + \beta_2 * \mathbf{Trade}_{it} + \beta_3 \mathbf{Gravity}_i + \beta_4 IFI_{it} + \beta_5 ADV_i + \mathbf{X}_{it} + \epsilon_{it},$$

where DR_{it} is the dominance ratio, $\mathbf{Finance}_{it}$ is a vector of variables capturing information on main foreign currency used as anchor and US-Euro area relative portfolio equity positions for each of these countries. In this paper, anchor currencies are represented as two dummy variables: one indicates when the U.S. dollar is used as the anchor currency, and the other indicates when the Euro serves as the anchor currency. $\mathbf{Trade}_{it}$ is another vector including variables capturing different dimensions of trade for the studied countries. This includes US-Euro area relative trade and oil trade balance. $\mathbf{Gravity}_i$ includes the relative distance of the country in question to the US versus the Euro Area. IFI_{it} is included to capture the *de-facto* degree of financial openness as measured by the "International Financial Integration" indicator from Milesi-Ferretti (2024) and Lane and Milesi-Ferretti (2018). ADV_i is a dummy variable, taking value 1 for advanced countries and 0 otherwise. The vector $\mathbf{X}_{it}$ includes an intercept and, to ensure stationarity, linear and quadratic time trends.

Since the focus here is on how the dominance ratio is associated with key correlates in the medium/long-term and not on the short-term dynamics (which will be studied later) we do not include a country-fixed effects.

Table 1 shows the results of the baseline model, which provides insights into the relevant correlates associated with our new dominance measure.

[3]Since our indicator is bounded between 0 and 1, we complement the previous standard approach by estimating a Generalized Linear Model (GLM) with a Logit link function (Table A.16 and A.17). This is because in traditional regression settings a bounded variable might lead to predicted values outside the feasible range, resulting in interpretation challenges and potential estimation biases. A GLM with a Logit link function is well-suited for this context, as these transformations ensure that the predicted values remain within the $(0, 1)$ interval, maintaining the interpretive integrity of the model. The logit link function transform the bounded dependent variable onto an unbounded latent scale, allowing us to model the linear relationship between explanatory variables and the transformed outcome. Here, this transformation is defined as $\text{logit}(DR_{it}) = \ln\left(\frac{DR_{it}}{1-DR_{it}}\right)$, where DR_{it} represents the dominance ratio introduced before. Employing GLMs with a logit link function also allows us to address potential heteroskedasticity inherent in proportion data, as the variance is likely to vary with the mean. While these coefficients can't be directly interpreted, unless they are evaluated at a given point of the underlying variable distributions, it is a good way of confirming the direction of these relations.

We introduce these as different conditioning blocks sequentially in the regression models (1) through (4) and then jointly in column (5) of Table 1. All these models include the advanced-country dummy and the financial integration indicator to always account for the few advanced economies in the sample that in turn exhibit in general a larger degree of financial integration than emerging countries in the rest of the sample.

As expected, there is a strong relationship between a country's anchor currency and its dominance ratio, as shown in columns (1) and (5). Countries that use the U.S. dollar as their anchor currency tend to have a larger share of external portfolio liabilities denominated in dollars. In contrast, countries with the euro as their anchor tend to show a lower dominance ratio. Notably, the magnitude of this effect differs systematically depending on whether the dollar or the euro serves as the anchor currency, with the euro's effect consistently being much larger. Specifically, the decrease in the dominance ratio associated with a euro anchor, compared to the baseline, is systematically greater than the increase associated with a dollar anchor. This large difference in size is mostly driven by European countries included in the sample. Column 2 presents the positive link between the dominance ratio and portfolio equity liabilities to the US relative to the Euro area. In other words, there is evidence of the complementarities between the choice of currency for cross-border portfolio debt borrowing and portfolio equity linkage to the US and Euro area.

Column 3 shows the relation between the dominance ratio and trade linkages to the US and Euro Area as issuer countries of the US Dollar and Euro, as well as the oil trade balance of countries. The coefficient of relative trade to the US indicates that more trade with the US relative to Euro Area is associated with a larger dominance ratio. Furthermore, we observe the positive link between the dominance ratio and the oil trade balance of countries.

Column 4 displays how geographical distance to the currency issuer affects the dominance ratio. The greater the distance to the US relative to the Euro Area, the lower the dominance ratio.

When all regressors are included, the coefficient on portfolio equity linkage to the U.S. shifts from positive to negative, while the coefficient on distance to the U.S. shifts from negative to positive. We interpret these counterintuitive results with caution, as portfolio equity linkages to the U.S. and the Euro area are highly correlated with trade linkages and euro anchoring. Similarly, geographic distance to both regions is also strongly correlated with trade linkages.

Tables 2 and 3 provide baseline regression results for the government and private sectors separately. Table 4, 5, and 7 provides the regression results for sub-sectors of the private sector; non-financial corporations (NFC), banks and non-bank financial intermediaries (NBFI), respectively[4].

One interesting result from the further sectoral breakdown is the coefficient of the US dollar anchor. We observed, consistent with economic theory, the complementarity between having the US dollar as an anchor currency and the choice of a dollar over the euro for portfolio debt issuance for the government and private sectors. However, this linkage disappears for NBFIs.

Overall, the findings of this study underscore the significant influence that a country's choice of anchor currency has on its dominance ratio in cross-border portfolio liabilities. Countries that use the US dollar as their anchor currency tend to exhibit a higher dominance ratio. In contrast, the euro as an anchor currency is associated with a notably lower dominance ratio, with the effect being systematically larger compared to the dollar. Notably, the results from sector-specific regressions reveal a strong complementarity between the US dollar anchor and portfolio debt issuance in the government and private sectors. However, this relationship weakens for non-bank financial intermediaries. The study emphasizes how financial and trade linkage to currency issuers and the trade balance in oil trade influence the US dollar and euro allocation in external debt liabilities.

6 Currency Dominance and Uncertainty shocks (*Step 3*)

Taking advantage of the quarterly frequency of the data we turn the analysis onto the assessment of short term response in the DR indicator to different uncertainty shocks.

The COVID-19 pandemic, global supply chain disruptions, Russia's war against Ukraine, and the heightened U.S.-China trade dispute have all elevated economic and political uncertainties that could potentially affect the use of the dollar and the euro in the international monetary and financial system (Figure 11). The dollar is considered the safest currency in periods of high economic, financial and geopolitical uncertainty. In times of crisis, demand for dollar-safe assets spikes, which requires the provision of dollar liquidity (Farhi, Gourinchas, &

[4]While all the data sources we are using provide sectoral breakdown as government and private, TIC data for the US portfolio debt holdings does not provide further breakdown for the private sector. Therefore, we proxy the issuer sectoral breakdown in the portfolio debt holdings of the US by multiplying the US's private sector issuer portfolio debt holding with the weights of sub-sectors within the private sector. We compute the weights using IMF CPIS data

Rey, 2011; Gourinchas, 2021). However, several significant shocks could alter this status quo.

We follow an event study approach, taking two alternative outcome measured for the Dominance ratio: the change in the quarter in quarter dominance ratio two years before and after the shock and the change in the residual of a regression where we regress dominance ratio on finance, trade and gravity blocs as well as IFI and dummy variables for advanced economies and the UK as financial centre.

We manually identify the shocks in World Uncertainty, Economic Policy, Trade Policy, Geopolitical Risk, VIX, equity markets and oil prices as reported in Figure 11.

6.1 Uncertainty Shocks and Rationale

We take a holistic approach for the selection of uncertainty shocks and include the following:

We use the World Uncertainty Index (WUI) to account for general uncertainty. Developed by Ahir, Bloom, and Furceri (2022), it provides a comprehensive measure of global economic uncertainty by analysing the frequency of the word "*uncertainty*" in country reports produced by the Economist Intelligence Unit tailored to national economic and political developments.

We utilise The Economic Policy Uncertainty (EPU) Index, developed by Baker, Bloom, and Davis (2016) for economic uncertainties. The EPU Index quantifies uncertainty related to economic policy by tracking the frequency of specific terms—such as "*economic*," "*policy*," and "*uncertainty*"—in major newspapers and mitigates concerns about the claimed ideological bias and consistency of the WUI. Baker et al. (2016) reported that policy uncertainty leads to increased volatility in the stock markets and an adverse impact on investment. We use the Trade Policy Uncertainty (TPU) index constructed by Baker, Bloom, Davis, and Kost (2019) to measure uncertainty related to trade policies. The index relies on the frequency of joint occurrences of trade policy and uncertainty terms across major newspapers, and its spikes are closely aligned with key events, such as the US withdrawal from the TPP, Brexit, or US-China trade tensions. Like in the case of policy uncertainty, Baker et al. (2019) empirically establish that tariff hikes, tariff threats, and tariff retaliation are the crucial sources of increased TPU values, which in turn contribute to exacerbating equity market volatility, proxied through the implied Volatility Index (VIX).

Furthermore, the Geopolitical Risk (GPR) Index, developed by Caldara and Iacoviello (2022), quantifies the threat, realisation, and escalation of adverse or disruptive events asso-

ciated with wars, terrorism, and tensions between states or political actors, using 10 leading international newspapers. The GPR Index captures both actual events and threats, with notable spikes during periods like the 9/11 attacks, the Iraq War, and the Russia–Ukraine conflict.

We use the CBOE Volatility Index (VIX), the US Equity Market Volatility Index, and the Oil Price Uncertainty Index to account for volatility and uncertainty related to financial and commodity markets. The VIX reflects investor sentiment and uncertainty about future market movements, with higher values indicating greater expected volatility. It is forward-looking and typically spikes during periods of market stress, financial crises, or economic uncertainty—such as the 2008 global financial crisis or the COVID-19 pandemic. In contrast, the US Equity Market Volatility Index, developed by Jurado, Ludvigson, and Ng (2015), provides a model-based measure of equity market volatility that captures the unpredictable component of stock market returns filtered from economic noise. Lastly, the Oil Price Uncertainty Index, developed by Abiad and Qureshi (2023), measures global uncertainty related to oil prices, analysing the dispersion of oil price forecasts from a broad set of professional forecasters. Spikes in the index typically occur around major events such as conflicts in the Middle East or OPEC policy changes.

These indicators capture a wide spectrum of policy, trade, geopolitical, and financial market uncertainties that shape international preferences for currency use. According to the "Mercury hypothesis," financial attributes such as safety, stability, and liquidity guide currency choice. In addition, US dollar-denominated assets are traditionally considered to be relatively safe during periods of heightened uncertainty and volatility (Jiang, Krishnamurthy, & Lustig, 2021; He, Krishnamurthy, & Milbradt, 2019; Jiang, Krishnamurthy, & Lustig, 2024). For instance, Khalil and Strobel (2024) show evidence that the deviation from the covered rate interest rate parities between US and non-US 5-year government bonds widen in response to TPU shocks, and foreign holdings of long-term US assets increase. Alternatively, the "Mars hypothesis" considers the strategic leverage of the currency-issuing country. When US geopolitical commitment wanes, as Eichengreen, Mehl, and Chiţu (2019) suggest, the strategic underpinnings of dollar dominance may weaken, creating opportunities for competing currencies like the euro to gain traction.

As expected, there is no statistically significant relationship between these shocks and the

various measures of changes in the dominance ratio within the four-year window surrounding each shock (see Figures 12 and 13). This finding is consistent with the literature Eichengreen (2011), Eichengreen and Flandreau (2009), Maggiori, Neiman, and Schreger (2020), Maggiori, Neiman, and Schreger (2019), and Ilzetzki, Reinhart, and Rogoff (2020), which emphasises the long-term nature and slow-moving dynamics of dollar dominance by looking at traditional determinants such as the size of the issuing country's economy, the availability of safe and liquid assets, and the openness to international financial markets as key factors that sustain its dominance.

However, recent empirical evidence in the literature points to a gradual shift away from the U.S. dollar as a reserve currency, not in favor of the euro, but toward a more diverse set of smaller currencies. This trend has also included increased allocations to gold, reflecting broader diversification efforts by reserve managers.[5]

While the dollar's dominance has traditionally been underpinned by the scale of the U.S. economy and the depth of its financial markets, it also relies heavily on institutional integrity, characterised by the rule of law, central bank independence, and a predictable policy environment. Any perceived erosion of these foundations may undermine the long-term resilience of the dollar's international role (Arslanalp et al., 2022; Arslanalp, Eichengreen, & Simpson-Bell, 2023; Bruggen, Habib, Gormis, & Vallin, 2025). This is reinforced by recent developments in financial markets. Historically, a positive co-movement between U.S. government bond yields and the dollar's value has reinforced its safe-haven status, as higher yields signaled economic strength and attracted foreign capital. However, this relationship appears to be weakening. Following President Trump's so-called "Liberation Day," the dollar has depreciated even as yields on 10-year Treasury bonds have risen. This divergence raises questions about the durability of dollar strength and the stability of investor confidence in U.S. institutions (Herbert, 2025, June 1; Collyns & Michael, 2025, June 2). Nevertheless, it is too early to observe clear signs of this shift in debt markets, particularly given the lag in available data.

[5]According to a survey conducted by the World Gold Council between February and April 2024, reserve managers primarily value gold as a portfolio diversifier to hedge against economic risks—such as inflation, cyclical downturns, and sovereign defaults, and secondarily as a safeguard against geopolitical risk.

7 Dollar and Euro Concentration (*Step 4*)

Consistent with research on U.S. dollar dominance, our paper confirms that the global share of dollar- and euro-denominated liabilities is slow moving. Using an event study methodology, the previous section demonstrated that the relative internationalisation of these currencies, measured by our proposed DR index, is unaffected by uncertainty shocks in the short term.

Motivated by these results, this section investigates how the degree of cross-country concentration in dollar- and euro-denominated international debt responds to such uncertainty shocks. This approach focuses on whether heightened global uncertainty alters the distribution of these currencies' use across countries or country groups.

Several recent studies highlight the role of the dollar as a safe haven in periods of elevated uncertainty. Shin (2022) notes that shocks such as the COVID-19 pandemic and the war in Ukraine have driven investors into dollar-denominated assets, emphasising that "*as uncertainty has increased, the dollar tends to attract safe-haven flows*". Similarly, Georgiadis, Müller, and Schumann (2021) document that episodes of heightened financial market volatility, such as the 2008 Global Financial Crisis and the early stages of the COVID-19 pandemic, were marked by spikes in the VIX and concurrent rallies in the dollar. They argue that such "dollar dominance" can amplify external shocks, though U.S. Federal Reserve liquidity provision (e.g., swap lines) played a stabilizing role during COVID-19.

Ito and Xu (2024) provide complementary evidence from firm-level syndicated loan data for the period 1995–2019, showing that trade-policy uncertainty shocks lead borrowers in emerging markets to increase their use of USD (treating the dollar as a hedge), i.e. the dollar share of loans rises. However, uncertainty related to the U.S. macroeconomic policy or broader financial stress tends to reduce dollar lending shares, likely reflecting dollar funding strains in periods of turmoil.

Taken together, these studies suggest that broad uncertainty shocks, whether financial or political, related tend to reinforce demand for the dollar, supporting its dominant role in the international monetary system. In what follows, we assess whether these shocks influence the concentration of dollar and euro international debt across countries, country groups or within country groups.

We use the Herfindahl-Hirschman Index (HHI) to measure the concentration of the U.S. dollar and the euro. We calculate the HHI across all countries in the sample, as well as within

specific country groups, such us financial centres, advanced economies, and emerging and developing countries. To capture intra-group variation, we also compute the HHI for countries within each group. Our analysis focuses on the individual HHI values for the dollar and the euro, as well as the differences between them.

We construct the HHI for the US dollar euro as the following equations:

$$HHI_t^{USD} = \sum_i (w_{it}^{USD})^2, \quad HHI_t^{EUR} = \sum_i (w_{it}^{EUR})^2$$

with w_{it}^{USD} and w_{it}^{EUR} are defined as

$$w_{it}^{USD} = \frac{PDL_{it,nUS}^{USD}}{\sum_i PDL_{it,nUS}^{USD}}, \quad w_{it}^{EUR} = \frac{PDL_{it,nEA}^{EUR}}{\sum_i PDL_{it,nEA}^{EUR}}$$

w_{it}^{USD} is country or country group i's proportion of debt liabilities denominated in dollars. w_{it}^{EUR} is country or country group i's proportion of debt liabilities denominated in euro.

Taking the full country sample and plotting the time series for the two indices, we see that there has been a reduction in the level of concentration in euro-denominated debt liabilities. This is a stable negative trend. A similar downtrend pattern is exhibited by the HHI calculated using dollar-denominated debt. However, this trend reverses in early 2018, shifting to a positive trend from 2018 to 2023 (Figure 14).

The analysis of concentration indices for specific country groups reveals distinct patterns in dollar- and euro-denominated debt. In financial centers (Bahrain, Bermuda, Cayman Islands, Hong Kong SAR, Macao, Mauritius, Netherlands Antilles, Panama, and the United Kingdom), both dollar and euro-denominated debt concentration consistently rises over the entire period (Figure 15). Among advanced economies (Australia, Canada, Czech Republic, Denmark, Iceland, Israel, Japan, Korea, Norway, and Sweden), dollar-denominated debt concentration increases, with the HHI rising from 0.17 to 0.21, while euro-denominated debt concentration declines from 2012 to 2021 but slightly increases from 2021 onward, with the HHI moving from 0.15 to 0.18 (Figure 16). In contrast, emerging market and developing countries show stable dollar-denominated debt concentration, with the HHI ranging between 0.05 and 0.06 throughout the period. However, euro-denominated debt concentration in these countries drops from 0.13 to 0.09 between 2013 and 2016, then stabilises, followed by a slight downward trend with a gradual slope from 2018 to 2022 (Figure 17).

7.1 Empirical strategy

In order to study how absolute and relative degree of dollar and euro concentration respond to the uncertainty shocks previously introduced, we follow three steps. First, we estimate different regression models of the form represented in Equation (1) to study the responsiveness of absolute concentration of dollar- and euro-denominated portfolio debt liabilities. Here, the explained variable is the log level of the Herfindal index for each of the two currencies. The explanatory variables used in all three steps are the log levels of previous uncertainty shocks, allowing us to interpret the point estimates as elasticities.

$$HHI_t^{USD,EUR} = \beta Shock_t + \Gamma X_t + \epsilon_t \tag{1}$$

To study how the **relative** concentration of these currencies respond to the above shocks we follow two strategies. First, we take the difference in the log-level of the dollar and euro HHI indices. We define this as $DHHI_t \equiv HHI_t^{USD} - HHI_t^{EUR}$. Our focus is to study the relative responsiveness of dollar versus euro concentration in portfolio debt. To study this, we estimate the model in Equation (2).

$$DHHI_t = \beta Shock_t + \Gamma X_t + \epsilon_t \tag{2}$$

Finally, we adopt a global perspective by considering the relative scale of dollar- and euro-denominated international portfolio debt in our sample. To do this, we apply the previously defined **Dominance Ratio** to weight the concentration measures of each currency. More specifically, we construct the weighted index $DwHHI_t \equiv DR_t * HHI_t^{USD} - (1 - DR_t) * HHI_t^{EUR}$. We then estimate a series of empirical models based on Equation (3).

$$DwHHI_t = \beta Shock_t + \Gamma X_t + \epsilon_t \tag{3}$$

The *Shock* variable sequentially incorporates the World Uncertainty Index (WUI), Economic Policy Uncertainty (EPU) Index, Trade Policy Uncertainty (TPU) Index, Geopolitical Risk (GPR) Index, CBOE Volatility Index (VIX), U.S. Equity Market Volatility Index, and Oil Price Uncertainty Index. The vector X_t includes an intercept along with linear and quadratic time trends.

7.2 Findings

We define absolute concentration as the distribution of a currency across countries, groups, and within groups. In contrast, relative concentration reflects the difference in concentration between the dollar and the euro. To measure relative concentration, we use two methods: first, the log-level difference, which calculates the difference between the absolute concentrations of the dollar and the euro; and second, the weighted difference, which uses the Dominance Ratio as a weighting factor. This second approach explicitly accounts for the relative scales of dollar and euro portfolio debt.

The regression results for all exercises are presented in Tables 8, 9, and 10. The absolute and relative concentration measures, derived from equations (1), (2) and (3), are reported in Tables 8, 9 and 10, respectively. We study three country groups: financial centers, advanced economies, and emerging and developing countries.

A 1% shock in World uncertainty increases cross-country absolute dollar concentration and decreases euro concentration by 5% and -3%, respectively. The net effect is statistically significant too. This is the case when the relative concentration is defined as the difference in the log levels of absolute dollar and euro concentration, i.e. unweighted. The effect of world uncertainty in relative concentration is a 8% increase in dollar concentration relative to euro. When dollar and euro scales are factored in the difference between dollar and euro concentration becomes statistically insignificant. When dollar and euro debt is aggregated by country groups our approach does not yield any statistically significant relation between world uncertainty and concentration. Zooming in to the degree of relative concentration within different country groupings, we identify a statistically relevant relation within the financial centre group. A 1% increase in world uncertainty is associated with a 2% increase in dollar concentration relative to euro. This result only emerges when dollar and euro are unweighted. When the Dominance Ratio is included to compute the relative concentration in the financial centre group, the previous positive link disappears. The observation that world uncertainty increases cross-country dollar concentration relative to the euro can be attributed to the dollar's perceived status as a safe-haven currency during times of global uncertainty, as we discussed in the previous sections.

As in the before, we look at economic policy uncertainty using two indicators: economic policy uncertainty broadly defined and trade policy uncertainty. A shock to the broad economic

policy uncertainty indicator is associated with an increase in relative dollar concentration across all countries in our sample. A 1% shock increases relative concentration by 12%. A similar qualitative result is observed for concentration across country groups but of a smaller magnitude (2% instead of 12% increase in concentration). Absolute currency concentration models or relative concentration models factoring in the scale of dollar dominance yield no statistically significant results. The only exception is the relative dollar concentration increasing 5% in response to an broad economic policy shock when relative importance of the dollar is factored in within the emerging and developing country group. This of course makes a lot of sense given the very high usage of dollar to denominate debt in these countries. For the latter, trade policy uncertainty, we find again an increase in relative dollar concentration in response to this shock. An increase of 4% in response to a 1% increase in trade policy uncertainty. However, the channel through which this takes place is via a reduction of absolute euro concentration, instead of an increase in absolute dollar concentration as for the previous shock. A 1% increase in trade policy uncertainty reduces absolute euro concentration by 5% across countries and by 1% across country groups. There is no evidence of change in the relative dollar concentration in response to a trade uncertainty shock across country groups. Within country groups we uncover an 8% reduction of relative dollar concentration within advance economies and 13% reduction within emerging market economies in response to the trade uncertainty shock. Since these results are driven by changes in the absolute euro concentration, the previous relative concentration results vanish with the dominance ratio scaling factor (which gives a much heavier weight to the dollar) is added. Interestingly, once the Dominance Ratio is included to account for scales, the relative concentration of the dollar vis-à-vis the euro within financial centre countries falls by 2%. The negative relationship between trade uncertainty shocks and euro concentration can be attributed to the EU's strategic efforts to diversify its trade relationships and reduce dependence on specific trading partners. Events such as the stalled Transatlantic Trade and Investment Partnership (TTIP) negotiations and the escalation of the US-China trade war under the Trump administration underscored the vulnerabilities of relying heavily on a single major trade partner. In response, the EU accelerated its ongoing strategy of expanding trade ties with a broader set of countries. Firms confronted with heightened trade-related uncertainties are more inclined to adopt adjustment strategies, including increasing inventories and diversifying their supplier base (European Investment Bank, 2024). Consequently, the

expanding geographic dispersion of the EU's trade flows is likely to contribute to a reduction in the geographic concentration of euro-denominated transactions.

Next, we move onto a very relevant shock to study these days: the geopolitical risk shock. While before we were not able to link this shock with changes in overall scale of dollar or euro debt denomination, we now find statistically relevant changes in their degree of concentration. When looking at absolute concentration across countries, we find that a 1% move in the geopolitical risk index is associated with a 6% reduction in dollar absolute concentration. A qualitatively similar but smaller result is found for the absolute dollar concentration across country groups (2% reduction). For the case where the relative concentration is calculated without factoring in dollar and euro scales, we find no effect of this shock in relative concentration. The only exception for the unweighted approach is a 9% reduction in relative dollar concentration within advanced economies. However, when the scale of dollar and euro is factored in via the Dominance ratio, we have strong evidence of relative dollar concentration vis-à-vis the euro falling across the board. An 8% reduction across countries, a 3% reduction across groups, a 4% reduction within financial centres and a 5% reduction within emerging market and developing countries. This is a very clear and strong result driven by a reduction in the absolute dollar concentration of 6% across countries and 2% across groups.

Foreign demand for a country's government debt is a key determinant of the international role of its currency. While official sector investors typically hold government debt or foreign exchange reserve for precautionary purposes they may also take geopolitical tensions into account, as these can affect the liquidity of their holdings. Abuse of exorbitant privilege in the form of excessive use of sanctions particularly US financial sanctions can shift the geography of this currency in time of crisis. (Arslanalp et al., 2023; Laser, Mihailov, & Weidner, 2025; Ferranti, 2024) For example, although non-aligned countries are the main holders of euro area government debt in the foreign official sector, Beck, Burian, Georgiadis, and McQuade (2025) estimates that their holdings (excluding Russia) were, on average, nearly 40% lower than those of aligned countries following the Russian invasion of Ukraine in 2022.

The final set of shocks focuses on financial and commodity risk. To assess their impact, we expand the previous analysis to include the VIX index, the US equity market volatility, and oil price uncertainty as the shock variables. Consistent with existing research on the safe-haven status of the dollar, we find that these shocks lead to an increase in dollar concentration.

Specifically, both absolute and relative dollar concentration rise in response to VIX and equity market volatility shocks. This is case for cross-country concentration and concentration across country groups. The effect of a VIX shock on relative dollar concentration is 7% for the cross-country version and 2% for the across groups. Absolute dollar concentration in response to this shock increases in the same proportions. Similarly, oil price shocks increase relative dollar concentration across countries (3%) and across groups (1%). However, it only does so for absolute concentration across countries and not across country groups. These results emerge again when the scale of dollar dominance is factored in Table 10, with the responsiveness of relative dollar concentration to equity volatility shocks becoming stronger. There are 9% and 3% for relative concentration across countries and across groups, respectively.

Intragroup relative concentration also increases in response to these three shocks. A shock to the VIX index increases the dollar relative concentration within financial centres (2%), advanced economies (5%) and emerging and developing countries (7%). When the scale of dollar dominance is factored in the concentration in financial centres increases by 3% while that within advanced and emerging and developing countries by 4%. In addition, the precision of these estimates increases in this version of the model. All point estimates being significant at 1% levels. A shock to equity markets volatility increased the relative dollar concentration in financial centres only when dollar scale is not accounted. When the scale of dollar-denominated debt is factored in via the Dominance Ratio, relative dollar concentration goes up in all country groups and coefficient estimates very precisely estimated. Finally, shock to oil prices do not seem to have a robust impact on the relative dollar concentration within groups. The only exception is within financial centres for the model not accounting for the dollar scale.[6]

7.2.1 Findings Summary

Our findings highlight that global uncertainty and financial market shocks tend to increase absolute and relative dollar concentration, while reducing euro concentration across countries and groups. This pattern is particularly pronounced for trade policy shocks, which lead to a notable

[6]We have a small sample of 41 quarters so there is a limit to the number of regressors we can include. However, to test for potential omitted variable bias, we jointly include all seven shocks in the same regression framework in Table 11. These, together with the intercept and trends, leave only 30 degrees of freedom. Due to the nature of these shocks and associated correlation, we expect the point estimates to have large standard errors. Fortunately, we do not find large changes in the point estimates to raise concerns of relevant omitted-variable biases. Even with the inclusions of 6 additional shocks, some point estimates are still statistically significant, which is add as additional level of robustness to our findings.

decline in euro concentration—especially within emerging and developing countries—thereby increasing relative dollar concentration. Conversely, geopolitical risk shocks reduce absolute dollar concentration, with the strongest effects observed in advanced economies, and also lead to a decline in relative dollar concentration when accounting for currency scale. Economic policy shocks and oil uncertainty show more limited or non-robust effects, often becoming insignificant once the relative scale of the dollar and euro is taken into account. Overall, the results suggest that while certain shocks reinforce the dollar's dominance though more concentration, their impact is sensitive to the underlying scale of currency usage in portfolio debt markets.

8 Conclusions

This study advances the measurement of currency dominance in global portfolio debt by introducing the Dominance Ratio (DR), a novel metric that refines the assessment of currency internationalisation by excluding debt liabilities held by the issuing jurisdictions (the US for dollars and the Euro Area for euros). Our new calculation confirms that the dollar exhibits a global reach, with roughly 70% of dollar-denominated portfolio debt liabilities held outside the US for our sample of 87 countries, reinforcing its role as the preeminent international currency. In contrast, the euro's influence is primarily regional, with over half of euro-denominated liabilities concentrated within the Euro Area.

Our four-step empirical analysis yields several key insights. First, the cross-country distribution of the Dominance Ratio highlights the significant influence of conditioning factors such as anchor currency choice, trade linkages, and geographical proximity. Countries with the US dollar as their anchor currency exhibit a Dominance Ratio skewed toward dollar-dominated, while euro-anchor countries show varied exposure, often retaining substantial dollar-denominated international debt. Trade linkages, particularly with the US, and oil trade balances reinforce dollar dominance, consistent with the complementarity between trade invoicing and debt issuance. Geographical proximity to the US or Euro Area has a nuanced effect when combined with other factors.

In the medium term, regression analyses reveal robust associations between the Dominance Ratio and macro-financial variables, including financial integration and trade patterns. The dollar's dominance is bolstered by trade and financial complementarities, while the euro's

role is less resilient outside the Euro Area. Sectoral breakdowns indicate that these patterns hold across government and private sectors, though the effect is weaker for non-bank financial intermediaries. In the short term, the Dominance Ratio is slow-moving and unaffected by uncertainty shocks, aligning with the literature on the persistent nature of currency dominance. However, the geographical concentration of dollar and euro debt responds to specific shocks. Trade policy shocks reduce euro concentration, indirectly enhancing relative dollar concentration, while geopolitical risk shocks diminish dollar concentration, particularly when scaled its importance. Financial market shocks, such as those captured by the VIX and equity market volatility indices, increase dollar concentration, reinforcing its safe-haven status.

These findings carry significant policy implications for central banks, policymakers, and international financial institutions. First, the persistent dominance of the US dollar underscores the need for robust access to dollar liquidity, particularly during financial market volatility. Central banks in emerging and developing economies, where dollar-denominated debt is prevalent, should prioritise reserve management strategies to ensure adequate dollar holdings, mitigating risks from exchange rate fluctuations and debt servicing costs. This is critical given the procyclical nature of debt flows, which can exacerbate financial instability.

Second, the regional concentration of euro-denominated debt suggests that Euro Area policymakers should deepen financial integration to bolster the euro's international role. Initiatives such as unified Eurobond issuance or enhanced cross-border financial infrastructure could reduce reliance on dollar-denominated borrowing, particularly for European emerging markets. However, the significant dollar exposure in euro-anchor countries indicates that broader euro internationalisation requires strengthening trade and financial linkages beyond the Euro Area.

Third, the sensitivity of debt concentration to uncertainty shocks highlights the need for proactive risk management. Trade policy shocks, which reduce euro concentration, suggest that trade agreements and regional cooperation could stabilise euro-denominated debt markets. Geopolitical risk shocks, which diminish dollar concentration, underscore the importance of diversifying currency exposures through mechanisms like currency swaps or multilateral lending facilities. Finally, the pivotal role of financial centers, particularly the United Kingdom, in euro-denominated debt issuance calls for sustained regulatory cooperation post-Brexit to maintain access to London's debt markets. Financial centers issuing dollar-denominated debt should strengthen risk-sharing mechanisms to stabilise debt flows.

In conclusion, while the US dollar's global dominance in portfolio debt remains robust, the euro's regional influence and the impact of uncertainty shocks offer opportunities for targeted policy interventions. By addressing these structural and cyclical factors, policymakers can enhance financial stability, optimise currency choice in debt issuance, and foster a more balanced international monetary system.

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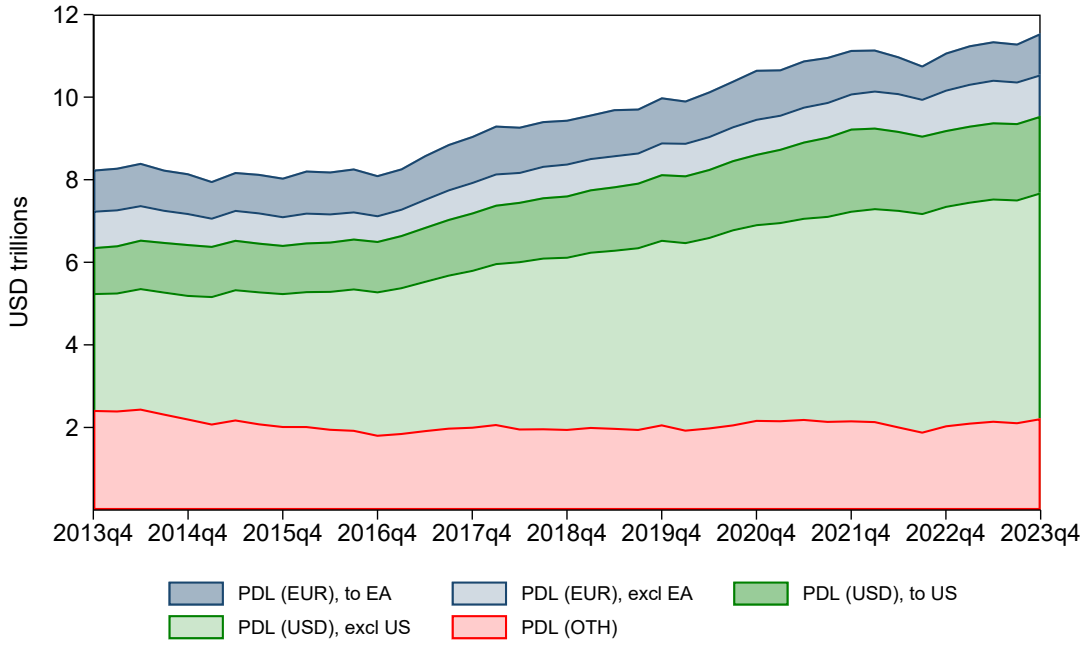
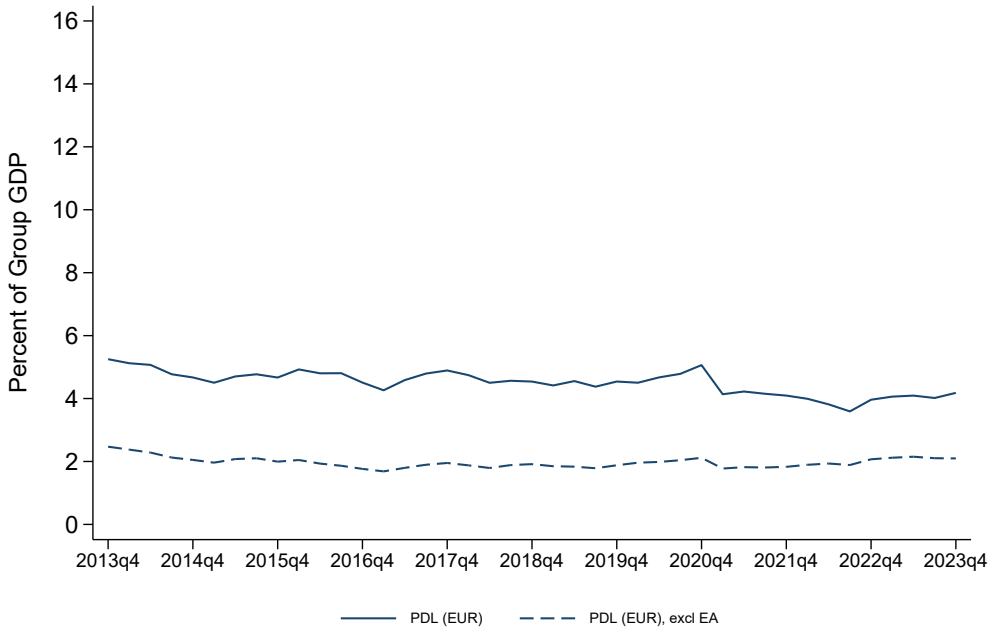
Figure 1: Portfolio debt liabilities



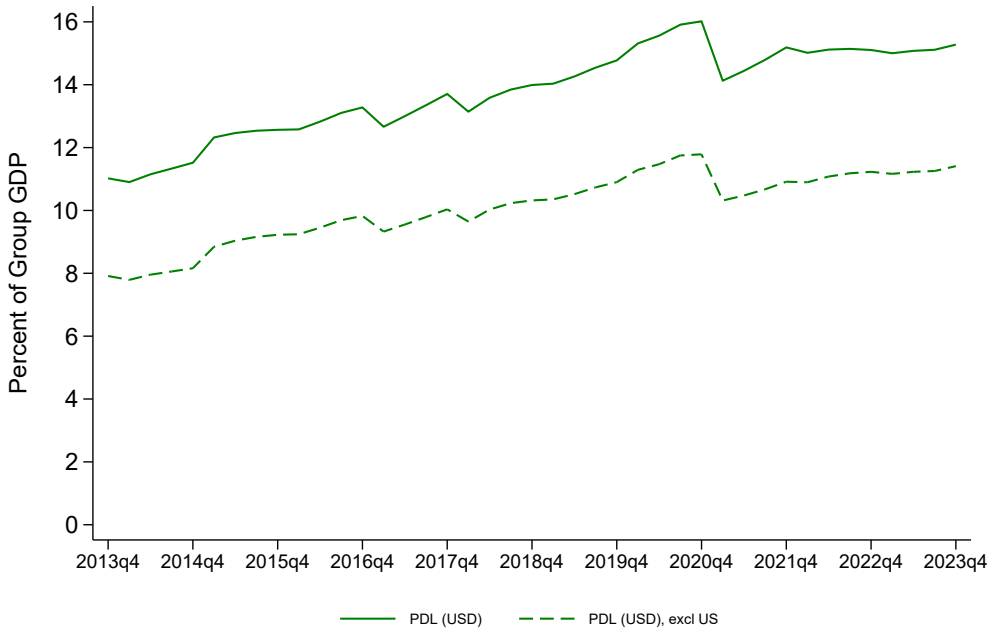
Note: Sum of portfolio debt liabilities of our country sample (see Figure A.3) in Euro to Euro Area (dark blue) and to rest of the world excluding Euro Area (light blue), in Dollar to the US (dark green) and to rest of the world excluding the US (light green), and in other currencies (red)

Figure 2: PDL: All sample

(a) Euro denominated

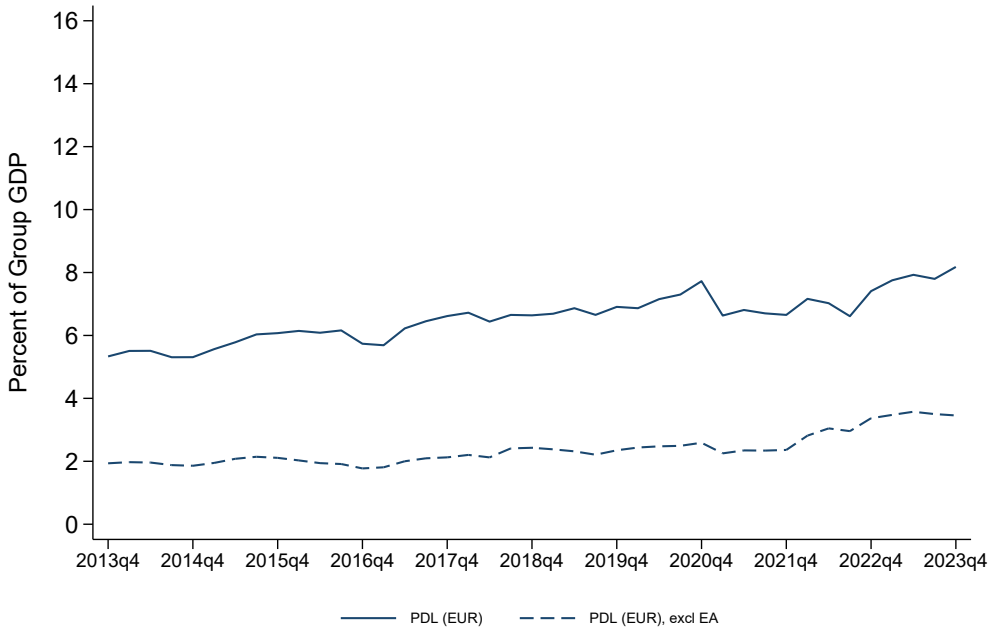


(b) Dollar denominated

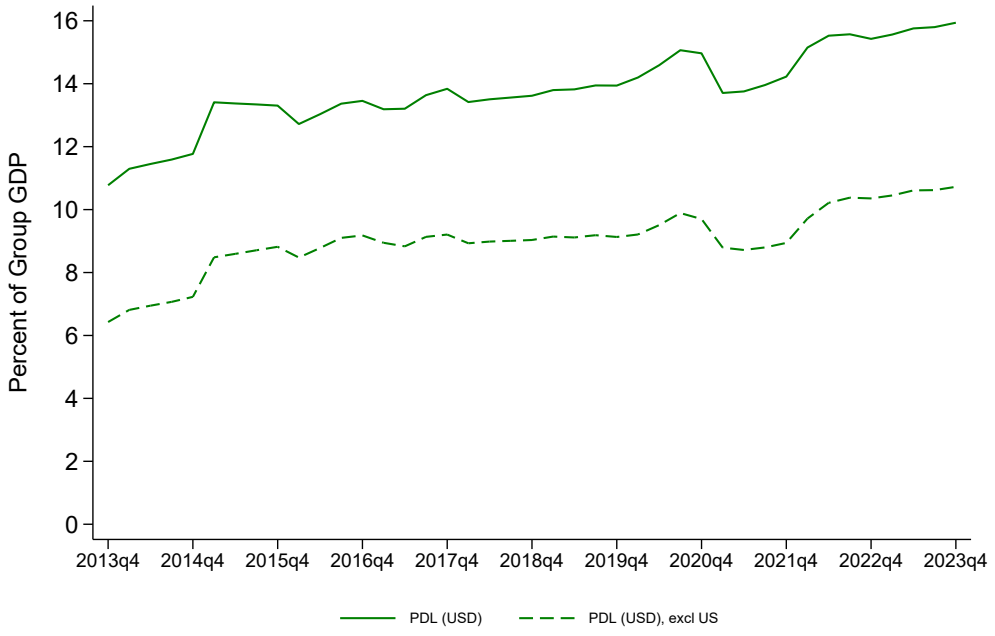


Note: Sum of portfolio debt liabilities of our country sample (see Figure A.3) in Euro including all the counterpart countries (blue line) and excluding Euro Area as a counterpart (dashed blue line) in (a). Sum of portfolio debt liabilities of our country sample (see Figure A.3) in Dollar including all the counterpart countries (green line) and excluding the US as a counterpart (dashed green line) in (b).

Figure 3: PDL: Advanced Economies



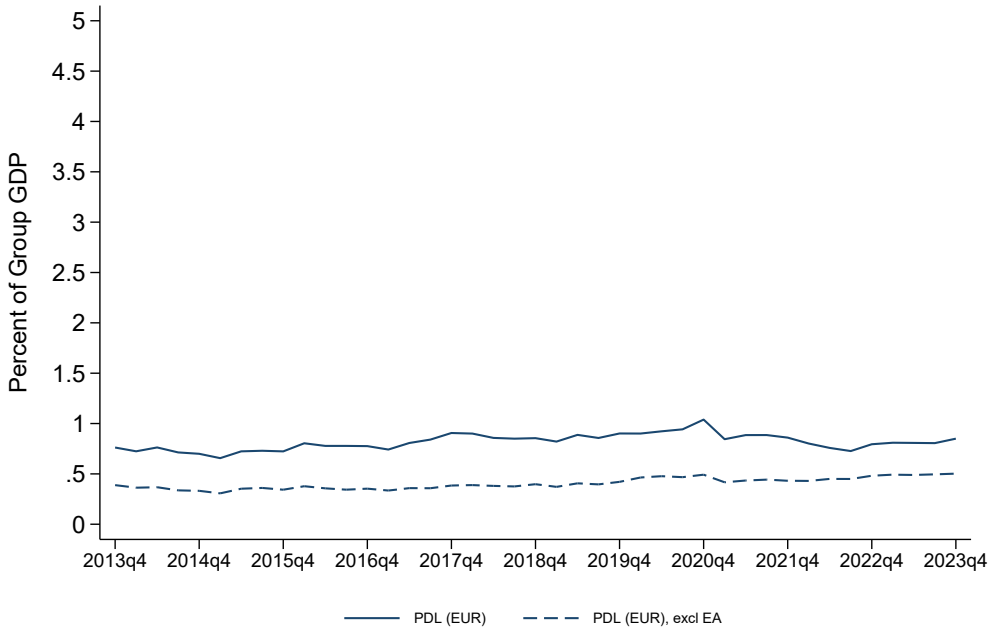
(a) EUR



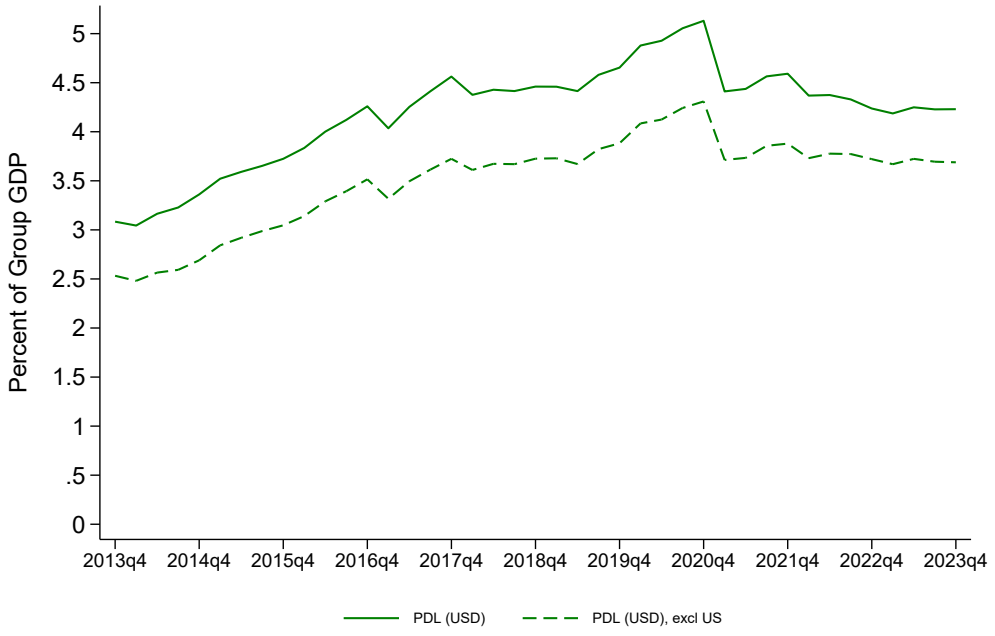
(b) USD

Note: Sum of portfolio debt liabilities to sum of GDP of our advanced country sample (see Figure A.3) in Euro including all the counterpart countries (blue line) and excluding Euro Area as a counterpart (dashed blue line) in (a). Sum of portfolio debt liabilities to sum of GDP of our country sample (see Figure A.3) in Dollar including all the counterpart countries (green line) and excluding the US as a counterpart (dashed green line) in (b).

Figure 4: PDL: Emerging and Developing Economies



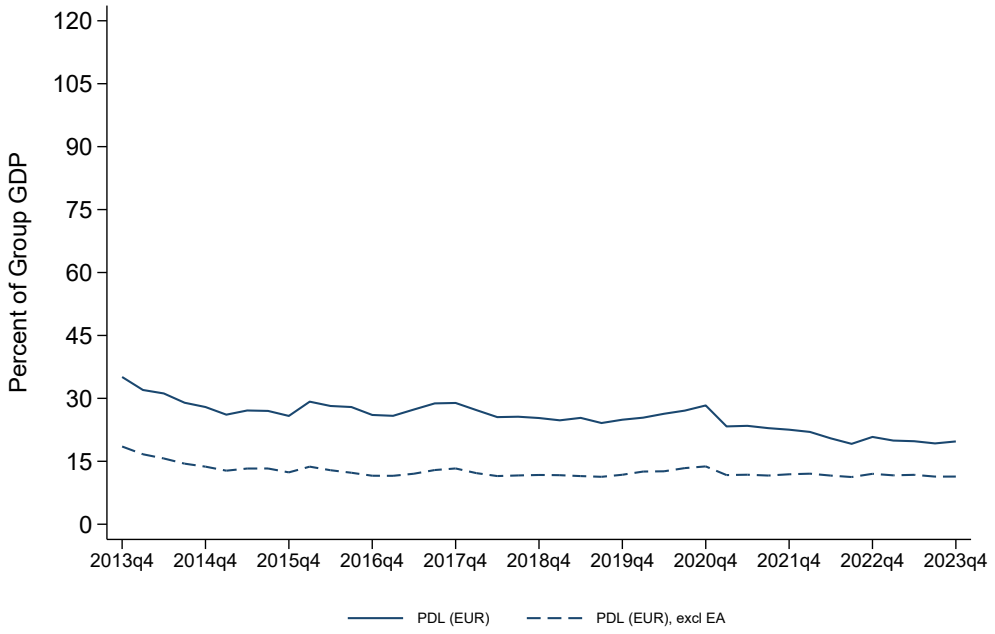
(a) EUR



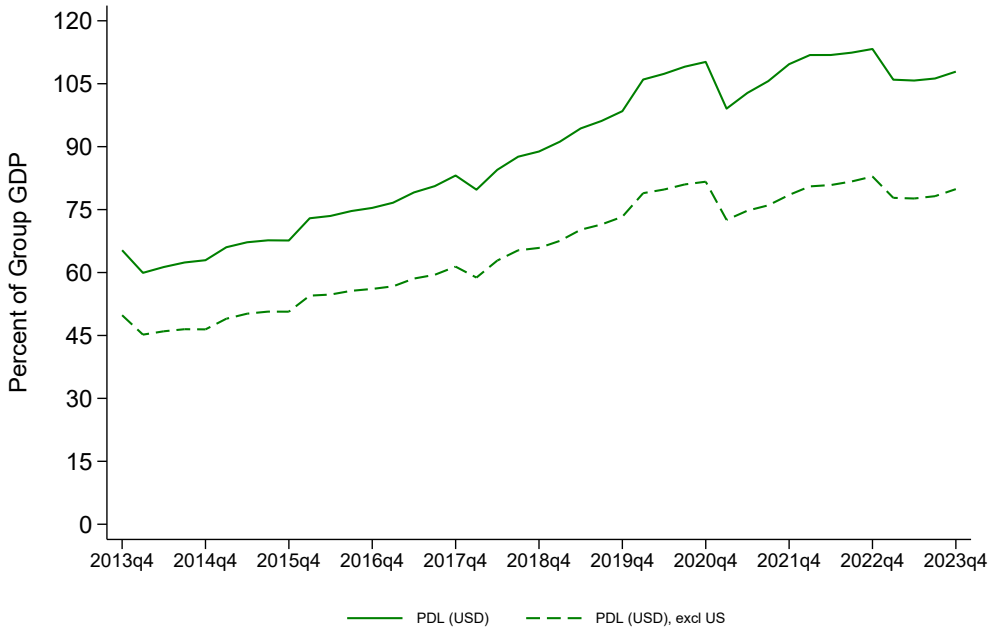
(b) USD

Note: Sum of portfolio debt liabilities to sum of GDP of our emerging and developing country sample (see Figure A.3) in Euro including all the counterpart countries (blue line) and excluding Euro Area as a counterpart (dashed blue line) in (a). Sum of portfolio debt liabilities to sum of GDP of our country sample (see Figure A.3) in Dollar including all the counterpart countries (green line) and excluding the US as a counterpart (dashed green line) in (b).

Figure 5: PDL: Financial Centers



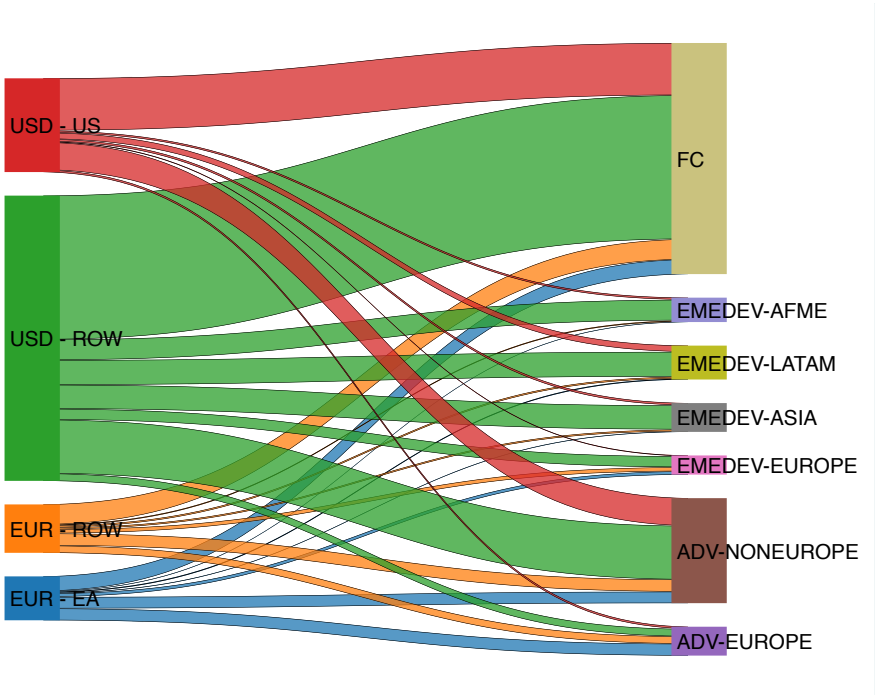
(a) EUR



(b) USD

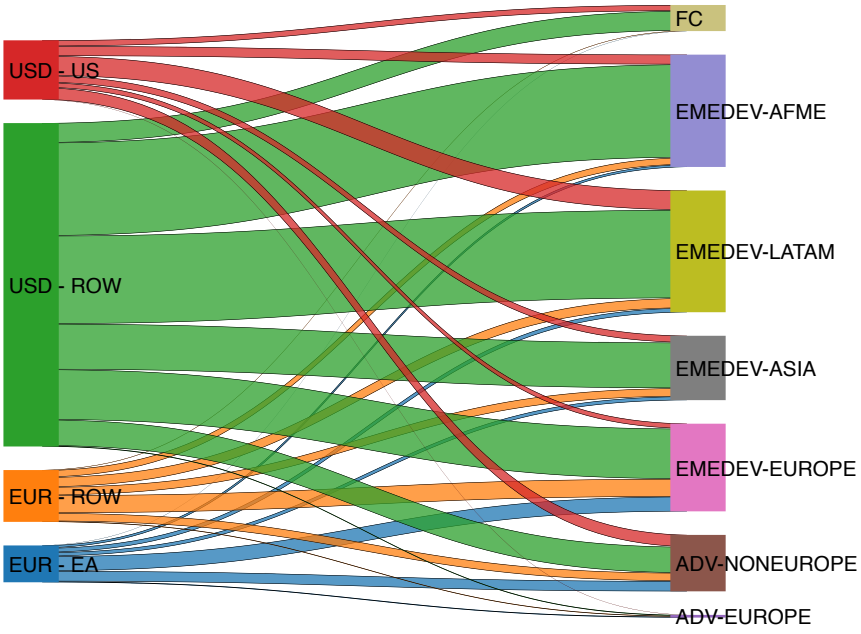
Note: Sum of portfolio debt liabilities to sum of GDP of our financial center country sample (see Figure A.3) in Euro including all the counterpart countries (blue line) and excluding Euro Area as a counterpart (dashed blue line) in (a). Sum of portfolio debt liabilities to sum of GDP of our country sample (see Figure A.3) in Dollar including all the counterpart countries (green line) and excluding the US as a counterpart (dashed green line) in (b).

Figure 6: Geography of Portfolio Debt in 2022

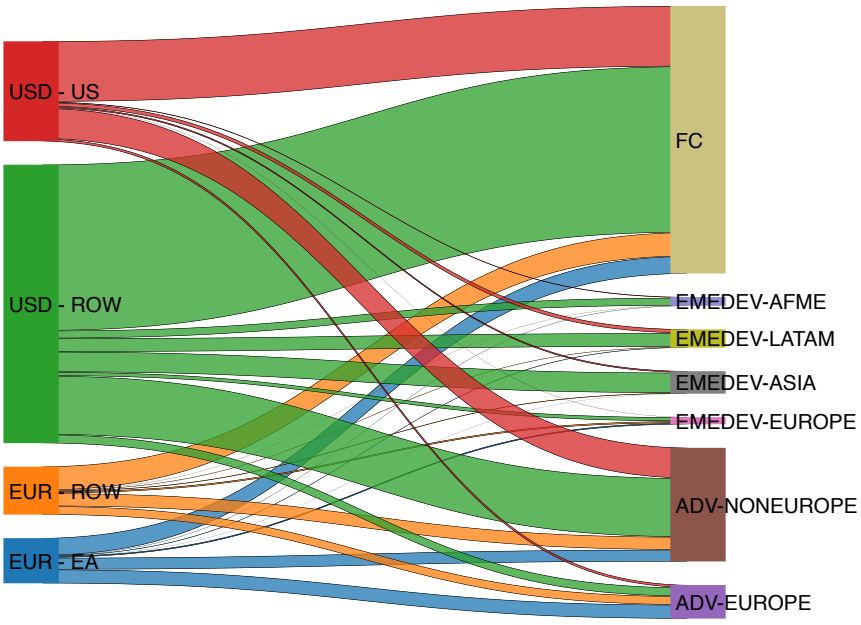


Note: It shows the patterns of portfolio debt liabilities in different country groups, 2022Q4. The amounts on the right show the total amount of issuance by different country groups. Each of the colored lines breaks down these amounts according to counterpart countries: the US, the euro area, or the rest of the world, and currency of denomination: US dollar or euro. The red area represents the dollar-denominated liabilities to the US. The green area illustrates dollar-denominated liabilities to countries outside the US. The orange shows euro-denominated liabilities to countries outside the euro area. The blue area represents the euro-denominated liabilities the euro area.

Figure 7: Geography of Portfolio Debt in 2022: Sectoral Breakdown



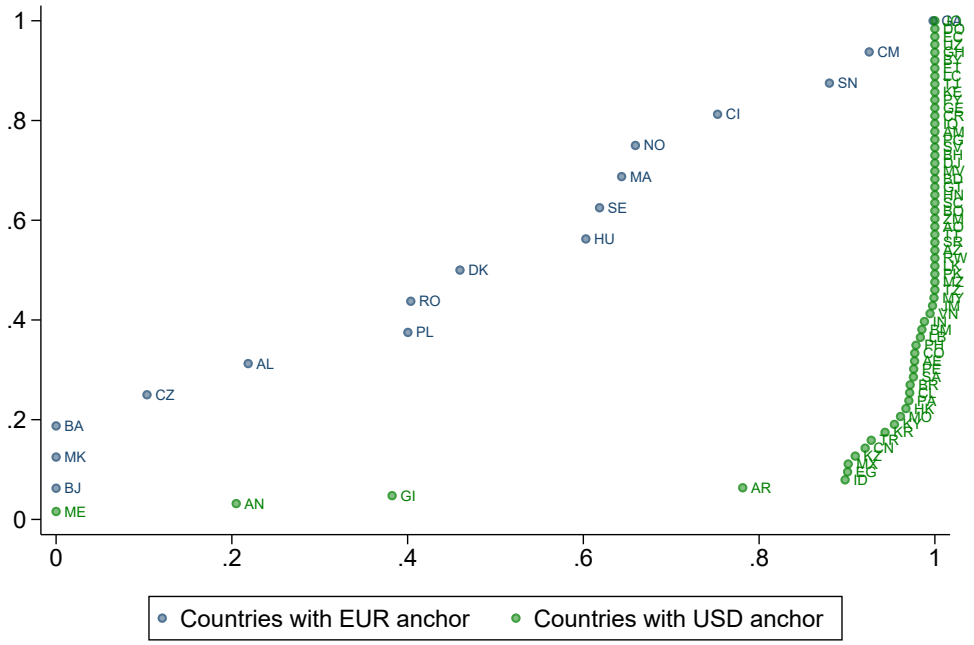
(a) Government



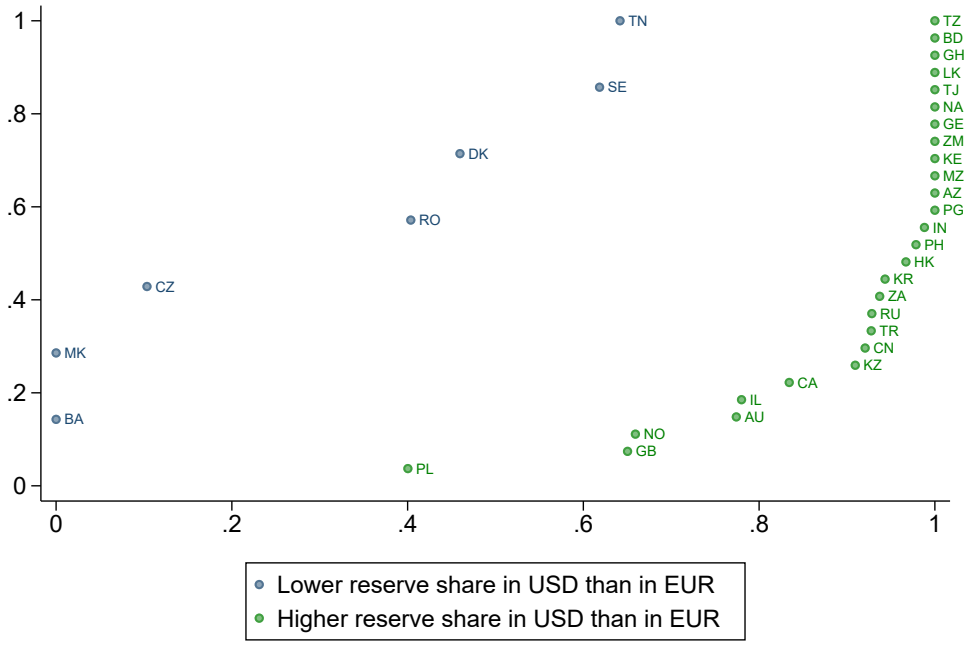
(b) Private

Note: It shows the patterns of portfolio debt liabilities in different country groups, 2022Q4. The amounts on the right show the total amount of issuance by different country groups. Each of the colored lines breaks down these amounts according to counterpart countries: the US, the euro area, or the rest of the world, and currency of denomination: US dollar or euro. The red area represents the dollar-denominated liabilities to the US. The green area illustrates dollar-denominated liabilities to countries outside the US. The orange shows euro-denominated liabilities to countries outside the euro area. The blue area represents the euro-denominated liabilities the euro area.

Figure 8: Dominance Ratio Distributions: Finance Block



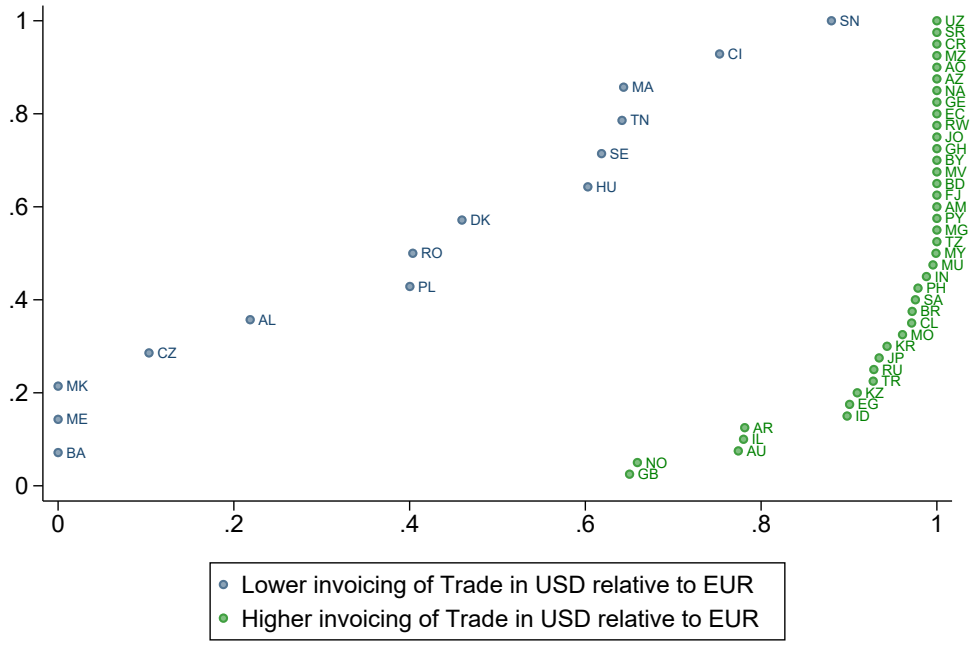
(a) Anchor currency



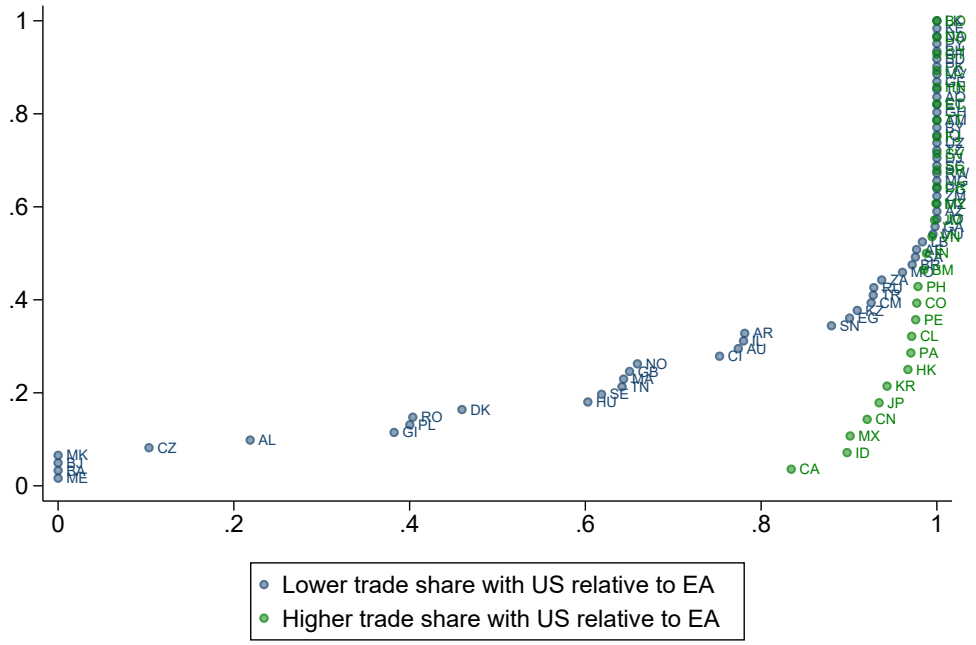
(b) Reserve currency

Note: Cumulative distribution for the country period-average of the dominance ratio ($PDL^{USD}_{it,nUS}/(PDL^{EUR}_{it,nEA} + PDL^{USD}_{it,nUS})$). In Figure (a), the country sample is divided as countries using EUR as an anchor currency (in blue) and countries using USD as an anchor currency (in green). Data source is Ilzetzki et al. (2019); Ilzetzki et al. (2022). In Figure (b), the country sample is divided as countries having more Foreign exchange reserve (FXR) in EUR than in USD (in blue) and countries having more FXR in USD than in EUR (in green). Data source is Ito and McCauley (2020); Chinn et al. (2022). The country's period-average dominance ratio is measured on the horizontal axis and ranges between 0 and 1. The vertical axis measures the cumulative distribution, or the proportion of countries, below each share value in the horizontal axis.

Figure 9: Dominance Ratio Distributions: Trade Block



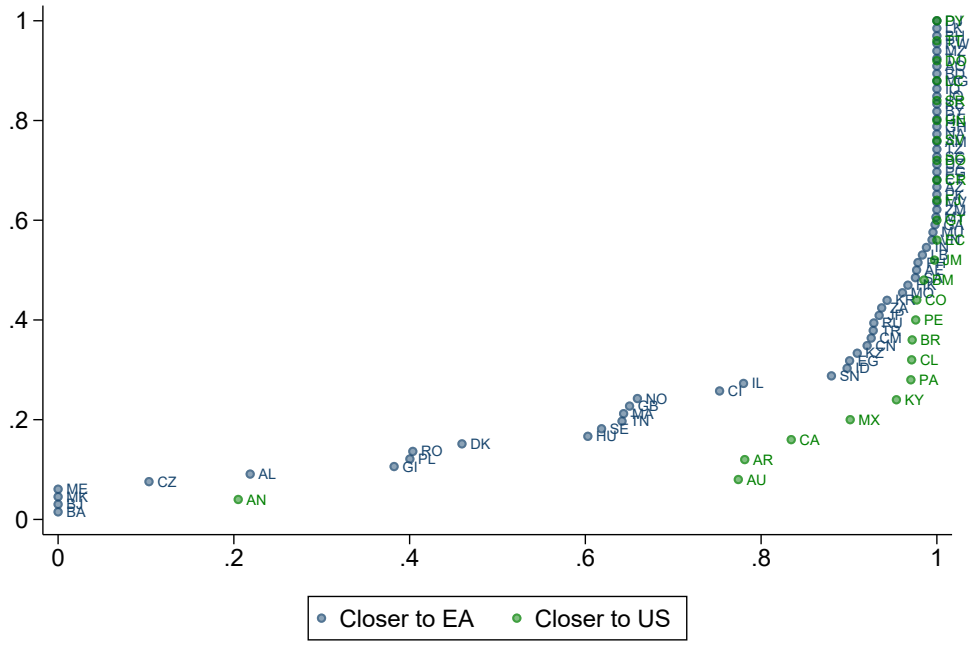
(a) Trade invoicing



(b) Geography of trade

Note: Cumulative distribution for the country period-average of the dominance ratio ($PDL^{USD}_{it,nUS}/(PDL^{EUR}_{it,nEA} + PDL^{USD}_{it,nUS})$). In Figure (a), the country sample is divided as countries using EUR more than USD in their trade (in blue) and countries using USD more than EUR in their trade (in green). Data source is Boz et al. (2022). In Figure (b), the country sample is divided as countries trading with EA more than with the US (in blue) and trading with the US more than with EA (in green). Data source is IMF Direction of Trade Statistics (DOT). The country's period-average dominance ratio is measured on the horizontal axis and ranges between 0 and 1. The vertical axis measures the cumulative distribution, or the proportion of countries, below each share value in the horizontal axis

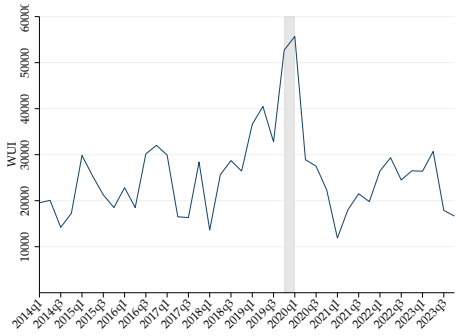
Figure 10: Dominance Ratio Distributions: Gravity Block



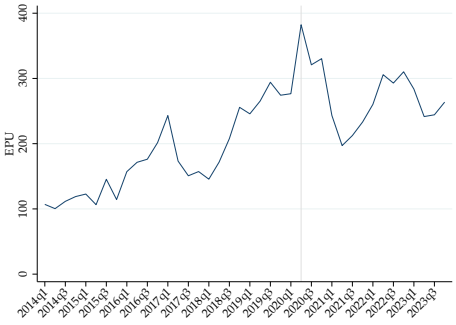
(a) Distance

Note: Cumulative distribution for the country period-average of the dominance ratio ($PDL^{USD}_{it,nUS}/(PDL^{EUR}_{it,nEA} + PDL^{USD}_{it,nUS})$). The country sample is divided into countries being geographically closer to EA than to the US (in blue) and countries being geographically closer to the US than to EA (in green). Data source is CEPII GeoDist. The country's period-average dominance ratio is measured on the horizontal axis and ranges between 0 and 1. The vertical axis measures the cumulative distribution, or the proportion of countries, below each share value in the horizontal axis

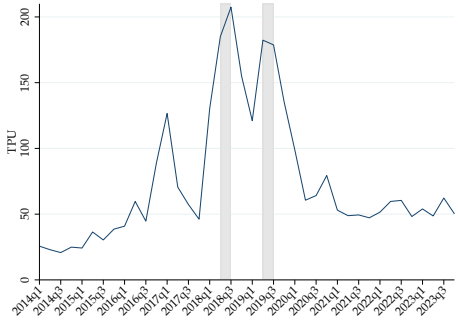
Figure 11: Uncertainty Shocks



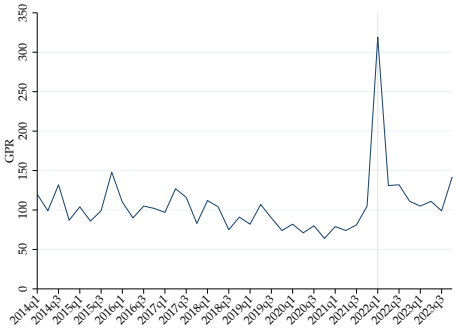
(a) World Uncertainty



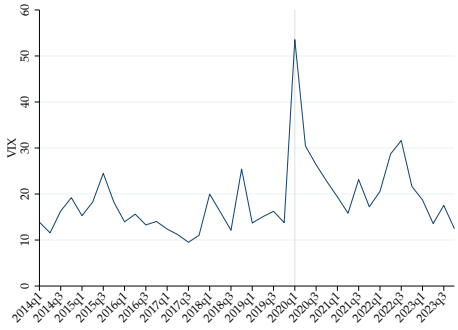
(b) Economic Policy



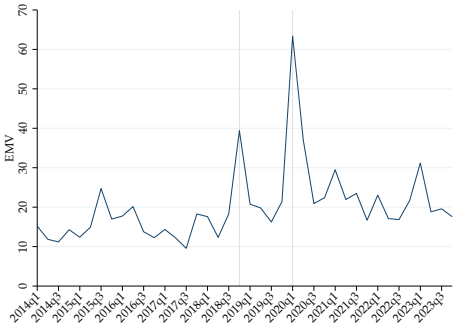
(c) Trade Policy



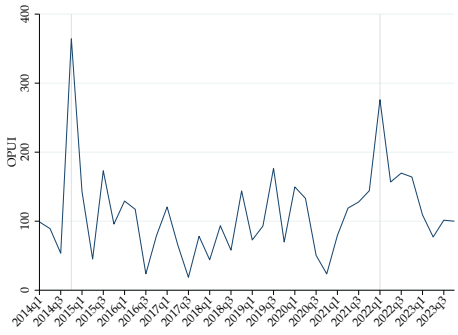
(d) Geopolitical Risk



(e) VIX



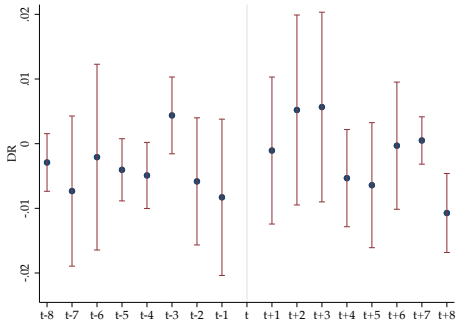
(f) Equity Market



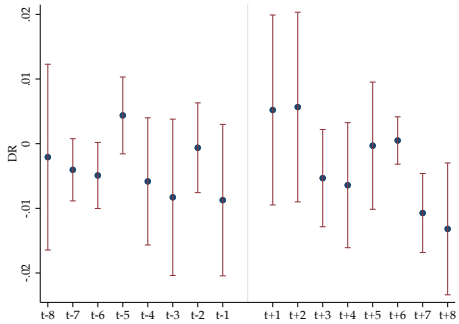
(g) Oil

Note: Charts (a)- (g) represent the time series of the World Uncertainty Index, Economic Policy Uncertainty, Trade Policy Uncertainty, Geopolitical Risk, CBOE Volatility (VIX), US Equity Market Volatility, and Oil Price Uncertainty Index, respectively. Grey-shaded areas indicate shock periods, defined as observations exceeding the mean plus two standard deviations ($mean + 2\sigma$).

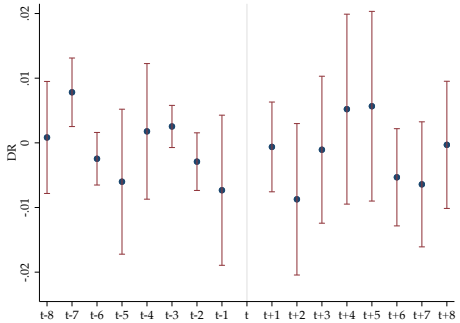
Figure 12: Dynamics around the shock episodes



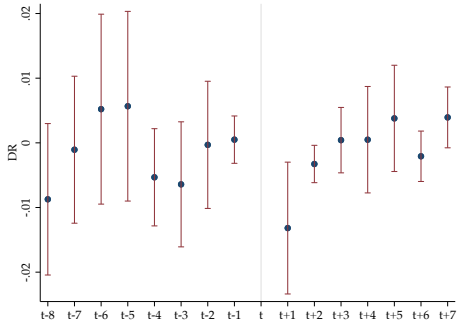
(a) World Uncertainty



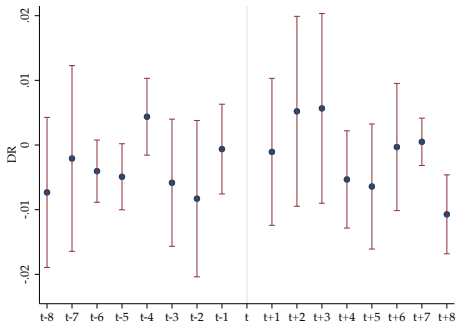
(b) Economic Policy



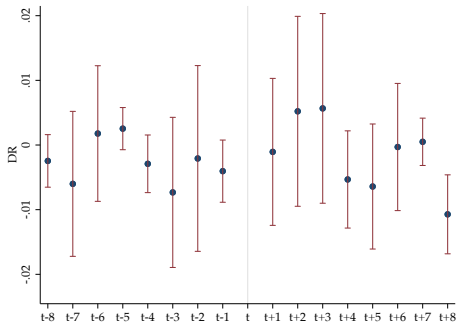
(c) Trade Policy



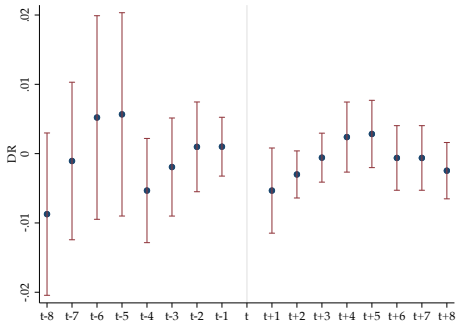
(d) Geopolitical Risk



(e) VIX



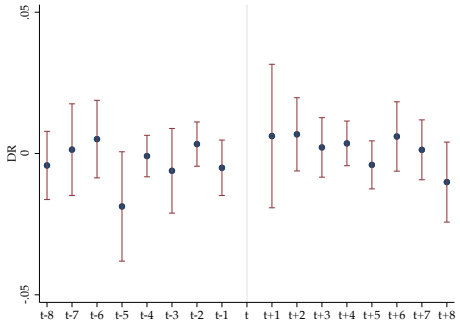
(f) Equity Market



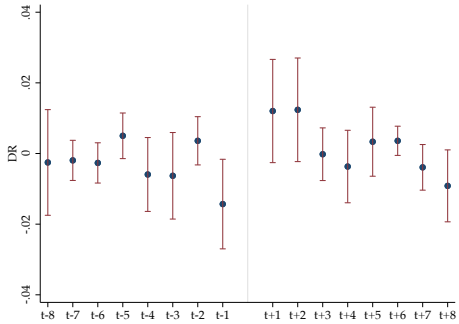
(g) Oil

Note: All charts represent cross-country means of change in dominance ratio. The set of shocks in this figure is formed by: WUI 2019q4-2020q1, EPU 2020q2, TPU 2018q2-2018q3 and 2019q2-2019q3, GPR 2022q1, VIX 2020q1, EMV 2018q4 and 2020q1, ERAPP 2017q3 and 2020q3 and OPUI 2014q4 and 2022q1.

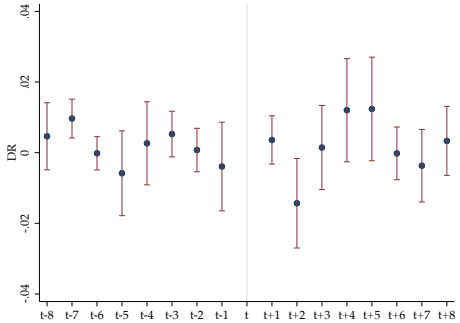
Figure 13: Dynamics around the shock episodes (Residual DDR)



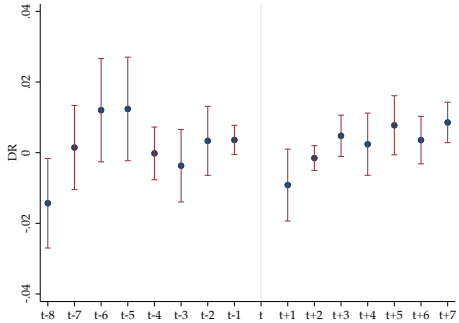
(a) World Uncertainty



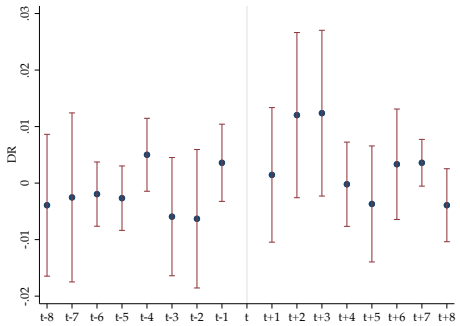
(b) Economic Policy



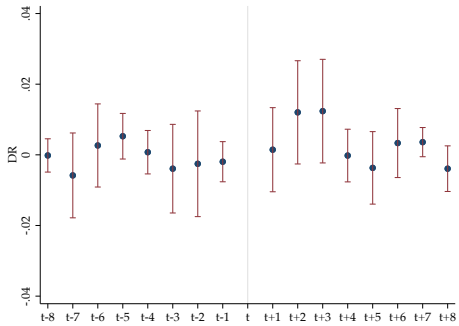
(c) Trade Policy



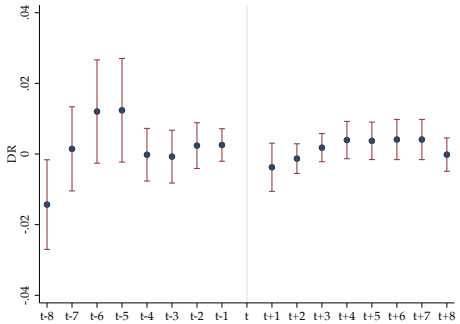
(d) Geopolitical Risk



(e) VIX



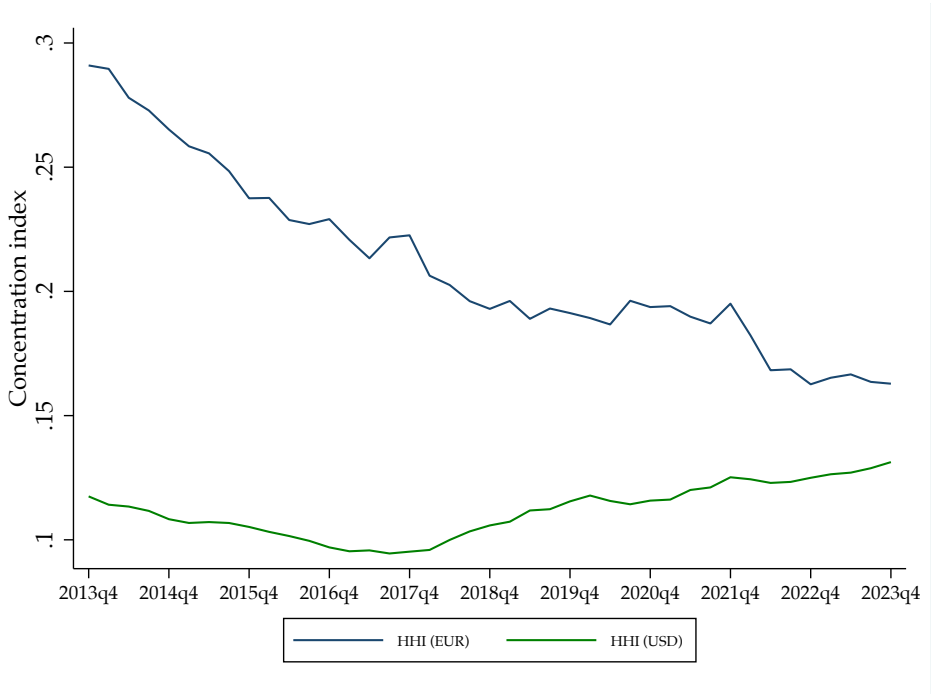
(f) Equity Market



(g) Oil

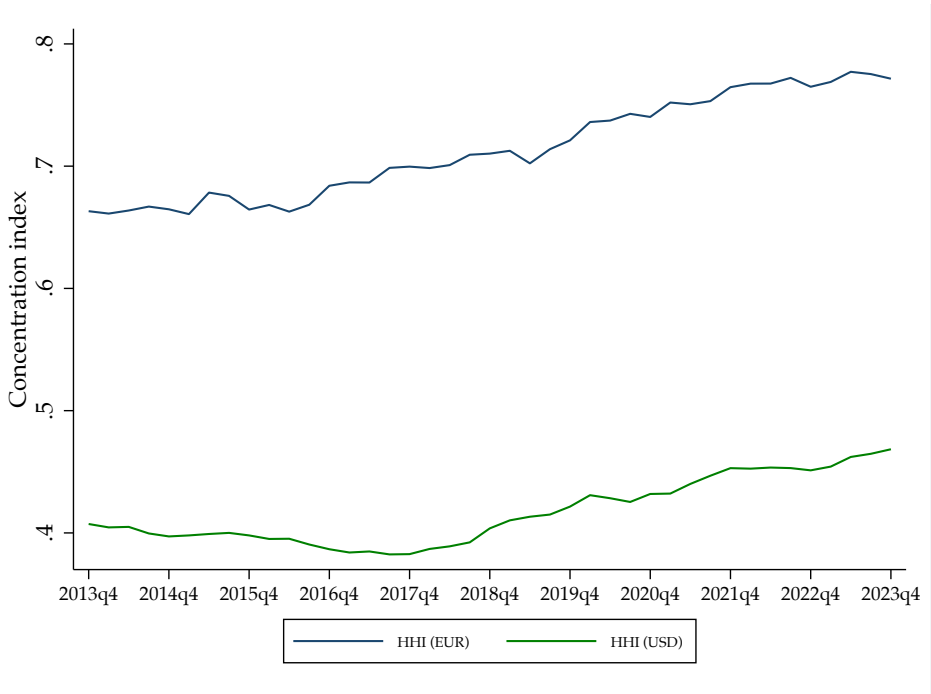
Note: All charts represent cross-country means of change in the residual of dominance ratio from medium-term regression (the part not explained by the regressors). The set of shocks in this figure is formed by: WUI 2019q4-2020q1, EPU 2020q2, TPU 2018q2-2018q3 and 2019q2-2019q3, GPR 2022q1, VIX 2020q1, EMV 2018q4 and 2020q1, ERAPP 2017q3 and 2020q3 and OPUI 2014q4 and 2022q1.

Figure 14: Geographical concentration: All Countries



Note: It shows the time series of HHI for the euro (in blue) and US dollar (in green) across all countries.

Figure 15: Within Group Geographical Concentration: Financial Centres

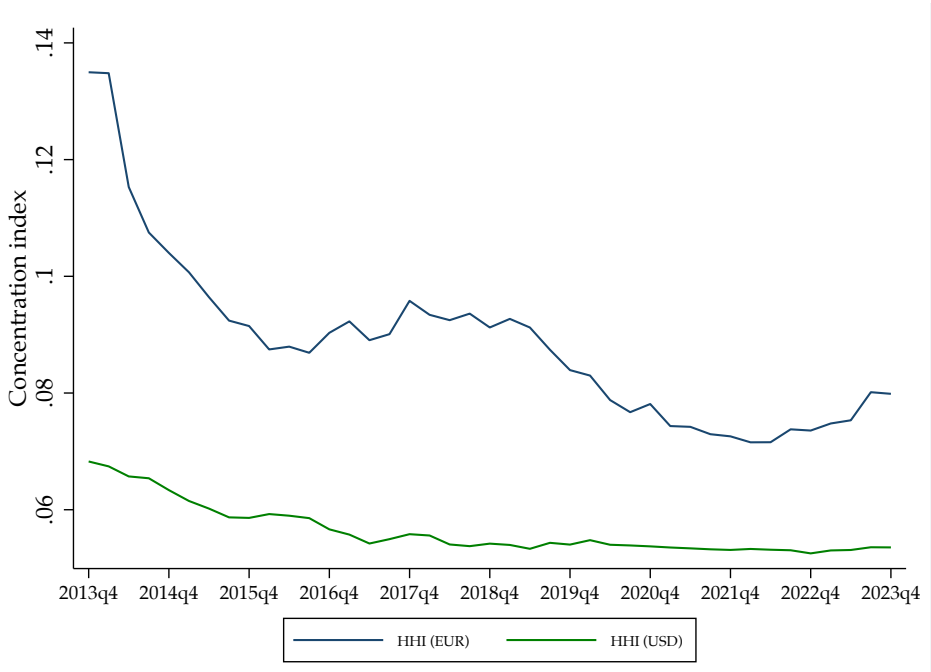


Note: It shows the time series of HHI for the euro (in blue) and US dollar (in green) across financial centres (FC).

Figure 16: Within Group Geographical Concentration: Advanced Economies

Note: It shows the time series of HHI for the euro (in blue) and US dollar (in green) across advanced countries excluding financial centres.

Figure 17: Within Group Geographical Concentration: Emerging Markets and Developing Countries



Note: It shows the time series of HHI for the euro (in blue) and US dollar (in green) across emerging market developing countries excluding financial centres.

Table 1: Dominance in the Medium-term: All Sectors

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.07***				0.04***
	(0.01)				(0.01)
Euro anchor	-0.24***				-0.17***
	(0.01)				(0.01)
Relative peql to the US		0.03***			-0.03***
		(0.00)			(0.00)
Relative trade to the US			0.09***		0.07***
			(0.00)		(0.00)
Oil Trade Balance			0.06***		0.05***
			(0.00)		(0.01)
Relative Distance to the US				-0.07***	0.01**
				(0.00)	(0.00)
ADV	-0.17***	-0.26***	-0.26***	-0.25***	-0.19***
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
UK	-0.30***	-0.21***	-0.23***	-0.18***	-0.29***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
IFI = (ta + tl)/gdp	0.01***	-0.01***	0.01***	0.01**	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	2,063	2,063	2,063	2,063	2,063
R-squared	0.550	0.293	0.579	0.398	0.656

Note: Pooled regressions for the total sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table 2: Dominance in the Medium-term: Government Sector

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.14***				0.13***
	(0.02)				(0.02)
Euro anchor	-0.13***				-0.10***
	(0.02)				(0.02)
Relative peql to the US		0.01***			-0.02***
		(0.00)			(0.00)
Relative trade to the US			0.07***		0.01*
			(0.00)		(0.01)
Oil Trade Balance			0.03***		0.03***
			(0.01)		(0.01)
Relative Distance to the US				-0.07***	-0.04***
				(0.00)	(0.01)
ADV	-0.21***	-0.29***	-0.31***	-0.30***	-0.22***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
IFI = (ta + tl)/gdp	0.04***	0.02***	0.04***	0.04***	0.05***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,809	1,809	1,809	1,809	1,809
R-squared	0.306	0.144	0.289	0.255	0.378

Note: Pooled regressions for the government sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table 3: Dominance in the Medium-term: Private Sector

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.13***				0.09***
	(0.01)				(0.01)
Euro anchor	-0.40***				-0.25***
	(0.02)				(0.02)
Relative peql to the US		0.13***			0.01
		(0.01)			(0.01)
Relative trade to the US			0.11***		0.11***
			(0.00)		(0.01)
Oil Trade Balance			0.02***		0.01**
			(0.01)		(0.01)
Relative Distance to the US				-0.08***	0.07***
				(0.00)	(0.01)
ADV	-0.06***	-0.25***	-0.20***	-0.19***	-0.12***
	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)
UK	-0.27***	-0.16***	-0.16***	-0.07**	-0.29***
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)
IFI = (ta + tl)/gdp	0.01***	-0.02***	0.00	-0.00	0.01*
	((0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,632	1,632	1,632	1,632	1,632
R-squared	0.564	0.316	0.492	0.273	0.644

Note: Pooled regressions for the private sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table 4: Dominance in the Medium-term: Non-financial Corporations

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.17***				0.16***
	(0.01)				(0.01)
Euro anchor	-0.39***				-0.23***
	(0.03)				(0.03)
Relative peql to the US		0.11***			0.00
		(0.02)			(0.01)
Relative trade to the US			0.10***		0.05***
			(0.00)		(0.01)
Oil Trade Balance			0.05***		0.03***
			(0.01)		(0.01)
Relative Distance to the US				-0.11***	-0.01
				(0.00)	(0.01)
ADV	-0.09***	-0.22***	-0.20***	-0.24***	-0.11***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
UK	-0.61***	-0.34***	-0.37***	-0.29***	-0.49***
	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)
IFI = (ta + tl)/gdp	0.00	-0.05***	-0.03***	-0.03***	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)
Observations	1,208	1,208	1,208	1,208	1,208
R-squared	0.610	0.409	0.569	0.522	0.637

Note: Pooled regressions for the non-financial corporations sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table 5: Dominance in the Medium-term: Banking Sector

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.09***				0.07***
	(0.01)				(0.01)
Euro anchor	-0.34***				-0.19***
	(0.02)				(0.02)
Relative peql to the US		0.09***			0.01***
		(0.01)			(0.00)
Relative trade to the US			0.10***		0.10***
			(0.01)		(0.01)
Oil Trade Balance			0.02***		0.01*
			(0.01)		(0.00)
Relative Distance to the US				-0.07***	0.06***
				(0.01)	(0.01)
ADV	-0.16***	-0.29***	-0.27***	-0.29***	-0.19***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
UK	-0.30***	-0.18***	-0.20***	-0.14***	-0.29***
	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)
IFI = (ta + tl)/gdp	0.02***	-0.00	0.02***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,465	1,465	1,465	1,465	1,465
R-squared	0.518	0.294	0.500	0.347	0.586

Note: Pooled regressions for the banking sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table 6: Baseline regression: NBFI

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.04**				-0.02
	(0.01)				(0.02)
Euro anchor	-0.64***				-0.28***
	(0.03)				(0.03)
Relative peql to the US		0.25***			0.04***
		(0.02)			(0.01)
Relative trade to the US			0.18***		0.21***
			(0.01)		(0.01)
Oil Trade Balance			0.02***		0.01**
			(0.01)		(0.01)
Relative Distance to the US				-0.10***	0.12***
				(0.01)	(0.01)
ADV	-0.06***	-0.23***	-0.19***	-0.14***	-0.18***
	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
UK	-0.38***	-0.11**	-0.11***	0.05	-0.38***
	(0.04)	(0.04)	(0.03)	(0.05)	(0.03)
IFI = (ta + tl)/gdp	0.02***	-0.01**	0.01	-0.01	0.01***
	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)
Observations	1,348	1,348	1,348	1,348	1,348
R-squared	0.472	0.278	0.531	0.231	0.644

Note: Pooled regressions for the nonbank financial intermediaries sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the portfolio equity liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table 7: Baseline regression: Balanced

	ALL	GOV	PRIV	NFC	BANK	NBFI
US dollar anchor	0.06***	0.09***	0.13***	0.08***	0.12***	-0.06**
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Euro anchor	-0.27***	-0.18***	-0.24***	-0.27***	-0.10***	-0.20***
	(0.02)	(0.03)	(0.03)	(0.04)	(0.04)	(0.05)
Relative peql to the US	0.00	0.01	0.04***	0.03***	0.04***	0.02
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Relative trade to the US	0.13***	0.10***	0.13***	0.02**	0.12***	0.26***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Oil Trade Balance	0.06***	0.11***	0.07***	0.06***	0.05***	0.07***
	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
Relative Distance to the US	0.11***	0.10***	0.10***	-0.03***	0.11***	0.15***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
ADV	-0.14***	-0.09***	-0.10***	0.00	-0.13***	-0.14***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.03)
IFI = (ta + tl)/gdp	0.02***	0.05***	-0.00	-0.05***	0.00	0.01
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	723	723	723	723	723	723
R-squared	0.705	0.331	0.760	0.810	0.504	0.577

Note: Pooled regressions for the total sector, government, private, non-financial corporates, banking, and non-bank financial intermediaries are presented in Columns (1) through (6), respectively, covering the period 2013Q4–2023Q4. Each column includes the full set of explanatory variables: the anchor currency bloc, portfolio equity liabilities to the US relative to the euro area, relative trade with the US versus the euro area, oil trade balance (Trade Bloc), relative distance to the US versus the euro area (Gravity Bloc), international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions include both linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table 8: Coefficients from Individual Regressions

	Across Countries			Across Country Groups		
	USD-EUR	USD	EUR	USD-EUR	USD	EUR
	(1)	(2)	(3)	(4)	(5)	(6)
World Uncertainity	0.08***	0.05*	-0.03*	0.01	0.01	-0.00
	(0.02)	(0.03)	(0.02)	(0.01)	(0.01)	(0.00)
Economic Policy	0.12**	0.08	-0.04	0.02*	0.02	-0.01
	(0.05)	(0.05)	(0.03)	(0.01)	(0.01)	(0.01)
Trade Policy	0.04*	-0.01	-0.05***	0.01	-0.00	-0.01***
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.00)
Geopolitical Risk	-0.01	-0.06*	-0.06	-0.01	-0.02*	-0.01*
	(0.02)	(0.04)	(0.04)	(0.01)	(0.01)	(0.01)
VIX	0.07***	0.07***	0.00	0.02***	0.02***	-0.00
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.00)
Equity Market	0.07***	0.07***	-0.00	0.02***	0.02***	-0.00
	(0.02)	(0.02)	(0.01)	(0.00)	(0.00)	(0.00)
Oil	0.03**	0.02*	-0.01	0.01**	0.01	-0.00
	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)
Observations	41			41		
Time Period	2013q4-2023q4			2013q4-2023q4		

Note: It reports the coefficients of shock variables from regressions where we include each shock indicator individually; in other words, β values from Eq. 1 and 2. The dependent variable is the difference between the concentration of logarithmic dollars and euros across countries in Columns (1)-(3) and across country groups (FC, ADV, and EMEDEV) in Columns (4)-(6). The key independent variables are the logarithm of the World, Economic Policy, Trade Policy Uncertainty indices, Geopolitical Risk, Volatility, U.S. Equity Market Volatility, and Oil Price Uncertainty Indices. Linear and quadratic time trends are included in all regressions. All regressions are estimated using robust standard errors. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table 9: Relative USD-EUR concentration - intragroup

	ALL	FC	ADV	EMEDEV
	(1)	(2)	(3)	(4)
World Uncertainity	0.08***	0.02**	-0.04	-0.03
	(0.02)	(0.01)	(0.03)	(0.03)
Economic Policy	0.12**	0.03	-0.01	-0.02
	(0.05)	(0.02)	(0.05)	(0.06)
Trade Policy	0.04*	-0.01	-0.08***	-0.13***
	(0.02)	(0.01)	(0.02)	(0.02)
Geopolitical Risk	-0.01	-0.02	-0.09**	0.04
	(0.02)	(0.01)	(0.04)	(0.04)
VIX	0.07***	0.02***	0.05**	0.07**
	(0.02)	(0.01)	(0.02)	(0.03)
Equity Market	0.07***	0.03***	0.02	0.01
	(0.02)	(0.01)	(0.02)	(0.03)
Oil	0.03**	0.01*	-0.00	0.02
	(0.01)	(0.01)	(0.01)	(0.02)
Observations	41			
Time Period	2013q4-2023q4			

Note: It reports the coefficients of shock variables from regressions where we include each shock indicator individually; in other words, β values from Eq. 2. The dependent variable is the difference between the concentration of logarithmic dollars and euros across countries within the country group all country sample (ALL), financial centres (FC), advanced countries excluding financial centres (ADV), emerging and developing countries excluding financial centres (EMEDEV) in Columns (1), (2), (3) and (4), respectively. The key independent variables are the logarithm of the World, Economic Policy, Trade Policy Uncertainty indices, Geopolitical Risk, Volatility, U.S. Equity Market Volatility, and Oil Price Uncertainty Indices. Linear and quadratic time trends are included in all regressions. All regressions are estimated using robust standard errors. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table 10: Relative USD-EUR concentration and Dominance

	Across Countries	Across Country Groups	FC	ADV	EMEDEV
	(1)	(2)	(3)	(4)	(5)
World Uncertainty	0.04	0.00	0.00	0.01	0.00
	(0.03)	(0.01)	(0.01)	(0.02)	(0.02)
Economic Policy	0.07	0.02	0.02	0.01	0.05*
	(0.05)	(0.02)	(0.02)	(0.04)	(0.03)
Trade Policy	-0.00	0.00	-0.02**	0.01	-0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)
Geopolitical Risk	-0.08**	-0.03**	-0.04*	-0.04	-0.05***
	(0.04)	(0.01)	(0.02)	(0.03)	(0.02)
VIX	0.06***	0.02**	0.03***	0.04***	0.04***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Equity Market	0.09***	0.03***	0.03***	0.06***	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Oil	0.01	0.00	0.00	0.00	-0.00
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Observations	41	41	41		
Time Period	2013q4-2023q4	2013q4-2023q4	2013q4-2023q4		

Note: It reports the coefficients of shock variables from regressions where we include each shock indicator individually; in other words, β values from Eq. 3. The dependent variable is the difference between the weighted concentration of logarithmic dollars and euros across countries within the country group all country sample in Column (1) , across country groups in Column (2), within the country group financial centres (FC), advanced countries excluding financial centres (ADV), emerging and developing countries excluding financial centres (EMEDEV) in Column (1), (2) and (3), respectively. The key independent variables are the logarithm of the World, Economic Policy, Trade Policy Uncertainty indices, Geopolitical Risk, Volatility, U.S. Equity Market Volatility, and Oil Price Uncertainty Indices. Linear and quadratic time trends are included in all regressions. All regressions are estimated using robust standard errors. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table 11: Robustness: all shock jointly incorporated

	Across Countries			Across Country Groups		
	USD-EUR	USD	EUR	USD-EUR	USD	EUR
	(1)	(2)	(3)	(4)	(5)	(6)
World Uncertainity	0.04*	0.03	-0.01	0.00	0.01	0.00
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.00)
Economic Policy	0.02	0.01	-0.01	0.00	-0.00	-0.00
	(0.04)	(0.04)	(0.03)	(0.01)	(0.01)	(0.01)
Trade Policy	0.04**	-0.01	-0.05***	0.01	-0.00	-0.01***
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.00)
Geopolitical Risk	0.01	-0.05	-0.06	-0.00	-0.02	-0.01*
	(0.02)	(0.03)	(0.04)	(0.01)	(0.01)	(0.01)
VIX	0.04	0.03	-0.00	0.01*	0.01	-0.01
	(0.03)	(0.03)	(0.01)	(0.01)	(0.01)	(0.00)
Equity Market	0.04*	0.02	-0.02	0.01	0.01	-0.00
	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.00)
Oil	0.01	0.01	0.00	0.00	0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)
Observations	41			41		
Time Period	2013q4-2023q4			2013q4-2023q4		

Note: It reports the coefficients of shock variables from the regressions where we include shock indicators all together; in other words, β values from Eq.3. The dependent variable is the difference between the concentration of logarithmic dollars and euros across countries in Columns (1)-(3) and across country groups (FC, ADV, and EMEDEV) in Columns (4)-(6). The key independent variables are the logarithm of the World, Economic Policy, Trade Policy Uncertainty indices, Geopolitical Risk, Volatility, U.S. Equity Market Volatility, and Oil Price Uncertainty Indices. Linear and quadratic time trends are included in all regressions. All regressions are estimated using robust standard errors. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.1: Country List: PDL (Regression)

Advanced Economies	Emerging Economies	Developing Economies		Financial Centers
Australia	Argentina	Albania	Papua New Guinea	Bahrain
Canada	Bangladesh	Angola	Rwanda	Bermuda
Czech Republic	Brazil	Armenia	Saudi Arabia	Cayman Islands
Denmark	China	Azerbaijan	Senegal	Hong Kong SAR
Iceland	Colombia	Belarus	Seychelles	Macao
Israel	CostaRica	Bolivia	Sri Lanka	Mauritius
Japan	Dominican Republic	Cameroon	St Lucia	Netherlands Antilles
Korea	Egypt	Côte d'Ivoire	Suriname	Panama
Norway	ElSalvador	Djibouti	Tajikistan	United Kingdom
Sweden	Georgia	Ecuador	Tanzania	
	Guatemala	Ethiopia	Trinidad and Tobago	
	Hungary	Fiji	Tunisia	
	India	Gabon	United Arab Emirates	
	Indonesia	Ghana	Uruguay	
	Malaysia	Honduras	Uzbekistan	
	Mexico	Iraq	Vietnam	
	Pakistan	Jamaica	Zambia	
	Paraguay	Jordan		
	Peru	Kazakhstan		
	Philippines	Kenya		
	Poland	Lebanon		
	Romania	Madagascar		
	Russia	Maldives		
	South Africa	Morocco		
	Turkey	Mozambique		
		Namibia		

Table A.2: Country List: PDL (Constant Country Sample)

Country	Period
Denmark	2014q4-2022q4
Sweden	2014q4-2022q4
Canada	2014q4-2022q4
Japan	2014q4-2022q4
Iceland	2014q4-2022q4
Turkey	2014q4-2022q4
South Africa	2014q4-2020q4
Argentina	2014q4-2022q4
Brazil	2014q4-2021q1
Costa Rica	2014q4-2020q4
Dominican Republic	2016q2-2017q4
Guatemala	2016q2-2022q4
Mexico	2014q4-2022q4
Panama	2021q1-2022q4
Hong Kong	2014q4-2022q4
Indonesia	2014q4-2022q4
Korea	2014q4-2022q4
Vietnam	2019q3-2022q4
Kazakhstan	2014q4-2019q1
Russia	2014q4-2022q4
China	2019q4-2022q4
Hungary	2014q4-2022q4
Poland	2014q4-2022q4
Romania	2020q1-2021q3

Table A.3: Country List: PDL (Diagrams)

Advanced Economies	Emerging Economies	Developing Economies		Financial Centers
Australia	Argentina	Albania	Rwanda	Bermuda
Canada	China	Angola	Senegal	Cayman Islands
Czech Republic	CostaRica	Armenia	Seychelles	Hong Kong SAR
Denmark	Egypt	Azerbaijan	Sri Lanka	Mauritius
Iceland	ElSalvador	Bolivia	St Lucia	Netherlands Antilles
Israel	Georgia	Côte d'Ivoire	Trinidad and Tobago	United Kingdom
Japan	Guatemala	Ecuador	Tunisia	
Korea	Hungary	Gabon	United Arab Emirates	
Norway	India	Ghana	Zambia	
Sweden	Mexico	Honduras		
	Pakistan	Iraq		
	Paraguay	Jamaica		
	Peru	Jordan		
	Philippines	Lebanon		
	Poland	Montenegro		
	Romania	Morocco		
	Russia	Mozambique		
	South Africa	Namibia		
	Turkey	North Macedonia		

A Robustness Checks

A.1 Regression Results

Table A.4: Baseline regression

	(1)	(2)	(3)	(4)
US dollar anchor	0.07***			0.06***
	(0.01)			(0.01)
Euro anchor	-0.26***			-0.18***
	(0.01)			(0.01)
Relative trade to the US		0.08***		0.04***
		(0.00)		(0.00)
Oil Trade Balance		0.06***		0.04***
		(0.00)		(0.00)
Relative Distance to the US			-0.06***	-0.01***
			(0.00)	(0.00)
ADV	-0.17***	-0.27***	-0.26***	-0.20***
	(0.01)	(0.01)	(0.01)	(0.01)
UK	-0.30***	-0.26***	-0.19***	-0.28***
	(0.02)	(0.01)	(0.02)	(0.02)
IFI = (ta + tl)/gdp	0.01***	0.01***	0.01**	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Observations	2,613	2,613	2,613	2,613
R-squared	0.558	0.525	0.392	0.625

Note: Pooled regressions for the total sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.5: Baseline regression: Government

	(1)	(2)	(3)	(4)
US dollar anchor	0.12***			0.12***
	(0.01)			(0.01)
Euro anchor	-0.17***			-0.10***
	(0.02)			(0.02)
Relative trade to the US		0.06***		0.00
		(0.00)		(0.00)
Oil Trade Balance		0.05***		0.04***
		(0.01)		(0.01)
Relative Distance to the US			-0.06***	-0.04***
			(0.00)	(0.00)
ADV	-0.22***	-0.32***	-0.30***	-0.22***
	(0.02)	(0.02)	(0.02)	(0.02)
IFI = (ta + tl)/gdp	0.03***	0.04***	0.04***	0.04***
	(0.00)	(0.00)	(0.00)	(0.00)
Observations	2,350	2,350	2,350	2,350
R-squared	0.331	0.303	0.266	0.395

Note: Pooled regressions for the government sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.6: Baseline regression: Private

	(1)	(2)	(3)	(4)
US dollar anchor	0.13***			0.10***
	(0.01)			(0.01)
Euro anchor	-0.40***			-0.32***
	(0.02)			(0.02)
Relative trade to the US		0.09***		0.08***
		(0.00)		(0.01)
Oil Trade Balance		0.03***		0.02***
		(0.01)		(0.00)
Relative Distance to the US			-0.07***	0.05***
			(0.00)	(0.00)
ADV	-0.06***	-0.20***	-0.20***	-0.09***
	(0.02)	(0.01)	(0.02)	(0.01)
UK	-0.27***	-0.15***	-0.09***	-0.30***
	(0.02)	(0.02)	(0.03)	(0.02)
IFI = (ta + tl)/gdp	0.01***	-0.00	-0.00	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,999	1,999	1,999	1,999
R-squared	0.591	0.453	0.299	0.641

Note: Pooled regressions for the private sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.7: Baseline regression: NFC

	(1)	(2)	(3)	(4)
US dollar anchor	0.17***			0.16***
	(0.01)			(0.01)
Euro anchor	-0.39***			-0.29***
	(0.03)			(0.03)
Relative trade to the US		0.08***		0.02***
		(0.00)		(0.01)
Oil Trade Balance		0.06***		0.03***
		(0.01)		(0.01)
Relative Distance to the US			-0.09***	-0.02**
			(0.00)	(0.01)
ADV	-0.10***	-0.22***	-0.25***	-0.11***
	(0.02)	(0.02)	(0.02)	(0.02)
UK	-0.62***	-0.40***	-0.33***	-0.53***
	(0.05)	(0.05)	(0.05)	(0.05)
IFI = (ta + tl)/gdp	0.00	-0.03***	-0.03***	-0.00
	(0.00)	(0.01)	(0.01)	(0.00)
Observations	1,513	1,513	1,513	1,513
R-squared	0.640	0.549	0.527	0.658

Note: Pooled regressions for the non-financial corporations sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.8: Baseline regression: Bank

	(1)	(2)	(3)	(4)
US dollar anchor	0.09***			0.08***
	(0.01)			(0.01)
Euro anchor	-0.33***			-0.24***
	(0.02)			(0.02)
Relative trade to the US		0.08***		0.07***
		(0.01)		(0.01)
Oil Trade Balance		0.03***		0.01**
		(0.01)		(0.00)
Relative Distance to the US			-0.07***	0.04***
			(0.01)	(0.01)
ADV	-0.16***	-0.28***	-0.29***	-0.18***
	(0.02)	(0.02)	(0.02)	(0.02)
UK	-0.29***	-0.20***	-0.15***	-0.30***
	(0.03)	(0.02)	(0.03)	(0.03)
IFI = (ta + tl)/gdp	0.02***	0.01***	0.01***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,663	1,663	1,663	1,663
R-squared	0.534	0.468	0.352	0.579

Note: Pooled regressions for the banking sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

Table A.9: Baseline regression: NBFI

	(1)	(2)	(3)	(4)
US dollar anchor	0.06***			-0.02
	(0.01)			(0.02)
Euro anchor	-0.64***			-0.34***
	(0.03)			(0.03)
Relative trade to the US		0.16***		0.20***
		(0.01)		(0.01)
Oil Trade Balance		0.02***		0.01***
		(0.01)		(0.00)
Relative Distance to the US			-0.10***	0.11***
			(0.01)	(0.01)
ADV	-0.06***	-0.18***	-0.15***	-0.16***
	(0.02)	(0.02)	(0.03)	(0.02)
UK	-0.36***	-0.11***	0.04	-0.39***
	(0.03)	(0.03)	(0.05)	(0.03)
IFI = (ta + tl)/gdp	0.02***	0.01	-0.01	0.01***
	(0.00)	(0.01)	(0.01)	(0.00)
Observations	1,524	1,524	1,524	1,524
R-squared	0.489	0.529	0.265	0.642

Note: Pooled regressions for the nonbank financial intermediaries sector are presented in Columns (1) through (4), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (3) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (4) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

A.2 Regression Results, including relative fdil to the US

Table A.10: Baseline regression

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.05***				0.03***
	(0.01)				(0.01)
Euro anchor	-0.46***				-0.38***
	(0.01)				(0.01)
Relative fdil to the US		0.11***			0.04***
		(0.01)			(0.00)
Relative trade to the US			0.09***		0.02***
			(0.00)		(0.01)
Oil Trade Balance			0.05***		0.04***
			(0.01)		(0.01)
Relative Distance to the US				-0.07***	0.02***
				(0.00)	(0.01)
ADV	-0.11***	-0.26***	-0.17***	-0.15***	-0.16***
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
UK	-0.54***	-0.23***	-0.15***	-0.03	-0.53***
	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)
IFI = (ta + tl)/gdp	0.04***	-0.01**	-0.00	-0.01***	0.04***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	1,119	1,119	1,119	1,119	1,119
R-squared	0.784	0.545	0.641	0.494	0.811

Note: Pooled regressions for the total sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.11: Baseline regression: Government

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.15***				0.15***
	(0.02)				(0.02)
Euro anchor	-0.33***				-0.28***
	(0.02)				(0.03)
Relative fdil to the US		0.07***			-0.01
		(0.01)			(0.01)
Relative trade to the US			0.07***		-0.05***
			(0.00)		(0.02)
Oil Trade Balance			0.12***		0.10***
			(0.01)		(0.02)
Relative Distance to the US				-0.07***	-0.08***
				(0.00)	(0.01)
ADV	-0.25***	-0.33***	-0.28***	-0.26***	-0.17***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
IFI = (ta + tl)/gdp	0.12***	0.05***	0.07***	0.06***	0.10***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	909	909	909	909	909
R-squared	0.360	0.195	0.303	0.294	0.413

Note: Pooled regressions for the government sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.12: Baseline regression: Private

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.08***				0.07***
	(0.01)				(0.01)
Euro anchor	-0.49***				-0.42***
	(0.02)				(0.01)
Relative fdil to the US		0.12***			0.05***
		(0.01)			(0.00)
Relative trade to the US			0.10***		0.02***
			(0.00)		(0.00)
Oil Trade Balance			0.09***		0.06***
			(0.01)		(0.01)
Relative Distance to the US				-0.07***	0.04***
				(0.01)	(0.00)
ADV	-0.03**	-0.20***	-0.09***	-0.08***	-0.09***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)
UK	-0.39***	-0.07*	0.03	0.14***	-0.41***
	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)
IFI = (ta + tl)/gdp	0.02***	-0.03***	-0.03***	-0.03***	0.01***
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
Observations	1,084	1,084	1,084	1,084	1,084
R-squared	0.828	0.578	0.672	0.509	0.863

Note: Pooled regressions for the private sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.13: Baseline regression: NFC

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.15***				0.15***
	(0.02)				(0.02)
Euro anchor	-0.34***				-0.09**
	(0.03)				(0.04)
Relative fdil to the US		0.10***			0.02*
		(0.01)			(0.01)
Relative trade to the US			0.09***		0.04**
			(0.00)		(0.02)
Oil Trade Balance			0.26***		0.27***
			(0.02)		(0.03)
Relative Distance to the US				-0.10***	-0.02
				(0.00)	(0.01)
ADV	-0.10***	-0.27***	-0.17***	-0.21***	-0.12***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
UK	-0.54***	-0.36***	-0.22***	-0.22***	-0.26***
	(0.06)	(0.07)	(0.06)	(0.06)	(0.06)
IFI = (ta + tl)/gdp	-0.01	-0.05***	-0.05***	-0.03***	-0.04***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	892	892	892	892	892
R-squared	0.574	0.488	0.605	0.561	0.639

Note: Pooled regressions for the non-financial corporations sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.14: Baseline regression: Bank

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	0.06***				0.04***
	(0.01)				(0.01)
Euro anchor	-0.38***				-0.34***
	(0.03)				(0.02)
Relative fdil to the US		0.11***			0.05***
		(0.01)			(0.01)
Relative trade to the US			0.08***		0.03***
			(0.01)		(0.01)
Oil Trade Balance			0.01		-0.04***
			(0.01)		(0.01)
Relative Distance to the US				-0.06***	0.04***
				(0.01)	(0.01)
ADV	-0.13***	-0.29***	-0.20***	-0.20***	-0.20***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
UK	-0.37***	-0.16***	-0.10**	-0.01	-0.47***
	(0.05)	(0.04)	(0.04)	(0.04)	(0.05)
IFI = (ta + tl)/gdp	0.03***	-0.01	-0.00	-0.01	0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1,047	1,047	1,047	1,047	1,047
R-squared	0.587	0.489	0.503	0.415	0.629

Note: Pooled regressions for the banking sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.15: Baseline regression: NBFI

	(1)	(2)	(3)	(4)	(5)
US dollar anchor	-0.02				-0.06***
	(0.01)				(0.02)
Euro anchor	-0.70***				-0.50***
	(0.02)				(0.03)
Relative fdil to the US		0.15***			0.03***
		(0.01)			(0.01)
Relative trade to the US			0.14***		0.10***
			(0.01)		(0.01)
Oil Trade Balance			0.07***		0.03
			(0.02)		(0.02)
Relative Distance to the US				-0.10***	0.05***
				(0.01)	(0.01)
ADV	0.02	-0.12***	-0.01	0.06***	-0.09***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
UK	-0.45***	0.07	0.15***	0.37***	-0.46***
	(0.03)	(0.06)	(0.04)	(0.04)	(0.04)
IFI = (ta + tl)/gdp	0.02***	-0.05***	-0.03***	-0.06***	0.02***
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1,029	1,029	1,029	1,029	1,029
R-squared	0.590	0.366	0.527	0.394	0.643

Note: Pooled regressions for the nonbank financial intermediaries sector are presented in Columns (1) through (5), covering 2013Q4–2023Q4. Each column corresponds to a different specification. Column (1) includes only the vector of variables representing the anchor currency bloc. Column (2) includes only the foreign direct investment liabilities to the US relative to the euro area. Column (3) includes only relative trade with the US versus the euro area, as well as oil trade balance (Trade Bloc). Column (4) includes only the relative distance to the US versus the euro area (Gravity Bloc). Column (5) includes all the variables together. Across all specifications, we include international financial integration (IFI), a dummy variable for advanced economies (ADV), and a dummy for the United Kingdom (UK). All regressions also include linear and quadratic time trends. Robust standard errors are in parentheses. ***, **, and * denote, respectively $p<0.01$, $p<0.05$, $p<0.1$.

A.3 Regression Results: GLMs with a logit link function

Table A.16: Logit

	TOT	GOV	PRIV	NFC	BANK	NBFI
US dollar anchor	1.27***	1.50***	2.23***	2.77***	2.63***	-1.02***
	(0.23)	(0.20)	(0.31)	(0.37)	(0.48)	(0.29)
Euro anchor	-0.44**	-0.47**	-1.04***	0.19	-0.75**	-0.59*
	(0.21)	(0.21)	(0.24)	(0.38)	(0.37)	(0.36)
Relative trade to the US	0.63***	0.09	1.21***	0.48***	1.40***	2.37***
	(0.10)	(0.09)	(0.14)	(0.17)	(0.18)	(0.19)
Oil Trade Balance	0.71***	1.16***	0.41*	2.17***	0.77**	0.94***
	(0.15)	(0.24)	(0.21)	(0.40)	(0.36)	(0.21)
Relative Distance to the US	-0.03	-0.36***	0.86***	-0.23	1.01***	1.07***
	(0.08)	(0.08)	(0.15)	(0.20)	(0.20)	(0.15)
ADV	-1.71***	-1.64***	-0.94***	-0.90***	-1.71***	-1.91***
	(0.22)	(0.22)	(0.23)	(0.24)	(0.26)	(0.27)
UK	-2.23***		-2.45***	-1.09	-3.12***	-3.37***
	(0.52)		(0.56)	(0.68)	(0.71)	(0.60)
IFI = (ta + tl)/gdp	0.14***	0.46***	0.03	-0.15**	0.10	0.10
	(0.05)	(0.06)	(0.06)	(0.07)	(0.07)	(0.06)
Observations	2,613	2,350	1,999	1,513	1,663	1,524

Note: It reports estimates from Generalized Linear Models (GLM) with a Logit link, covering 2013Q4–2023Q4. Columns (1)–(6) correspond to the total sector, government, private, non-financial corporates, banking, and non-bank financial intermediaries, respectively. Each regression includes the full set of explanatory variables: anchor currency bloc, relative trade with the U.S. vs. the euro area, oil trade balance (Trade Bloc), relative distance to the U.S. vs. the euro area (Gravity Bloc), international financial integration (IFI), and dummy variables for advanced economies (ADV) and the United Kingdom (UK). Linear and quadratic time trends are included. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.

Table A.17: Logit: Balanced

	TOT	GOV	PRIV	NFC	BANK	NBFI
US dollar anchor	0.45	0.71***	1.45***	1.56***	2.04***	-1.72***
	(0.32)	(0.27)	(0.40)	(0.45)	(0.51)	(0.36)
Euro anchor	-0.94**	-0.46	-0.73*	-0.32	-0.45	0.38
	(0.41)	(0.40)	(0.43)	(0.46)	(0.44)	(0.46)
Relative trade to the US	1.15***	0.67***	1.27***	0.38*	1.33***	2.85***
	(0.19)	(0.17)	(0.21)	(0.22)	(0.22)	(0.28)
Oil Trade Balance	0.89**	1.72***	0.73*	0.95*	0.39	2.06***
	(0.41)	(0.49)	(0.42)	(0.55)	(0.45)	(0.40)
Relative Distance to the US	0.90***	0.54***	0.87***	-0.35	1.07***	1.34***
	(0.21)	(0.19)	(0.23)	(0.25)	(0.24)	(0.21)
ADV	-0.98***	-0.53*	-0.74**	-0.16	-1.02***	-1.54***
	(0.28)	(0.27)	(0.30)	(0.36)	(0.33)	(0.31)
IFI = (ta + tl)/gdp	0.03	0.26***	-0.07	-0.32***	-0.05	-0.04
	(0.08)	(0.08)	(0.08)	(0.10)	(0.08)	(0.09)
Observations	772	772	772	772	772	772

Note: It reports estimates from Generalized Linear Models (GLM) with a Logit link, covering 2013Q4–2023Q4 using a constant country sample. Columns (1)–(6) correspond to the total sector, government, private, non-financial corporates, banking, and non-bank financial intermediaries, respectively. Each regression includes the full set of explanatory variables: anchor currency bloc, relative trade with the U.S. vs. the euro area, oil trade balance (Trade Bloc), relative distance to the U.S. vs. the euro area (Gravity Bloc), international financial integration (IFI), and dummy variables for advanced economies (ADV) and the United Kingdom (UK). Linear and quadratic time trends are included. ***, **, and * denote, respectively p<0.01, p<0.05, p<0.1.