Global Political Ties and the Global Financial Cycle *

Gene Ambrocio [†] Iftekhar Hasan [‡] Xiang Li [§]

First Version: January 30, 2023

This Version: December 24, 2023

Abstract

We study the implications of forging stronger political ties with the US on the sensitivities of stock returns around the world to a global common factor - the global financial cycle. Using voting patterns at the United Nations as a measure of political ties with the US along with various measures of the global financial cycle, we document evidence indicating that stronger political ties with the US amplify the sensitivities of stock returns in developing countries to the global financial cycle. We explore several channels and find that a deepening of financial linkages along with a reduction in information asymmetries and an amplification of sentiment are potentially important factors behind this result.

Keywords: Political Ties, Global Financial Cycle, International Spillovers, Stock Returns **JEL Codes**: E44, F30, F50, G15

^{*}We are grateful for the detailed and helpful feedback received from Kai Arvai, Christoph E. Boehm, Matteo Cacciatore, Nuno Coimbra, Giancarlo Corsetti, Virginia Di Nino (discussant), Lena Dräger, Andrea Ferrero, Georgios Georgiadis, Yang Liu, Josefin Meyer (discussant), Steven Ongena, Evgenia Passari (discussant), Loriana Pelizzon (discussant), Helen Popper, Hélène Rey, Robinson Reyes-Pena (discussant), Xingdi Tian (discussant), Jos van Bommel, and participants at the WIMFEH, FMA European Conference, CEBRA Annual Meeting, AMES Tsinghua, ICFBA, Banque de France-EUI Workshop, ECB IPA Seminar and the CREDIT Conference. We also thank Nguyen Van Sach for excellent research assistance. All remaining errors are our own. The views and opinions expressed in this paper are those of the authors and do not necessarily reflect those of the Bank of Finland.

[†]Bank of Finland, Snellmaninaukio, P.O. Box 160, Helsinki, 00101, Finland. Email: gene.ambrocio@bof.fi

[‡]Fordham University, 45 Columbus Avenue, New York, NY 10023, United States. Email: ihasan@fordham.edu

[§]Halle Institute for Economic Research. Kleine Maekerstrasse 8, Halle (Saale), 06108, Germany. Email: Xiang.Li@iwh-halle.de.

1 Introduction

Standard asset pricing theory suggests that asset returns are driven by compensation for non-diversifiable risk. Globally, recent evidence in Rey (2015) and Miranda-Agrippino and Rey (2020, 2022) point towards the significant influence of a common global factor - the Global Financial Cycle (henceforth GFCy) - on various financial variables including equity returns. Further, their findings indicate that the economy of the United States of America (US) is a major driver of this common factor. The sensitivities or loadings of foreign assets on this common factor are heterogeneous, not only across markets or asset classes but also geographically across countries.

What determines how sensitive foreign equities are to the GFCy? State-level geopolitical ties may be one factor. Global economic relations appear to be increasingly driven by geopolitical preference rather than geographic or economic motivations. Recent developments such as the Russo-Ukrainian conflict, Brexit, and the US-China trade war have highlighted the role of geopolitical tensions in international financial markets.² One way for countries to mitigate geopolitical risk is to forge stronger geopolitical ties.³ Having strong relations with other countries reduces the likelihood that the pursuit of national interests would erupt and escalate into serious conflict in favor of diplomatic resolutions. On the other hand, political ties also bind nations closer to one another, potentially increasing co-movement in economic variables including asset prices. In this paper, we study the effects of political ties between foreign governments and the US - arguably the foremost global power and whose economy has the strongest impact on the GFCy - on foreign equity prices.

As a motivating exercise, we assess how the correlation between a measure for the GFCy, the volatility of the US stock market S&P 500 index (VIX), and returns of stock

¹The centrality of the US economy in shaping the global financial cycle has been documented in many other contributions to the literature. See e.g., Boehm and Kroner (2023), Kalemli-Özcan (2019), and Kim (2022).

²Geopolitical shocks such as these have been shown to affect the global organization of production (Aiyar et al. 2023, Aizenman et al. 2023, Alfaro and Chor 2023).

³For instance, Eichengreen (2023) cautions on how geopolitical tensions among global powers could lead to disruptions in the global economy. See also Clayton et al. (2023).

indices in other countries is affected by political ties with the US. The GFCy literature predicts a negative correlation as higher US stock-market volatility induces negative spillover effects on the price of risky assets in other countries, and a larger magnitude in the correlation indicates a stronger spillover. Figure 1 shows a bin scatter plot of these correlations (vertical axis), which is calculated as the correlation coefficient between daily VIX and stock return for each country-year, against political ties with the US (horizontal axis), the measurement of which will be explained in full detail later on. We plot the average correlation coefficients along the 50 equal-sized bins of political ties.

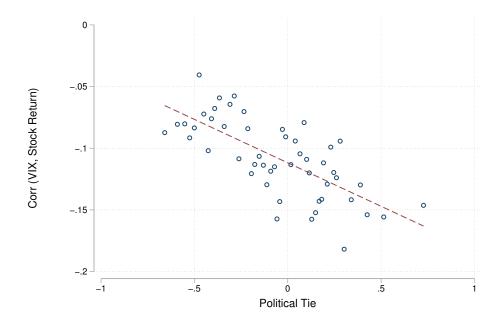


Figure 1: Bin Scatter: Political Tie and Spillover Effect

Notes: The vertical axis reports the correlation between stock returns and the VIX for 50 equal-sized groups defined in terms of the strength of political ties with the US on the horizontal axis. The correlation coefficient between stock returns and the VIX is calculated based on daily data for each country-year. Political ties with the US are defined in terms of relative voting similarities with the US at the United Nations General Assembly.

First, and consistent with the GFCy literature, the correlation coefficients between VIX and stock market return are all negative. Second, and most importantly, the correlation becomes more pronounced under stronger political ties with the US. That is, the more politically connected to the US the country is, the stronger the spillover from US financial markets. Moreover, the slope of the fitted line is -0.07, which is statistically significant at the 1% confidence level and quite substantial given that the correlations vary

between -0.2 to 0 and political ties vary between -1 to 1. This cursory analysis provides some initial evidence that political ties with the US could play a role in the sensitivity of stock returns to the GFCy.

In the rest of the paper, we conduct a more rigorous analysis to show that stronger political ties with the US amplify the sensitivities of foreign stock returns to the GFCy. Using a country-year panel of stock index returns and voting patterns at the United Nations General Assembly (UNGA) as our measure of state-level political ties, we find that having stronger political ties with the US leads to a stronger sensitivity of foreign stock returns to several measures for the GFCy. In response to a one standard deviation deterioration of global financial conditions as indicated by various measures of the GFCy, we find that stock returns in countries with one standard deviation stronger political ties with the US fall by 2.0 to 2.4 percentage points more. We also find that this result is mainly driven by stock returns in developing countries who are not members of the OECD where the equivalent differential effects on stock returns are now between 3.4 to 4.4 percentage points.

We find evidence of the unique position of political ties with the US in amplifying stock return sensitivities to the GFCy. We find that measures of political ties with the US focusing on voting patterns on issues that the US State Department has flagged as important is a key element in our results. Further, we do not find similar effects when using measures of political ties with other countries such as China and the EU. We also show that the amplifying effect of political ties with the US on sensitivities of stock returns to the GFCy is not a substitute for other factors such as trade and financial openness policy, exchange rate regime, macro-prudential interventions, and other macroeconomic conditions. We also demonstrate that the stock returns of the financial, utilities, and consumer-facing sectors are the most affected and that the amplifying effect of US political ties on stock return sensitivities to global financial conditions is quite persistent.

We run a battery of additional exercises to verify the robustness of our findings. For instance, we show that the results remain when we use alternative definitions of our political ties and GFCy measures as well as when we restrict the sample periods to before and after the global financial crisis. Our findings also persist when we additionally account for differences in institutional quality and the ideological distance between the ruling parties of a country and the US.

We conduct several exercises to mitigate endogeneity concerns and enhance the causal interpretation of our findings. First, we implement a shift-share instrument variable approach taking advantage of differences between US foreign policy priorities when the US President is in their first or second term to verify the robustness of our findings. Moreover, we also conduct propensity score matching on the likelihood of having strong political ties with the US and use a matched sample to obtain the same results.

Finally, we explore potential mechanisms through which political ties with the US could affect the sensitivity of foreign stock returns to the GFCy. Focusing on the sample of developing countries, an intensification of financial linkages following an improvement in political ties with the US seems to be a plausible channel. We also find evidence in support of an information channel whereby stronger political ties with the US appear to mitigate the negative effects of information asymmetry on financial flows. We also find that news coverage of foreign firms in countries with strong political ties with the US tends to co-move more strongly with the GFCy. Finally, we also find evidence in support of a sentiment amplification channel. Specifically, we find that stronger political ties with the US increase the perceived (negative) effects of worsening global financial conditions on forecasts of activity for the country and the firms in it.

Our work builds on the literature regarding common factors to global equity pricing. A strand of this literature focuses on global financial risk. Engle and Campos-Martins (2023) provide a measure of global financial risk in terms of common volatility and show that it has a substantial impact on global financial assets. Caldara and Iacoviello (2022) provide a text-based measure of geopolitical risk which predicts lower investment, employment, and stock prices. More generally, Miranda-Agrippino and Rey (2020, 2022) develop a measure of the Global Financial Cycle which is associated with global risk appetite and

developments in the US.⁴ Batini and Durand (2021) show that loadings on this common factor vary across countries. Our paper complements this strand of the literature by looking at geopolitical ties. The two are related in that stronger political ties may mitigate the likelihood of significant effects from higher geopolitical risk, i.e., geopolitical ties may be seen as insurance against geopolitical risk. On the other hand, stronger geopolitical ties may also bind economies closer together effectively, increasing foreign asset price sensitivities to global common factors. The evidence we present in this paper provides evidence suggestive of the latter.

Our analysis of the effects of state political ties on the global pricing of foreign equity returns complements the strand of the literature which has documented the role of domestic political connections on firm value.⁵ More closely related to our work are those who focus on cross-border relations such as Fink and Stahl (2020) who show that foreign firm campaign contributions to US elections help them obtain higher abnormal returns. Similarly, Biguri and Stahl (2022) find that US firms' visits to European Commission officials generate positive abnormal equity returns. Relative to these contributions to the literature, our results suggest that state-level global political ties also have an impact on stock markets.

Our main result that state-level global political ties matter for the pricing of foreign equities expands the literature on the far-reaching effects of geopolitical ties. The use of voting at the UNGA as a measure of political ties draws from the broader literature on state-level political connections (e.g., Aiyar et al. 2023, Alesina and Dollar 2000, Barro and Lee 2005, Faye and Niehaus 2012, Garmaise and Natividad 2013, IMF 2023). Global political ties have been shown to help shape foreign direct investment flows and friendshoring (Aiyar et al. 2023, Alfaro and Chor 2023). Political alliance with the US has also been previously shown to affect currency choice and trade (Eichengreen et al.

⁴Fluctuations in global financial conditions have also been shown to affect domestic credit, primarily through the exposure of domestic banks to international capital markets (di Giovanni et al. 2022).

⁵See e.g., Fisman (2001), Faccio (2006), Goldman et al. (2009) and Acemoglu et al. (2016).

⁶On a related note, Bekaert et al. (2014) and Durnev et al. (2015) show that political risk and instability also matter for FDI flows.

2019, 2021).⁷ Aleksanyan et al. (2021) show that state visits have a strong influence on cross-border mergers and acquisitions. Qian and Yanagizawa-Drott (2017) find that political alliance with the US affects media reporting of human rights violations and similarly Ruf et al. (2021) show that US foreign relations affect the tone of US media coverage for firms. Kempf et al. (2023) find that the alignment of foreign governments' political ideologies with US investors' own views plays a role in their foreign investment decisions, and Knill et al. (2012) show that bilateral political relations are associated with sovereign wealth fund investment decisions. Our results indicate that political ties with the US also increase stock return co-movement around the world, particularly for developing countries.

The rest of the paper is organized as follows. The data is described in Section 2 while Section 3 presents our main results. Section 4 looks into the possible channels through which state-level political ties affects equity returns. Finally, section 5 concludes with some remarks regarding the implications of our findings and avenues for future work.

2 Data and Variable Descriptions

To measure each country's political ties with the US, we first obtain data on voting patterns at the UNGA from Voeten (2013) and Bailey et al. (2017). We construct indices of political ties by calculating bilateral voting similarities relative to how the US voted at the UNGA (Signorino and Ritter 1999). This approach follows Alesina and Dollar (2000), Barro and Lee (2005), Faye and Niehaus (2012), Garmaise and Natividad (2013) and Ambrocio and Hasan (2021) among others.

Our primary measure (S3UN-imp) uses a three-category scale to compare voting patterns relative to the US (Yes-No-Abstain), and we focus only on votes on issues that the US State Department has deemed of importance to the US.⁸ We use alternative defini-

⁷Fisman et al. (2022) has also recently shown that political ties affect exports by Russian firms.

⁸US State Department flags for important resolutions at the UNGA are available for the period 1983-2017.

tions in our robustness checks which use two-category scales (S2UN imp) and measures which also include votes that have not been deemed important by the US State Department (S3UN and S2UN). A higher value indicates more similar voting patterns relative to the US which we interpret as a proxy for stronger political ties.

Figure 2 plots the average values of the political ties measure of each country across the years 1990-2017, and Figure 3a shows the average values of the political tie measure across countries over time when split between OECD and non-OECD member countries. The time series of political ties for each country can be found in the appendix Figure A1.

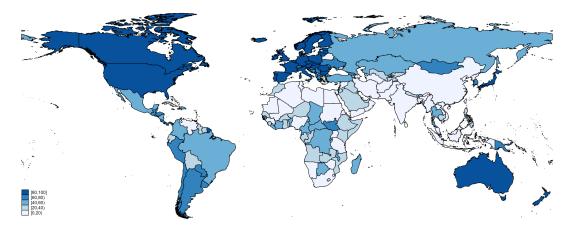


Figure 2: Political Ties with the US, 1990-2017 Average

Notes: The different shades of blue correspond to the average S3UN-Imp US political ties measure for each country over the period 1990-2017. Darker shades indicate stronger average political ties with the US.

We observe that OECD countries' voting patterns are more similar to the US when compared against those of non-OECD countries. Moreover, for both groups of countries, we see a similar trend over the past three decades. Our measure of political ties with the US was strongest in the early 1990s following the fall of the Soviet Union and the reunification of Germany, essentially signaling the end of the Cold War. We then see a decline from the mid 1990s to the mid 2000s partly due to the focus on domestic rather than foreign issues by the Clinton administration followed by the globally unpopular US-led Iraq invasion during the Bush administration, a move which faced vocal opposition at the UNGA. The measure for US political ties with the rest of the world on average

⁹Clearly, many other factors played a role in characterizing significant changes in US foreign policy

did not improve until the late 2000s.

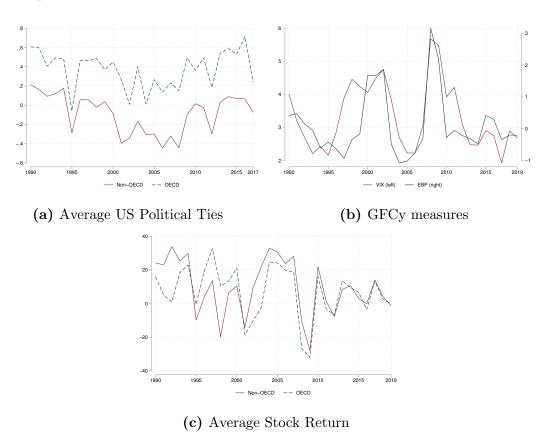


Figure 3: Average Values of Key Variables Over Time

Notes: The panels report averages of political ties, GFCy measures, and stock returns over time. The political ties measure in panel a) is on a three-category scale (Yes-No-Abstain) averaging the votes on issues that the US State Department has deemed of importance and split into averages for OECD (dashed blue) and non-OECD (red) member countries. The GFCy measures in panel b) are the standardized VIX (option-implied volatility of the S&P 500 index in red, left vertical axis) and the standardized excess bond premium (EBP in blue, right vertical axis). The stock returns on panel c) are averages of returns on country stock indexes split into averages for OECD (dashed blue) and non-OECD (red) member countries.

In addition, we make use of other measures such as the US economic and military aid to foreign countries, state visits, and the ideological distance between the US and other countries, as alternative measures of political ties in robustness checks. We also conduct a principal component analysis of all these measurements and extract the first factor as an alternative index of political ties. Our main findings do not depend on the specific choice of a political tie measure.

We collect data on several measures of the GFCy. First, we use the stock market's expectation of volatility based on S&P 500 index options, VIX, as a measure of global over the last few decades. We do not attempt to provide a complete account of US foreign policy in this paper.

risk appetite. Second, we use the excess bond premium (EBP) proposed by Gilchrist and Zakrajšek (2012) and extended in Gilchrist et al. (2022).¹⁰ These two measures are indicators of financial distress and capture the risk attitude of US financial intermediaries. Another potential choice for the GFCy measure is the global factor from Miranda-Agrippino and Rey (2022) which is extracted from a dynamic factor model for a large and heterogeneous panel of risky asset prices traded around the globe. We do not use this global factor as our main indicator of the GFCy in our analysis because the nature of its construction directly utilizes major stock market indices which are the dependent variables in our study. Therefore, using the global factor as a measure for the GFCy would increase the likelihood and risk of reverse causality and mechanical correlations in our analyses.

Figure 3b plots the two GFCy measures used in our main analysis, the VIX and the EBP. We standardize these GFCy indicators to facilitate the comparison and interpretation of results throughout the paper. The correlation coefficient between the VIX and the EBP is 0.73. We observe substantial fluctuations over the years. Both measures indicate adverse global financial conditions during the mid-1990s and the global financial crisis episodes, and better global conditions in the early 2000s and post-crisis periods.

Our dependent variable is the stock market return of each country, obtained from Datastream, and it is calculated as the log difference of the stock market price index between the current and previous year. Figure 3c shows the average stock return for OECD and non-OECD countries over the years 1990-2019. Both groups of economies saw strong market performance in the 2000s before being hit by the global financial crisis. In succeeding analyses, we also make use of the stock returns of individual sectors within countries as the dependent variable.

Finally, we also collect data on standard macroeconomic conditions and policy indi-

¹⁰The EBP is the component of the Gilchrist-Zakrajsek (GZ) spread net of expected defaults. Gilchrist and Zakrajšek (2012) first compute credit spreads as the difference between the yield of corporate bonds and the hypothetical risk-free Treasury securities of the same cash flows and maturities and then conduct regressions to remove the expected default risk of individual firms from the underlying credit spreads, and finally aggregate the firm level residuals to construct the EBP. The Gilchrist-Zakrajsek credit spread (GZ spread) is also used in our robustness checks.

cators as control variables. Specifically, we use GDP growth, inflation, currency appreciation, foreign reserves, exchange rate regime, exchange rate stability, monetary policy independence, de jure capital account openness, de facto financial integration, trade openness, and macro prudential policy. These are obtained from various sources including the World Development Indicators (WDI) of the World Bank, the International Monetary Fund (IMF), and other existing studies. Detailed definitions of each variable can be found in the appendix in Table A3.

To avoid potential non-linearities arising from the impact of the COVID-19 pandemic disruptions, we have restricted the sample to the years preceding 2020. The final sample in the main analysis consists of 54 countries, of which 29 are OECD member and 25 are non-OECD member countries, covering 1991-2018. We report the sample period covered for each country in the appendix in Table A4. Table 1 presents the summary statistics for all countries, and for the two groups of non-OECD and OECD countries, separately.

Table 1: Summary Statistics

		All	Non-	OECD	O]	ECD
	Mean	SD	Mean	SD	Mean	SD
Stock Market Return	7.125	(25.870)	8.405	(27.886)	6.062	(24.038)
VIX	3.387	(1.046)	3.387	(1.051)	3.388	(1.042)
EBP	0.151	(1.063)	0.144	(1.075)	0.156	(1.053)
Political Tie-S3UN imp	0.124	(0.410)	-0.168	(0.362)	0.368	(0.262)
GDP Growth	3.351	(3.489)	4.256	(3.639)	2.600	(3.172)
Inflation	5.743	(10.477)	7.392	(10.086)	4.374	(10.604)
Appreciation	-3.834	(13.729)	-4.424	(13.442)	-3.335	(13.957)
Foreign Reserve	16.075	(15.487)	21.876	(17.214)	11.268	(11.931)
Peg	0.385	(0.487)	0.352	(0.478)	0.412	(0.493)
Exchange Rate Stability	0.550	(0.296)	0.538	(0.270)	0.559	(0.317)
Monetary Policy Independence	0.358	(0.230)	0.439	(0.188)	0.290	(0.240)
Capital Account Openness	0.705	(0.332)	0.534	(0.336)	0.846	(0.254)
Financial Integration	4.010	(7.251)	3.669	(8.881)	4.293	(5.536)
Trade Openness	86.856	(58.017)	92.425	(73.156)	82.234	(40.937)
Macro Prudential Policy	0.671	(1.754)	0.735	(1.974)	0.618	(1.548)
Observations	1292		586		706	

Notes: The table reports summary statistics of key variables in the analysis. We also report summary statistics when the sample is split between OECD and non-OECD member countries as indicated by the column headers. The data is at an annual frequency and the sample covers 54 countries (29 OECD) over the period 1991-2018.

3 Empirical Analysis

3.1 Baseline Results

For our baseline analysis, we adopt the following specification:

$$Return_{ct} = \beta_1 PolTie_{ct-1} + \beta_2 Gfcy_t \times PolTie_{ct-1} + \Gamma Control_{ct-1} + \delta_c + \theta_t + \epsilon_{ct}$$
 (1)

where c and t indicate country and year respectively. The dependent variable $Return_{ct}$ is the stock market return, computed as the annual change of the country's stock market price index in log form. $PolTie_{ct-1}$ is the political ties measure of country c with the US using the three-category voting similarity measure at the UN General Assembly on issues that the US has deemed of importance (S3UN-imp) in the baseline specification. $Gfcy_t$ is one of the global financial cycle variables, either the VIX or the EBP. Both variables are standardized and a higher value indicates worse global financial market conditions. We control for an array of domestic policy, economic, and financial conditions in $Control_{ct-1}$ as described in the previous section. We use lagged terms of the political ties measure and other control variables to help mitigate concerns about reverse causality. We address endogeneity concerns with strategies utilizing stronger identification in Section 3.4. The specification includes both country and year fixed effects in δ_c and θ_t , which also means that the un-interacted global financial cycle variable (along with any other variables that do not change across countries or over time) is absorbed. Standard errors are clustered at the country level throughout the main results.

¹¹As an additional robustness check, we report the results when the political ties measure and other control variables are not lagged in the appendix in Table A5.

¹²In a separate analysis, we investigate if the global financial cycle has the anticipated negative impact on stock returns using our data. Specifically, we regress the returns of the domestic stock market on the global financial cycle variable and other control variables while excluding the political ties variable and year fixed effects. Results reported in Table A1 in the appendix demonstrate that a weaker global financial condition, as indicated by both GFCy measures, is associated with lower asset returns for the countries in our sample. These findings are in line with the literature, such as Rey (2015) and Miranda-Agrippino and Rey (2020).

¹³In the appendix Tables A6 and A7 we also report estimates using country and year two-way clustered and heteroscedasticity-consistent standard errors and the general findings still hold.

We are mostly interested in the coefficient of the interaction term between the global financial cycle and political ties, i.e., β_2 . Since worsened global financial market conditions negatively spill over to the returns of domestic risky assets, a significantly negative (positive) β_2 estimate would indicate that stronger political ties with the US are associated with a larger (smaller) spillover effect from the GFCy and a stronger (weaker) global financial co-movement.

Table 2 presents the baseline estimates. The first four columns show that closer political ties with the US are significantly associated with more pronounced spillover effects from the VIX and the EBP proxies of global financial conditions. The estimates for the key parameter we are interested in are stable across the odd and even columns which alternate the regression specification between with and without the other control variables. The effects are also economically significant. Using the coefficient estimates in columns (2) and (4), a one standard deviation worsening of global financial conditions in terms of the VIX and the EBP will lower stock returns in countries with a one standard deviation stronger political ties with the US by 1.99 and 2.44 percentage points more respectively.¹⁴

Columns (5) to (12) show that the spillover-enhancing effect of political ties with the US is particularly strong for non-OECD countries. When splitting the sample into non-OECD member and OECD member countries, we find that the magnitudes of the coefficients of the interaction term reported in columns (5) to (8) corresponding to the non-OECD sample more than double that in the full sample. In comparison, political ties with the US do not seem to play a significant role in the spillover effects of the GFCy on stock returns for OECD member countries. Based on the estimates shown in columns (6) and (8), when global financial conditions worsen by one standard deviation as captured by the VIX and EBP, a developing country whose political tie with the US is stronger than another country by one standard deviation will see a larger decrease in asset returns by 4.39 and 3.41 percentage points respectively.¹⁵

¹⁴Column (2): $-4.865 \times 0.410 = -1.99$; column (4): $-5.959 \times 0.410 = -2.44$.

¹⁵Column (6): $-12.134 \times 0.362 = -4.39$; column (8): $-9.414 \times 0.362 = -3.41$.

Table 2: Baseline Results: Political Ties with the US and the Global Financial Cycle

		Full S	ample			Non-C	ECD		OECD			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie	-4.911***	-4.865***			-11.862***	-12.134***			-0.344	0.680		
	(1.490)	(1.537)			(2.124)	(2.252)			(4.339)	(4.433)		
EBP \times L.PolTie			-6.147***	-5.959***			-9.340***	-9.414***			-0.368	-0.618
			(1.481)	(1.525)			(2.137)	(2.202)			(4.343)	(4.323)
L.PolTie	9.404	9.976	-4.488	-3.873	39.960***	45.825***	1.846	6.905	0.665	-12.196	-0.414	-9.715
	(7.395)	(6.464)	(4.812)	(3.543)	(10.949)	(9.952)	(7.752)	(6.128)	(17.409)	(10.649)	(10.995)	(8.139)
L.GDP Growth		0.092		0.109		-0.104		-0.038		-0.477		-0.463
		(0.264)		(0.264)		(0.359)		(0.372)		(0.525)		(0.519)
L.Inflation		0.178**		0.180**		0.070		0.076		0.522***		0.523***
		(0.069)		(0.069)		(0.085)		(0.086)		(0.178)		(0.178)
L.Appreciation		-0.246**		-0.241**		-0.268**		-0.264**		-0.041		-0.040
		(0.101)		(0.101)		(0.099)		(0.103)		(0.209)		(0.209)
L.Foreign Reserve		0.168		0.172		0.093		0.125		0.164		0.164
		(0.106)		(0.104)		(0.218)		(0.219)		(0.117)		(0.117)
L.Peg		4.918		5.091*		3.406		4.647		2.269		2.370
		(2.995)		(3.011)		(3.327)		(3.416)		(6.409)		(6.388)
L.Exchange Rate Stability		-13.408**		-13.561**		-11.104**		-12.865**		-13.235		-13.463
		(5.216)		(5.175)		(5.017)		(5.053)		(13.040)		(13.011)
L.Monetary Policy Independence		-2.150		-2.189		9.024		8.026		-4.205		-4.403
		(4.810)		(4.777)		(8.006)		(8.277)		(5.691)		(5.626)
L.Capital Account Openness		-10.002**		-9.758**		-16.861***		-16.812***		3.334		3.248
		(4.153)		(4.118)		(5.267)		(5.218)		(5.463)		(5.265)
L. Financial Integration		-0.134		-0.137		0.041		0.088		-0.254		-0.252
		(0.254)		(0.249)		(0.349)		(0.332)		(0.306)		(0.306)
L. Trade Openness		0.045		0.053		0.003		0.017		0.078		0.078
		(0.062)		(0.061)		(0.084)		(0.083)		(0.103)		(0.102)
L.Macro Prudential Policy		-0.248		-0.270		-0.555		-0.455		0.036		0.003
		(0.428)		(0.423)		(0.544)		(0.501)		(0.906)		(0.884)
Observations	1292	1292	1292	1292	586	586	586	586	706	706	706	706
Adjusted R-Square	0.350	0.402	0.354	0.406	0.358	0.418	0.351	0.410	0.449	0.482	0.449	0.482
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between without and with additional controls for odd and even columns respectively. The first four columns report results using the full sample with the first two columns using the VIX as the GFCy measure and the last two columns using the EBP. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

3.2 Key Features

We proceed with exploring the key features of our baseline results. Specifically, we first compare estimated effects when the political ties measure is based on voting on issues that the US State Department has deemed of importance and when they are not. Then, we examine the uniqueness of political ties with the US in contrast with political ties with other nations. Third, we assess whether the magnitude of the estimated spillover effects is related to levels of global geopolitical risk. Fourth, we check for the heterogeneity of effects across different sectors. Finally, we assess the persistence of the spillover effects of political ties with the US on sensitivities of stock returns to the GFCy.

First, the political ties measure used in the baseline is the voting similarities at UNGA on issues that are important for the US (S3UN-imp). We now examine whether we get the same results when we measure political ties with the US using voting similarities on issues that the US has not considered to be important (S3UN-unimp). Table 3 presents the results when we include both voting similarities measured in terms of issues deemed important and not important by the US State Department. The results show that it is the political ties measure using votes that US State Department has deemed important that matters for amplifying the global financial transmission to the developing countries while the measure of political ties using votes on issues that are less important for the US does not play a significant role. For advanced economies, political ties captured by either measure of voting similarities with the US do not significantly affect the spillover from global financial conditions. These results reinforce the notion that our measure and the effect that we estimate capture political ties with the US and not commonalities in preferences across countries over issues raised at the UN.

Table 3: Political Ties with US using Votes on Important and Unimportant Issues

		Full Sa	ample			Non-0	DECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie-imp	-11.899***	-9.917***			-12.400***	-9.661***			-5.525	-3.134		
	(2.518)	(2.431)			(3.538)	(3.340)			(5.716)	(5.573)		
${\rm VIX}\times{\rm L.PolTie\text{-}unimp}$	11.399***	8.538***			-1.012	-7.309			7.487*	6.108		
	(3.207)	(3.137)			(7.497)	(7.798)			(4.140)	(4.145)		
EBP \times L.PolTie-imp			-8.295***	-7.318***			-12.214***	-10.762**			3.971	3.594
			(2.626)	(2.699)			(3.916)	(4.082)			(5.215)	(5.373)
EBP \times L.PolTie-unimp			3.399	2.308			4.885	2.027			-4.795	-4.416
			(4.022)	(4.377)			(8.494)	(8.745)			(4.894)	(4.950)
L.PolTie-imp	33.266***	26.955***	-3.755	-3.629	43.046***	38.807***	3.312	7.869	15.165	-3.338	-3.364	-13.676*
	(10.448)	(9.536)	(5.048)	(3.786)	(12.927)	(11.142)	(8.357)	(6.601)	(23.771)	(17.125)	(11.515)	(7.873)
L.PolTie-unimp	-39.623***	-26.317**	-5.654	-0.989	-26.970	3.011	-28.133	-19.621	-6.458	3.483	16.477	21.661**
	(14.638)	(11.849)	(11.956)	(8.868)	(32.806)	(31.061)	(25.977)	(18.482)	(16.082)	(15.253)	(10.131)	(9.425)
Observations	1292	1292	1292	1292	586	586	586	586	706	706	706	706
Adjusted R-Square	0.354	0.403	0.354	0.405	0.360	0.418	0.352	0.410	0.452	0.486	0.450	0.485
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between without and with additional controls for odd and even columns respectively. The first four columns report results using the full sample with the first two columns using the VIX as the GFCy measure and the last two columns using the EBP. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Second, we show that it is specifically the political ties with US rather than political

ties with other countries that generate these spillover effects and matters for the transmission of the global financial cycle to stock returns. To this end, we construct measures of political ties between a country and an alternative economy other than the US using the same voting similarities methodology. Specifically, we examine and compare the roles of political ties with the US, political ties with the EU (using the average political ties with the five largest EU countries namely, France, Germany, Italy, Spain, and the Netherlands), and political ties with China. We exclude EU countries and China from the sample when comparing the relative roles of a country's political ties with them and the US.

Table 4: Political Ties with US versus Other Countries

			Full S	ample					Non-OI	ECD					OE	CD		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
$VIX \times L.PolTie$ with US	0.114	-11.616	-7.454				-29.932**	-21.357***	-35.436**				2.165	17.110	23.023			
	(2.424)	(7.311)	(9.283)				(14.027)	(7.493)	(14.603)				(4.312)	(25.825)	(31.827)			
$VIX \times L.PolTie$ with EU	-5.957		-5.888				21.302		16.852				-7.603		-8.598			
	(4.859)		(4.853)				(13.855)		(17.375)				(8.562)		(9.672)			
VIX × L.PolTie with China		-8.434	-8.173					-14.723^{*}	-11.697					16.110	21.652			
		(8.264)	(7.986)					(7.752)	(10.119)					(26.649)	(32.142)			
EBP × L.PolTie with US				-0.269	-7.733	-4.238				-20.832*	-12.993	-23.322°				2.224	11.094	15.528
				(2.119)	(7.656)	(9.502)				(11.001)	(8.488)	(12.425)				(3.872)	(18.720)	(23.100)
EBP × L.PolTie with EU				-4.951		-4.908				14.101		15.007				-4.814		-5.189
				(4.284)		(4.336)				(9.461)		(15.003)				(7.422)		(8.230)
$EBP \times L.PolTie$ with China					-4.500	-4.235					-6.886	-1.666					9.206	13.645
					(8.528)	(8.486)					(8.045)	(14.052)					(19.901)	(24.375)
Observations	834	834	834	834	834	834	504	504	504	504	504	504	330	330	330	330	330	330
Adjusted R-Square	0.398	0.397	0.398	0.398	0.397	0.397	0.408	0.408	0.408	0.405	0.404	0.403	0.416	0.413	0.414	0.415	0.413	0.412
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES						
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES						
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES						

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first column includes political ties measures for the US and the EU, the second column includes political ties with the US and China, and the third column includes all three political ties measures. The first six columns report results using the full sample with the first three columns using the VIX as the GFCy measure and the last three columns using the EBP. The next six columns restrict the sample to non-OECD member countries. Finally, the last six columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

We first evaluate the effect of political ties with the EU and China in comparison to that with the US individually and subsequently evaluate the effects of all three political ties measures together. Table 4 reports the results. We find that political ties with US stand out and play a unique role for developing countries as the coefficients of the interaction term on the political ties measures for the EU and China are insignificant across both GFCy variables. On the other hand, the coefficients of the interaction term

 $^{^{16}}$ We report illustrative maps of average political ties with the EU and China in Figure A2 and A3 in the appendix.

using political ties with the US remain significantly negative, and the magnitudes are even more pronounced than those in the baseline. These results demonstrate that the global spillover effects on developing countries are indeed enhanced by stronger political ties specifically with the US. For developed countries, the political ties measures with any of the three economies do not significantly alter the transmission of global financial conditions to domestic stock market returns.

Table 5: Low and High Fragmentation Among Three Powers

		Full Sa	mple			Non-C	DECD			OI	ECD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
$VIX \times L.PolTie$	4.106	-4.249*			-5.007	-7.767*			5.773	0.083		
	(4.008)	(2.403)			(7.582)	(4.471)			(9.087)	(6.101)		
EBP \times L.PolTie			2.277	-3.890*			7.858	-8.122**			6.501	-0.580
			(6.264)	(1.957)			(15.068)	(3.075)			(10.884)	(5.632)
L.PolTie	-20.980	13.174	-7.580	0.834	23.412	33.629*	8.893	10.235	-91.210**	-8.334	-71.240***	-7.412
	(17.852)	(11.839)	(9.037)	(6.614)	(23.584)	(19.054)	(11.278)	(8.433)	(36.284)	(17.400)	(15.606)	(14.451)
Observations	401	400	401	400	252	243	252	243	145	151	145	151
Adjusted R-Square	0.463	0.388	0.462	0.389	0.444	0.406	0.445	0.413	0.520	0.383	0.520	0.383
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The results alternate between sub-samples of low and high geopolitical fragmentation for odd and even columns respectively. Geopolitical fragmentation for each country is defined in terms of the country's relative (absolute) difference in voting similarities with the US, EU, and China. The first four columns report results using the full sample with the first two columns using the VIX as the GFCy measure and the last two columns using the EBP. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

In the same vein, we explore whether geopolitical balance, or the fragmentation of political ties with global powers affects the impact of political ties with the US on the transmission of the global financial cycle to stock returns. We use relative differences in voting similarities with the US, the EU, and China to construct a proxy of geopolitical fragmentation by assessing how a country balances its political ties with the three aforementioned major global powers.¹⁷ A larger value for our proxy measure indicates an imbalance in political ties with these three global powers while a low value indicates a

¹⁷Specifically, we first calculate the absolute differences in political ties (measured by voting similarities) between the country and each pair of these powers (US-EU, US-China, and EU-China). These differences represent the political distance a country has for each pair of global powers. We then average these three differences and compute the sum of the absolute differences net of the average to gauge fragmentation.

roughly equal political distance across the three global powers. We categorize countries as having either high or low fragmentation depending on whether they are above or below the median. Table 5 reports results using the baseline specification across sub-samples of countries with high and low geopolitical fragmentation measures. We find that the political ties with the US work more strongly in amplifying the global financial cycle for developing countries in a highly fragmented situation. In contrast, for countries that maintain a geopolitical equilibrium among the major powers, political ties with the US do not play a significant role in transmitting the global financial conditions to stock returns.

Third, we examine whether the role of political ties in amplifying the sensitivity of stock returns to the GFCy depends on the level of global geopolitical risk. For this purpose, we obtain the geopolitical risk (GPR) measure from Caldara and Iacoviello (2022) and generate two dummy variables indicating whether the geopolitical risk is at a low or high level based on whether the index is below or above its median. We then run a regression that includes a full set of (triple) interaction terms between the global financial cycle, political ties with the US, and the dummy variables for the two levels of global geopolitical risk. The results are reported in Table 6.

Two observations stand out from the results shown in Table 6. First, the role of political ties with US still only matters for developing countries. In the OECD sample, the coefficients of the interaction terms between political ties and GFCy variable are statistically insignificant no matter the level of the global geopolitical risk situation. Second, in developing countries, the amplifying effects of stronger political ties with US only hold when global geopolitical risk is below its median. On the other hand, when global geopolitical risk is high, the spillover effects of global financial conditions on domestic stock returns do not significantly co-vary with political ties with the US. This

¹⁸Caldara and Iacoviello (2022) build a news-based measure of geopolitical risk by computing the share of articles mentioning adverse geopolitical events in the newspaper, where geopolitical risk is defined as the threat, realization, and escalation of adverse events associated with wars, terrorism, and any tensions across the globe that affect the peaceful course of international relations. They find that higher geopolitical risk foreshadows lower investment, employment, and stock prices. We plot the GPR during our sample period in the appendix Figure A4, which shows that the global geopolitical risk also shows fluctuations across years and it peaked in 2001-2003 due to the 9/11 attacks.

may indicate a hedging or insurance benefit to US political ties during periods of high geopolitical risk which offsets the amplifying effects during other times.

Table 6: Interaction with Geopolitical Risk

	F	ull	Non-0	DECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
$VIX \times L.PolTie \times Low GPR$	-4.154*		-14.460***		1.438	
	(2.131)		(3.007)		(5.145)	
VIX × L.PolTie × High GPR	-7.369***		-2.214		-4.169	
	(2.488)		(6.606)		(3.556)	
EBP × L.PolTie × Low GPR		-6.182***		-10.561***		1.394
		(1.793)		(2.540)		(5.297)
EBP × L.PolTie × High GPR		-5.682**		-4.005		-3.762
		(2.375)		(5.648)		(3.148)
L.PolTie \times Low GPR	9.056	-3.227	44.771***	-5.745	-4.389	0.320
	(8.184)	(3.834)	(13.445)	(7.505)	(18.519)	(9.455)
L.PolTie \times High GPR	16.250**	-4.535	16.910	10.833	11.763	-0.946
	(7.942)	(3.754)	(17.842)	(10.220)	(15.125)	(13.931)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.402	0.405	0.365	0.360	0.448	0.448
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between the VIX and the EBP as the GFCy measure in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Next, we investigate whether the effect is heterogeneous across different sectors. We obtain the stock price index of eleven sectors for each country from Thomson Reuters, and then construct the stock return for each sector in the same way as the overall stock market and use them as the dependent variable.¹⁹ Table 7 reports the results. To save space, we only report the results using the sample of non-OECD member countries for this analysis.

¹⁹The eleven sectors are: technology; telecommunications; health care; financials which include banks, financial services, and insurance; real estate; consumer discretionaries which include automobiles and parts, consumer products and services, media, retail, and travel and leisure; consumer staples which include food, beverage and tobacco, personal care, drug and grocery stores; industrials which include construction and materials, industrial goods and services; basic materials which include basic resources and chemicals; energy; and utilities. We also show that all sectoral stock returns respond negatively to increases in the measures of the GFCy in Table A2 in the appendix.

Table 7: Stock Return by Sector

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Tech	Tele	Heath	Financials	Real Estate	Consum Discret	Consum Stap	Indu	Basic Material	Energy	Utilities
					Pane	l A: VIX					
VIX × L.PolTie	-18.163 (12.982)	-0.970 (4.085)	-11.049** (4.142)	-13.825*** (3.385)	0.298 (4.224)	-13.939*** (4.828)	-11.311*** (3.968)	-8.820** (3.418)	-10.418 (6.788)	-8.747** (4.176)	-15.594** (5.801)
L.PolTie	34.171 (30.130)	(4.083) 11.962 (14.951)	34.279* (19.129)	(3.365) 43.200*** (12.755)	-15.323 (15.132)	(4.020) 43.301** (16.552)	(3.908) 34.339* (19.690)	(3.418) 24.437 (14.877)	32.261 (19.675)	34.201** (14.034)	(5.801) 57.387** (23.897)
Observations	177	382	330	525	349	500	529	524	479	452	330
Adjusted R-Square	0.401	0.397	0.222	0.376	0.289	0.261	0.190	0.221	0.278	0.236	0.239
					Pane	l B: EBP					
EBP \times L.PolTie	-2.521 (11.165)	-3.730 (3.692)	-4.032 (3.797)	-12.942*** (3.059)	1.119 (5.323)	-10.759** (4.532)	-9.373** (3.574)	-7.215* (4.109)	-11.908* (6.365)	-7.008 (4.128)	-10.170** (3.908)
L.PolTie	-20.563 (21.687)	9.820 (9.381)	-2.976 (9.539)	0.325 (9.319)	-14.787** (7.032)	-0.194 (11.492)	-1.158 (11.868)	-3.401 (8.374)	1.072 (7.995)	6.066 (13.580)	6.837 (9.430)
Observations	177	382	330	525	349	500	529	524	479	452	330
Adjusted R-Square	0.386	0.399	0.205	0.376	0.289	0.252	0.185	0.218	0.283	0.234	0.221
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE Controls	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is sector stock returns. Each column reports the results for stock returns in a given sector identified in the column headers. The sample is restricted to non-OECD member countries. Panel A reports results when the VIX is used as the GFCy measure and Panel B reports results for the EBP. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

We observe a clear heterogeneity across sectors. The amplifying effect of political ties with the US on the sensitivities of stock returns to the global financial cycle is most prominently observed for sectoral stock returns in financials and utilities as well as consumer goods. On the other hand, the sensitivity of stock returns to the GFCy in sectors such as technology, telecommunication, and real estate are insignificantly affected by political ties with the US. Broadly speaking, the most affected sectors seem to be service-related and the most directly consumer-facing sectors while the least affected sectors seem to be those in heavy industries higher up in the supply chain.

Finally, we examine how persistent the effects of political ties are with regard to the sensitivities of stock returns to the GFCy. To do so, we estimate impulse response functions (IRFs) by local projections (Jordà 2005, Montiel Olea and Plagborg-Møller 2021). We follow closely the specification in Cloyne et al. (2023) in order to capture the heterogeneous effects of global financial conditions in countries with high and low

political ties with the US:

$$Return_{c,t-1}^{c,t+h-1} = \alpha_c^h + \sum_g \beta_g^h I_{[PolTie_{c,t-1} \in g]} \times Gfcy_t + \sum_g \gamma_g^h I_{[PolTie_{c,t-1} \in g]} + \phi^h X_{c,t-1} + \epsilon_{c,t+h}$$

$$(2)$$

where subscript c denotes country, t indicates year, and h represents the horizon. $Return_{c,t-1}^{c,t+h-1}$ is the cumulative stock return spanning from time t-1 to t+h-1 and it is calculated as the log difference of the stock index at the start and end of this horizon. In the regression, we also control for two- and three-year lags of the level of the stock index. $I_{[PolTie_{c,t-1} \in g]}$ is an indicator denoting the group g that the political ties measure falls under. We categorize political ties into two groups, a low category when the political ties measure is below the median and a high category when it is above the median. As before, $Gfcy_t$ is the measure of the global financial cycle in year t and it is captured by either the VIX or EBP, and $X_{c,t-1}$ is the set of lagged control variables. The parameters α_c^h are country fixed effects. We estimate the IRFs over a forecast horizon of 5 years.

Our primary focus lies on estimates of β_g^h which capture the responses to global financial conditions in countries with low and high political ties separately. Figure 4 plots the estimates accompanied by 68% confidence bands, when either the VIX or the EBP increases by one standard deviation. To save space, we only present the results when the sample is restricted to non-OECD member countries. There are two main results from Figure 4. First, in the aftermath of deteriorating global financial conditions, stock returns in foreign developing countries experience a marked decline irrespective of the strength of their political ties with the US. The effect is significant by the first year and the peak effect is reached two years after the shock. Second, countries with high political ties with the US exhibit a stronger reaction to deteriorating global financial conditions. Specifically, the peak effect for countries with high US political ties amounts to a 20% plummet in stock returns which is twice that for countries with low US political ties. The difference between the IRFs is statistically significant and is illustrated in the appendix Figure A5. Moreover, the effect of the GFCy on stock returns is more persistent

for the high US political ties group as the accumulated stock return is significantly lower even four years after the shock.

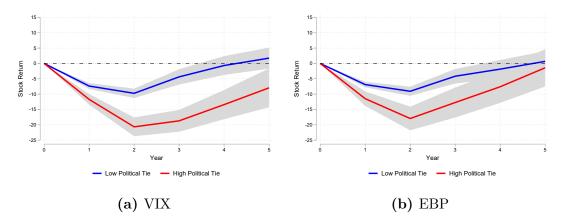


Figure 4: IRFs for High and Low Political Ties

Notes: The figure plots impulse responses of cumulative stock returns for horizons one to five years to a one standard deviation shock to the GFCy in terms of the VIX (left panel) and the EBP (right panel) for countries with low (blue) and high (red) political ties with the US. One standard deviation (68%) confidence bands are plotted as gray-shaded areas.

Next, we alter our specification by using the continuous instead of the categorical variable of political ties and also adding year fixed effects:

$$Return_{c,t-1}^{c,t+h-1} = \alpha_c^h + \theta_t^h + \beta^h PolTie_{c,t-1} \times Gfcy_t + \gamma^h PolTie_{c,t-1} + \phi^h X_{c,t-1} + \epsilon_{i,t+h}$$
 (3)

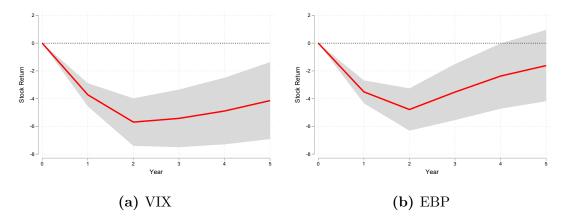


Figure 5: IRFs to Global Financial Conditions and Political Ties

Notes: The figure plots impulse responses of cumulative stock returns for horizons one to five years to a one standard deviation shock to the GFCy in terms of the VIX (left panel) and the EBP (right panel) for countries with political ties with the US equal to one relative to those whose political ties with the US is equal to zero. One standard deviation (68%) confidence bands are plotted as gray-shaded areas.

Our focus remains on the coefficient β^h , which is reported in Figure 5. The interpretation is slightly different. The coefficient now captures the differential effect of a one standard deviation deterioration in global financial conditions for countries whose political ties with the US are equal to one relative to those whose political ties with the US are significantly associated with a more pronounced response to global financial conditions. Again, this effect is persistent, remaining statistically significant for up to four years ahead.

3.3 Robustness Checks

We conduct several exercises to verify the robustness of our baseline estimates. We verify that our results persist when we use different measures of political ties with the US and the GFCy. We consider the stability of our results to alternate time frames, specifically before and after the global financial crisis. Finally, we also run regressions that consider and control for other factors such as institutional quality and ideological distance.

First, we show that our baseline findings are robust to alternative measurements of political ties with the US. Specifically, our results remain if we focus on a two-category voting similarity classification (S2UN-imp) which omits abstains or absences when calculating voting similarities with the US on issues deemed important by the US State Department. Further, we obtain similar results to the baseline when calculating political ties with the US without limiting votes to those on issues deemed of importance by US using both the three- and two-category voting patterns (S3UN and S2UN). In addition, we also use the ideal distance point (IDP) measure from Bailey et al. (2017), which can account for latent preferences and changes in the UN agenda using dynamic national ideal points estimated from an ideal point model. Table 8 presents the results when we use S2UN-imp, S3UN, S2UN, and IDP to measure political ties with the US in panels A, B, C, and D, respectively. The coefficients of the interaction term between various global financial cycle variables and these alternative political tie measures are all significantly negative for the non-OECD sample while statistically insignificant for the OECD sample.

Table 8: Robustness: Alternative Measures of Voting Similarities at the UNGA

	Full S	Sample	Non-0	OECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
GFCy:	VIX	EBP	VIX	EBP	VIX	EBP
	D	1.4. D. U	T: COLIN:			
	Pa	net A: Pot	Tie: S2UN-i	mp		
${\rm GFCy}\times{\rm L.PolTie}$	-3.907***	-4.789***	-9.394***	-7.660***	-0.008	-0.588
	(1.148)	(1.180)	(1.774)	(1.847)	(4.002)	(3.935)
L.PolTie	9.595*	-1.899	35.119***	5.244	-6.162	-6.099
	(5.025)	(2.796)	(7.342)	(4.458)	(9.876)	(6.501)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.402	0.406	0.418	0.412	0.481	0.481
	Ĺ	Panel B: P	olTie: S3UN	V		
$GFCy \times L.PolTie$	-4.749*	-8.265***	-19.895***	-13.903***	2.690	-3.282
- 0 10	(2.401)	(2.625)	(4.786)	(4.332)	(4.405)	(4.997)
L.PolTie	18.658**	6.233	64.641***	2.160	1.942	9.512
	(8.359)	(7.125)	(19.731)	(12.892)	(11.659)	(7.683)
Observations	1348	1348	608	608	740	740
Adjusted R-Square	0.394	0.400	0.415	0.405	0.479	0.480
	ل	Panel C: P	olTie: S2UN	V		
$GFCy \times L.PolTie$	-3.907*	-6.810***	-17.252***	-12.162***	2.566	-2.029
01 0j // 2 11 01110	(2.151)	(2.460)	(4.609)	(4.242)	(3.480)	(4.201)
L.PolTie	21.000**	10.117	64.294***	9.127	1.687	8.791
2.1 01110	(8.265)	(6.204)	(19.680)	(12.902)	(11.268)	(6.145)
Observations	1343	1343	608	608	735	735
Adjusted R-Square	0.396	0.401	0.413	0.404	0.480	0.480
	Panel I)· PolTie·	Ideal Distan	ce Point		
	1 4/100 2		2 10 10 10 10 10 10 10 10 10 10 10 10 10	00 1 00,00		
GFCy \times L.PolTie	-1.310*	-2.766***	-5.507***	-3.836***	1.273	-1.810
	(0.690)	(0.715)	(1.473)	(1.176)	(1.520)	(1.927)
L.PolTie	9.706***	4.344	20.432***	1.558	-0.587	2.942
	(3.489)	(3.216)	(6.967)	(4.449)	(4.452)	(4.952)
Observations	1343	1343	608	608	735	735
Adjusted R-Square	0.397	0.405	0.414	0.405	0.480	0.481
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. Panel A uses S2UN-IMP as the measure for political ties with the US while Panel B and C use S3UN and S2UN respectively. Panel D uses the ideal distance point (IDP) measure from Bailey et al. (2017). The reported regression results alternate between the VIX and the EBP as the GFCy measure in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

We also make use of the state visits data to measure political ties as the literature suggests that state visits can be used to represent political connections between countries (Aleksanyan et al. 2021, Malis and Smith 2021, Lebovic and Saunders 2016). We obtain data on the travels abroad of the US President and Secretary of State, and the visits by foreign leaders to the White House from the Office of Historian of the State Department. Since these high-level visits are infrequent, we use dummy variables to indicate whether a certain type of visit happened.²⁰

Table 9: Robustness: State Visits as Measures of Political Ties

	Full S	ample	Non-C	DECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
VIX × L.D(Visit from US President)	-0.754		-7.245**		2.026	
	(1.603)		(2.609)		(1.951)	
$VIX \times L.D(Visit to US President)$	0.431		-0.190		0.489	
	(1.378)		(1.821)		(1.650)	
$VIX \times L.D(Visit from US SoS)$	1.733		1.713		2.386	
	(1.527)		(2.622)		(1.588)	
$EBP \times L.D(Visit\ from\ US\ President)$		-0.713		-5.933**		1.863
		(1.637)		(2.842)		(1.765)
$EBP \times L.D(Visit to US President)$		-0.682		-0.910		-0.626
		(1.596)		(1.955)		(1.910)
$EBP \times L.D(Visit from US SoS)$		0.284		0.324		1.632
		(1.619)		(2.577)		(1.718)
L.D(Visit from US President)	4.565	2.131*	24.076**	-0.093	-3.676	3.047^{**}
	(4.955)	(1.268)	(8.690)	(2.674)	(6.158)	(1.241)
L.D(Visit to US President)	0.978	2.513**	3.375	2.757*	-0.100	1.758
	(4.262)	(1.024)	(5.841)	(1.549)	(5.179)	(1.303)
L.D(Visit from US SoS)	-7.833	-2.020	-7.958	-2.104	-9.414*	-1.576
	(4.691)	(1.222)	(8.742)	(1.410)	(4.674)	(1.696)
Observations	1306	1306	564	564	742	742
Adjusted R-Square	0.393	0.392	0.392	0.390	0.486	0.484
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between the VIX and the EBP as the GFCy measure in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table 9 shows the results when we use the three types of state visits together to measure political ties with the US. The results indicate that a visit by US President to a foreign country is significantly associated with stronger transmission from global financial conditions to stock returns in a foreign country. Again, this effect only shows

²⁰Using the number of visits in each year does not alter the main results.

up in developing countries. In contrast, visits by foreign leaders to the White House or visits by the US Secretary of State do not play significant roles in altering the strength of the impact of the global financial cycle on stock returns.

Moreover, to jointly account for the relevance of various voting similarity measures and US foreign aid flows to other countries in capturing political ties with the US, we conduct a principal component analysis and extract the first factor among nine variables of UN voting similarities and US economic and military aid.²¹ Table 10 reports the results using this first component as an index of political ties with the US. Again, the results show that political ties with the US are significantly associated with a strengthened transmission from global financial conditions to stock returns for developing countries.

Table 10: Robustness: Principal Component Index as Measure of Political Ties

	Full S	ample	Non-0	DECD	OE	CD
Gfcy:	VIX	EBP	VIX	EBP	VIX	EBP
	(1)	(2)	(3)	(4)	(5)	(6)
Gfcy × PolTie (Principal Component)	-0.733**	-0.814**	-2.382***	-1.693***	-0.064	-0.358
	(0.313)	(0.305)	(0.547)	(0.511)	(0.497)	(0.505)
L.Political Tie (Pricipal Component)	2.694**	0.597	8.633***	1.115	0.408	0.190
	(1.343)	(0.897)	(2.705)	(1.631)	(1.657)	(0.991)
Observations	1077	1077	571	571	506	506
Adjusted R-Square	0.422	0.424	0.415	0.406	0.505	0.506
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between the VIX and the EBP as the GFCy measure in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Next, we also verify the robustness of our findings to alternative measures of the GFCy. Specifically, we use as alternative indicators of the GFCy, the Gilchrist-Zakrajsek (GZ) spread, US economic policy uncertainty (EPU), and two composite indices of US overall financial conditions.²² The GZ spread is the aggregated US corporate bond spread

²¹Official US foreign aid data is obtained from the USAID Greenbook dataset. The first principal component accounts for 56% of the variation and is the factor where all variables have positive loadings. Details regarding the factor analysis are reported in the appendix in Table A8.

²²In additional analyses, we also consider oil supply news shocks, taken from Känzig (2021) who

over risk-free treasuries. The EPU is the Baker et al. (2016) three-component index of US economic policy uncertainty which includes news articles discussing economic policy uncertainty, the federal tax code, and the dispersion of forecasting on policy-related macroeconomic variables. Finally, we include two summary composite indices of US financial conditions which combine information from a host of financial variables. We include the Federal Reserve Bank of Kansas City financial stress index (KCFSI) and the Federal Reserve Bank of Chicago national financial conditions index (NFCI).²³ For both indices, a positive (negative) value indicates that financial stress is higher (lower) than average.

We interact these alternative indicators of the GFCy with US political ties and reestimate the baseline specification. Table 11 reports estimates of the coefficients on the
interaction terms which remain significantly negative for the non-OECD sample. These
results show that stronger political ties with the US is associated with a more pronounced
spillover from financial conditions in the US across a wide range of measures. Moreover,
the NFCI can be decomposed into contributions from risk, credit, and leverage. When
split into these three components and interacted with US political ties, we find that
political ties with the US amplify the transmission of US financial conditions related to
risk to foreign stock returns but not for US financial conditions relating to credit and
leverage. The results for these regressions are reported in Table 12. These results are
indicative of potential channels through which US political ties amplify sensitivities of
stock returns to the GFCy which will be explored further in Section 4.

construct an index of oil supply expectation surprises based on high-frequency data around OPEC announcements, as a potential source of global stock return co-movement. We obtain similar results when this variable is used as an alternative measure for the GFCy which are available upon request.

²³KCFSI is constructed based on 11 variables consisting of yield spreads and the behavior of asset prices that indicate flight to quality, flight to liquidity, and uncertainty about fundamentals. NFCI is constructed based on 105 indicators covering money markets, debt and equity markets, and traditional and shadow banking systems. Details can be found in https://www.kansascityfed.org/data-and-trends/kansas-city-financial-stress-index/ and https://www.chicagofed.org/research/data/nfci/current-data. Similar indices are also provided by the Office of Financial Research and the Federal Reserve Bank of St. Louis. However, these have shorter coverage relative to the ones we use. We nevertheless find similar results using these indicators which are available upon request.

Table 11: Robustness: Alternative Measures of the GFCy

	Full S	Sample	Non-0	OECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
		Panel A:	GZ Spread			
$GFCy \times L.PolTie$	-7.001***	-6.421***	-12.648***	-11.449***	2.666	0.850
	(1.603)	(1.571)	(2.818)	(2.400)	(3.932)	(4.127)
L.PolTie	13.630*	12.356**	34.390***	35.866***	-7.436	-12.057
	(7.259)	(6.140)	(11.130)	(9.343)	(11.827)	(7.828)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.356	0.406	0.360	0.414	0.450	0.482
		Panel .	B: EPU			
$GFCy \times L.PolTie$	-5.864***	-5.574***	-11.303**	-10.233**	1.299	-2.192
v	(1.834)	(1.853)	(4.448)	(3.990)	(4.728)	(4.451)
L.PolTie	15.647*	14.799*	42.941**	43.801**	-5.686	-1.244
	(8.863)	(8.122)	(19.834)	(17.312)	(15.566)	(13.089)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.351	0.402	0.352	0.408	0.449	0.482
Panel	C: Fed Ka	nsas City F	inancial Stre	ess Index (K	CFSI)	
$Gfcy \times L.PolTie$	-6.059***	-5.657***	-12.095***	-11.545***	-0.705	-1.124
	(1.601)	(1.625)	(2.114)	(2.380)	(4.788)	(5.085)
L.PolTie	-5.424	-4.977	1.568	6.413	-0.463	-9.810
	(4.800)	(3.490)	(7.957)	(6.376)	(11.397)	(8.715)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.354	0.405	0.361	0.418	0.449	0.482
Panel D:	Fed Chicag	o National I	Financial Co	ndition Inde	ex (NFCI)	
$Gfcy \times L.PolTie$	-5.445***	-4.765***	-12.636***	-11.151***	0.313	-0.603
	(1.625)	(1.642)	(2.457)	(2.641)	(4.464)	(4.742)
L.PolTie	-10.898**	-10.042***	-9.600	-3.739	-0.226	-10.418
	(4.780)	(3.544)	(7.585)	(5.960)	(13.752)	(12.438)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.352	0.402	0.364	0.417	0.449	0.482
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The measure for the GFCy changes across the panels and is indicated in the panel heading. The reported regression results alternate between without and with additional controls in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table 12: Robustness: US Financial Conditions Arising from Risk, Credit, and Leverage

	Full S	Sample	Non-0	DECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
FCI -Risk \times L.PolTie	7.618*	7.916*	-36.661**	-31.368**	20.041	18.931
	(4.248)	(4.201)	(14.082)	(12.952)	(12.519)	(13.113)
FCI-Credit × L.PolTie	-12.351***	-12.942***	22.193*	16.940	-18.820	-16.906
	(3.890)	(3.775)	(11.809)	(11.762)	(13.402)	(13.937)
FCI-Leverage \times L.PolTie	-2.531	-1.424	4.074	5.161	-3.228	-5.004
	(2.570)	(2.791)	(6.407)	(6.127)	(5.588)	(4.693)
L.PolTie	1.808	2.728	-33.951**	-24.448*	21.034**	10.471
	(5.785)	(5.032)	(14.863)	(13.888)	(7.709)	(13.731)
Observations	1292	1292	586	586	706	706
Adjusted R-Square	0.355	0.406	0.374	0.422	0.453	0.484
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The measure for the GFCy are the three components of the NFCI relating to risk, credit, and leverage. The reported regression results alternate between without and with additional controls in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

In the third set of robustness exercises, we verify the robustness of our findings across different time periods. Recent research suggests that global push factors became less significant after the global financial crisis (Fratzscher 2012, Forbes and Warnock 2021). We also find that stock return sensitivities to the GFCy have declined after the global financial crisis in our sample.²⁴ With this in mind, we repeat the baseline regressions for sub-samples of the data before and after the global financial crisis. The results are reported in Table 13. We find that the amplifying effect of political ties with the US on sensitivities of stock returns to the GFCy remains significant in both sample periods and that the magnitudes of the estimated effects are in most cases slightly lower after the global financial crisis.

Fourth, we mitigate the concern that the findings on political ties are confounded by other macroeconomic conditions or policy interventions. For instance, Batini and Durand (2021) show that capital controls and macroprudential policy can dampen sensitivities to

²⁴Results are reported in the appendix Table A1.

the global financial cycle. Specifically, we show that political ties with the US still matter for sensitivities of stock returns to the global financial cycle even after augmenting the baseline specification by including interaction terms between global financial conditions and each of the control variables. We are essentially running a horse race between the political ties measure and the other control variables. To ease the interpretation of the relative magnitudes in this specification, we standardize each control variable by subtracting the mean and dividing by the standard deviation.

Table 13: Robustness: Before and After the Global Financial Crisis

	Full S	Sample	Non-C	DECD	OECD		
	(1)	(2)	(3)	(4)	(5)	(6)	
GFCy:	VIX	EBP	VIX	EBP	VIX	EBP	

Panel A: Before the Global Financial Crisis

${\rm GFCy} \times {\rm L.PolTie}$	-4.115*	-6.387***	-14.366***	-9.430***	3.889	-0.840
	(2.288)	(1.776)	(4.164)	(2.967)	(3.902)	(4.284)
L.PolTie	4.495	-6.096	61.631***	12.993	-32.443**	-18.776*
	(10.870)	(5.004)	(18.677)	(9.232)	(12.085)	(9.517)
Observations	758	758	342	342	416	416
Adjusted R-Square	0.393	0.403	0.389	0.380	0.533	0.532

Panel B: After the Global Financial Crisis

GFCy \times L.PolTie	-3.948**	-3.575	-9.424**	-11.151*	-2.742	-3.649
	(1.847)	(2.462)	(4.476)	(5.795)	(5.097)	(6.075)
L.PolTie	5.547	-5.944	16.258	-10.282	4.771	-3.290
	(7.868)	(5.581)	(15.128)	(8.580)	(15.214)	(8.824)
Observations	534	534	244	244	290	290
Adjusted R-Square	0.500	0.498	0.538	0.537	0.479	0.479
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The measure for the GFCy alternate between the VIX and the EBP in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table 14 shows the horse race results. We also include the political ties with the EU and China in this horse race in the even columns. For non-OECD countries, columns

(5)-(8) show that the role of political ties with the US remains and it is one of only three factors that are statistically significant when interacted with the two GFCy measures. The other two factors are capital account openness, which also significantly increases the transmission of global financial conditions, and exchange rate stability, which tends to reduce the transmission. Based on estimates shown in columns (5) and (7), when it comes to reinforcing the correlation between a country's stock market returns and the global financial cycle, the magnitude of the effect of strengthening political ties with the US is just as significant, if not more so, than the effect of liberalizing a country's capital account or increasing exchange rate flexibility. Trade openness appears to reduce the transmission, but the effect is only marginally significant.

Similar to our baseline analysis, we also observe that there are no statistically significant effects of the interaction between political ties with the US and the GFCy measures for OECD countries. For the other control variables, having a fixed exchange rate regime and high foreign reserves tend to amplify the spillover effects of the EBP, and stronger de facto financial integration is associated with more pronounced transmission from the VIX.

Within the same framework, we can also compare the role of political ties with other economic and financial ties with the US. For this purpose, we include as additional regressors in the specification, the interaction term between the GFCy measures and a country's trade, financial portfolio, and direct investment linkage with the US. This allows us to determine if the findings on political ties remain even after including these economic ties measures. Specifically, we define trade linkage as the sum of bilateral exports and imports, financial linkage as the sum of holdings of US portfolio and domestic assets held by US residents, and direct investment linkage as the sum of FDI and ODI with the US. All these are normalized by the respective country's GDP and standardized to ease the interpretation of the magnitudes. However, the sample size is notably reduced by nearly half due to the limited data availability on linkage measures. The results indicate that countries with lower trade connections but higher direct investment links to the US have

a significantly stronger global financial transmission. Moreover, the significant influence of political ties remains even after controlling for these bilateral linkages as additional interaction terms. We report the results of this additional horse race in the appendix Tables A15 and A16.

Table 14: Robustness: Horse Race with Non-Political Ties Variables

	Full Sample					Non-	OECD		OECD			
Gfcy:	V	IX	El	BP	V	IX	EBP		VIX		EBP	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Gfcy \times L.PolTie with US	-2.644**	-3.314	-2.338**	-1.753	-3.729***	-13.150**	-2.791**	-11.081**	-1.703	7.713	-0.512	6.647
	(1.069)	(3.400)	(0.935)	(3.480)	(1.073)	(5.572)	(1.095)	(4.521)	(1.626)	(10.037)	(1.446)	(6.627)
Gfcy \times L. PolTie with EU		-0.983		-0.952		5.792		8.294*		-0.348		0.074
		(1.113)		(0.961)		(5.725)		(4.632)		(2.463)		(1.668)
Gfcy \times L.PolTie with China		-2.738		-1.645		-3.606		0.618		7.599		5.767
		(2.612)		(2.665)		(3.476)		(4.205)		(8.440)		(5.646)
$Gfcy \times L.GDP$ Growth	-0.798	-0.800	-2.045	-0.807	-0.364	1.614	-2.289	-1.507	-1.718	-4.261	-0.091	1.645
	(1.498)	(2.271)	(1.542)	(1.719)	(2.308)	(2.573)	(1.707)	(2.455)	(2.410)	(3.298)	(3.129)	(5.192)
$Gfcy \times L.Inflation$	-39.305	16.898	-10.248	6.985	-57.610	-71.576	75.805	71.027	-23.953	107.449	-49.711	-5.582
	(55.150)	(60.343)	(72.858)	(79.901)	(54.181)	(59.306)	(78.667)	(88.544)	(82.370)	(110.492)	(88.803)	(120.152)
$Gfcy \times L.Appreciation$	2.415	3.718	1.899	2.537	1.596	0.899	-0.043	-1.012	1.096	6.424	1.087	3.887
	(2.424)	(2.676)	(2.364)	(2.525)	(2.436)	(2.744)	(2.075)	(2.822)	(3.750)	(4.793)	(3.356)	(4.343)
$Gfcy \times L.Peg$	-0.837	-0.785	-3.302***	-2.287	-1.767	-1.056	-2.611*	-1.959	-0.073	-3.070	-5.621**	-7.728*
	(1.217)	(1.476)	(1.195)	(1.580)	(1.262)	(1.450)	(1.420)	(1.914)	(2.419)	(5.121)	(2.195)	(3.855)
$Gfcy \times L.Exchange Rate Stability$	0.046	1.051	2.782**	3.023	4.205**	3.561*	4.957**	4.453	-2.985	-14.849*	3.167	4.838
	(1.385)	(2.072)	(1.325)	(2.169)	(1.700)	(2.047)	(1.825)	(2.869)	(2.335)	(7.499)	(2.043)	(6.717)
Gfcy \times L.Monetary Policy Independence	-0.452	-0.385	-0.088	0.195	0.517	0.572	0.108	0.082	-1.538*	0.454	-0.482	0.706
	(0.623)	(0.672)	(0.458)	(0.682)	(0.921)	(0.905)	(0.989)	(1.140)	(0.860)	(1.440)	(0.478)	(1.534)
Gfcy × L.Capital Account Openness	0.792	0.476	-1.045	-0.296	-2.073**	-1.537	-3.272***	-2.927**	4.557^{*}	5.711**	1.601	3.532
	(1.212)	(1.280)	(1.035)	(1.208)	(0.994)	(1.167)	(0.954)	(1.393)	(2.255)	(2.476)	(2.284)	(2.448)
Gfcy × L.Financial Integration	-26.780	-148.800	-43.920*	-119.017	-28.062	-84.414	-12.564	-99.667***	-48.204	-255.312**	-71.604**	-127.993
	(25.246)	(92.927)	(25.545)	(73.361)	(23.595)	(68.498)	(20.767)	(34.474)	(31.977)	(114.418)	(27.569)	(80.134)
Gfcy \times L.Trade Openness	0.082	3.301	2.629**	5.110***	1.877	2.533	2.391*	3.527*	0.009	14.941**	1.992	5.925*
	(1.243)	(1.980)	(1.143)	(1.492)	(1.238)	(2.414)	(1.218)	(1.910)	(1.704)	(5.304)	(1.329)	(3.282)
Gfcy × L.Macro Prudential Policy	0.100	0.663	0.364	1.215	-0.840	-0.091	-0.889	-0.497	1.784	2.373	4.407	4.044
	(0.924)	(1.167)	(0.891)	(1.280)	(0.718)	(1.034)	(0.524)	(1.028)	(2.244)	(2.495)	(2.647)	(4.076)
$Gfcy \times L.Foreign Reserve$	0.031	-1.248	-4.364**	-6.217**	-1.895	-1.142	-1.540	-0.424	1.988	1.140	-7.581*	-7.604*
	(2.541)	(2.640)	(2.152)	(2.371)	(2.795)	(4.126)	(2.417)	(4.051)	(3.878)	(4.028)	(3.910)	(3.753)
Observations	1292	806	1292	806	586	504	586	504	706	302	706	302
Adjusted R-Square	0.410	0.422	0.413	0.421	0.427	0.418	0.422	0.417	0.514	0.506	0.516	0.494
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between not including and including political ties measures with the EU and China as additional interaction variables with the GFCy for odd and even columns respectively. The first four columns report results using the full sample with the first two columns using the VIX as the GFCy measure and the last two columns using the EBP. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Furthermore, we conduct additional robustness analysis on the effects of political ties with the US after controlling for institutional quality measures which are also interacted with global financial cycle variables. Studies suggest that institutional quality is an important driver of financial flows and plays a crucial role in buffering the effects of the global financial cycle on financial markets in emerging market economies (Papaioannou

2009, Ferrero et al. 2022). To account for this, we use institutional quality measures from the World Bank Worldwide Governance Indicators (WGI) database covering six dimensions of institutional quality such as political stability, rule of law, government effectiveness, corruption control, regulatory quality, and voice and accountability. We report results which include the rule of law measure interacted with the GFCy in Table 15 and leave the results using the other five measures as well as all six measures together in appendix Tables A9-A14. These regressions have fewer observations because of the limited data available for the institutional quality measures. Consistent with the literature, we find that the rule of law is significantly associated with a reduced transmission from the EBP to developing countries (significantly positive coefficient of the interaction term in column (8)). More importantly, the coefficient on the interaction of the GFCy with US political ties still remains significantly negative.

Table 15: Robustness: Inclusion of Interaction with Institutional Quality

		Full S	Sample			Non-C	DECD		OECD				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
VIX × L.PolTie		-7.471***				-14.037***				0.736			
		(2.424)				(2.486)				(7.390)			
VIX \times L. Rule of Law	-1.033	1.153			1.048	2.238			-1.515	-1.594			
	(0.965)	(1.308)			(1.143)	(1.455)			(1.823)	(2.528)			
EBP \times L.PolTie				-7.744***				-12.519***				1.506	
				(2.202)				(2.275)				(6.315)	
EBP \times L. Rule of Law			-0.567	1.746			2.474**	3.391**			-0.948	-1.116	
			(1.042)	(1.334)			(1.036)	(1.225)			(1.614)	(2.155)	
L.PolTie		21.159**		-2.203		44.446***		-0.863		-8.697		-6.405	
		(8.789)		(5.118)		(11.687)		(6.717)		(18.848)		(10.672)	
L.Rule of Law	-3.449	-11.515*	-6.916	-7.584*	-14.388*	-20.296**	-11.151*	-12.486**	7.922	7.738	3.422	2.945	
	(5.090)	(5.897)	(4.259)	(4.401)	(7.281)	(8.986)	(6.137)	(5.594)	(4.758)	(7.707)	(3.980)	(3.832)	
Observations	967	967	967	967	446	446	446	446	521	521	521	521	
Adjusted R-Square	0.447	0.457	0.446	0.458	0.417	0.455	0.422	0.455	0.526	0.525	0.525	0.524	
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The regression specification alternates between not including and including the interaction of US political ties with the GFCy in odd and even columns respectively. The measure for the GFCy alternates between the VIX and the EBP over pairs of columns. The first four columns use the full sample, the next four columns restrict the sample to non-OECD member countries, and the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Lastly, and in the same vein, we examine the robustness of our findings by taking into account the impact of the ideological differences between a country and the US. For

instance, Kempf et al. (2023) show that the further a country's ideology is from that of the US, the lower the investment allocation between the two. Following Kempf et al. (2023), we acquire the left-right ideological scores of the winning party or the party with the highest vote share in elections using the Manifesto database. Then, we calculate the absolute difference between this score for a country and the score for the US. If a country is not holding elections in a particular year, we use the ideological distance from the latest election year. Using this measure, we add an additional interaction term between ideological distance and the global financial cycle and test whether the effect of the interaction term between US political ties and global financial conditions remains significant. The results presented in Table 16 indicate that ideological distance does not have significant effects on the spillover from the GFCy to stock returns. Moreover, the inclusion of this additional interaction term does not weaken the role of US political ties in amplifying such spillovers.

Table 16: Robustness: Inclusion of Interaction with Ideological Distance

	Full Sample					Non-	OECD		OECD				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
$VIX \times L.PolTie$		-4.549*				-13.272***				1.054			
		(2.540)				(3.796)				(4.578)			
VIX \times L.Ideology Distance	0.059	0.030			0.076	-0.017			0.083	0.083			
	(0.064)	(0.067)			(0.115)	(0.109)			(0.064)	(0.067)			
EBP \times L.PolTie				-4.539*				-10.533***				-0.427	
				(2.338)				(3.957)				(4.372)	
EBP \times L. Ideology Distance			0.041	0.004			0.001	-0.068			0.041	0.036	
			(0.068)	(0.070)			(0.086)	(0.100)			(0.069)	(0.071)	
L.PolTie		3.058		-10.691**		36.650**		-2.867		-13.134		-9.380	
		(8.978)		(5.226)		(16.763)		(13.737)		(11.085)		(8.339)	
L.Ideology Distance	-0.195	-0.116	-0.007	-0.012	-0.261	0.055	0.008	0.018	-0.292	-0.288	-0.035	-0.031	
	(0.203)	(0.206)	(0.052)	(0.051)	(0.426)	(0.418)	(0.098)	(0.147)	(0.201)	(0.208)	(0.046)	(0.046)	
Observations	906	906	906	906	200	200	200	200	705	705	705	705	
Adjusted R-Square	0.436	0.440	0.435	0.440	0.493	0.519	0.492	0.509	0.482	0.482	0.481	0.480	
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The regression specification alternates between not including and including the interaction of US political ties with the GFCy in odd and even columns respectively. The measure for the GFCy alternates between the VIX and the EBP over pairs of columns. The first four columns use the full sample, the next four columns restrict the sample to non-OECD member countries, and the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

3.4 Addressing Endogeneity Concerns

Although we have lagged the US political ties measure in our baseline specification and included a comprehensive set of control variables, the issue of potential omitted confounding factors and the endogeneity of the political ties measure remains. To help address these concerns, in this section we enhance our identification strategy by adopting instrumental variables regressions and propensity score matching.

First, we utilize a shift-share instrumental variable (IV) strategy (Goldsmith-Pinkham et al. 2020). Following similar approaches in Nunn and Qian (2014) and Temple and Van de Sijpe (2017), we construct our instrument by taking the product of country averages of (lagged) US political ties and the time average of (lagged) US political ties. The first component is country-specific and captures the propensity of a given country to positively engage in political ties with the US. The second term in the product relates to time-variation in the US' inclination to reach out and forge closer political ties with other countries. To further enhance the exogeneity of the time-variation component to our instrument, we interact the time average of political ties with the US with an indicator for when the US president is in his second term. Studies such as Lebovic (2018) and Malis and Smith (2021) show that there is a shift in the priorities of US Presidents and administrations between their first and second terms. These studies indicate that there is a pivot in foreign policy where diplomacy takes a backseat and strategic interests become predominant in the second term of US presidencies. Further, to instrument the interaction between political ties and the GFCy, we interact our shift-share instrument with monetary policy shocks from Aruoba and Drechsel (2023) who take a natural language processing approach on Federal Reserve staff preparatory documents to obtain US monetary policy shocks. The literature has shown that US monetary policy plays an important role in shaping the global financial cycle. Formally, our shift-share instrument is constructed as follows:

Shift-share
$$Inst_{ct} = (\sum_{t} PolTie_{c,t-1}) \times (\sum_{c} PolTie_{c,t-1}) \times I[SecondTerm]_{t}$$

$$= \overline{PolTie}_{c} \times \overline{PolTie}_{t} \times I[SecondTerm]_{t}$$
(4)

where $I[SecondTerm]_t$ is the indicator for second term US presidencies. By taking averages, both over time for each country and across countries for the time average, we have two components that are plausibly exogenous. Taking advantage of the fact that our regression specifications have country and year fixed effects, the country averages are exogenous to changes in economic conditions in each country and its economic relations with the US. Similarly, the time average is exogenous to country-specific variations in other factors which may jointly influence stock returns and political ties with the US. The inclusion of a dummy for second-term US presidencies further enhances the exogeneity of the time average to global time-varying factors. The idea here is that the product of these two averages (along with the indicator) represents the plausibly exogenous country-time variation in political ties with the US. Results from the IV regressions are reported in Table 17.

We find that our coefficient of interest remains statistically significant and negative for the non-OECD sample. We also report the Kleibergen-Paap F statistic as an indicator for weak instruments as well as the Anderson-Rubin weak instrument robust inference statistics and the 90% weak instrument robust confidence interval.²⁵ We also consider an alternative but plausibly more exogenous shift-share instrument following Eichengreen et al. (2019). In the alternative instrument we use the average diplomatic exchange between the US and other countries over the period 1966-1981 from the correlates of War dataset (Bayer 2006) instead of country average US political ties. The diplomatic exchange variable is then similarly multiplied by the time average political ties with the US and the indicator for second-term US presidencies. The results are reported in Table

²⁵We also include the Sanderson-Windmeijer (SW) F statistics for each of the endogenous variables as well as the Kleibergen-Paap test statistic for under-identification.

A17 in the appendix where we still find statistically significant and negative coefficients although the first-stage results indicate that the instruments are much weaker.

Table 17: Instrumental Variable Approach

	Pε	anel A: Second S	Stage Results			
	F	`ull	Non-	OECD	OE	CCD
Dep. var.: Stock Return	(1) VIX	(2) EBP	(3) VIX	(4) EBP	(5) VIX	(6) EBP
L.PolTie with US × GFCy	3.776	7.268	-24.772*	-45.571*	7.850	11.021
	(6.871)	(13.435)	(13.657)	(25.884)	(18.680)	(26.112)
L.PolTie with US	-81.940***	-74.965***	90.745	33.362	-69.509***	-46.896
	(30.016)	(24.383)	(78.367)	(57.259)	(13.568)	(51.791)
		Test of weak in	struments	, ,	, ,	
Kleibergen-Paap F statistic	43.795	82.957	17.602	9.803	18.694	5.612
L. PolTie SW F statistic	104.915	88.222	53.151	39.210	1589.803	83.392
$L.PolTie \times GFCy SW F statistic$	339.404	125.505	190.099	27.950	42.230	19.169
·		Test of underident	entification			
Kleibergen-Paap LM statistic	23.031	27.142	11.359	9.822	5.533	4.917
Kleibergen-Paap LM p-value	0.000	0.000	0.001	0.002	0.019	0.027
0 1 1	Wea	ak instrument ro	bust inference	·		
Anderson-Rubin Chi2 statistic	9.386	9.386	2.383	2.383	5.151	5.151
Anderson-Rubin Chi2 p-value	0.009	0.009	0.304	0.304	0.076	0.076
L.PolTie × GFCy 90% CI	[-9.41,16.96]	[-18.51,33.05]	[-50.98,1.44]	[-95.24,4.10]	[-28.00,43.70]	[-39.09,61.13
	Panel B: L.F	PolTie with US	First Stage Co	oefficients		
Shift-share Inst. \times MP shock	-0.303***	-0.303***	-0.468***	-0.468***	-0.057	-0.057
	(0.051)	(0.051)	(0.074)	(0.074)	(0.118)	(0.118)
Shift-share Instrument	-0.650***	-0.650***	-0.644**	-0.644**	-1.437***	-1.437***
	(0.180)	(0.180)	(0.293)	(0.293)	(0.241)	(0.241)
Pa	nel C: L.PolTi	e with US × G	FCy First Stag	ge Coefficients		
Shift-share Inst. × MP shock	-1.920***	-0.707***	-2.422***	-0.727***	-1.247***	-0.771***
	(0.177)	(0.064)	(0.329)	(0.157)	(0.429)	(0.140)
Shift-share Instrument	1.028	1.158***	1.049	1.381***	-1.798*	1.668***
	(0.722)	(0.177)	(1.235)	(0.347)	(0.943)	(0.238)
Observations	705	705	317	317	388	388
Adjusted R-squared	-0.140	-0.196	-0.092	-0.387	0.019	-0.009
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The shift-share instrument is constructed by taking the product of country average lagged political ties with the US with the time average of lagged political ties with the US and the indicator for second term US presidencies. Panel A reports the second stage results where the dependent variable is stock returns. Panels B and C report the first stage results for lagged political ties and lagged political ties interacted with the GFCy respectively. The regression specification alternates between the VIX and the EBP as measures of the GFCy in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

As a second exercise to establish causal effects, we conduct propensity score matching. We define a dummy variable indicating whether a country's political tie with the US is above the median (high) and then conduct a propensity score matching (PSM) exercise to identify countries that closely resemble the country in other aspects. With these matched units, we proceed to estimate the following specification:

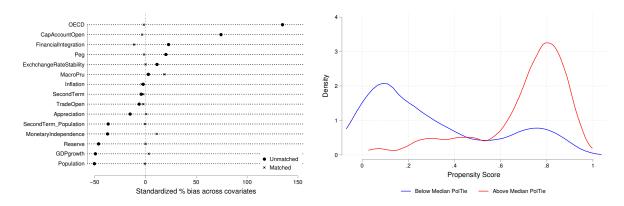
$$Return_{ct} = \beta_1' D(HPolTie)_{ct-1} + \beta_2' Gfcy_t \times D(HPolTie)_{ct-1} + \Gamma' Control_{ct-1} + \delta_c' + \theta_t' + \epsilon_{ct}'$$
(5)

where D(HPolTie) is the dummy variable indicating whether country c's political ties with the US are above the median in year t-1. In this way, we compare the strength of the effects of the global financial cycle on stock returns for two countries whose primary distinction is in their US political ties. This helps mitigate concerns that countries with different US political ties are fundamentally different.

Specifically, we first adopt a logit model, regressing D(HPolTie) on the indicator for OECD member countries, an interaction term between the indicator for second-term US presidencies and the population to capture US foreign interests according to country size, and the array of control variables from the baseline specification. Subsequently, we apply kernel matching to find the matched units. The results from the logit regression are reported in the appendix in Table A18. To evaluate the matching performance, we use the covariate imbalance test to compare the matched and unmatched units and assess the propensity score distributions for the groups with high and low political ties, as shown in Figure 6. It shows that the standardized percentage biases are obviously smaller in the matched units relative to the unmatched ones, and the propensity score distributions skew right-tailed for countries with high political ties and left-tailed for those with low political ties, suggesting common support and good performance.

Then, we use the matched units to estimate Equation (5) and present the results in Table 18, where estimates using the raw sample are also reported. We observe that the spillover of the global financial cycle on stock returns – be it represented by the VIX or

the EBP – is significantly stronger in developing countries when their political ties with the US are high, particularly for the matched sample.



- (a) Covariate Imbalance Test
- (b) Kernel Density of Propensity Scores

Figure 6: Propensity Score Matching Performance

Notes: The figure plots indicators regarding the performance of propensity score matching. The left panel reports the standardized bias on the horizontal axis for observations below against above the median US political ties in terms of a set of covariates listed on the vertical axis for the unmatched sample (circle) and after matching (cross). The right panel reports the estimated density of propensity scores for observations below (blue) and above (red) the median in terms of US political ties.

Table 18: Results from Matching Exercises

		Full	Sample			Non-C	DECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Raw	Matching	Raw	Matching	Raw	Matching	Raw	Matching	Raw	Matching	Raw	Matching
$VIX \times D(High PolTie)$	-1.627	2.022			-5.197*	-7.536**			0.913	2.874		
	(1.161)	(2.509)			(2.777)	(2.813)			(2.265)	(3.203)		
$EBP \times D(High\ PolTie)$			-3.233***	0.185			-2.511	-6.421**			0.279	1.478
			(1.206)	(2.205)			(1.859)	(2.434)			(1.868)	(2.695)
D(High PolTie)	6.000	-6.822	1.251	0.280	19.919**	25.218**	2.774	0.997	-6.656	-10.088	-3.469	-0.327
	(4.683)	(7.961)	(2.198)	(2.024)	(9.481)	(9.518)	(3.388)	(3.893)	(7.489)	(10.203)	(2.849)	(2.312)
Observations	1282	1282	1282	1282	586	586	586	586	696	696	696	696
Adjusted R-Square	0.391	0.474	0.394	0.473	0.400	0.533	0.396	0.529	0.475	0.490	0.475	0.489
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The regression specification alternates between the unmatched and matched samples in odd and even columns respectively. The measure for the GFCy alternates between the VIX and the EBP over pairs of columns. The first four columns use the full sample, the next four columns restrict the sample to non-OECD member countries, and the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

To sum up, our application of the instrumental variable approach and propensity score matching exercises indicate that our estimated amplifying effect of US political ties on the sensitivities of stock returns in developing countries to the GFCy is robust to concerns regarding the endogeneity of political ties with the US. These methods strengthen the causal interpretation of our main findings that stronger political ties with the US amplify the response of stock returns to global financial conditions.

4 Channels

In this section, we consider the plausibility of three channels through which stronger political ties with the US may lead stock returns in foreign countries to be more sensitive to the GFCy. First, we consider deepening trade and financial integration – globalization – as a channel through which stronger political ties with the US could induce stronger co-movement in stock returns. Second, we explore an information channel whereby increased political ties with the US could reduce information asymmetry constraints to global financial flows. Third, we examine whether stronger political ties with the US could potentially affect global investor sentiment and views about foreign country fundamentals. Given that the results reported in the previous section demonstrate that the effects of US political ties with the US on stock return sensitivities to the GFCy are present largely only for developing economies, this section will focus on the sample of developing, i.e., non-OECD member, countries.

4.1 Increased Globalization

We first investigate whether political ties with the US have an impact on a country's overall financial and trade openness. For financial globalization, we use both *de jure* and *de facto* financial integration measures. The former is the KAOPEN index by Chinn and Ito (2008) and measures the policy stance towards opening capital accounts and the latter is the ratio of the sum of external assets and liabilities to GDP as in Lane and Milesi-Ferretti (2007). For trade globalization, we use the ratio of total exports and imports to GDP. We use the change in these variables as the dependent variable and regress them on our measure of political ties. As the level of these variables is also included as control

variables in the regression, we report the results without any other control variables as well.

Table 19 reports the results from these regressions. We find that stronger political ties with US in the previous year are significantly associated with stronger de facto financial linkages with the rest of the world. Moreover, the magnitude of the effects is large. A one standard deviation increase in a developing country's political ties with US is associated with an enlarged external financial exposures by 40% to 48% of the country's GDP, which would consequently imply a stronger co-movement of stock returns with global financial conditions. On the other hand, the impact of US political ties on de jure financial liberalization policy and trade are not similarly significant.

Table 19: Channel: Financial and Trade Integration

	De Jure	FinLib	De Fact	o FinLib	Trad	leLib
	(1)	(2)	(3)	(4)	(5)	(6)
L.Political Tie	-0.005	0.003	1.335**	1.103**	0.034	0.033*
	(0.029)	(0.026)	(0.573)	(0.508)	(0.020)	(0.019)
Observations	586	586	586	586	586	586
Adjusted R-Square	0.023	0.138	0.066	0.148	0.178	0.244
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are measures of de jure financial liberalization in columns 1 and 2, de facto financial liberalization in columns 3 and 4, and trade liberalization in columns 5 and 6. The regression specification alternates between without and with additional controls in odd and even columns respectively. All columns use the sample restricted to non-OECD member countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

4.2 Reduced Information Asymmetry

Information asymmetry is well documented in the literature as an important determinant of capital flows (Portes et al. 2001, Portes and Rey 2005, Van Nieuwerburgh and Veld-kamp 2009). In this regard, geographical distance is a widely used proxy for information asymmetry and has been shown to negatively affect bilateral financial flows. To test whether political ties with the US serve as a means to reduce information asymmetry,

we examine how US political ties could potentially alter the role of geographical distance in decreasing financial transactions in terms of bilateral portfolio holdings and direct investment with the US.

Specifically, we regress cross-holdings of securities and direct investments between the US and other countries on their political ties with US and an interaction term between US political ties and geographical distance. The geographical distance variable on its own is absorbed by country fixed effects. If the coefficient on the interaction term between US political ties and distance is significantly positive, it implies that political ties with the US are potentially mitigating information asymmetry issues in cross-border financial transactions.

We take (logarithms of) geographical distance data from the CEPII GeoDist database and obtain portfolio holdings of US securities (US liabilities) by foreigners and US residents' portfolio holdings of foreign securities (US assets) from the Department of the Treasury. These portfolio holdings are also broken down into its equity and debt components. In addition, we also collect data on bilateral foreign direct investment (FDI) positions in the US and the US' direct investments in foreign countries from the Bureau of Economic Analysis. All of these variables are expressed in proportion to the country's GDP. The results from regressions with these as dependent variables are reported in Table 20.

Focusing first on the results regarding bilateral securities holdings reported in columns 1-7 of Table 20, we find that stronger US political ties mitigate the negative effects of distance on total securities holdings. When broken down into directional sub-components (columns 2-7), we find that the effect is driven by the reduced effect of distance on foreign holdings of US debt (column 4) and US holdings of foreign equity (column 6).²⁶ Next, we turn to the results regarding bilateral direct investment flows reported in columns 8-10

²⁶We also find evidence using alternative data on bilateral equity holdings from Maggiori et al. (2020) and Coppola et al. (2021), which also includes equity holdings of other non-US investors (Australia, Canada, United Kingdom, Switzerland, Denmark, Norway, Sweden, and Euro area countries), and find that the mitigating effect of US political ties on distance is only statistically significant for US investor equity holdings in non-OECD countries. The results are reported in appendix Table A19.

of Table 20. Again we find that political ties with the US mitigate the dampening effect of distance on FDI and that this result is driven by the reduced effect of distance on FDI flows from the US to foreign countries.

Table 20: Channel: Bilateral Securities Holdings and FDI with the US

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Total		Foreign Hold V	US		US Hold Forei	gn	Total	To US	From US
	Sec	Sec	Sec: Equity	Sec: Debt	Sec	Sec: Equity	Sec: Debt	FDI	FDI	FDI
L.PolTie	-47.096**	-32.994	-5.705	-27.321**	-14.102*	-18.454***	4.314	-35.420**	-0.773	-34.648***
	(22.272)	(22.151)	(15.542)	(12.531)	(7.228)	(6.165)	(6.964)	(12.903)	(3.304)	(11.677)
L.PolTie \times Distance	5.612**	4.207	1.189	3.022**	1.404*	1.904***	-0.495	3.784**	0.148	3.636**
	(2.698)	(2.680)	(1.868)	(1.451)	(0.794)	(0.673)	(0.753)	(1.418)	(0.309)	(1.306)
Observations	374	374	374	374	374	374	374	400	400	400
Adjusted R-Square	0.877	0.856	0.817	0.863	0.894	0.891	0.634	0.895	0.660	0.874
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are indicated in the column headers. All columns use the sample restricted to non-OECD member countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

As an alternative way to establish the plausibility of an information asymmetry channel, we also verify whether news coverage of foreign firms co-varies with countries' political ties with the US and the GFCy. Hirshleifer and Sheng (2022) use news reports from the RavenPack database to show that macroeconomic news is complementary to firm news and that investor sensitivity to firm news increases on macroeconomic news days. We collect data on news coverage of foreign firms from RavenPack classifying reports into factual, forecast, and opinion pieces. We take the sum total (in thousands) of reports for firms in foreign countries for each year and each category and regress these news coverage variables on our measure of political ties with the US and the interaction of political ties with the US and the GFCy. The results are reported in Table 21.

We find that news coverage of firms in foreign countries with strong US political ties tends to be lower on average but that news coverage also disproportionally increases with the global financial cycle. That is, the worse global financial conditions are, the more news coverage there seems to be for firms in countries with strong political ties with the US. This holds especially true for factual reports and forecasts. Taken together with the previous results, these suggest that reducing information asymmetry may be a plausible channel behind the amplifying effect of US political ties on the sensitivities of stock returns to the GFCy.

Table 21: Channel: Political Ties and News coverage

		Fact			Forecast			Opinion	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
L.PolTie	-40.769**	-91.834**	-46.555**	-2.384**	-4.813**	-2.711**	-1.069*	-2.184**	-1.150*
	(17.752)	(38.774)	(18.860)	(1.078)	(2.084)	(1.146)	(0.571)	(0.807)	(0.551)
${\rm L.PolTie} \times {\rm VIX}$		14.385*			0.689*			0.331**	
		(7.296)			(0.351)			(0.153)	
$\text{L.PolTie} \times \text{EBP}$			10.164*			0.589*			0.206
			(5.649)			(0.325)			(0.150)
Observations	451	451	451	430	430	430	411	411	411
Adjusted R-Square	0.646	0.659	0.653	0.664	0.674	0.672	0.398	0.401	0.398
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are news coverage of firms in foreign countries in terms of factual reports (columns 1-3), forecasts (columns 4-6), and opinion pieces (columns 7-9) as indicated in the column headers. All columns use the the sample restricted to non-OECD member countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

4.3 Amplified Sentiment Transmission

Lastly, we investigate whether stronger political ties with the US are associated with a stronger sentiment transmission of global financial conditions to stock returns of firms in foreign countries. For this purpose, we collect data on IMF forecasts of GDP growth rates and evaluate how these are affected by the GFCy and political ties with the US. Specifically, we take forecasts from the IMF World Economic Outlook report published in April every year where IMF economists provide forecasts of GDP growth rates for the current and following year. We take the difference between current-year forecasts made in the current year and calculate forecast revisions as the relative difference to the one-year ahead forecast made in the previous year (i.e., $f_{t+1}^{t+1} - f_t^{t+1}$). We use these forecast revisions as dependent variables and regress them on the lagged political ties and the interaction between political ties and the global financial cycle. The hypothesis is that worsening global financial conditions will be associated with more pessimistic forecasts of economic

growth and that this pessimistic view is amplified by stronger political ties with the US. In turn, such an amplification of sentiment in forecasts to the GFCy could transmit to or explain the increased sensitivity of domestic stock market returns to the GFCy. Table 22 reports the results from these regressions where we also include results with the level of forecasts as the dependent variable. We find that political ties with the US are indeed associated with a more pronounced transmission of global financial conditions to the economic forecasts by the IMF indicating an amplification of the perceived effects of the GFCy (i.e., sentiment) on economic activity in countries with strong US political ties.

Table 22: Channel: IMF GDP Growth Forecast

		Level			Revision	
	(1)	(2)	(3)	(4)	(5)	(6)
L.PolTie	0.420	2.598***	0.632	0.697	2.458***	0.884**
	(0.524)	(0.896)	(0.477)	(0.457)	(0.729)	(0.426)
$\text{L.PolTie} \times \text{VIX}$		-0.608**			-0.497***	
		(0.242)			(0.173)	
$\text{L.PolTie} \times \text{EBP}$			-0.396*			-0.344*
			(0.221)			(0.174)
Observations	474	474	474	453	453	453
Adjusted R-Square	0.585	0.591	0.587	0.403	0.410	0.406
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are IMF forecasts (columns 1-3) and forecast revisions (columns 4-6) of GDP growth rates as indicated in the column headers. All columns use the sample restricted to non-OECD member countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

As a complementary exercise to the sentiment amplification channel, we also take sentiment indicators based on textual analysis of news reports from the RavenPack database as dependent variables. We regress the average sentiment of news coverage (the average of event sentiment scores for reports classified in terms of factual reports, forecasts, and opinion pieces) on firms in foreign countries on political ties with the US and the interaction of political ties with the GFCy. The results from these regressions are reported in Table 23. We find no statistically significant effects for factual news coverage and opinion pieces. However, we do find that the sentiment on news coverage regarding forecasts for foreign firms is disproportionately more pessimistic for firms in countries with strong po-

litical ties with the US when global financial conditions worsen. This result is consistent with the IMF forecast revision results previously shown which indicate an amplification of negative sentiment associated with worsening global financial conditions.

Table 23: Channel: Sentiment

		Fact			Forecast			Opinion	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
L.PolTie	-0.043	-0.008	-0.040	-0.011	0.108*	0.003	0.129	0.088	0.135
	(0.048)	(0.057)	(0.047)	(0.039)	(0.061)	(0.040)	(0.107)	(0.107)	(0.107)
$\text{L.PolTie} \times \text{VIX}$		-0.010			-0.035***			0.012	
		(0.010)			(0.011)			(0.019)	
L.PolTie \times EBP			-0.008			-0.032**			-0.015
			(0.009)			(0.012)			(0.020)
Observations	406	406	406	406	406	406	406	406	406
Adjusted R-Square	0.604	0.604	0.603	0.248	0.257	0.256	0.552	0.551	0.551
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are sentiment indicators on news coverage of firms in foreign countries in terms of factual reports (columns 1-3), forecasts (columns 4-6), and opinion pieces (columns 7-9) as indicated in the column headers. All columns use the sample restricted to non-OECD member countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Summing up, we explore three potential channels driving the amplifying effect of US political ties on the sensitivities of stock returns to global financial conditions. Focusing on the sub-sample of developing countries, we find evidence suggestive of a *de facto* financial integration channel whereby stronger political ties with the US tend to increase the global financial connectedness of foreign countries. We also find evidence in support of an information asymmetry channel. In particular, we find that US political ties mitigate the negative effects of geographic distance on US investor holdings of foreign equity and US FDI. Further, news coverage on foreign firms tends to increase more for firms in countries with strong US political ties during periods of worsening global financial conditions. Finally, we find evidence in support of a sentiment amplification channel. Specifically, we find that stronger political ties with the US amplify the perceived negative effects of worsening global financial conditions on IMF forecasts and revisions as well as in forecasts for firms in news reports.

5 Conclusion

We show that stronger political ties with the US amplify the sensitivities of stock returns in developing countries around the world to the global financial cycle. We find that this amplification is unique to political ties with the US, is not a proxy for other factors, and is quite persistent. We explore several channels and find that a deepening of financial linkages, a reduction in information asymmetry, and sentiment amplification appear to be potentially important mechanisms behind our main result. These results add to the literature on the far-reaching effects of global political ties on global financial and economic outcomes and add new meaning to the phrase "when the US sneezes, the world catches a cold."

Our findings also have important policy implications as they identify geopolitical ties with the US as a relevant contributor to the synchronization of stock markets around the world. The relevance of our results is also enhanced given recent trends in geopolitical fragmentation risks. The role of US political ties in amplifying sensitivities to the global financial cycle may be predicated on the US' dominant position in the global geopolitical-economic sphere. Investigating how these results may be affected by worsening geopolitical fragmentation is an area for future research. Exploring the relationship between US political ties and the dominance of the US dollar as a global medium of exchange and dominant currency is also left for future work.

References

- Acemoglu, D., Johnson, S., Kermani, A., Kwak, J., and Mitton, T. (2016). The value of connections in turbulent times: Evidence from the United States. *Journal of Financial Economics*, 121(2):368–391.
- Aiyar, S., Malacrino, D., and Presbitero, A. (2023). Investing in friends: The role of geopolitical alignment in fdi flows. *CEPR Discussion Paper No. 18434*.
- Aizenman, J., Chinn, M. D., and Ito, H. (2008). Assessing the emerging global financial architecture: Measuring the trilemma's configurations over time. NBER Working Paper No.14533.
- Aizenman, J., Lindahl, R., Stenvall, D., and Uddin, G. S. (2023). Geopolitical shocks and commodity market dynamics: New evidence from the russian-ukraine conflict. *NBER Working Paper No.* 31950.
- Aleksanyan, M., Hao, Z., Vagenas-Nanos, E., and Verwijmeren, P. (2021). Do state visits affect cross-border mergers and acquisitions? *Journal of Corporate Finance*, 66.
- Alesina, A. and Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth*, 5(1):33–63.
- Alfaro, L. and Chor, D. (2023). Global supply chains: The looming "great reallocation".

 *NBER Working Paper No. 31661.
- Ambrocio, G. and Hasan, I. (2021). Quid pro quo? Political ties and sovereign borrowing.

 Journal of International Economics, 133.
- Aruoba, S. B. and Drechsel, T. (2023). Identifying monetary policy shocks: A natural language approach. *Working Paper*.
- Bailey, M. A., Strezhnev, A., and Voeten, E. (2017). Estimating dynamic state preferences from united nations voting data. *Journal of Conflict Resolution*, 61(2):430–456.

- Baker, S. R., Bloom, N., and Davis, S. J. (2016). Measuring economic policy uncertainty.

 The Quarterly Journal of Economics, 131(4):1593–1636.
- Barro, R. and Lee, J.-W. (2005). Imf programs: Who is chosen and what are the effects? Journal of Monetary Economics, 52(7):1245–1269.
- Batini, N. and Durand, L. (2021). Facing the global financial cycle: What role for policy responses. *IMF Working Paper No. 2021/034*.
- Bayer, R. (2006). Diplomatic exchange data set, v2006.1. Online: http://correlatesofwar.org.
- Bekaert, G., Harvey, C. R., Lundblad, C. T., and Siegel, S. (2014). Political risk spreads.

 Journal of International Business Studies, 45:471–493.
- Biguri, K. and Stahl, J. (2022). Who pays a visit to brussels? firm value effects of cross-border political access to European Commissioners. *Working Paper*.
- Boehm, C. and Kroner, N. (2023). The us, economic news, and the global financial cycle.

 *NBER Working Paper No. 30994.
- Caldara, D. and Iacoviello, M. (2022). Measuring geopolitical risk. *American Economic Review*, 112(4):1194–1225.
- Chinn, M. D. and Ito, H. (2008). A new measure of financial openness. *Journal of Comparative Policy Analysis*, 10(3):309–322.
- Clayton, C., Maggiori, M., and Schreger, J. (2023). A framework for geoeconomics.

 Working Paper.
- Cloyne, J., Ferreira, C., Froemel, M., and Surico, P. (2023). Monetary policy, corporate finance, and investment. *Journal of the European Economic Association*, forthcoming.
- Coppola, A., Maggiori, M., Neiman, B., and Schreger, J. (2021). Redrawing the map of global capital flows: The role of cross-border financing and tax havens. *The Quarterly Journal of Economics*, 136(3):1499–1556.

- di Giovanni, J., Kalemli-Ozcan, S., Ulu, M. F., and Baskaya, Y. S. (2022). International spillovers and local credit cycles. *The Review of Economic Studies*, 89(2):733–773.
- Durnev, A., Enikolopov, R., Petrova, M., and Santarosa, V. (2015). Politics, instability, and composition of international investment flows. *Journal of Corporate Finance*, 30:299–324.
- Eichengreen, B. (2023). International finance and geopolitics. *Asian Economic Policy Review*.
- Eichengreen, B., Mehl, A., and Chiţu, L. (2019). Mars or mercury? the geopolitics of international currency choice. *Economic Policy*, 34(98):315–363.
- Eichengreen, B., Mehl, A., and Chiţu, L. (2021). Mars or mercury redux: The geopolitics of bilateral trade agreements. *The World Economy*, 44(1):21–44.
- Engle, R. and Campos-Martins, S. (2023). What are the events that shake our world? measuring and hedging global covol. *Journal of Financial Economics*, 147(1):221–242.
- Faccio, M. (2006). Politically connected firms. American Economic Review, 96(1):369–386.
- Faye, M. and Niehaus, P. (2012). Political aid cycles. *American Economic Review*, 102(7):3516–3530.
- Ferrero, A., Habib, M. M., Stracca, L., and Venditti, F. (2022). Leaning against the global financial cycle. *ECB Working Paper No. 2022/2763*.
- Fink, A. and Stahl, J. (2020). The value of international political connections: Evidence from trump's 2016 surprise election. *Journal of Economic Behavior & Organization*, 176:691–700.
- Fisman, R. (2001). Estimating the value of political connections. *American Economic Review*, 91(4):1095–1102.
- Fisman, R., Knill, A., Mityakov, S., and Portnykh, M. (2022). Political beta. *Review of Finance*, 26(5):1179–1215.

- Forbes, K. J. and Warnock, F. E. (2021). Capital flow waves—or ripples? Extreme capital flow movements since the crisis. *Journal of International Money and Finance*, 116:102394.
- Fratzscher, M. (2012). Capital flows, push versus pull factors and the global financial crisis. *Journal of International Economics*, 88(2):341–356.
- Garmaise, M. and Natividad, G. (2013). Cheap credit, lending operations, and international politics: The case of global microfinance. *The Journal of Finance*, 68(4):1551–1576.
- Gilchrist, S., Wei, B., Yue, V. Z., and Zakrajšek, E. (2022). Sovereign risk and financial risk. *Journal of International Economics*, 136:103603.
- Gilchrist, S. and Zakrajšek, E. (2012). Credit spreads and business cycle fluctuations.

 American Economic Review, 102(4):1692–1720.
- Goldman, E., Rocholl, J., and So, J. (2009). Do politically connected boards affect fim value? The Review of Financial Studies, 22(6):2331–2360.
- Goldsmith-Pinkham, P., Sorkin, I., and Swift, H. (2020). Bartik instruments: What, when, why, and how. *American Economic Review*, 110(8):2586–2624.
- Hirshleifer, D. and Sheng, J. (2022). Macro news and micro news: Complements or substitutes? *Journal of Financial Economics*, 145(3):1006–1024.
- IMF (2023). Geopolitics and financial fragmentation: implications for macro-financial stability. *IMF Financial Stability Report*.
- Jordà, Ò. (2005). Estimation and inference of impulse responses by local projections.

 American Economic Review, 95(1):161–182.
- Kalemli-Özcan, S. (2019). U.s. monetary policy and international risk spillovers. *NBER Working Paper No. 26297*.
- Känzig, D. R. (2021). The macroeconomic effects of oil supply news: Evidence from opec announcements. *American Economic Review*, 111(4):1092–1125.

- Kempf, E., Luo, M., Schäfer, L., and Tsoutsoura, M. (2023). Political ideology and international capital allocation. *Journal of Financial Economics*, 148(2):150–173.
- Kim, S. Y. (2022). Global footprint of us fiscal policy. Working Paper.
- Knill, A., Lee, B.-S., and Mauck, N. (2012). Bilateral political relations and sovereign wealth fund investment. *Journal of Corporate Finance*, 18(1):108–123.
- Lane, P. R. and Milesi-Ferretti, G. M. (2007). The external wealth of nations mark ii: Revised and extended estimates of foreign assets and liabilities, 1970–2004. *Journal of International Economics*, 73(2):223–250.
- Lebovic, J. H. (2018). Security first?: The traveling us secretary of state in a second presidential term. *Presidential Studies Quarterly*, 48(2):292–317.
- Lebovic, J. H. and Saunders, E. N. (2016). The diplomatic core: The determinants of high-level us diplomatic visits, 1946–2010. *International Studies Quarterly*, 60(1):107–123.
- Maggiori, M., Neiman, B., and Schreger, J. (2020). International currencies and capital allocation. *Journal of Political Economy*, 128(6):2019–2066.
- Malis, M. and Smith, A. (2021). State visits and leader survival. *American Journal of Political Science*, 65(1):241–256.
- Miranda-Agrippino, S. and Rey, H. (2020). Us monetary policy and the global financial cycle. *The Review of Economic Studies*, 87(6):2754–2776.
- Miranda-Agrippino, S. and Rey, H. (2022). The global financial cycle. In Gopinath, G., Helpman, E., and Rogoff, K., editors, *Handbook of International Economics: International Macroeconomics*, volume 6, pages 1–43. Elsevier.
- Montiel Olea, J. L. and Plagborg-Møller, M. (2021). Local projection inference is simpler and more robust than you think. *Econometrica*, 89(4):1789–1823.
- Nunn, N. and Qian, N. (2014). Us food aid and civil conflict. *American Economic Review*, 104(6):1630–1666.

- Papaioannou, E. (2009). What drives international financial flows? Politics, institutions and other determinants. *Journal of Development Economics*, 88(2):269–281.
- Portes, R. and Rey, H. (2005). The determinants of cross-border equity flows. *Journal of International Economics*, 65(2):269–296.
- Portes, R., Rey, H., and Oh, Y. (2001). Information and capital flows: The determinants of transactions in financial assets. *European Economic Review*, 45(4-6):783–796.
- Qian, N. and Yanagizawa-Drott, D. (2017). Government distortion in independently owned media: Evidence from u.s. news coverage of human rights. *Journal of the European Economic Association*, 15(2):463–499.
- Rey, H. (2015). Dilemma not trilemma: the global financial cycle and monetary policy independence. *NBER Working Paper No. 21162*.
- Ruf, T., Song, J., and Zhang, B. (2021). Political relations and media coverage. Working Paper.
- Shambaugh, J. C. (2004). The effect of fixed exchange rates on monetary policy. *The Quarterly Journal of Economics*, 119(1):301–352.
- Signorino, C. S. and Ritter, J. M. (1999). Tau-b or not tau-b: Measuring the similarity of foreign policy positions. *International Studies Quarterly*, 43(1):115–144.
- Temple, J. and Van de Sijpe, N. (2017). Foreign aid and domestic absorption. *Journal of International Economics*, 108:431–443.
- Van Nieuwerburgh, S. and Veldkamp, L. (2009). Information immobility and the home bias puzzle. *The Journal of Finance*, 64(3):1187–1215.
- Voeten, E. (2013). Data and analyses of voting in the un general assembly. In Reinalda, B., editor, *Routledge Handbook of International Organization*. Routledge, 1 edition.

Global Political Ties and the Global Financial Cycle

Online Appendix

A1 Global Financial Cycle Regressions

Here we report the results of global financial cycle regression specified as the following equation:

$$StockReturn_{ct} = \alpha + \beta_1 Gfcy_t + Control_{ct-t} + \theta_c + \epsilon$$
 (6)

The results reported in Tables A1-A2 show that the effects of the global financial cycle on stock return apply in general. The estimated coefficient is significantly negative for the VIX and the EBP proxy measures, indicating that a worse global financial condition is associated with lower stock returns across countries. This holds true across time periods and stock return sub-sectors.

Table A1: Global Financial Cycle Regression

	Full S	ample	Non-0	DECD	OE	CD
	(1)	(2)	(3)	(4)	(5)	(6)
	Pane	el A: Whole	Period (199	1-2019)		
VIX	-8.826***	-9.425***	-8.567***	-8.871***	-9.043***	-9.767***
	(0.629)	(0.701)	(1.017)	(1.181)	(0.798)	(0.885)
Observations	1348	1348	608	608	740	740
Adjusted R-Square	0.156	0.221	0.125	0.203	0.188	0.250
EBP	-9.780***	-9.890***	-8.123***	-8.280***	-11.196***	-11.101***
	(0.731)	(0.744)	(1.034)	(1.101)	(0.956)	(0.943)
Observations	1348	1348	608	608	740	740
Adjusted R-Square	0.191	0.246	0.118	0.198	0.277	0.315
- 1	Panel B: Bej	fore Global I	Financial Cr	isis (1991-20	009)	
VIX	-12.433***	-12.187***	-13.004***	-13.117***	-11.951***	-11.168***
	(0.911)	(0.849)	(1.525)	(1.609)	(1.094)	(0.935)
Observations	817	817	367	367	450	450
Adjusted R-Square	0.241	0.293	0.214	0.300	0.263	0.316
EBP	-10.551***	-10.106***	-8.982***	-8.822***	-11.909***	-10.892***
	(0.801)	(0.707)	(1.181)	(1.222)	(1.027)	(0.816)
Observations	817	817	367	367	450	450
Adjusted R-Square	0.227	0.277	0.127	0.222	0.330	0.364
	Panel C: Af	ter Global F	inancial Cri	sis (2010-20	019)	
VIX	-1.166	-2.089*	1.191	-0.235	-3.166**	-6.050***
	(1.205)	(1.184)	(1.923)	(1.960)	(1.448)	(1.741)
Observations	531	531	241	241	290	290
Adjusted R-Square	0.145	0.222	0.200	0.272	0.066	0.192
EBP	-10.381***	-10.436***	-9.569**	-9.988**	-11.071***	-10.463**
	(2.302)	(2.615)	(3.642)	(4.007)	(2.987)	(3.947)
Observations	531	531	241	241	290	290
Adjusted R-Square	0.175	0.244	0.217	0.293	0.095	0.162
Country FE	YES	YES	YES	YES	YES	YES
Year FE	NO	NO	NO	NO	NO	NO
Controls	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between without and with additional controls for odd and even columns respectively. The first panel reports results for the whole sample period in terms of year coverage while the next two panels split the time period to before and after the Global Financial Crisis. Each panel reports results using the VIX and the EBP as measures of the global financial cycle. The first two columns report results using the full sample of countries. The next two columns restrict the sample to non-OECD member countries. Finally, the last two columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A2: Global Financial Cycle Regression: By Sector

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Tech	Tele	Heath	Financials	Real Estate	Consum Discret	Consum Stap	Indu	Basic Material	Energy	Utilities
					Panel	A: VIX					
VIX	-7.029*	-7.796***	-7.192***	-12.502***	-9.354***	-8.579***	-5.383***	-7.660***	-5.915***	-6.044***	-7.901***
	(3.415)	(1.233)	(1.213)	(1.253)	(1.538)	(1.499)	(1.101)	(1.161)	(1.981)	(1.489)	(1.645)
Observations	217	428	362	573	393	548	576	572	525	498	373
Adjusted R-Square	0.171	0.097	0.116	0.182	0.144	0.110	0.027	0.076	0.031	0.009	0.068
					Panel	B: EBP					
EBP	-12.432***	-8.246***	-8.631***	-11.497***	-7.556***	-8.917***	-6.332***	-9.642***	-6.918***	-7.585***	-6.616***
	(3.053)	(1.337)	(1.024)	(1.440)	(1.671)	(1.360)	(1.140)	(1.351)	(2.016)	(1.620)	(1.406)
Observations	217	428	362	573	393	548	576	572	525	498	373
Adjusted R-Square	0.219	0.114	0.146	0.164	0.102	0.124	0.046	0.117	0.045	0.032	0.047
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are sectoral stock returns as indicated in the column headers. The first panel reports results using the VIX as the measure of the global financial cycle while the second panel uses the EBP. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

A2 Additional Figures and Tables

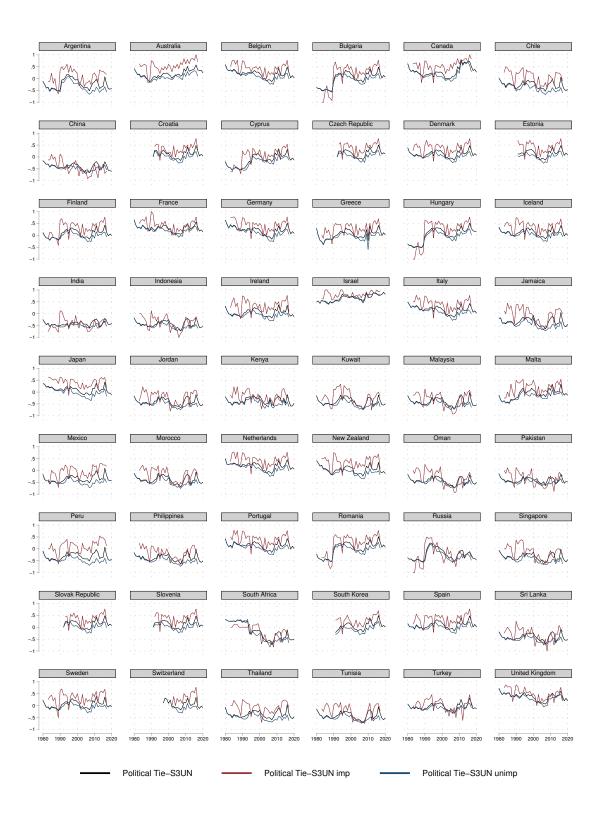


Figure A1: Political Ties with US: by Country

Notes: The figure plots the political ties with the US measures for all countries in our sample in each panel. We report the S3UN (black), S3UN-IMP (red), and S3UN-UNIMP (blue) resources. The first measure uses all votes while the last two measures uses votes which the US State Department has flagged as important or not flagged as important respectively.

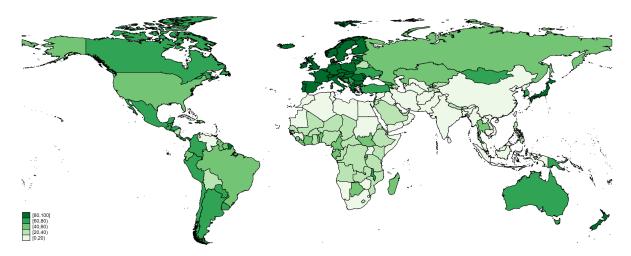


Figure A2: Political Ties with EU, 1990-2017 Average

Notes: The different shades of green correspond to the average EU political ties measure for each country over the period 1990-2017. Darker shades indicate stronger average political ties with the US.

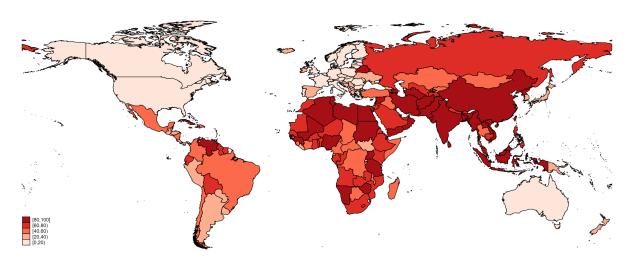


Figure A3: Political Ties with China, 1990-2017 Average

Notes: The different shades of red correspond to the average China political ties measure for each country over the period 1990-2017. Darker shades indicate stronger average political ties with the US.

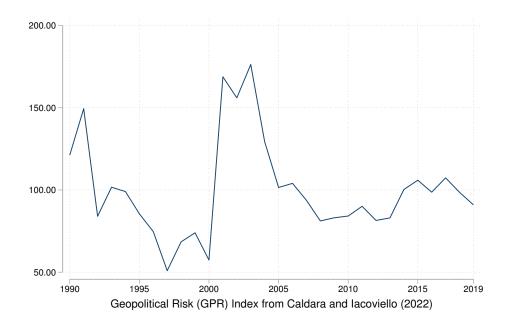


Figure A4: Geopolitical Risk Index

Notes: The figure plots geopolitical risk (GPR) measure from Caldara and Iacoviello (2022).

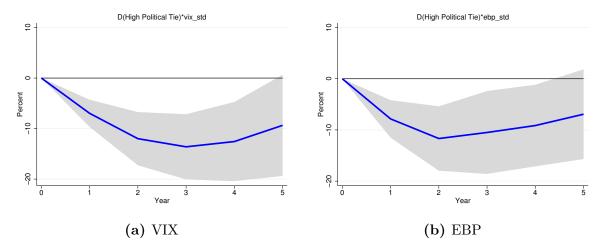


Figure A5: Significance of the Differences in IRFs Between Political Tie Group

Notes: The figure plots the difference between the two IRFs for high and low US political ties using the VIX (left panel) and the EBP (right panel) measures of the global financial cycle.

Table A3: Variable Definition

Variable	Definition	Source
Stock Market Return	Growth rate of domestic stock market indices.	Datastream
VIX	CBOE S&P 500 volatility index. An increase in the index is interpreted	WRDS, CBOE
	as an increase in market volatility.	
EBP	Excess bond premium, which is the component of the GZ spread net	Gilchrist and Zakrajšek (2012),
	of expected defaults and is calculated as the difference between the	Gilchrist et al. (2022)
	average U.S. corporate bond spread and the average expected default	
	risk.	
GZ Spread	The average US bond credit spreads defined as the difference between	Gilchrist and Zakrajšek (2012),
	the yield of corporate bonds and the hypothetical risk-free Treasury	Gilchrist et al. (2022)
	securities of the same cash flows and maturities.	
Political Tie-S3UN imp	Voting similarities between the country and US using a three-category	Voeten (2013), Bailey et al. (2017)
	scale (Yes-No-Abstain), only considering votes on issues that the US	
	state department has deemed of imprtance to US.	
Political Tie-S3UN	Voting similarities between the country and US using a three-category	Voeten (2013), Bailey et al. (2017)
	scale (Yes-No-Abstain).	
Political Tie-S2UN	Voting similarities between the country and US using a two-category	Voeten (2013), Bailey et al. (2017)
	scale (Yes-No).	
Political Tie-S2UN imp	Voting similarities between the country and US using a two-category	Voeten (2013), Bailey et al. (2017)
	scale (Yes-No), only considering votes on issues that the US state de-	
	partment has deemed of improve to US.	
GDP Growth	Growth rate of gross domestic products.	WDI
Inflation	Growth rate of consumer price index.	WDI
Appreciation	Growth rate of the official exchange rate expressed as US dollars per	WDI
	unit of local currency.	
Foreign Reserve	The ratio of total reserves to GDP.	WDI
Peg	A dummy variable indicating that the country has a fixed exchange rate, following the classification in Shambaugh (2004).	Shambaugh (2004)
Exchange Rate Stability	Taken from the trilemma indexes by Aizenman et al. (2008). It is the	Aizenman et al. (2008)
	annual standard deviation of the monthly exchange rate between the	
	home country and the base country normalized between zero and one.	
Monetary Policy Indepen-	Taken from the trilemma indexes by Aizenman et al. (2008). It is	Aizenman et al. (2008)
dence	the reciprocal of the annual correlation of the monthly interest rates	
	between the home country and the base country.	
Capital Account Openness	Taken from the trilemma indexes by Aizenman et al. (2008). It is the	Aizenman et al. (2008), Chinn and Ito
	de jure capital account openness from Chinn and Ito (2008).	(2008)
Financial Integration	The $de\ facto$ financial openness calculated as the ratio of the external	Lane and Milesi-Ferretti (2007)
	liabilities and assets to GDP.	
Trade Openness	The ratio of trade, i.e., sum of the imports and exports in percentage to GDP.	WDI
Macro Prudential Policy	It is an index capturing the change in integrated macroprudential poli-	iMaPP, IMF
v	cies covering broad based, household sector, corporate sector, liquidity	
	and foreign exchange, nonbank, and structural tools. An increase in	
	the index is interpreted as a tightening of macroprudential policies.	

Notes: The table describes the key variables used in the analysis as well as the data sources.

Table A4: Country and Sample Period

OECD C	ountries	Non-OEC	D Countries
Country	Sample Period	Country	Sample Period
Australia	1993-2018	Argentina	1992-2018
Belgium	1991-2018	Bulgaria	2001-2018
Canada	1999-2018	China	1993-2018
Chile	1991-2018	Croatia	1998-2015
Czech Republic	1997-2018	Cyprus	2005-2018
Denmark	1991-2018	India	1992-2018
Estonia	1997-2018	Indonesia	1991-2017
Finland	1991-2018	Jamaica	1991-2017
France	1991-2018	Jordan	1991-2017
Germany	1991-2018	Kenya	1991-2018
Greece	1991-2018	Kuwait	1995-2018
Hungary	1993-2018	Malaysia	1991-2018
Iceland	1997-2018	Malta	1996-2018
Ireland	1991-2018	Morocco	2003-2018
Israel	1997-2018	Oman	1997-2018
Italy	1998-2018	Pakistan	1991-2018
Japan	1991-2018	Peru	1992-2018
Mexico	1991-2018	Philippines	1991-2018
Netherlands	1991-2018	Romania	1998-2018
New Zealand	2001-2018	Russia	1998-2018
Portugal	1993-2018	Singapore	2000-2018
Slovak Republic	1997-2018	South Africa	1996-2018
Slovenia	2007-2018	Sri Lanka	1991-2018
South Korea	1992-2018	Thailand	1991-2018
Spain	1991-2018	Tunisia	1998-2018
Sweden	1991-2018		
Switzerland	2003-2018		
Turkey	1991-2018		
United Kingdom	1991-2018		

Notes: The table describes the sample coverage (in years) for each country in our sample.

Table A5: Using Current Political Connection and Control Variables

		Full S	ample			Non-O	ECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$VIX \times PolTie$	-4.725***	-4.065***			-12.598***	-11.054***			-2.057	-3.638		
	(1.540)	(1.463)			(2.426)	(2.752)			(3.539)	(3.826)		
$\mathrm{EBP} \times \mathrm{PolTie}$			-5.323***	-4.943***			-8.533***	-8.657***			-0.854	-3.788
			(1.434)	(1.453)			(2.302)	(2.495)			(3.351)	(3.472)
PolTie	14.418**	13.911**	0.889	2.505	46.624***	41.792***	5.625	6.287	4.748	7.464	-1.853	-3.390
	(6.455)	(5.936)	(4.154)	(4.022)	(11.263)	(11.246)	(6.014)	(6.413)	(13.417)	(11.837)	(10.115)	(7.956)
Observations	1269	1269	1269	1269	570	570	570	570	699	699	699	699
Adjusted R-Square	0.339	0.466	0.341	0.468	0.352	0.465	0.341	0.460	0.430	0.516	0.430	0.516
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between without and with additional controls for odd and even columns respectively. The first four columns report results using the full sample with the first two columns using the VIX as the GFCy measure and the last two columns using the EBP. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A6: Standard Errors Clustered at Country and Year Level (Two-way)

	Full S	Sample	Non-C	DECD	OECD		
	(1)	(2)	(3)	(4)	(5)	(6)	
$\overline{ m VIX \times L.Political\ Tie-S3UN\ imp}$	-4.865***		-12.134***		0.680		
	(1.742)		(1.662)		(2.992)		
EBP \times L.Political Tie-S3UN imp		-5.959***		-9.414***		-0.618	
		(1.469)		(2.112)		(3.412)	
L.Political Tie-S3UN imp	9.976	-3.873	45.825***	6.905	-12.196*	-9.715	
	(5.987)	(2.812)	(9.813)	(5.923)	(6.961)	(7.017)	
Observations	1292	1292	586	586	706	706	
Adjusted R-Square	0.402	0.406	0.418	0.410	0.482	0.482	
Country FE	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	
Controls	YES	YES	YES	YES	YES	YES	

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between the VIX and the EBP as the GFCy measure for odd and even columns respectively. The first two columns report results using the full sample. The next two columns restrict the sample to non-OECD member countries. Finally, the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are two-way clustered by country and year.

Table A7: Robust Standard Errors

	Full S	ample	Non-C	DECD	OECD		
	(1)	(2)	(3)	(4)	(5)	(6)	
$VIX \times L.$ Political Tie-S3UN imp	-4.865***		-12.134***		0.680		
	(1.275)		(2.711)		(3.600)		
EBP \times L.Political Tie-S3UN imp		-5.959***		-9.414***		-0.618	
		(1.304)		(2.576)		(3.056)	
L.Political Tie-S3UN imp	9.976	-3.873	45.825***	6.905	-12.196	-9.715	
	(6.080)	(4.374)	(11.303)	(6.999)	(11.243)	(7.541)	
Observations	1292	1292	586	586	706	706	
Adjusted R-Square	0.402	0.406	0.419	0.412	0.483	0.483	
Country FE	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	
Controls	YES	YES	YES	YES	YES	YES	

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The reported regression results alternate between the VIX and the EBP as the GFCy measure for odd and even columns respectively. The first two columns report results using the full sample. The next two columns restrict the sample to non-OECD member countries. Finally, the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Robust standard errors are reported in parentheses.

Table A8: Factor Analysis of Political Ties Measurement

	Factor 1	Factor 2	Factor3	Factor 4
Share variation	0.556	0.230	0.092	0.084
Loadings				
S3UN imp	0.379	-0.092	0.255	-0.503
S2UN imp	0.369	-0.092	0.279	-0.542
S3UN unimp	0.406	-0.060	-0.124	0.315
2UN unimp	0.406	-0.045	-0.120	0.307
S3UN	0.419	-0.079	-0.044	0.234
S2UN	0.421	-0.068	-0.026	0.191
US Economic Aid	0.146	0.577	-0.446	-0.229
US Military Aid	0.007	0.442	0.786	0.333
US All Aid	0.129	0.662	-0.088	-0.072

Notes: The table reports the results from a principal component analysis of the nine proxy measures for political ties with the US. The first row reports the share of variation each factor accounts for while the succeeding rows report factor loadings.

Table A9: Institutional Quality: Control of Corruption

		Full S	Sample		Non-OECD					OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie		-6.967***				-13.658***				0.217		
		(2.452)				(2.618)				(7.150)		
VIX \times L.Control of Corruption	-0.988	0.732			0.310	1.364			-1.136	-1.117		
	(0.945)	(1.277)			(1.111)	(1.297)			(1.787)	(2.240)		
EBP \times L.PolTie				-7.068***				-12.279***				1.214
				(2.235)				(2.360)				(6.193)
$\mathrm{EBP} \times \mathrm{L.Control}$ of Corruption			-0.712	1.088			1.709*	2.580*			-0.672	-0.752
			(0.994)	(1.308)			(0.917)	(1.324)			(1.529)	(1.897)
L.PolTie		19.754**		-1.481		43.628***		0.050		-6.929		-6.744
		(8.544)		(5.175)		(12.151)		(6.955)		(17.665)		(10.606)
L.Control of Corruption	1.957	-3.827	-1.579	-1.999	-2.316	-6.449	-1.304	-2.098	4.351	4.092	0.893	0.757
	(4.645)	(5.248)	(4.804)	(4.851)	(7.282)	(8.469)	(6.146)	(5.912)	(5.928)	(7.154)	(7.154)	(6.901)
Observations	967	967	967	967	446	446	446	446	521	521	521	521
Adjusted R-Square	0.446	0.455	0.445	0.455	0.413	0.449	0.416	0.448	0.526	0.524	0.525	0.523
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A10: Institutional Quality: Government Effectiveness

		Full S	ample		Non-OECD				OECD			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie		-8.121***				-13.831***				-0.227		
		(2.192)				(2.573)				(7.231)		
$VIX \times L.Government Effectiveness$	-0.667	1.790			1.843	2.526			-0.964	-0.898		
	(1.081)	(1.333)			(1.612)	(1.585)			(1.988)	(2.687)		
$EBP \times L.PolTie$				-7.993***				-12.319***				0.561
				(2.029)				(2.350)				(5.983)
EBP \times L.Government Effectiveness			-0.313	2.079			3.162**	3.534**			-0.254	-0.305
			(1.146)	(1.355)			(1.495)	(1.580)			(1.654)	(2.156)
L.PolTie		23.012***		-2.305		43.127***		-1.151		-5.961		-6.983
		(8.132)		(5.132)		(12.180)		(7.101)		(17.811)		(10.610)
L.Government Effectiveness	-1.047	-11.762*	-3.499	-5.947	-14.244	-18.913*	-8.426	-11.973	2.852	2.487	-0.494	-0.596
	(6.138)	(6.731)	(4.745)	(4.695)	(8.703)	(9.345)	(7.204)	(7.017)	(5.451)	(8.678)	(4.854)	(4.611)
Observations	967	967	967	967	446	446	446	446	521	521	521	521
Adjusted R-Square	0.445	0.458	0.445	0.459	0.417	0.454	0.423	0.455	0.525	0.523	0.524	0.523
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A11: Institutional Quality: Political Stability

		Full S	Sample			Non-	OECD		OECD				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
$VIX \times L.PolTie$		-5.624***				-14.890***				0.218			
		(2.046)				(2.488)				(5.459)			
${\rm VIX} \times {\rm L.Political~Stability}$	-1.561*	-0.216			-0.107	1.802			-2.978**	-2.950*			
	(0.929)	(1.138)			(1.194)	(1.163)			(1.408)	(1.533)			
EBP \times L.PolTie				-6.368***				-13.831***				0.701	
				(2.118)				(2.241)				(4.866)	
$\mathrm{EBP} \times \mathrm{L.Political\ Stability}$			-0.706	0.807			1.218	2.878***			-1.508	-1.515	
			(0.861)	(1.102)			(0.905)	(0.897)			(1.422)	(1.428)	
L.PolTie		14.804*		-2.208		46.085***		-1.867		-5.854		-6.587	
		(7.555)		(5.219)		(11.685)		(6.880)		(15.918)		(10.951)	
L.Political Stability	2.124	-2.961	-3.394	-3.812*	-4.643	-12.280**	-5.498**	-6.383***	11.261*	10.981	1.392	1.103	
	(4.429)	(4.924)	(2.121)	(2.136)	(5.293)	(5.313)	(2.287)	(2.260)	(6.312)	(7.001)	(4.921)	(5.041)	
Observations	967	967	967	967	446	446	446	446	521	521	521	521	
Adjusted R-Square	0.450	0.456	0.446	0.456	0.417	0.456	0.419	0.458	0.533	0.531	0.526	0.525	
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A12: Institutional Quality: Regulatory Quality

		Full S	sample			Non-	DECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$VIX \times L.PolTie$		-7.591***				-14.221***				-1.223		
		(2.389)				(2.470)				(6.944)		
VIX \times L.Regulatory Quality	-1.627^*	1.291			-1.662	1.283			-0.226	0.077		
	(0.961)	(1.222)			(1.734)	(1.383)			(1.861)	(2.678)		
EBP \times L.PolTie				-7.986***				-13.359***				-0.475
				(2.264)				(2.388)				(5.680)
EBP \times L. Regulatory Quality			-1.177	1.998			-0.479	2.165*			0.724	0.856
			(1.045)	(1.311)			(1.545)	(1.249)			(1.931)	(2.455)
L.PolTie		22.459**		-1.075		46.728***		1.464		-2.799		-7.012
		(8.690)		(5.112)		(10.988)		(6.878)		(18.017)		(10.614)
L.Regulatory Quality	-1.775	-10.831*	-6.677	-7.018*	-3.473	-13.796*	-8.855	-11.899**	0.962	0.195	0.306	0.452
	(5.156)	(5.679)	(4.171)	(4.008)	(7.725)	(7.820)	(6.198)	(5.466)	(6.306)	(8.594)	(3.593)	(3.546)
Observations	967	967	967	967	446	446	446	446	521	521	521	521
Adjusted R-Square	0.449	0.457	0.448	0.458	0.418	0.452	0.416	0.450	0.524	0.523	0.524	0.523
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A13: Institutional Quality: Voice and Accountability

	Full Sample				Non-OECD				OECD			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie		-5.531*				-13.172***				0.476		
		(3.212)				(3.052)				(7.235)		
${\rm VIX} \times {\rm L.Voice~Accountability}$	-2.334***	-0.200			-3.849**	0.042			-1.741	-1.834		
	(0.842)	(1.568)			(1.442)	(1.456)			(2.726)	(3.644)		
EBP \times L.PolTie				-6.469**				-13.130***				0.703
				(3.193)				(3.129)				(5.830)
EBP \times L.Voice Accountability			-1.973**	0.614			-2.829*	1.265			-0.757	-0.877
			(0.919)	(1.731)			(1.534)	(1.724)			(2.555)	(3.109)
L.PolTie		15.405		-1.160		43.961***		1.763		-5.576		-4.029
		(10.557)		(5.269)		(12.281)		(7.048)		(18.476)		(10.299)
L.Voice Accountability	5.435	-0.915	-2.254	-1.771	8.004	-4.778	-4.997	-4.963	18.740**	18.334*	14.715	13.964
	(4.225)	(5.718)	(3.143)	(3.182)	(5.301)	(5.614)	(3.022)	(2.926)	(7.872)	(10.593)	(9.025)	(8.663)
Observations	967	967	967	967	446	446	446	446	521	521	521	521
Adjusted R-Square	0.452	0.455	0.450	0.454	0.429	0.448	0.423	0.444	0.529	0.527	0.528	0.526
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A14: Institutional Quality: All WGI Variables Together

		Full Sa	ample			Non-0	DECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VIX × L.PolTie		-6.474**				-12.846***				-5.880		
		(2.550)				(3.374)				(6.414)		
$VIX \times L.Rule of Law$	3.705	3.579			6.424**	5.041			-3.743	-2.734		
	(2.483)	(2.449)			(2.944)	(2.967)			(4.907)	(4.863)		
VIX× L.Control of Corruption	-4.215	-4.761			-5.021	-6.105**			-5.216	-6.735		
	(3.873)	(3.855)			(3.271)	(2.880)			(6.825)	(6.637)		
VIX× L.Government Effectiveness	5.176**	4.834**			6.322***	3.581			5.591	6.852		
	(2.064)	(1.969)			(1.923)	(2.244)			(5.309)	(4.426)		
VIX× L.Political Stability	-2.024*	-2.223*			0.497	1.852			-4.209**	-5.119**		
	(1.111)	(1.168)			(1.689)	(1.602)			(1.927)	(1.859)		
VIX× L.Regulatory Quality	-0.282	1.690			-6.151	-1.869			10.730	10.780		
	(4.134)	(4.218)			(3.882)	(3.326)			(7.705)	(7.490)		
VIX × L. Voice Accountability	-3.697***	-1.609			-4.089***	-0.919			1.273	3.391		
	(0.858)	(1.155)			(1.112)	(1.244)			(5.258)	(5.489)		
$EBP \times L.PolTie$				-6.660**				-12.004***				-3.36
				(2.916)				(3.648)				(5.747)
$EBP \times L.Rule of Law$			3.844	3.560			5.314	3.692			-5.839	-5.399
			(3.051)	(2.771)			(3.970)	(3.655)			(4.713)	(4.711)
EBP× L.Control of Corruption			-4.326	-4.722			-1.372	-1.991			-4.943	-5.639
			(4.066)	(4.031)			(4.082)	(3.710)			(6.956)	(6.756)
$EBP \times L.Government Effectiveness$			4.794**	4.306**			5.892***	3.436			6.403	6.977
			(2.099)	(2.107)			(1.924)	(2.132)			(5.439)	(5.060
EBP× L.Political Stability			-0.323	-0.542			1.510	2.697*			-1.669	-2.30
			(0.999)	(1.108)			(1.558)	(1.337)			(1.513)	(1.568)
EBP × L.Regulatory Quality			-1.189	0.877			-9.143*	-5.391			10.029	9.962
			(4.425)	(4.456)			(4.626)	(3.852)			(10.933)	(10.896)
EBP × L.Voice Accountability			-3.618***	-1.271			-3.322*	-0.020			0.729	2.272
			(1.140)	(1.561)			(1.659)	(1.801)			(6.071)	(6.105)
L.PolTie		18.512**		-2.410		41.170**		-0.666		18.338		-3.105
		(9.152)		(5.639)		(15.971)		(8.091)		(18.395)		(10.837)
L.Rule of Law	-17.785	-17.798	-5.075	-5.438	-29.510**	-25.637^*	-7.603	-6.762	13.445	9.337	-1.366	-1.665
	(11.513)	(11.373)	(5.721)	(6.083)	(13.811)	(13.942)	(6.920)	(7.693)	(17.418)	(17.265)	(7.946)	(8.132
L.Control of Corruption	20.028	22.047*	4.720	4.390	27.088*	31.190**	8.876	8.964	17.691	22.785	-0.231	-0.477
	(13.405)	(13.048)	(6.485)	(6.630)	(14.732)	(13.061)	(8.134)	(8.573)	(22.264)	(21.394)	(8.891)	(8.819
L.Government Effectiveness	-20.418**	-20.418**	-3.852	-4.149	-29.235**	-20.609	-9.497	-10.247	-20.650	-25.372*	-0.841	-0.598
	(8.816)	(8.673)	(6.013)	(5.956)	(12.094)	(13.530)	(10.463)	(10.130)	(17.325)	(14.174)	(4.667)	(4.751)
L.Political Stability	5.088	5.734	-1.786	-1.774	-4.992	-10.018	-2.384	-2.996	13.476*	16.220**	-1.543	-1.565
	(4.620)	(4.830)	(2.123)	(2.159)	(6.447)	(6.267)	(2.325)	(2.428)	(7.024)	(6.124)	(5.971)	(6.036
L.Regulatory Quality	-4.974	-10.704	-5.390	-5.017	15.516	1.228	-6.936	-7.792	-41.298	-41.090	-2.036	-1.922
	(16.063)	(16.538)	(4.783)	(4.668)	(14.809)	(14.564)	(5.802)	(5.629)	(27.646)	(27.846)	(5.942)	(5.766
L.Voice Accountability	11.812**	5.634	0.416	1.065	7.926	-2.653	-4.194	-4.679	15.325	9.815	16.923	17.16
•	(4.656)	(4.878)	(4.678)	(4.891)	(4.990)	(4.982)	(4.960)	(5.208)	(16.415)	(15.550)	(13.763)	(13.121
Observations	967	967	967	967	446	446	446	446	521	521	521	521
Adjusted R-Square	0.457	0.460	0.455	0.458	0.440	0.454	0.447	0.459	0.537	0.537	0.531	0.529
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Standard errors in parentheses

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

^{*} $p < 0.1, \, ^{**}$ $p < 0.05, \, ^{***}$ p < 0.01

Table A15: Simple Horse Race: Bilateral Trade and Financial Linkages with US

		Full Sa	ımple			Non-	-OECD			OE	CD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$VIX \times L.PolTie$ with US		-1.171** (0.561)				-2.624** (1.092)				-0.661 (1.814)		
VIX \times L.Trade Linkage with US	4.609*** (1.092)	4.238*** (0.871)			12.140*** (2.171)	10.190*** (2.644)			3.298*** (0.721)	3.454*** (0.792)		
VIX \times L. Financial Linkage with US	-154.513*** (55.732)	-150.568** (57.872)			80.233 (191.567)	-31.380 (197.211)			-116.603 (72.570)	-113.714 (76.424)		
VIX \times L. Direct Investment Linkage with US	-7.209 (7.453)	-1.855 (8.491)			-126.375** (50.502)	-91.275* (50.251)			2.129 (8.424)	2.157 (8.382)		
EBP \times L.PolTie with US				-0.505 (0.469)				-2.184* (1.229)				-0.044 (1.560)
EBP \times L.Trade Linkage with US			3.653*** (0.992)	3.412*** (0.887)			11.295*** (1.888)	9.551*** (2.330)			2.338*** (0.789)	2.442*** (0.867)
EBP \times L. Financial Linkage with US			-90.007 (63.656)	-86.430 (65.511)			376.357 (239.869)	231.278 (283.256)			-104.542 (74.463)	-104.006 (76.836)
EBP \times L. Direct Investment Linkage with US			-6.437 (8.690)	-3.551 (8.938)			-186.866*** (63.550)	-145.486** (65.661)			3.487 (9.373)	3.454 (9.327)
L.PolTie with US		-0.396 (3.129)		-4.252* (2.348)		4.104 (5.325)		-3.352 (3.783)		-3.016 (5.929)		-4.702** (2.223)
L.Trade Linkage with US	-12.840** (4.968)	-11.615** (4.946)	-1.091 (4.083)	-1.253 (4.080)	-31.176** (11.717)	-26.549** (12.706)	5.915 (8.506)	3.689 (8.761)	-5.494 (4.634)	-5.779 (4.911)	2.223 (4.961)	2.124 (5.095)
L.Financial Linkage with US	213.092 (197.345)	223.253 (206.939)	-140.413 (187.718)	-125.383 (191.940)	-231.014 (523.779)	63.388 (518.067)	82.295 (241.086)	90.086 (273.933)	330.119* (173.725)	326.748* (185.859)	53.489 (64.070)	56.886 (70.697)
L.Direct Investment Linkage with US	-41.209 (31.028)	-58.867* (33.154)	-55.619 (34.991)	-58.696 (35.797)	336.439* (163.200)	225.905 (141.028)	-47.958 (74.093)	-50.896 (85.570)	-28.294 (44.107)	-30.659 (46.308)	-17.360 (27.211)	-19.428 (29.370)
Observations	646	646	646	646	257	257	257	257	389	389	389	389
Adjusted R-Square	0.612	0.619	0.603	0.607	0.571	0.580	0.573	0.579	0.702	0.703	0.695	0.696
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first four columns report results using the full sample with the even columns including the interaction between the VIX and the EBP with US political ties. The next four columns restrict the sample to non-OECD member countries. Finally, the last four columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A16: Full Horse Race: Bilateral Trade and Financial Linkages with US

	Full S	ample	Non-0	OECD	OI	ECD
	(1)	(2)	(3)	(4)	(5)	(6)
	VIX	EBP	VIX	EBP	VIX	EBP
Gfcy × L.PolTie with US	-2.192**	-2.252***	-3.818**	-4.231**	-2.145*	-2.084*
	(0.896)	(0.754)	(1.569)	(1.934)	(1.222)	(1.044)
Gfcy \times L.GDP Growth	2.599*	2.331	0.731	1.381	5.831**	5.062***
	(1.443)	(1.562)	(2.759)	(2.771)	(2.246)	(1.488)
Gfey \times L.Inflation	-156.124***	-252.724***	-47.676	-94.735	-262.883^*	-344.925**
	(47.923)	(73.208)	(57.491)	(101.994)	(142.976)	(127.229)
Gfcy \times L.Appreciation	-0.545	-0.970	3.279	3.835	-3.589**	-3.130
	(1.277)	(1.744)	(2.699)	(3.926)	(1.717)	(2.077)
$Gfcy \times L.Peg$	-0.629	-1.072	1.251	2.924	0.121	-0.185
	(1.545)	(1.539)	(1.825)	(2.122)	(2.512)	(2.100)
Gfcy \times L.Exchange Rate Stability	-1.066	-0.105	0.004	0.879	-1.764	-1.136
	(1.638)	(1.707)	(2.618)	(3.696)	(2.364)	(2.075)
Gfcy \times L.Monetary Policy Independence	-0.559	-0.113	0.884	2.266	-0.606	-0.018
	(0.560)	(0.617)	(1.066)	(1.457)	(0.432)	(0.458)
Gfcy \times L.Capital Account Openness	0.859	1.133	1.092	-0.133	0.887	1.427
	(0.859)	(0.804)	(0.757)	(1.082)	(1.334)	(1.068)
Gfcy \times L.Financial Integration	-30.769	-11.972	-53.888	-33.936	-68.019*	-91.649**
	(23.982)	(18.189)	(33.869)	(42.657)	(38.512)	(36.794)
Gfcy \times L.Trade Openness	-0.313	-0.612	2.089	2.642	-1.129	-0.798
	(0.982)	(0.954)	(2.095)	(2.429)	(1.112)	(1.135)
Gfcy \times L.Macro Prudential Policy	-0.488	-0.420	-0.493	-0.349	0.060	1.426**
	(0.401)	(0.428)	(0.408)	(0.618)	(0.668)	(0.576)
Gfcy \times L.Foreign Reserve	-0.505	-1.022	-1.066	-2.782	-2.102	-7.394**
	(1.531)	(1.409)	(3.618)	(3.849)	(2.416)	(3.498)
Gfcy \times L.Trade Linkage with US	3.088***	2.454**	7.176**	8.215**	0.495	-1.351
	(1.064)	(1.072)	(3.156)	(3.862)	(0.996)	(1.037)
Gfcy \times L. Financial Linkage with US	-131.713***	-105.548^*	-168.394	207.086	13.612	44.622
	(37.019)	(60.363)	(155.159)	(189.324)	(74.850)	(85.437)
Gfcy \times L. Direct Investment Linkage with US	15.416	6.967	-66.115	-152.753*	35.693**	43.226***
	(9.529)	(11.165)	(73.020)	(85.405)	(14.324)	(13.106)
Observations	646	646	257	257	389	389
Adjusted R-Square	0.631	0.618	0.571	0.569	0.733	0.729
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is stock returns. The first two columns report results using the full sample with odd columns using the VIX as the GFCy measure and even using the EBP. The next two columns restrict the sample to non-OECD member countries. Finally, the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A17: Alternative Instrumental Variable Approach

		Panel A: Seco	ond Stage Results			
	F	ull	Non-O	DECD	OE	CD
Dep. var.: Stock Return	(1)	(2)	(3)	(4)	(5)	(6)
	VIX	EBP	VIX	EBP	VIX	EBP
L.PolTie with US \times GFCy	-26.745	-76.137	-78.856**	-140.291***	161.788	154.383
	(26.076)	(58.093)	(34.694)	(38.779)	(148.113)	(102.392)
L.PolTie with US	289.597	51.223	583.662**	45.459	-388.108	109.347
	(224.320)	(133.296)	(264.131)	(126.939)	(383.861)	(74.916)
		Test of wea	ak instruments			
Kleibergen-Paap F statistic	0.874	1.604	1.602	4.253	0.780	0.850
L. PolTie SW F-statistic	1.982	3.792	3.331	6.832	3.592	3.424
L.PolTie \times GFCy SW F statistic	1.931	7.255	3.634	8.703	5.051	2.840
		Test of und	eridentification			
Kleibergen-Paap LM statistic	0.728	1.832	1.041	1.256	1.068	1.099
Kleibergen-Paap LM p-value	0.394	0.176	0.308	0.262	0.301	0.294
		Weak instrume	nt robust inference	e		
Anderson-Rubin Chi2 statistic	0.762	0.762	1.366	1.366	1.865	1.865
Anderson-Rubin Chi2 p-value	0.683	0.683	0.505	0.505	0.394	0.394
L.PolTie \times GFCy 90% CI	[-76.78,23.29]	[-187.62,35.34]	[-145.43,-12.28]	[-214.71,-65.87]	[-122.44, 446.02]	[-42.11, 350.87]
	Panel E	3: L.PolTie with	US First Stage C	oefficients		
Shift-share Inst. \times MP shock	-0.149*	-0.149*	-0.150**	-0.150**	0.229	0.229
	(0.090)	(0.090)	(0.075)	(0.075)	(0.183)	(0.183)
Shift-share Instrument	0.023	0.023	0.043	0.043	0.310	0.310
	(0.054)	(0.054)	(0.043)	(0.043)	(0.261)	(0.261)
	Panel C: L.I	PolTie with US	× GFCy First Sta	ge Coefficients		
Shift-share Inst. \times MP shock	-0.834**	0.175	-0.709**	0.175	0.918**	0.222
	(0.362)	(0.135)	(0.312)	(0.138)	(0.399)	(0.179)
Shift-share Instrument	0.701***	0.174**	0.661***	0.208***	0.736	-0.228
	(0.184)	(0.088)	(0.180)	(0.072)	(0.774)	(0.261)
Observations	646	646	290	290	356	356
Adjusted R-squared	-1.965	-1.443	-3.999	-3.333	-4.078	-4.740
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: ***, ***, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The shift-share instrument is constructed by taking the product of country average diplomatic exchange with the US over the period 1966-1981 from the Correlates of War dataset (Bayer, 2006) with the time average of lagged political ties with the US and the indicator for second term US presidencies. Panel A reports the second stage results where the dependent variable is stock returns. Panels B and C report the first stage results for lagged political ties and lagged political ties interacted with the GFCy respectively. The regression specification alternates between the VIX and the EBP as measures of the GFCy in odd and even columns respectively. The first two columns use the full sample, the next two columns restrict the sample to non-OECD member countries, and the last two columns restrict the sample to OECD countries. Country and year fixed effects as well as the controls are included in all specifications. Standard errors are reported in parentheses and are clustered by country.

Table A18: Logit Regression in Matching Analysis

	(1)
	Dep Var: D(High PolTie)
GDPgrowth	-0.047**
	(0.024)
Inflation	-0.001
	(0.005)
Appreciation	-0.031***
	(0.007)
Reserve	-0.008
	(0.007)
Peg	0.329
	(0.269)
${\bf Exchchange Rate Stability}$	0.090
	(0.468)
${\bf Monetary Independence}$	1.397***
	(0.459)
CapAccountOpen	1.099***
	(0.282)
FinancialIntegration	0.038***
	(0.013)
TradeOpen	-0.006***
	(0.002)
MacroPru	0.191***
	(0.054)
OECD	2.357***
	(0.180)
SecondTerm	-0.237
	(0.198)
Population	-14.954***
	(3.297)
$SecondTerm_Population$	0.937
	(3.990)
Constant	-1.667***
	(0.474)
Observations	1292
Pseudo R-Square	0.329
LR Chi2	589.425

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variable is the indicator for high US political ties(above median). Standard errors are reported in parentheses.

Table A19: Channel: Bilateral Equity Holdings of US and Other investors

	Other investors			US investors		
	(1)	(2)	(3)	(4)	(5)	(6)
L.Poltie: non-OECD	0.419	0.257	-14.697	-0.121	0.036	-11.174***
	(0.409)	(0.584)	(10.478)	(0.338)	(0.252)	(1.263)
L.Poltie: OECD	-0.506	-0.251	-1.489	-0.658**	-0.494***	-0.519
	(0.455)	(0.415)	(6.337)	(0.245)	(0.153)	(1.548)
L.PolTie \times Distance: non-OECD			1.622			1.215***
			(1.139)			(0.149)
L.PolTie \times Distance: OECD			0.146			0.004
			(0.706)			(0.186)
Observations	277	277	277	283	283	283
Adjusted R-Square	0.943	0.953	0.953	0.935	0.944	0.944
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Controls	NO	YES	YES	NO	YES	YES

Notes: ***, **, and * indicate statistical significance at the 1, 5 and 10% levels respectively. The dependent variables are equity holdings of US and non-US investors as indicated in the column headers. Additional controls are included in columns 2, 3, 5, and 6. Country and year fixed effects are included in all specifications. Standard errors are reported in parentheses and are clustered by country.