NBER WORKING PAPER SERIES

SPILLOVERS OF U.S. FISCAL CHALLENGES: THE GLOBAL IMPACT OF U.S. FISCAL DOMINANCE CONCERNS ON INTEREST RATES IN EMERGING AND DEVELOPED MARKETS

Joshua Aizenman
William Eldén
Yothin Jinjarak
Gazi Salah Uddin
Frida Widholm

Working Paper 32868
http://www.nber.org/papers/w32868

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
August 2024, Revised September 2025

An earlier version of this paper was presented at the economics division of Linköping University, Sweden. The authors are deeply grateful to Bo Sjö, Donghyun Park, Jamel S., Ayhan Kose, Franziska Ohnsorge, and Naotaka Sugawara for sharing the fiscal space data. The insightful comments from anonymous referees and editor are gratefully acknowledged. Our data DOI on the repository is https://data.mendeley.com/datasets/b87nk67rfx/1. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research and the Asian Development Bank.

Spillovers of U.S. Fiscal Challenges: The Global Impact of U.S. Fiscal Dominance Concerns on Interest Rates in Emerging and Developed Markets

Joshua Aizenman, William Eldén, Yothin Jinjarak, Gazi Salah Uddin, and Frida Widholm

NBER Working Paper No. 32868
August 2024, Revised September 2025
JEL No. E31, E62, F33, F42

ABSTRACT

This study examines the international spillovers of U.S. inflationary spells and fiscal concerns on policy interest rates in Emerging Market Economies (EMEs) and Developed Economies (DEs). Previous research has focused on fiscal concerns in domestic environments, overlooking cross-border impacts. Using data from EMEs and DEs, we construct a novel index of fiscal dominance concerns through Principal Components Analysis to capture international fiscal dynamics. The results are confirmed by robustness analysis and show that greater U.S. fiscal challenges affect negatively the policy rates in both EMEs and DEs, with a greater impact observed in EMEs. Moreover, a low degree of financial repression in EMEs is associated with more significant spillover effects from greater U.S. fiscal challenges. Our findings offer insights into the complex interplay between financial repression, central bank independence, and global market integration in shaping a country's resilience to international financial influences.

Joshua Aizenman
University of Southern California
School of International Relations
Department of Economics
and NBER
aizenman@usc.edu

William Eldén
Linköping University, Sweden.
Department of Management and Engineering
wilel054@student.liu.se

Yothin Jinjarak
Asian Development Bank (ADB)
yjinjarak@adb.org

Gazi Salah Uddin
Linköping University
Department of Management and Engineering
gazi.salah.uddin@liu.se

Frida Widholm
Linköping University
Department of Management and Engineering
friwi326@student.liu.se

1. Introduction

In the years following the subprime crisis, a global financial crisis that originated in the United States (U.S.) in 2007, the world witnessed a surge in public debt to GDP, which was approaching levels seen at the end of WWII. This crisis sharply increased mortgage delinquencies and foreclosures in the U.S. It also led to a severe global recession, triggering bailouts of systemic institutions and increasing fiscal spending by affected countries to stabilize and stimulate their economies. The COVID-19 global pandemic triggered another spell of large emergency fiscal outlay. At the end of 2022, fourteen years after the Global financial crisis (GFC), public debt to GDP in the United States had risen by 78%, reaching a debt level of 121% (Federal Reserve Bank of St. Louis, 2024a), and the federal debt held by the public is predicted to rise from 96% to 116% in 2034 (Federal Reserve Bank of St. Louis, 2024b; Congressional Budget Office, 2024). The same trend holds for other country groups. For instance, Developed Economies (DEs) have seen a rise in public debt to GDP of 57% and Emerging market economies (EMEs) of 48% (IMF, 2022).

In light of this, a debate on the possible consequences of growing indebtedness has emerged, such as the effects on growth (Herndon et al., 2013; Reinhart & Sbrancia, 2015), the banking sector (Reinhart & Rogoff, 2011), and economic sustainability (D'Erasmo et al., 2016), among others. These potential consequences should raise serious concerns about the future of the global economy. One notable challenge is the possible rise of fiscal dominance, whereby monetary policies may be forced to accommodate expansionary fiscal policies. Scholars argue that fiscal dominance concerns may be present in the U.S., where the monetary authority is pressured to finance the gap between the fiscal authority's demanded revenue and the amount of bonds that can be sold to the public through seignorage (Sargent & Wallace, 1981; Cochrane, 2024), or through financial repression (Reinhart & Sbrancia, 2015).

Meanwhile, the world has become far more interconnected, with the U.S. playing a pivotal role. Figure 1 documents that the role of the U.S. in the global economy has increased substantially. Since 2007, U.S. foreign direct investment has more than doubled (U.S. Bureau of Economic Analysis, 2024). Much of global trade in goods and services is denominated in U.S. dollars. The dollar is also widely used for bilateral trade between countries other than the United States, and the U.S. dollar bond market remains the most liquid market, so far preserving the dominance of U.S. policies, affecting global financial and economic trends (Goldberg, 2024). Major world events have proven that no country is independent from the other. The subprime crisis threw shock waves throughout the world economy, the Russian invasion of Ukraine has caused widespread inflation, and the current conflicts in the Middle East continue to shake commodity prices and stock markets.

Sargent and Wallace (1981) contrasted fiscally dominant regimes with monetary-dominant regimes, arguing that monetary authorities are compelled to adjust to fiscal policies in a fiscally-dominant regime. Woodford (1998) argued that even an independent central bank concerned about price stability

should be concerned about fiscal policies. More recent studies have shown that fiscally dominant regimes are characterized by high inflation (Fratianni & Spinelli, 2001), difficulties in handling adverse demand shocks (Ascari et al., 2023), and persistent waves of pessimism (De Grauwe & Foresti, 2023). R. Ahmed et al. (2021) extended their view on fiscal dominance by concluding that economies with greater exchange rate volatility and commodity price exposure face a stronger link between public debt and policy interest rates. These authors provided an international perspective of fiscal dominance. However, the research on fiscal dominance in the international context still needs to be explored. Interconnectedness has been examined through the lens of, for example, monetary cycles (R. Ahmed et al., 2023; Cui et al., 2024; Bruno & Shin, 2015; Kalemli-Özcan, 2019), uncertainty (Bhattarai et al., 2020; Hoek et al., 2022; Kalemli-Özcan, 2019; Lakdawala et al., 2021) and growth (Kose et al., 2017; Shen & Abeysinghe, 2021), but not from the perspective of fiscal dominance.

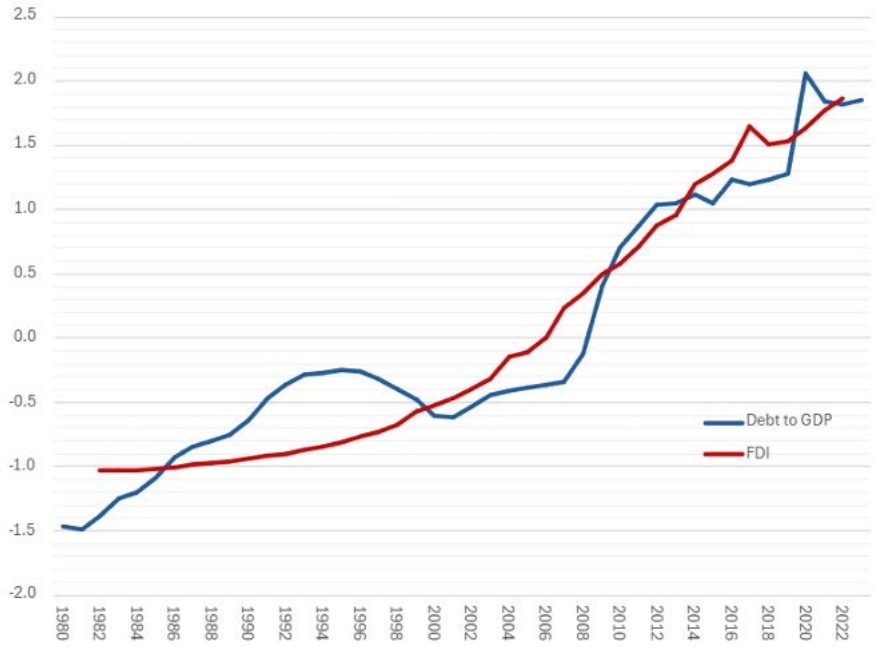


Figure 1: *Normalized U.S. Debt to GDP and U.S. Foreign Direct Investments (FDI).*
Sources: FRED, 2024 and U.S. Bureau of Economic Analysis, 2024.

This study aims to fill this gap by examining the potential international spillovers of U.S. fiscal dominance concerns to EMEs and DEs. The increase in world debt levels, as a consequence of expansionary fiscal policies, combined with the increased global interconnectedness, calls for an understanding of how the dynamics of fiscal dominance work from a global perspective. The dominance of the U.S. dollar has been subject to several threats in the past years, including China's and Russia's ways of managing trade without the U.S. dollar, and the rise of the BRICS countries. However, the U.S. dollar remains the most frequently used currency (Boz et al., 2022), and the U.S. still stands as a great hegemon in the global economy (Kose et al., 2017). Furthermore, short of greater fiscal discipline, the U.S. may be exposed to greater fiscal challenges (Bordo & Levy, 2021; Selgin, 2021), making it an ideal country to study in the context of fiscal dominance spillovers. Hence, this study intends to answer the following research question: How did greater U.S. Fiscal Challenges affect the policy interest rates in EMEs and DEs? To answer this question, we construct an index of the

concerns of future fiscal dominance. Specifically, we apply Principal Components Analysis (PCA) of fiscal indicators of U.S. debt overhang, constructing an index associated with the odds of future fiscal dominance. This index is our main independent variable. We run fixed effects regressions and Impulse Response Functions (IRFs) against the policy rates in EMEs and DEs, controlling for global and domestic factors. The main dependent variable, the policy rate, captures how the U.S. affects the monetary policy space of foreign countries in light of international spillovers. We divide our analysis into EMEs and DEs for comparative reasons. Our results imply that growing U.S. fiscal concerns significantly affect the policy rates in both EMEs and DEs. In investigating the factors behind this finding, we also ask through what channels does the growing U.S. fiscal challenges affect the policy rates in foreign countries. Specifically, we investigate the possible characteristics that make a country prone to fiscal dominance spillovers through IRFs with interaction variables. Based on theories and previous literature, we examine several domestic and international financial factors, such as the degree of financial repression and capital flows and mobility.

Our research brings two novelties to the field of fiscal dominance and interconnectedness. Firstly, we introduce a new measurement of fiscal dominance concerns, where the debate on quantifying the phenomenon is inconclusive. By constructing a PCA index that captures the dynamics of multiple fiscal variables, we contribute to the existing literature by offering a new approach to quantifying the complex concept of fiscal dominance. Secondly, we present new findings that restrain policymakers in a global economy. The evidence, backed by robustness checks, reveals that U.S. fiscal dominance has spillovers to both EMEs and DEs, with a more substantial influence on EMEs. The panel VAR model results imply that a lower degree of financial repression in EMEs is associated with more substantial spillovers from U.S. fiscal dominance, reflecting a rigidness to global factors in interest rate setting[1]. This finding suggests that financial repression can work as a reduction of vulnerability to global spillovers.

The rest of the paper is structured as follows: Section 2 presents related literature on fiscal dominance and international spillovers. Section 3 provides details on the data, followed by a description of the methodology in section 4. Section 5 presents the main findings and analysis, and ultimately, section 6 concludes the paper.

2. Related Literature on Fiscal Dominance

While previous studies have primarily focused on the dynamics of fiscal dominance in the domestic environment, our work concerns the interconnectedness of the U.S. with foreign countries. This literature review will concentrate on U.S. international spillovers and examine the existing

[1] A note of caution: this result does not necessarily imply that developing economies should pursue financial repression to reduce spillover effects, as there may be other, possibly less costly ways of dealing with the spillover effects, like targeted macro-prudential tools, in line with 2023 IMF departmental paper, concluding:

"Moreover, growing evidence points to the resilience-building effects of macroprudential policy. The evidence is that these benefits hold up through time, especially for borrower-based tools, suggesting that preemptive use of such policies can have lasting benefits in containing downside risks to growth. In emerging markets, monetary policy, foreign exchange (FX) intervention, and macroprudential policies appear to have mutually reinforcing effects on credit. By contrast, such reinforcing effects seem to be less important in advanced economies, in that the marginal effect on credit of one policy is not much affected by the policy settings of another" (Biljanovska et al., 2023, p. ix).

literature on fiscal dominance, shedding new light on this crucial area of study.

Previous literature shows that several U.S. domestic conditions lead to spillover effects internationally. Spillover effects are more significant for EMEs than advanced economies because of several structural and economic conditions (Hoek et al., 2022). For instance, U.S. monetary policy spillover effects differ among foreign countries depending on the country's fundamental monetary and fiscal policies. The spillover effects are mainly determined by the currency regime, the nation's vulnerability (Bowman et al., 2015), and its financial openness (Kearns et al., 2023; Lakdawala et al., 2021). Through policy interest rates and the real effective exchange rate, an economy striving for greater financial openness and exchange rate stability will have a more vital link with dominant economies such as the U.S. (Aizenman et al., 2016; Kearns et al., 2023). More vulnerable economies experience more significant spillovers, and their financial markets suffer more (S. Ahmed et al., 2017; Hoek et al., 2022). Nevertheless, macroprudential policies and foreign exchange reserves have proven to support EMEs' economic stability in the face of global spillovers. EMEs can be less connected and affected by the interest rates of centric countries by their macroprudential policies (R. Ahmed et al., 2023; Aizenman et al., 2020).

A vast part of the literature on global interconnectedness has studied the transmission channels of U.S. monetary policy to EMEs and DEs. The literature identifies various channels through which the spillovers occur. For example, a contractionary monetary policy by the U.S. will affect short-term and, most certainly, long-term market interest rates through the channel of risk premia (Kalemli-Özcan, 2019). A shock to the conventional monetary policy can, in turn, lead to a significant adverse change in GDP for EMEs and DEs. The effects through the risk and growth channels are usually more prominent for EMEs than for advanced economies because of country-specific risk (Cui et al., 2024; Kalemli-Özcan, 2019). However, examining only U.S. growth shows that an increase in U.S. growth will have a larger effect on growth in DEs than on EMEs (Kose et al., 2017; Shen & Abeysinghe, 2021).

Furthermore, an increase in U.S. uncertainty harms asset prices, exchange rates, and capital flows but increases bond yields as a consequence of higher risk premiums (Bhattarai et al., 2020; Hoek et al., 2022; Kalemli-Özcan, 2019; Lakdawala et al., 2021). Changes in the U.S. monetary policy also imply international risk spillovers through exchange rate fluctuations (Kalemli-Özcan, 2019), bond yields, trade balances, and interest rates (Hashmi & Nsafoah, 2024). Capital flows represent another channel of interconnectedness. For example, the expansionary monetary policy by the U.S. and other advanced economies after the Global Financial Crisis sped up the capital inflows to emerging and developing economies (Ammer et al., 2016). A higher degree of capital inflows, in turn, makes policymakers lower the policy rate for inflation-targeting purposes (Crockett, 1993). On the other hand, a contractionary monetary policy could instead decrease capital inflows and increase interest rates internationally (Ammer et al., 2016; Bowman et al., 2015; Bruno & Shin, 2015).

While a broad amount of literature analyses U.S. monetary spillovers through various channels,

potential U.S. fiscal dominance spillovers still need to be explored. The transmission of fiscal policies has been examined from many aspects, such as the effect of fiscal policy news on several economic conditions (Corrado & Silgado-Gómez, 2022), or how U.S. fiscal policies impact the real and nominal interest rates of emerging economies (Kumar et al., 2024). Nevertheless, to the best of our knowledge, no other papers have shown the possible relationships between U.S. fiscal dominance concerns and other economies' monetary conditions. Thereby, our research contributes to the existing literature on global interdependence, U.S. spillovers, and fiscal dominance.

There is broad consensus that regimes with high fiscal dominance are prone to several disadvantages in stabilizing prices and inflation. Regimes of fiscal dominance tend to be characterized by persistent waves of pessimism (De Grauwe & Foresti, 2023), associated with higher inflation volatility (Kumhof et al., 2010), have difficulties in handling adverse demand shocks (Ascari et al., 2023), and have more significant inflation (Fratianni & Spinelli, 2001). In periods of high inflation, it is proven that fiscal deficits substantially impact inflation. Unlike monetary policies, consolidation could successfully handle high inflation (Lin & Chu, 2013). Further, fiscal dominance may be inevitable in specific contexts. During the last two decades, it has been argued that public debt has been necessary because of demand shocks in the money market. Economic growth could have been negatively affected without expansionary fiscal policies (Beckworth, 2021). Nevertheless, in macroeconomic shocks, countries under fiscal dominance are impeded from acting on economic stabilization, and fiscal dominance is likely to prevent monetary authorities from stabilizing price levels and inflation.

Accordingly, understanding the drivers of fiscal dominance and determining which countries are more prone to it is relevant. Research has demonstrated that fiscal dominance is more prevalent in EMEs (R. Ahmed et al., 2021; De Resende, 2007) and that fiscal deficits, associated with fiscal dominance in the long run, have a more significant impact on inflation in EMEs compared to DEs (Catão & Terrones, 2005; Kwon et al., 2009). R. Ahmed et al. (2021) analyzed the short-term nominal interest rates and how they were affected by domestic fiscal dominance. They measured the effects through inflation, real GDP per capita, exchange rate volatility, commodity price exposure, and currency decomposition of public debt. The authors concluded that higher public debt ratios to GDP are associated with lower policy interest rates in DEs and EMEs, implying fiscal dominance. Further, they found the most robust evidence of fiscal dominance in EMEs. A possible explanation is that EMEs have higher exposure to exchange rate volatility and fluctuations in commodity prices, resulting in inflation (R. Ahmed et al., 2021). The authors opened the door for an international perspective by examining possible international drivers of fiscal dominance. We draw upon this article and aim to extend the understanding of the possible channels of fiscal dominance by examining the effects of U.S. fiscal dominance on EMEs' and DEs' policy interest rates.

3. Data and Summary Statistics

We compiled a panel dataset containing 29 EMEs and 29 DEs, excluding the U.S., over 43 years, from 1980 to 2023. The classification of countries into EMEs and DEs is based on the International Monetary Fund's World Economic Outlook (IMF, 2023). The choice of the sample period is based on the data available to the EMEs. However, DEs have data for a more extended period. In order to compare the DEs to EMEs, we consider the starting period of our sample, 1980. The choice of the EMEs is based on the data availability of the emerging economies, and bilateral trade in goods and services between the U.S. and other countries is denominated in U.S. dollars. We exclude several EME countries due to a lack of data and missing data during the sample period investigated. For eurozone observations, we have aggregated the variables based on each country's level of GDP. We acknowledge that this approach might cause complications in the accuracy of the dataset in capturing the variables connected to the eurozone policy rate setting. Therefore, as a robustness test, we run regressions without the eurozone sample and find that our results are robust. The countries can be found in Table A1 in the Appendix.

3.1 U.S. Fiscal Dominance Index

The theory of fiscal dominance was first introduced by Sargent and Wallace (1981), and they explained it as monetary-fiscal coordination, where fiscal policy dominates monetary policy. In a regime of fiscal dominance, the fiscal authority exercises autonomous control over budgetary decisions, including deficits, revenue generation through bond issuance, and currency issuance. Consequently, the monetary authority is constrained by the demand for government bonds determined by the fiscal authority, making it necessary to finance any gap between the revenue required by the fiscal authority and the number of bonds that can be sold to the public using currency issuance. If the fiscal deficits cannot be covered by bond issuance, the monetary authority must generate money and accept eventual inflation. Thus, the constraint usually results in high inflationary pressures because the central bank's goal to keep inflation low through policy adjustment is ineffective (Sargent & Wallace, 1981) and in the growing use of financial repression. Financial repression is a policy tool to control and reduce the servicing costs of public debt by maintaining low real interest rates, mainly through interest rate ceilings, targeted lending to the government by domestic stakeholders, capital controls, and other regulatory restrictions. As such, financial repression curtails market-driven interest rate determination by limiting financial openness and imposing regulatory constraints. This allows governments to borrow at lower costs than they would under free market conditions. Consequently, financial repression leads to increased control of capital flows, limits capital mobility, and has significant implications for financial stability (Reinhart & Sbrancia, 2015). As highlighted by Reinhart (2012), financial repression may be a long-term part of debt reduction strategies, especially when traditional fiscal policy is constrained and interest rates are kept low through regulation.

The measurement of fiscal dominance is a crucial aspect that needs to be clarified, and previous literature varies in how it defines the concept. To address this, we constructed an index for fiscal dominance using the robust Principal Component Analysis (PCA) method (Husson et al., 2011). PCA establishes an index for different variables that provide similar information, ensuring a comprehensive

and reliable measurement. This method is particularly beneficial as the index will consist of more information from a couple of variables instead of just one variable, thereby capturing the dynamics and complexities of fiscal dominance more favorably. The PCA index consists of the first four principal components and explains 98% of the variance in the data. The components are weighted based on the proportion of variance. The detailed components of the PCA are available in Appendix Table A3. We built upon the measurement of fiscal dominance from R. Ahmed et al. (2021), Kwon et al. (2009), and Blanchard (2005) when choosing the correct variables included in the index. R. Ahmed et al. (2021) define fiscal dominance as a measure of public debt to GDP ratio, Kwon et al. (2009) specify the concept with a variable of public debt growth, and Blanchard (2005) describes fiscal dominance in the context of the relationship between government debt, interest rates and the probability of default. We intend to develop a new metric for fiscal dominance by including multiple variables based on the theory of fiscal dominance and previous literature when quantifying the concept. Thus, the index consists of the following variables: *U.S. public debt as a percentage of GDP*, *U.S. public debt as a percentage of government revenue*, *U.S. government expenditure as a percentage of GDP*, *U.S. public debt as a percentage of money supply*, *U.S. interest payments made by the federal government as a percentage of GDP*, and *S&P 500 volatility*. We chose to use these variables because they consider different parameters connected to the definition of fiscal dominance: government debt levels, money supply, cost of servicing the government's debt and financing, such as expenditure and revenue. Our choice of including variables connected to the money supply, GDP, government revenue, and government expenditure is motivated by the studies by Kwon et al. (2009), Kumhof et al. (2010), and De Resende (2007), where these variables are used as control variables when measuring fiscal dominance effects. Our investigated sample period covers the Global Financial Crisis of 2007-2008; we incorporated U.S. financial market volatility as a control for structural change and financial shocks in our investigation. Our investigation considers the S&P500 index and transforms it into the conditional volatility index using the GARCH (1,1) process. It is important to note that we didn't consider the implied volatility, which is available from 1990, whereas our sample period starts from 1980. Admittedly, there has yet to be a clear consensus on the measurement of fiscal dominance, but we strive to capture the complex concept of fiscal dominance by integrating these diverse variables through the rigorous PCA method.

Figure 2 below shows the development of the PCA index for fiscal dominance in the U.S. A higher value for the PCA index reflects higher concerns of future U.S. fiscal dominance. The observed surge in the index and the general increase in U.S. public debt to GDP ratio after the GFC in 2008 as well as the spike in 2020 due to COVID-19 motivated us to include control variables for pre- and post-GFC and COVID-19. Considering the stylized fact, we hypothesize that if there is a relationship between the U.S. fiscal dominance index and the policy rates in the examined countries, this relationship will be more significant during the post-GFC period and post COVID-19than during the pre-GFC period. These results are presented in the Robustness Appendix (Tables B2 and B3). The use of the PCA index in measuring U.S. fiscal dominance provides a comprehensive and reliable measurement, enhancing the understanding of the concept and its implications.

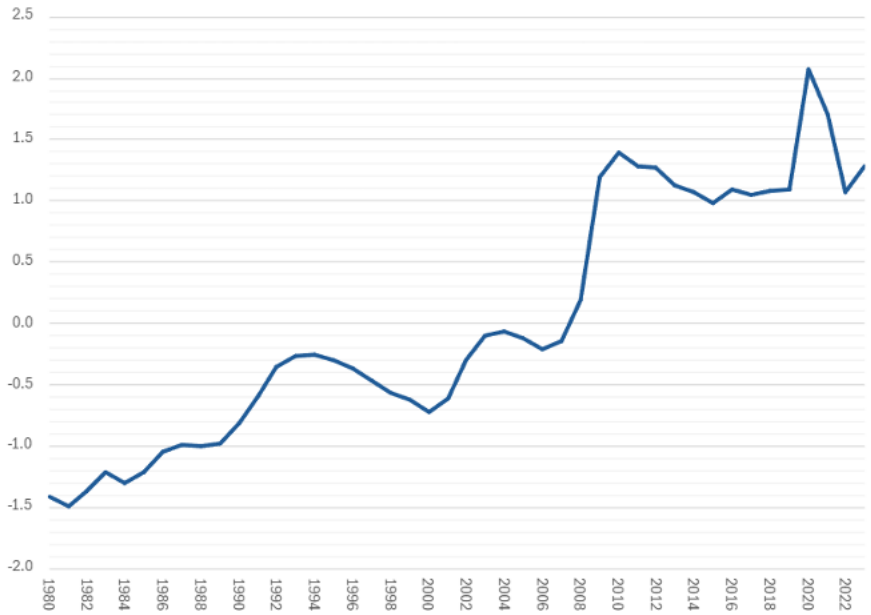


Figure 2: *Development of PCA Index for Fiscal Dominance in the United States.*
Note: Self constructed PCA Index for concerns of future U.S. fiscal dominance. Variables in PCA index: U.S. public debt as a percentage of GDP, U.S. public debt as a percentage of government revenue, U.S. government expenditure as a percentage of GDP, U.S. public debt as a percentage of money supply, U.S. interest payments made by the federal government as a percentage of GDP, and S&P 500 volatility.

Table 1: *Descriptive Statistics.*

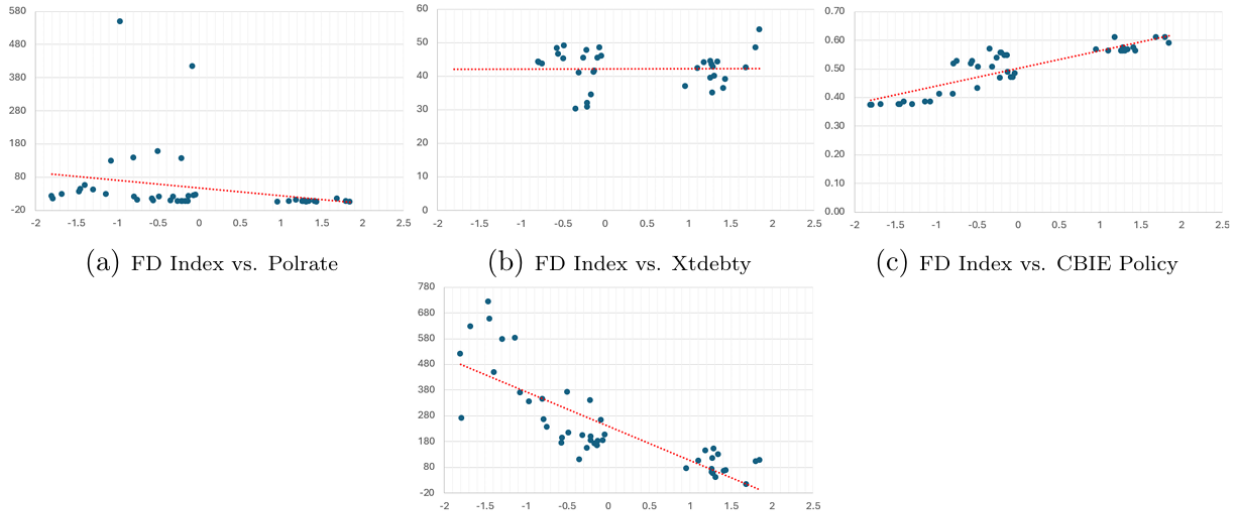
	N	Mean	SD	Min	Max	Kurtosis	Skewness	Levinlin	Madwu
Full Sample									
FD_Index	2219	-0.12	1.07	-1.81	2.02	1.96	0.32	-12.718***	194.7***
Emerging Market Economies									
Polrate	926	31.92	297.45	0.10	6404.97	361.75	18.26	-6.05***	132.1***
GDPgrowth	1247	3.78	5.78	-41.00	82.80	37.05	1.22	-6.34***	168.33***
Inflation	1180	58.16	477.33	-10.63	11749.64	366.44	17.32	-11.41***	101.66***
Currbal/GDP	1234	-0.28	11.11	-242.20	54.60	186.46	-7.53	-6.39***	159.82***
Govexp	1000	27.58	12.00	6.80	204.17	50.05	3.74	-5.54***	98.77***
FOR	742	0.21	0.19	0.00	0.91	4.21	1.21	NAP	NAP
SOB	742	0.28	0.23	0.00	0.95	3.02	0.88	NAP	NAP
KAOPEN	1146	0.46	0.35	0.00	1.00	1.69	0.34	NAP	NAP
FR Revenue/GDP	393	160.03	147.38	-3.11	1161.20	15.67	2.78	-4.52***	52.19***
Xtdebty	804	42.09	27.37	2.28	227.45	9.95	2.07	-6.99***	94.56***
Public_PD_inflows	621	0.66	2.28	-6.14	26.31	49.61	5.52	-7.28***	113.48***
Bank_PD_inflows	621	0.06	0.57	-4.96	6.41	54.95	3.46	-6.96***	116.54***
Corp_PD_inflows	621	0.25	0.89	-3.22	7.81	26.48	3.94	-6.70***	101.74***
ERS	1150	0.50	0.31	0.01	1.00	1.91	0.46	NAP	NAP
Cbie_policy	1108	0.51	0.21	0.07	0.80	2.12	-0.41	NAP	NAP
Cbie_lending	1108	0.58	0.33	0.00	1.00	1.86	-0.01	NAP	NAP
Developed Economies									
Polrate	683	7.49	37.00	-0.75	951.20	621.46	24.39	-8.84***	84.59***
GDPgrowth	873	2.84	3.14	-14.80	14.50	7.74	-0.63	-9.27***	128.45***
Inflation	899	15.64	100.06	-1.39	1500.00	146.66	11.53	-4.55***	126.1***
Currbal/GDP	849	0.48	6.69	-22.70	55.40	9.95	1.29	-5.36***	91.54***
Govexp	770	42.97	10.33	9.01	67.74	4.01	-0.82	-4.84***	52.02***
FOR	470	0.24	0.31	0.00	1.00	3.17	1.28	NAP	NAP
SOB	470	0.10	0.13	0.00	1.00	14.16	2.69	NAP	NAP
KAOPEN	802	0.79	0.29	0.00	1.00	2.93	-1.14	NAP	NAP
Xtdebty	337	174.38	136.61	1.77	922.86	8.94	2.12	-2.37***	38.25***
Public_PD_inflows	425	2.84	7.62	-16.01	66.21	19.35	3.30	-3.46***	38.25***
Bank_PD_inflows	425	1.88	6.34	-29.10	47.79	22.08	2.62	-4.55***	91.47***
Corp_PD_inflows	425	1.63	7.89	-91.34	48.98	59.59	-2.62	-3.94***	77.32***
ERS	845	0.46	0.20	0.04	1.00	3.35	0.77	NAP	NAP
Cbie_policy	854	0.51	0.21	0.00	0.80	2.42	-0.28	NAP	NAP
Cbie_lending	854	0.47	0.37	0.00	1.00	1.64	0.30	NAP	NAP

Notes: *, **, *** indicate significance at the 10%, 5% and 1% level, respectively, for Levinlin and Madwu critical values. Not applicable, NAP, refers to tests that are not applicable on indexes between 0 and 1. Sd implies standard deviation for the mean values. Variable definitions: FD_index: U.S. Fiscal Dominance PCA Index. Polrate: Policy rate. GDPgrowth: Real GDP growth. Inflat: Inflation. Currbal/GDP: Current balance (% of GDP). Govexp: Government expenditure (% of GDP). FOR: Foreign ownership of banks. SOB: State ownership of banks. KAOPEN: Financial openness. FR revenue/GDP: Revenue gained from financial repression (% of GDP), data only avaliabe for EMEs. Xtdebty: External debt. Public_PD_inflows: Public portfolio debt inflows. Bank_PD_inflows: Bank portfolio debt inflows. Corp_PD_inflows: Corporate portfolio debt inflows. ERS: Exchange Rate Stability. Cbie_policy: Central bank independence - monetary policy and conflicts resolution dimension. Cbie_lending: Central bank independence - limitations on lending to the government dimension. Sources for each variable can be found in Table A2 in the Appendix.

Table 1 shows the descriptive statistics for our regression's dependent and independent variables for the full sample, EMEs, and DEs. The observations vary between the variables because of the availability of the data. The mean, standard deviation for the mean, and minimum and maximum values illustrate the high variation in some variables, especially the *policy rate (*Polrate), *inflation* (Inflation), and f*inancial repression revenues* (FR revenue/GDP) for EMEs compared to DEs.

As proxies for financial repression, we use the variables *foreign ownership of banks* (FOR), *state ownership of banks* (SOB), *financial openness* (KAOPEN), *external debt stocks (*Xtdebty), and f*inancial repression revenues* (FR revenue/GDP). *Financial repression revenues* are measured following Giovannini and De Melo (1993) and Jinjarak (2013), who calculated the difference between the average interest rate on external debt and the average interest rate of total debt, multiplied by total debt through GDP.We use more recent data collected from the IDS database. The external debt interest rates reflect market-based borrowing costs since they are subject to global financial conditions. In contrast, domestic debt interest rates are more likely to be influenced by financial repression policies. These policies aim to hold government bonds at suppressed yields and keep the average interest rate of total debt lower than it would be under free market conditions. Thus, the interest rate differential captures the extent to which government policy influences domestic financial markets. A larger gap suggests stronger financial repression, indicating that domestic debt is financed at artificially lower rates than market-driven external borrowing costs. This proxy effectively quantifies an implicit tax on investors and domestic financial institutions, illustrating how much governments save on debt servicing by repressing domestic financial markets. Due to data availability, the *financial repression revenues* are estimated to be only for EMEs. Quantifying financial repression is admittedly intricate, given the many factors and variables that are at play. We acknowledge that our proxies might not fully capture the phenomenon of financial repression, but by using these five proxies, we hope to shed light on some of the dynamics involved. The variables for financial repression show that EMEs have less foreign- but more state ownership of banks, are less financially open to capital account transactions, and have lower levels of external debt stocks to GDP than DEs, indicating a high degree of financial repression in EMEs.

Figures 3 and 4 are instrumental in our analysis of transmission channels, as they visually represent the relationships between key variables in our estimations. Figure 3a presents a scatterplot showing the negative correlations between the U.S. fiscal dominance index and the average policy rates in EMEs. Figure 4a shows the corresponding correlation in DEs. This negative correlation aligns with theoretical expectations, as fiscal dominance is typically associated with downward pressure on interest rates. Figures 3a and 4a exhibit significant outliers for the policy rate, driven by Bolivia, Brazil, Croatia, and Peru. As a precaution, we will estimate the baseline Panel VAR model both with and without these countries. Additionally, we will test the robustness of the results by estimating winsorized samples at the 10th and 90th quantiles, as presented in the Robustness Appendix (Tables B4 and B5).

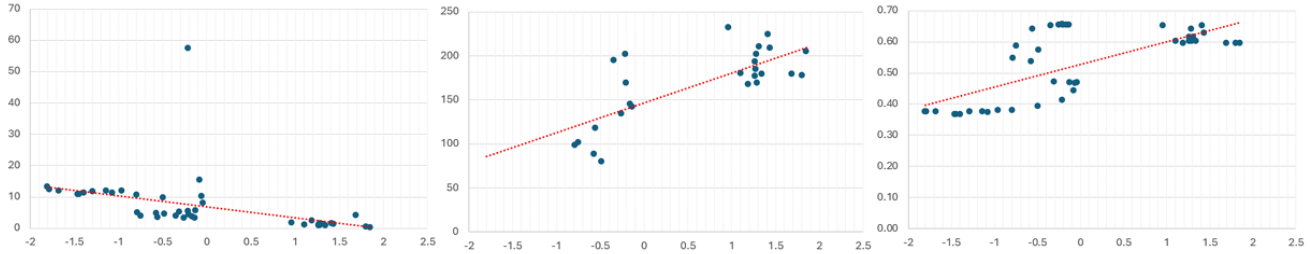


(a) FD Index vs. Polrate (b) FD Index vs. Xtdebty (c) FD Index vs. CBIE Policy

(d) FD Index vs. FR Revenue/GDP

Figure 3: *Scatter Plots of Main Variables, EMEs.*

Notes: The figures represent average values across the observed period (1980-2023). The x-axis represents the U.S. Fiscal Dominance (FD) Index, and the y-axis represents the corresponding variable. Variable definitions: Polrate: Policy rate. Xtdebty: External debt. CBIE Policy: Central bank independence - monetary policy and conflicts resolution dimension. FR Revenue/GDP: Revenue gained from financial repression (% of GDP).



(a) FD Index vs. Polrate (b) FD Index vs. Xtdebty (c) FD Index vs. CBIE Policy

Figure 4: *Scatter Plots of Main Variables, DEs.*

Notes: The figures represent average values across the observed period (1980-2023). The x-axis represents the U.S. Fiscal Dominance (FD) Index, and the y-axis represents the corresponding variable. Variable definitions: Polrate: Policy rate. Xtdebty: External debt. CBIE Policy: Central bank independence - monetary policy and conflicts resolution dimension.

4. Methodology

This section presents the methodology used to examine the spillover effects of U.S. fiscal dominance on EMEs and DEs. We apply two complementary approaches: fixed effects panel regressions (Wooldridge, 2005), and Panel Vector Autoregression (Panel VAR) from which we extract Impulse Response Functions (IRFs) (Lütkepohl, 1990). The fixed effects panel regressions aimed to establish the possible presence of spillovers from U.S. fiscal dominance to EMEs and DEs, respectively, while controlling for various domestic and global factors, and time-invariant heterogeneity at country and income-group levels. Then, the Panel VAR model allows us to delve further by capturing the dynamic interactions between U.S. fiscal dominance and policy rates over time, addressing both time-invariant heterogeneity and endogeneity from lagged dependent variables. Additionally, the IRFs derived from

the Panel VAR allow us to trace the impact of a U.S. fiscal dominance shock on policy rates through various transmission channels. By applying IRFs to both individual variables and interaction terms, we assess how the strength and timing of spillovers affect different countries based on their economic characteristics. Using these two approaches in combination enhances the robustness and credibility of our findings and provides a greater understanding of the underlying dynamics of U.S. fiscal dominance spillovers. This pairing provides our analysis useful multivariate dynamics, yet retains their credibility from comparing country-level observations to themselves over time.

$$\mathrm{Y_{it}} = \alpha \mathrm{Y_{it-1}} + \beta_1 \mathrm{X_{it}} + \beta_2 \mathrm{Z_{it}} + \beta_3 \mathrm{X_{it}} \mathrm{Z_{it}} + \beta_4 \mathrm{C_{it}} + \eta_\mathrm{i} + v_\mathrm{it} \qquad (1)$$

Equation 1 shows our baseline equation for the fixed effects model following a benchmark equation proposed by Kwon et al. (2009). $\mathrm{Y_{it}}$ is the dependent variable *policy rate* in country *i* at time *t* and $\mathrm{X_{it}}$ is the independent variable *U.S fiscal dominance*, which we derived from the PCA index. $\mathrm{Y_{it-1}}$ is the lagged value of the policy rate in each examined country, which we used as a robustness measure, and α is the corresponding coefficient for the variable. $\mathrm{Z_{it}}$ and $\mathrm{C_{it}}$ refer to control variables in each country *i*. $\mathrm{X_{it}Z_{it}}$ are the interaction variables between the independent variable U.S. fiscal dominance index and each of the other control variables $\mathrm{Z_{it}}$. In this study, the interaction variable, for example the financial repression revenues, describes how the effect of U.S. fiscal dominance on the policy rate depends on the value of one of the control variables. β refers to the corresponding coefficients. v_it is the error term and is assumed to be uncorrelated with the independent variable. The expected value of the fixed effects, η_i, is assumed to be uncorrelated with the error terms, v_it. A more in-depth description and sources for each variable can be found in Table A2 in the Appendix.

For robustness purposes and to determine the channels of the spillovers from U.S. fiscal dominance to the policy rate in each examined country, a panel VAR model was constructed according to Abrigo and Love (2016):

$$\mathrm{Y_{it}} = \mathrm{A_1 Y_{it-1}} + \mathrm{A_2 Y_{it-2}} + \cdots + \mathrm{A_{p-1} Y_{it-p+1}} + \mathrm{A_p Y_{it-p}} + \mathrm{B X_{it}} + \mathrm{u_i} + \mathrm{e_{it}} \qquad (2)$$

$$i \in \{1, 2, \ldots, N\}, t \in \{1, 2, \ldots, \mathrm{T_i}\}$$

Equation 2 shows the panel VAR regression of order *p* with *k* predictor terms where $\mathrm{Y_{it}}$ is a (1 x *k*) vector of dependent variables, $\mathrm{X_{it}}$ is a (1 x *l*) vector of exogenous covariates, $\mathrm{u_i}$ is a (1 x *k*) vector of the fixed-effects, and $\mathrm{e_{it}}$ is a (1 x *k*) vector of the error terms. The parameters to be measured are $\mathrm{A_1}$, $\mathrm{A_2}$, …, $\mathrm{A_{p-1}}$, and $\mathrm{A_p}$, which are (*k* x *k*) matrices, and B, which is a (*l* x *k*) matrix (Abrigo & Love, 2016).

The analysis was extended by constructing IRFs, according to Lütkepohl (1990), to identify how a shock in one variable affected the other variables for a predetermined horizon. We applied IRFs to interaction terms to analyze the dynamics of the spillovers and to detect the transmission channels of the U.S. fiscal dominance spillovers. Equation 3 below shows the forecast error impulse response function for the *i*th period after the shock:

$$\phi_{\mathrm{i}} = \sum_{j=1}^{i} \phi_{\mathrm{i-j}} \mathrm{A_j} \tag{3}$$

where $\phi_{\mathrm{i}} = \mathrm{I_k}$ is the (k x k) identity matrix, $\mathrm{A_j} = 0$ for $j > p$, j is the lag index and ranges from 1 to p, and p is the total number of lagged observations included in the model. We composed an orthogonal impulse response function which uses Cholesky decomposition to break down the covariance matrix to get $\sum = LL'$, where $\sum$ is the correlation matrix, and L is a lower triangular matrix with positive diagonal elements. We consider Cholesky's decomposition, ordering the U.S. fiscal dominance index first and the policy rate second since a shock in the fiscal dominance index can affect the policy rate contemporaneously (Abrigo & Love, 2016) and aligns with the theoretical framework in that U.S. domestic conditions affect foreign economies (Kumar et al., 2024). In the empirical setting, we ordered the control variable to be third, allowing a shock in the policy rate to affect the control variable contemporaneously. When constructing IRFs with the interaction term, including the U.S. fiscal dominance and each of the other control variables, the interaction term was put first in the order, followed by the policy rate. Equation 4 below shows the orthogonal impulse response:

$$\theta_{\mathrm{i}}^{0} = \phi_{\mathrm{i}} L \tag{4}$$

where ϕ_{i} is the forecast error impulse response function for the ith period after the shock and L is the lower triangular matrix with positive diagonal elements (Abrigo & Love, 2016).

5. Empirical Results and Analysis

This section presents our main findings from the fixed effects panel regression and the panel VAR model. We divided the regressions into samples of EMEs and DEs, respectively. Our results and robustness checks show that U.S. fiscal dominance has significant negative spillovers to both EMEs and DEs. Having established this significant relationship, we analyzed the dynamics and transmission channels of the spillovers using Impulse Response Functions (IRFs) from the panel VAR model.

5.1 Baseline Model

Tables 2 and 3 present the baseline results from the fixed effects regressions for the full period (1980-2023) for EMEs and DEs. The first row of both tables documents a significant negative impact of U.S. fiscal dominance on the policy rates in EMEs and DEs, staying consistent across a wide range of control variables. The main independent variable is a self-constructed PCA index, which makes the direct interpretations of the coefficients difficult. We can, however, conclude that the effects are economically significant: a level increase of 1 in the fiscal dominance index leads to a decrease of –0.63 to –1.88 in the policy rates in EMEs and a decrease of –0.86 to –1.80 in DEs.

The results of our study align with the theory of interconnectedness and the international influence of the U.S. economy. EMEs and DEs are deeply integrated with the U.S., a dominant global economy, and its influence on the global market is profound. This interconnectedness is evident across various channels, including financial markets, trade relations, capital flows, and policy coordination (Bergin,

2018; Cooper, 1985; Corsetti & Pesenti, 2001). For example, the U.S. dollar serves as the world's primary reserve currency, and EMEs and DEs can be significantly affected through global trade and financial transactions (Kose et al., 2017). The theory of interconnectedness and U.S. international influence can explain that shifts in the U.S. fiscal dominance can impact the value of the U.S. dollar and react across international borders, which can impact exchange rates and economic conditions in foreign countries. The interdependence between the U.S. and other countries explains the spillover effects of U.S. fiscal dominance on policy rates in foreign countries.

For most models, the coefficient for the U.S. fiscal dominance index has a higher negative value for EMEs than for DEs, implying a more substantial spillover effect in EMEs. Previous literature highlights that spillover effects, which are the unintended consequences of a country's economic policies on other countries, tend to be more significant for EMEs. This is due to their vulnerability, as they heavily depend on their degree of macroprudential policies and foreign exchange reserves to maintain monetary policy independence (R. Ahmed et al., 2023; Aizenman et al., 2020). However, even if EMEs are more susceptible to spillover effects, DEs can be more interconnected with the U.S. and more impacted by its fiscal dominance because of financial openness and exchange rate stability (Aizenman et al., 2016; Kearns et al., 2023). We can observe a significant negative relationship between the policy rates in DEs and their Exchange Rate Stability (ERS), as well as between the Central Bank Independence index of the monetary policy dimension (CBIE policy). DEs are able to maintain low policy rates because of their ERS and CBIE since these two conditions create an environment for credibility, economic stability and growth, giving the central bank greater flexibility in setting lower policy rates without compromising economic stability or fueling inflation.

Table 2: *Main Regressions with Transmission Channels, EMEs.*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
FD_index	**-1.67****	**-1.16****	**-0.83****	**-1.13****	**-1.88***	**-1.75****	**-1.70****	**-1.34****	**-1.35***	**-1.34****	**-0.72****	**-0.82***	**-0.63***
	(0.69)	**(0.45)**	**(0.37)**	**(0.46)**	**(1.13)**	**(0.68)**	**(0.71)**	**(0.66)**	**(0.69)**	**(0.68)**	**(0.35)**	**(0.44)**	**(0.34)**
FOR	-20.55	1.48											
	(14.41)	(3.23)											
Ka_open	-5.17		3.10										
	(5.31)		(2.12)										
SOB	-4.62			0.21									
	(6.24)			(1.41)									
FR Revenue/GDP	0.02*				0.01								
	(0.01)				(0.01)								
Xtdebty	-0.08					-0.01							
	(0.05)					(0.01)							
ΔXtdebty	5.32**						3.97**						
	(2.50)						(1.68)						
Public_PD_inflows								-0.01					
								(0.06)					
Bank_PD_inflows									0.04				
									(0.24)				
Corp_PD_inflows										-0.02			
										(0.12)			
ERS											1.99		
											(2.06)		
Cbie_policy												-0.07	
												(0.05)	
Cbie_lending													-6.54
													(5.26)
Observations	274	613	739	613	318	614	600	556	556	556	714	749	749
Adjusted R2	0.64	0.61	0.80	0.61	0.53	0.66	0.66	0.60	0.60	0.60	0.80	0.80	0.80
Baseline Control Variables Included	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

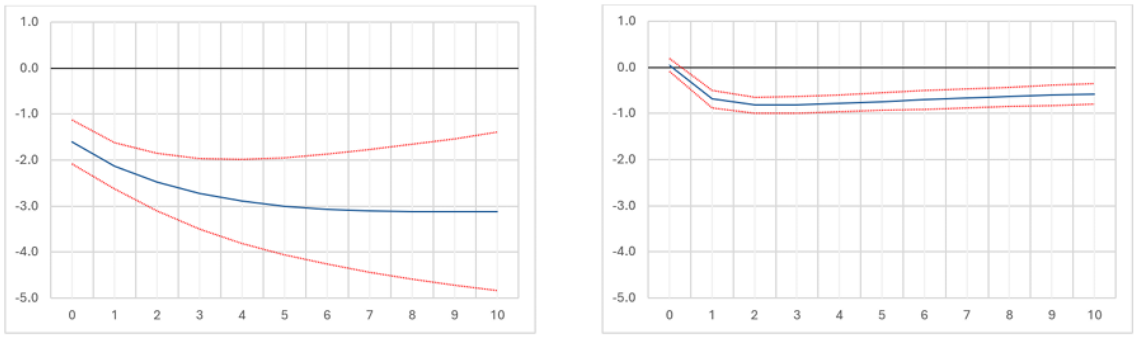
Notes: Dependent variable: Policy interest rate. Estimation: Panel fixed effects model. The associated standard errors are included below each estimated coefficient in parentheses. All regressions include the following baseline controls: lagged policy rate, GDP growth, inflation, current account balance, and government expenditure. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

In addition, it is relevant to discuss why and how U.S. fiscal dominance affects the U.S. policy rate and, in turn, the policy rates in EMEs and DEs. U.S. fiscal dominance impacts the policy rate in the United States since monetary policy is forced to accommodate fiscal policies. As fiscal authorities become more expansive, while the demand for government bonds is restrained, monetary authorities are forced to finance the fiscal gap through currency issuance or financial repression, which puts downward pressure on interest rates (Sargent & Wallace, 1981; Reinhart & Sbrancia, 2015). In other words, fiscal dominance led to a lower policy rate in the U.S. Furthermore, the GFC and the pandemic greatly inflated U.S. debt and led to political demand to maintain a low policy rate and adopt debt monetization. Financial repression was also a way to liquidate the debt through measures such as quantitative easing, implicit caps on interest rates, regulation of the flow of capital, and a tighter connection between the government and banks (Reinhart & Sbrancia, 2015). Subsequently, a low policy rate in the U.S. can lead to low policy rates in the global economy, considering the hegemonic position of the U.S. economy. This direct impact is referred to as monetary policy coordination (Cooper, 1985; Kose et al., 2017). A monetary decision in the U.S., for example, a decrease in the policy rate, can have not only indirect effects through transmission channels on the policy rates in foreign countries but also direct effects. As a result, we have monetary policy coordination if the recipient economies follow the policymakers in the U.S. and respond with similar monetary policies. Our findings might be a consequence of monetary policy coordination, where fiscal dominance has put downward pressure on the U.S. policy rate, and EMEs and DEs have followed accordingly.

Table 3: *Main Regressions with Transmission Channels, DEs.*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FD_index	**-0.92*** **	**-0.97*** **	**-0.95*** **	**-0.90*** **	**-0.87*** **	**-0.86*** **	**-1.25*** **	**-1.23*** **	**-1.23*** **	**-1.80*** **	**-1.56*** **	**-1.69*** **
	(0.26)	**(0.16)**	**(0.32)**	**(0.14)**	**(0.19)**	**(0.16)**	**(0.38)**	**(0.38)**	**(0.38)**	**(0.24)**	**(0.22)**	**(0.24)**
FOR	7.33***	-1.83										
	(2.81)	(1.82)										
Ka_open	-1.15		-1.48									
	(1.43)		(1.00)									
SOB	3.20***			3.91								
	(0.83)			(3.41)								
Xtdebty	0.0001				0.0001							
	(0.002)				(0.001)							
ΔXtdebty	1.16					1.09*						
	(0.75)					(0.62)						
Public_PD_inflows							0.01					
							(0.01)					
Bank_PD_inflows								0.02***				
								(0.01)				
Corp_PD_inflows									0.01*			
									(0.01)			
ERS										-2.15		
										(1.41)		
Cbie_policy											-6.89***	
											(1.52)	
Cbie_lending												-2.15*
												(1.24)
Observations	247	359	548	359	279	266	338	338	338	558	567	567
Adjusted R2	0.65	0.48	0.79	0.50	0.60	0.60	0.55	0.56	0.56	0.75	0.74	0.74
Baseline Control Variables Included	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: Dependent variable: Policy interest rate. Estimation: Panel fixed effects model. The associated standard errors are included below each estimated coefficient in parentheses. All regressions include the following baseline controls: lagged policy rate, GDP growth, inflation, current account balance, and government expenditure. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.



(a) Emerging Market Economies (b) Developed Economies

Figure 5: *Impulse Response Functions from the Panel VAR Model.*
Notes: The figures show the cumulative response of the policy rate to a shock in the U.S. fiscal dominance index. The red dashed line shows the 90% confidence interval. The model excludes the outliers Bolivia, Brazil, Croatia, and Peru.

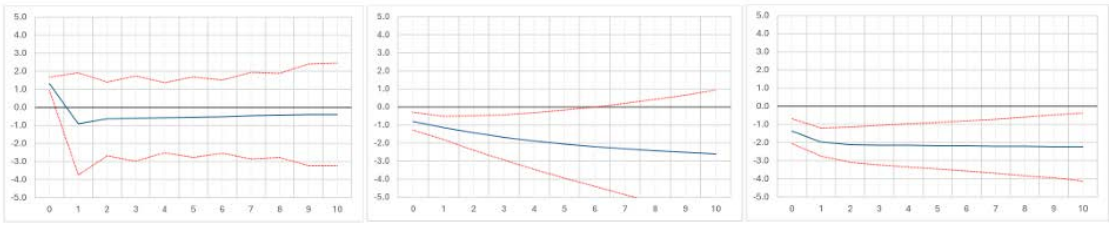
Figure 5 shows the medium-run impact of a shock in the U.S. fiscal dominance index on the policy rates in EMEs and DEs, respectively. The IRFs validate the negative relationship from the fixed effects regressions. The result shows that a one percentage point increase in the U.S. fiscal dominance index provokes about a 0.7 percentage point decrease in the policy rates in DEs after one year and continues to have a negative effect for ten years (see Figure 5b). In line with previous findings, the effect is more significant for EMEs, with an effect of a 3-percentage point decrease after 5 years, as illustrated in Figure 5a. A potential explanation for the more significant effect on EMEs can be due to a higher degree of indirect spillovers. Our analysis considers direct spillovers as those involving immediate impacts, such as monetary policy coordination.

Conversely, we consider indirect spillovers as the transmission of shocks via intermediate channels or third-party countries, often through transmission channels, which will be discussed in the next section. EMEs might be more susceptible to indirect spillovers because of their fundamental economic conditions. The relative negative response in EMEs magnifies over the ten years to a greater extent than the relative response in DEs. The difference in response time can be attributed to the significant impact on EMEs and a potentially slower reaction to indirect spillover effects.

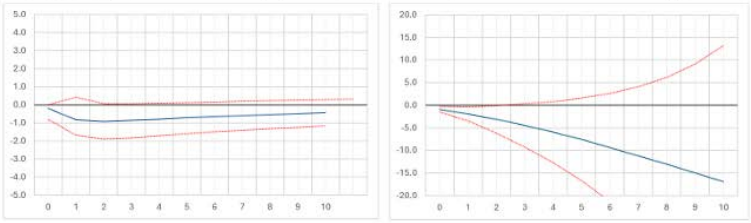
Transmission Channels of U.S. Fiscal Dominance Spillovers

Having established the significant spillover effects of U.S. fiscal dominance on the policy rates in the EMEs and DEs, this section extends the analysis by looking at the possible transmission channels of this phenomenon. A recent study by Kumar et al. (2024) shows the impact of the U.S. fiscal policy shock is different from U.S. monetary policy spillover shock in emerging economies. In creating a practical macroprudential framework for working against spillovers, it is essential to understand where and why they arise. Therefore, we examine various domestic and global factors that might be possible determinants of the spillovers based on previous literature and the findings from the main regressions, with a primary focus on financial repression and its underlying dynamics. The analysis is done through IRFs with interaction variables on the total sample of countries excluding outliers, including both the EMEs and DEs. The analysis on financial repression revenues, is only done on EMEs due to data availability. Each interaction term includes U.S. fiscal dominance and one of the control variables investigated as transmission channels. The IRFs shown in Figure 6 document how the policy rate's response to a shock in U.S. fiscal dominance changes depending on the value of one of the transmission channels, such as *financial repression revenues* or *capital inflows*.

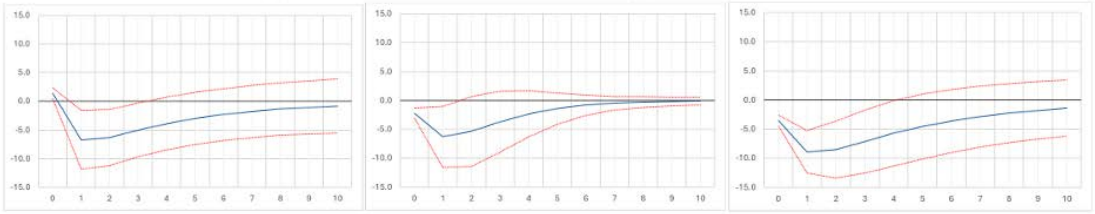
Figures 6a, 6b, 6c, 6d, and 6e document the findings from the IRFs connected to financial repression. Figure 6b shows how the medium-run impact of a U.S. fiscal dominance shock on policy rates varies depending on a country's financial openness. The data documents that countries with greater financial openness or less financial repression face more substantial negative spillovers. Therefore, the figure exemplifies how financial repression can diminish the effects of fiscal dominance spillover in the U.S. The usage of KAOPEN as a proxy for financial repression might be questioned because the variable captures the dynamics of capital flows and mobility in addition to financial repression. Hence, this motivates further analysis of the dynamics of the impact that several global factors might have on the spillover effect of U.S. fiscal dominance. Figure 6a also supports the conclusion that a higher degree of financial repression diminishes the negative spillovers from U.S. fiscal dominance spillovers since the figure shows a positive relationship between the policy rate and the interaction variable of financial repression revenue (FR Revenue/GDP) and fiscal dominance index. However, the positive relationship could be more persistent, and there is no significant effect from financial repression revenue after approximately one quarter. Figure 6c validates the findings of financial repression since it illustrates that as foreign ownership of banks (FOR) increases, a country is less financially repressed, and the negative spillovers magnify. Figure 6e shows that an increase in total external debt stocks (Xtdebty) leads to an amplified negative effect on the policy rates following a fiscal dominance shock. However, this effect is not significant after 2 years. Financial repression is associated with a reduction in external debt and capital inflows from other countries. Capital flows become more domestically oriented as many countries have incentives to keep capital in the country to finance their high levels of public debt by creating a domestic captive audience.



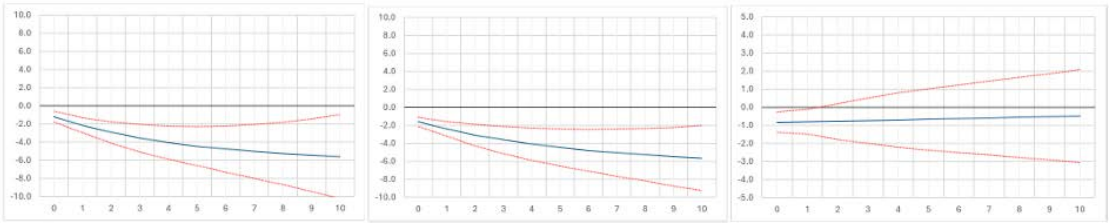
(a) *FD Index* X *FR Revenue/GDP* (b) *FD Index* X *KAOPEN* (c) *FD Index* X *FOR*



(d) *FD Index* X *SOB* (e) *FD Index* X *Xtdebty*



(f) *FD Index* X *Public PD Inflows* (g) *FD Index* X *Bank PD Inflows* (h) *FD Index* X *Corp PD Inflows*



(i) *FD Index* X *CBIE Lending* (j) *FD Index* X *CBIE Policy* (k) *FD Index* X *ERS*

Figure 6: *Impulse Response Functions from the Panel VAR Model: Interaction Variables.*

Notes: The figures show the cumulative response of the policy rate to a shock in each interaction variable. The red dashed line shows the 90% confidence interval. The model excludes the outliers Bolivia, Brazil, Croatia, and Peru. Variable definitions: FR Revenue/GDP: Financial repression revenue to GDP. KAOPEN: Financial openness. FOR: Foreign ownership of banks. SOB: State ownership of banks. Xtdebty: Total external debt stocks. Public PD Inflows: Public portfolio debt inflows. Bank PD Inflows: Bank portfolio debt inflows. Corp PD Inflows: Corporate portfolio debt inflows. ERS: Exchange Rate Stability. CBIE Lending: Central Bank Independence Extended index with lending dimension. CBIE Policy: Central Bank Independence Extended index with policy dimension.

In general, the findings from the IRFs in Figures 6a-6e show that high degrees of financial repression are associated with low degrees of spillovers from U.S. fiscal dominance. The results could be explained by the overall downward pressure on interest rates associated with financial repression. For example, governments try to manage their debt with caps on interest rates to reduce the cost of servicing public debt, putting additional downward pressure on policy rates. With financial repression present, the local financial market is segmented from the international market, effectively separating it from global financial dynamics. This separation is similar to capital controls, a government's measures to regulate flows from capital markets into and out of the country. This results in a lower impact from global factors such as fiscal dominance in the U.S.

A low degree of spillovers could reflect overall low responsiveness to external factors and rigidity in interest rate formation, which is associated with financial repression. Previous literature illustrates that high degrees of financial repression increase capital flights (Aizenman, 2008) and create a forced-to-home bias for capital (Reinhart & Sbrancia, 2015). In other words, foreign investors move capital to other countries while domestic investors are forced to keep capital in the domestic market. A country with higher financial repression loses international investor appetite, which makes the country less affected by external factors. Further, financial repression is associated with low degrees of global market integration and high capital controls. These characteristics should intuitively lead to lower spillover effects, as we find from the variables Financial Openness (KAOPEN) and Foreign Ownership of Banks (FOR). These findings can be contrasted by the findings on monetary independence indexes from Figures 6i and 6j, which state that as monetary independence increases, the spillovers are enhanced. In other words, higher independence results in higher spillovers from the U.S. fiscal dominance index, leading to lower policy rates. A potential explanation for this could be that central banks adapt to global factors, such as fiscal dominance in the U.S., and set the policy rate accordingly instead of obeying external pressure and reducing independence. To analyze some global factors, we test the IRFs with the interaction variables: public-, bank- and corporate portfolio debt inflows (Figures 6f, 6g, and 6h) and Exchange Rate Stability (ERS) (Figure 6k). To begin with, Figure 6k documents that the higher the degree of ERS, the greater the negative spillover effects from U.S. fiscal dominance, at least half a year following a shock in the U.S. fiscal dominance. Public, bank, and corporate inflows (Figures 6f, 6g, and 6h) show almost no evident heterogeneity among the different types of investments. The results indicate that corporate inflows magnify the spillover effects but only during the first couple of years. The variables for corporate portfolio debt inflows, along with the results for KAOPEN, represent that as a country is more open, it is more prone to spillovers, which is expected given previous literature and theory (Kearns et al., 2023; Lakdawala et al., 2021; Aizenman et al., 2016; Kearns et al., 2023).

Lastly, the medium-run impact of a U.S. fiscal dominance shock on policy rates, as illustrated in Figure 6d, varies with state ownership of banks (SOB) in a country. The figure illustrates an amplified negative effect of U.S. fiscal dominance on the policy rates with a higher degree of state ownership of banks. However, this effect is not significant. This result is puzzling, as it contradicts the previous finding that high degrees of financial repression are associated with lower spillover effects. Previous studies have emphasized how financial repression reduces the financial sector's efficiency, increases intermediation costs, and reduces investments and growth (Roubini & Sala-I-Martin, 1992, 1995; Fry, 1980), which might be possible explanations for this result. The finding might also be a consequence of the variable's ability to capture the degree of financial repression, which sheds light on the complexity of the quantification of financial repression and the need for further research.

5.2 Robustness Checks

To test the credibility of our findings, we run robustness checks with Mean Group Regressions, additional control variables, winsorized samples, samples excluding outliers, exclusion of eurozone countries, alternative measurements for U.S. fiscal dominance, and alternative specifications for our panel VAR model. The impact of U.S. domestic conditions on foreign countries varies depending on country-specific factors, such as trade dependency, foreign direct investments, among other factors, which suggests the need for country specific parameters in the estimations. To deal with this, we run mean group estimations with our baseline control variables. Since Mean Group Regressions are highly sensitive to unbalanced datasets, we run them on an alternative sample which consists of only OECD countries, where the data is more complete. The results are consistent with previous findings showing a negative impact of U.S. fiscal dominance on the policy rate, as reported in Table B1 in the Robustness Appendix.

The additional control variables test government debt sustainability measures, market perception measures, and controls for structural change, with collapsing regimes accounted for using measurements from Ilzetzki et al., (2019). The results show an overall consistency, as reported in Tables B2 and B3 in the Robustness Appendix. The results from the winsorized samples are documented in Tables B4 and B5 in the Robustness Appendix and align with previous results. Robustness Appendix Tables 7 and 8 document that the findings from the fixed effects regressions are also consistent when excluding Bolivia, Brazil, Peru, and Croatia which exhibit large outliers in policy rates and inflation. As a precaution to how we aggregate eurozone countries based on GDP, we tested the results excluding all eurozone countries in Table B6 in the Robustness Appendix, and the results are robust. In addition, we check the sensitivity of the eurozone policy rate, and we observe that higher U.S. fiscal dominance concerns negatively affect the policy rates in Eurozone member countries. The results are consistent with those before (pre) and after (during) the Eurozone.[2] The alternative measurements are done with variables included in the PCA index for U.S. fiscal dominance, based on how previous literature quantifies the concept. The results are reported in the Robustness Appendix in Tables B9-B16. While the results are not significant over all

[2] The results are available on request.

regression models, they show an overall consistency with our previous findings. We conjecture, however, that the most appropriate measure for U.S. fiscal dominance is our self-constructed PCA index, where the results show an overall significant impact in line with our baseline estimations.

Ultimately, we test the stability of the panel VAR model by incorporating control variables, testing alternative lag orders, and alternative samples including the outliers. Figures B1, B2, B3, B4, and B5 in the Robustness Appendix document that the results stay consistent when adding control variables and testing alternative lags. To address possible endogeneity issues concerning our main findings on financial repression, we also estimate Local Projections following Jordà (2005), which provide consistent impulse responses without relying on the dynamic structure of the PVAR. The results, presented in the Robustness Appendix Figure B6, support the baseline result of a diminishing impact of financial repression in the presence of U.S. fiscal dominance spillovers, as found in Figure 6a. As opposed to the findings from the PVAR, the significant effect takes place after two horizons and diminishes after five horizons.

6. Conclusion and Policy Implications

This study delves into the spillover effects of U.S. fiscal dominance concerns on policy rates in Emerging Market Economies (EMEs) and Developed Economies (DEs). The research is spurred by the surge in U.S. fiscal dominance after the Global Financial Crisis and the increasing global interconnectedness. While previous literature has examined the drivers and consequences of fiscal dominance from a domestic standpoint, our study stands out by exploring this phenomenon in an international context. A key aspect of our approach is the development of a novel measurement of fiscal dominance concerns. We have constructed an index using Principal Components Analysis, a method that effectively captures the intricate concept of fiscal dominance. A fixed effects model was formulated to investigate the correlation between the independent variable *U.S. fiscal dominance* and the dependent variable *policy rate* in both EMEs and DEs.

Additionally, a panel VAR model was developed to probe potential determinants and channels for the spillover effects of fiscal dominance in the U.S. The findings of our study carry significant weight, providing evidence of a negative relationship between the U.S. fiscal dominance index and the policy rates in EMEs and DEs, suggesting policymakers should pay attention to the evolution of U.S. fiscal dominance in their interest rate formation. This result is in line with the theory of interconnectedness and the global influence of the U.S. economy, as well as previous literature on monetary and fiscal spillover effects. Moreover, our findings suggest that the spillovers from U.S. fiscal dominance on the policy rates are more pronounced in EMEs than in DEs, a trend likely attributed to the higher vulnerability of EMEs due to their structural and economic conditions. Furthermore, as long as the U.S. dollar remains the

dominant global currency, a higher index of future fiscal dominance induces negative spillovers, impacting the less resilient countries.

The study is extended by investigating possible domestic and global factors determining the spillover's extent, with a focus on financial repression. The findings from the panel VAR model reveal that higher levels of financial repression generally reduce the spillover effects of U.S. fiscal dominance on the policy rates of EMEs and DEs. Financial repression isolates domestic markets from global financial dynamics, leading to less sensitivity to external shocks. The results concerning the transmission channels highlight the complex interplay between financial repression, central bank independence, and global market integration in shaping a country's exposure to international financial influences. Financial repression has previously been recognized as an effective toolkit to cope with debt reduction (Reinhart, 2012) and our findings suggest it might as well function as a reduction of international fiscal dominance spillovers. However, it is crucial to acknowledge the potential side effects of financial repression, including inflationary pressures, capital flow restrictions, and challenges to exchange rate stability. These considerations underscore the complexity of the phenomenon and the necessity for further research, indicating that our study is part of an ongoing academic conversation that requires continued exploration and discussion.

References

Abrigo, M. R., & Love, I. (2016). Estimation of panel vector autoregression in Stata. *The Stata Journal*, *16*(3), 778–804. https://doi.org/10.1177/1536867x1601600314

Ahmed, R., Aizenman, J., & Jinjarak, Y. (2021). Inflation and exchange rate targeting challenges under fiscal dominance. *Journal of Macroeconomics*, *67*, 103281. https://doi.org/10.1016/j.jmacro.2020.103281

Ahmed, R., Aizenman, J., Saadaoui, J., & Uddin, G. S. (2023). On the effectiveness of foreign exchange reserves during the 2021-22 U.S. monetary tightening cycle. *Economics Letters*, *233*, 111367. https://doi.org/10.1016/j.econlet.2023.111367

Ahmed, S., Coulibaly, B., & Zlate, A. (2017). International financial spillovers to emerging market economies: How important are economic fundamentals? *Journal of International Money and Finance*, *76*, 133–152. https://doi.org/10.1016/j.jimonfin.2017.05.001

Aizenman, J. (2008). On the hidden links between financial and trade opening. *Journal of International Money and Finance*, *27*(3), 372–386. https://doi.org/10.1016/j.jimonfin.2008.01.002

Aizenman, J., Chinn, M. D., & Ito, H. (2016). Monetary policy spillovers and the trilemma in the new normal: Periphery country sensitivity to core country conditions. *Journal of International Money and Finance*, *68*, 298–330. https://doi.org/10.1016/j.jimonfin.2016.02.008

Aizenman, J., Chinn, M. D., & Ito, H. (2020). Financial spillovers and macroprudential policies. *Open Economies Review*, *31*(3), 529–563. https://doi.org/10.1007/s11079-020-09580-9

Ammer, J., De Pooter, M., Erceg, C. J., & Kamin, S. B. (2016). International spillovers of monetary policy (Tech. Rep.). Board of Governors of the Federal Reserve System (U.S.).

Ascari, G., Florio, A., & Gobbi, A. (2023). Price level targeting under fiscal dominance. *Journal of International Money and Finance*, *137*, 102876. https://doi.org/10.1016/j.jimonfin.2023.102876

Avdjiev, S., Hardy, B., Kalemli-Özcan, Ş., & Servén, L. (2022). Gross capital flows by banks, corporates, and sovereigns. *Journal of the European Economic Association*, *20*(5), 2098–2135. https://doi.org/10.1093/jeea/jvab053

Beckworth, D. (2021). The prospect of fiscal dominance in the United States: A new quantity theory perspective. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3969473

Bergin, P. R. (2018). International macroeconomic comovement: The role of globalization in goods and asset markets. In *International macroeconomic interdependence* (pp. 1–28). World

Scientific.

Bhattarai, S., Chatterjee, A., & Park, W. Y. (2020). Global spillover effects of U.S. uncertainty. *Journal of Monetary Economics, 114*, 71–89. https://doi.org/10.1016/j.jmoneco.2019.05.008

Biljanovska, N., Chen, S., Gelos, G., Igan, D. O., Martinez Peria, M. S., Nier, E., & Valencia F. (2023). *Macroprudential policy effects: Evidence and open questions*. International Monetary Fund. https://doi.org/10.5089/9798400226304.087

Bordo, M. D., & Levy, M. D. (2021). Do enlarged fiscal deficits cause inflation? The historical record. *Economic Affairs, 41*(1), 59–83. https://doi.org/10.1111/ecaf.12446

Bowman, D., Londono, J. M., & Sapriza, H. (2015). U.S. unconventional monetary policy and transmission to emerging market economies. *Journal of International Money and Finance, 55*, 27–59. https://doi.org/10.1016/j.jimonfin.2015.02.016

Boz, E., Casas, C., Georgiadis, G., Gopinath, G., Le Mezo, H., Mehl, A., & Nguyen, T. (2022). Patterns of invoicing currency in global trade: New evidence. *Journal of International Economics, 136*, 103604. https://doi.org/10.1016/j.jinteco.2022.103604

Bruno, V., & Shin, H. S. (2015). Capital flows and the risk-taking channel of monetary policy. *Journal of Monetary Economics, 71*, 119–132. https://doi.org/10.1016/j.jmoneco.2014.11.011

Catão, L. A., & Terrones, M. E. (2005). Fiscal deficits and inflation. *Journal of Monetary Economics, 52*(3), 529–554. https://doi.org/10.1016/j.jmoneco.2004.06.003

Chinn, M. D., & Ito, H. (2006). What matters for financial development? Capital controls, institutions, and interactions. *Journal of Development Economics, 81*(1), 163–192. https://doi.org/10.1016/j.jdeveco.2005.05.010

Cochrane, J. H. (2024). *Fiscal Narratives for US Inflation*. Comments on "Origins of US Inflation Since 1950" by Christopher Sims at the 2024 AER P&P Session "Understanding the Return of Inflation." Hoover Institution, Stanford University and NBER. Retrieved from https://www.johnhcochrane.com/

Congressional Budget Office. (2024). *The budget and economic outlook: 2024 to 2034*. https://www.cbo.gov/publication/59710

Cooper, R. N. (1985). Economic interdependence and coordination of economic policies. In *Handbook of international economics* (Vol. 2, pp. 1195–1234). https://doi.org/10.1016/s1573-4404(85)02014-7

Corrado, L., & Silgado-Gómez, E. (2022). Assessing the effects of fiscal policy news under imperfect information. *Oxford Economic Papers, 75*(2), 574–587. https://doi.org/10.1093/oep/gpac028

Corsetti, G., & Pesenti, P. (2001). Welfare and macroeconomic interdependence. *The*

Quarterly Journal of Economics, 116(2), 421–445. https://doi.org/10.1162/00335530151144069

Crockett, A. D. (1993). Monetary policy implications of increased capital flows. In *Proceedings - Economic Policy Symposium - Jackson Hole* (pp. 331–377). Retrieved from https://www.kansascityfed.org/Jackson%20Hole/documents/6866/Borges%20JH93.pdf

Cui, B., Li, J., & Zhang, Y. (2024). Asymmetries in the international spillover effects of monetary policy: Based on TGVAR model. *The North American Journal of Economics and Finance*, *69*, 102029. https://doi.org/10.1016/j.najef.2023.102029

De Grauwe, P., & Foresti, P. (2023). Interactions of fiscal and monetary policies under waves of optimism and pessimism. *Journal of Economic Behavior & Organization, 212*, 466–481. https://doi.org/10.1016/j.jebo.2023.05.024

De Resende, C. (2007). *Cross-country estimates of the degree of fiscal dominance and central bank independence* (Tech. Rep.). Bank of Canada Working Paper.

D'Erasmo, P., Mendoza, E. G., & Zhang, J. (2016). What is a sustainable public debt? In *Handbook of macroeconomics* (Vol. 2, pp. 2493–2597). Elsevier. https://doi.org/10.1016/bs.hesmac.2016.03.013

Federal Reserve Bank of St. Louis. (2024a). *Gross federal debt as percent of gross domestic product*. Retrieved from https://fred.stlouisfed.org/series/GFDGDPA188S (Retrieved on June 7, 2024)

Federal Reserve Bank of St. Louis. (2024b). *Federal debt held by the public as percent of gross domestic product*. Retrieved from https://fred.stlouisfed.org/series/FYGFGDQ188S (Retrieved on July 4, 2024)

Fratianni, M., & Spinelli, F. (2001). Fiscal dominance and money growth in Italy: The long record. *Explorations in Economic History, 38*(2), 252–272. https://doi.org/10.1006/exeh.2000.0753

Fry, M. J. (1980). Saving, investment, growth, and the cost of financial repression. *World Development, 8*(4), 317–327. https://doi.org/10.1016/0305-750x(80)90030-3

Goldberg, L. S. (2024). The special role of the U.S. dollar (No. 97933) [Audio podcast episode]. In *EconoFact Podcast*. EconoFact. https://econofact.org/podcast/the-special-role-of-the-u-s-dollar

Giovannini, A., & de Melo, M. (1993). Government Revenue from Financial Repression. The American Economic Review, 83(4), 953–963. http://www.jstor.org/stable/2117587

Hashmi, A. R., & Nsafoah, D. (2024). International spillovers of conventional versus new monetary policy. *Economic Modelling*, *139*, 106812. https://doi.org/10.1016/j.econmod.2024.106812

Herndon, T., Ash, M., & Pollin, R. (2013). Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff. *Cambridge Journal of Economics, 38*(2), 257–279. https://doi.org/10.1093/cje/bet075

Hoek, J., Kamin, S., & Yoldas, E. (2022). Are higher U.S. interest rates always bad news for emerging markets? *Journal of International Economics, 137*, 103585. https://doi.org/10.1016/j.jinteco.2022.103585

Husson, F., Lé, S., & Pagès, J. (2011). *Exploratory multivariate analysis by example using R* (Vol. 15). CRC Press.

International Monetary Fund. (2022). *General government gross debt for the United States, 2022*. Retrieved from https://www.imf.org/external/datamapper/GGDEBTGDP@GDD/USA?year=2022 (Retrieved on May 2, 2024)

International Monetary Fund, Research Dept. (2023). *World economic outlook, April 2023*. https://doi.org/10.5089/9798400224119.081

Jinjarak, Y. (2013). Economic integration and government revenue from financial repression. *Economic Systems, 37*(2), 271–283. https://doi.org/10.1016/j.ecosys.2012.10.003

Jordà, (2005). Estimation and inference of impulse responses by local projections. American Economic Review, 95(1), 161–182. https://doi.org/10.1257/0002828053828518

Ilzetzki, E., Reinhart, C. M., & Rogoff, K. S. (2019). Exchange Arrangements Entering the Twenty-First Century: Which Anchor will Hold?. The Quarterly Journal of Economics, 134(2), 599–646. https://doi.org/10.1093/qje/qjy033

Kalemli-Özcan, S. (2019). *U.S. monetary policy and international risk spillovers* (Tech. Rep.). https://doi.org/10.3386/w26297

Kearns, J., Schrimpf, A., & Xia, F. D. (2023). Explaining monetary spillovers: The matrix reloaded. *Journal of Money, Credit and Banking, 55*(6), 1535–1568. https://doi.org/10.1111/jmcb.12996

Kose, M. A., Kurlat, S., Ohnsorge, F., & Sugawara, N. (2022). A cross-country database of fiscal space. *Journal of International Money and Finance, 128*, 102682. https://doi.org/10.1016/j.jimonfin.2022.102682

Kose, M. A., Lakatos, C., Ohnsorge, F., & Stocker, M. (2017). *The global role of the U.S. economy*. World Bank, Washington, DC.

Kumar, A., Mallick, S., & Sinha, A. (2024). Fiscal Spillover in Emerging Economies: Real versus Financial Channels. *Journal of International Money and Finance, 149*, 103168. https://doi.org/10.1016/j.jimonfin.2024.103168

Kumhof, M., Nunes, R., & Yakadina, I. (2010). Simple monetary rules under fiscal dominance. *Journal of Money, Credit and Banking, 42*(1), 63–92. https://doi.org/10.4324/9781003060697-12

Kwon, G., McFarlane, L., & Robinson, W. (2009). Public debt, money supply, and inflation: A cross-country study. *IMF Staff Papers, 56*(3), 476–515. https://doi.org/10.1057/imfsp.2008.26

Lakdawala, A., Moreland, T., & Schaffer, M. (2021). The international spillover effects of U.S. monetary policy uncertainty. *Journal of International Economics, 133*, 103525. https://doi.org/10.1016/j.jinteco.2021.103525

Lin, H.-Y., & Chu, H.-P. (2013). Are fiscal deficits inflationary? *Journal of International Money and Finance, 32*, 214–233. https://doi.org/10.1016/j.jimonfin.2012.04.006

Lütkepohl, H. (1990). Asymptotic distributions of impulse response functions and forecast error variance decompositions of vector autoregressive models. *The Review of Economics and Statistics*, 116–125. https://doi.org/10.2307/2109746

Panizza, U. (2023). *Bank ownership around the world*. The Graduate Institute Geneva. Available at SSRN: https://ssrn.com/abstract=4506763

Reinhart, C. M. (2012). The return of financial repression. SSRN Electronic Journal. https://papers.ssrn.com/sol3/Delivery.cfm/DP8947.pdf?abstractid=2066320&mirid=3

Reinhart, C. M., & Rogoff, K. S. (2011). From financial crash to debt crisis. *The American Economic Review, 101*(5), 1676–1706. https://doi.org/10.1257/aer.101.5.1676

Reinhart, C. M., & Sbrancia, M. B. (2015). The liquidation of government debt. *Economic Policy, 30*(82), 291–333. https://doi.org/10.1093/epolic/eiv003

Romelli, D. (2022). The political economy of reforms in central bank design: Evidence from a new dataset. *Economic Policy, 37*(112). https://doi.org/10.1093/epolic/eiac011

Romelli, D. (2024). *Trends in central bank independence: A de-jure perspective* (BAFFI CAREFIN Centre Research Paper No. 217).

Roubini, N., & Sala-I-Martin, X. (1992). Financial repression and economic growth. *Journal of Development Economics, 39*(1), 5–30. https://doi.org/10.1016/0304-3878(92)90055-e

Roubini, N., & Sala-I-Martin, X. (1995). A growth model of inflation, tax evasion, and financial repression. *Journal of Monetary Economics, 35*(2), 275–301. https://doi.org/10.1016/0304-3932(95)01192-q

Sargent, T. J., & Wallace, N. (1981). Some unpleasant monetarist arithmetic. *Federal Reserve Bank of Minneapolis Quarterly Review, 5*(3), 1–17. https://doi.org/10.21034/qr.531

Selgin, G. (2021). The fiscal and monetary response to COVID-19: What the Great Depression has—and hasn't—taught us. *Economic Affairs*, *41*(1), 3–20. https://doi.org/10.1111/ecaf.12443

Shen, Y., & Abeysinghe, T. (2021). International transmission mechanism and world business cycle. *Economic Inquiry*, *59*(1), 510–531. https://doi.org/10.1111/ecin.12916

Smelser, N. J., & Baltes, P. B. (2001). *International encyclopedia of the social & behavioral sciences* (Vol. 11). Elsevier Amsterdam.

U.S. Bureau of Economic Analysis. (2024). *Balance of payments and direct investment position data*. Retrieved from https://www.bea.gov/data/intl-trade-investment/balance-payments (Retrieved on April 18, 2024)

Woodford, M. (1998). *Public debt and the price level* (Tech. Rep.).

Wooldridge, J. M. (2005). Fixed-effects and related estimators for correlated random-coefficient and treatment-effect panel data models. *Review of Economics and Statistics*, *87*(2), 385–390. https://doi.org/10.1162/0034653053970320

Appendix

Table A1: *Country List for Emerging Market Economies (EMEs) and Developed Economies (DEs).*

EMEs	DEs
Albania	Australia
Algeria	Austria
Angola	Belgium
Argentina	Canada
Armenia	Croatia
Azerbaijan	Cyprus
Bangladesh	Denmark
Bolivia	Estonia
Brazil	Finland
Chile	France
China	Germany
Colombia	Iceland
Egypt	Ireland
Hungary	Italy
India	Japan
Indonesia	Latvia
Kuwait	Lithuania
Malaysia	Luxembourg
Mexico	Malta
Morocco	Netherlands
Peru	New Zealand
Philippines	Norway
Poland	Portugal
Romania	Singapore
Saudi Arabia	Slovenia
South Africa	Spain
Thailand	Sweden
Turkey	Switzerland
United Arab Emirates	United Kingdom

Table A2: *Description of Variables.*

Variable	Definition	Source
Independent Variable		
U.S. Fiscal Dominance Index	An index consisting of the variables below to indicate the fiscal dominance in the U.S.	Own calculation (PCA)
U.S. Public Debt/GDP	General government debt divided by nominal GDP.	FRED
U.S. Government Expenditure/GDP	Government expenditure (public spending), percent of GDP.	FRED
U.S. Public Debt/Government Revenue	Value of public debt divided by government revenue.	FRED
U.S. Interest/GDP	Interest payments made by the federal government, percent of GDP.	FRED
U.S. Public Debt/Money Supply (M2)	General government debt divided by money supply (M2).	FRED
Dependent Variable		
Policy Rate	Financial, interest rates, monetary policy-related interest rate, percent per annum.	IMF, IFS
Control Variables		
Policy Rate, t-1	Policy rate in last period.	IMF, IFS
GDP Growth	Real GDP growth (Annual percent change).	IMF
Inflation	Inflation, the rate of increase/decrease in prices annually.	Haver Analytics
Current Balance	Current account balance, percent of GDP.	IMF
Government Expenditure	Government expenditure (public spending), percent of GDP.	IMF
State Ownership of Banks	State ownership of banks, weigh by share including development banks (DB). Index between 0 and 1.	Panizza (2023)
Foreign Ownership of Banks	Foreign ownership of banks, weigh by share including development banks (DB). Index between 0 and 1.	Panizza (2023)
Financial Openness (KAOPEN)	An index between 0 and 1 for openness to capital account transactions.	Chinn and Ito (2006)
Financial Repression Revenue	Financial repression revenue to GDP. Calculated as financial repression tax rate multiplied by the stock of public debt, and then divided by GDP.	World Bank, IDS
External and Private Sector Debt	Total external debt stocks, % of GDP.	World Bank, Kose et al. (2022)
Public Portfolio Debt Inflows	Public (government and central bank) portfolio debt inflows, in billions USD.	BIS, Avdjiev et al. (2023)
Bank Portfolio Debt Inflows	Bank portfolio debt inflows, in billions USD.	BIS, Avdjiev et al. (2023)
Corporate Portfolio Debt Inflows	Corporate portfolio debt inflows, in billions USD.	BIS, Avdjiev et al. (2023)
Exchange Rate Stability (ERS)	Index between 0 and 1 to indicate stable movement of the exchange rate against the currency of the base country.	World Bank, WDI
Central Bank Independence – Extended (CBIE) Index	CBIE Policy - Monetary policy and conflicts resolution dimension and CBIE Lending - Limitations on lending to the government dimension. The index ranges from 0 to 1 where 0 corresponds to the lowest level of independence and 1 to the highest level.	Romelli (2024)

Table A3: *Proportion of Variance Explained by Each Principal Component in the PCA Index.*

Principal Components	Proportion	Cumulative Proportion
Component 1	57.94%	57.94%
Component 2	19.36%	77.30%
Component 3	12.35%	89.65%
Component 4	8.14%	97.79%

Note: The table displays the proportion of variance in the data that is explained by each principal component (PC) in the PCA index.