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Capital Flows at Risk: Taming the Ebbs and Flows

Abstract

The volatility of capital flows to emerging markets continues to pose challenges to policymakers. In this paper, we propose a new quantile regression framework to predict the entire future probability distribution of capital flows to emerging markets, based on changes in global financial conditions, domestic structural characteristics, and policies. The approach allows us to differentiate between short- and medium-term effects. We find that FX- and macroprudential interventions are effective in mitigating downside risks to portfolio flows stemming from adverse global shocks, while tightening of capital controls in response appears to be counterproductive. Good institutional frameworks are not able to shield countries from the increased volatility of portfolio flows in the immediate aftermath of global shocks. However, they do contribute to a more rapid bounce-back of foreign flows over the medium term.

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I. Introduction

Capital flows to emerging markets (EMs) remain highly volatile. Since the global financial crisis, unprecedented and prolonged monetary easing in advanced economies (AEs) has been associated with strong capital inflows to emerging markets. During the same period, these flows were sometimes disrupted by reversals in the face of unanticipated shocks, such as the "taper tantrum" in 2013, and most recently during the COVID-19 pandemic.

Both capital flow surges and "sudden stops" entail risks. Large exchange rate appreciations and accelerated domestic credit growth during periods of inflows create concerns about loss of competitiveness, asset price bubbles, and the build-up of financial sector vulnerabilities (e.g., Bianchi et al. 2016, Cecchetti et al. 2019). On the other hand, large exchange rate depreciations and the sharp tightening of financial conditions that often occur during episodes of capital outflows can threaten borrowers' access to finance and lead to a decline in asset prices, undermining financial stability and GDP growth (Calvo and Reinhart 1999, Guidotti et al. 2004, Mendoza 2010, and Bussiere et al. 2012, among many others)[1].

However, while the volume of literature on capital flows is considerable, empirical research on the role of policy frameworks and policy actions in addressing volatile flows is scant. Based on the early work by Calvo et al. (1993) and Fernandez-Arias (1996), research has typically focused on "push" factors (such as financial conditions in the U.S.) and "pull" factors (such as domestic growth). Findings generally point to an important role of global "push" factors in explaining portfolio and banking flows (see Koepke, 2019, for a review of the literature). Part of the literature has gone further, trying to understand large in- and outflow episodes – "surges" and "sudden stops" (Calvo et al., 2004; Cardarelli et al., 2010; Forbes and Warnock, 2012; Sahay et al., 2014; Ghosh et al., 2014; Calderón and Kubota, 2019, among others). Other studies have analyzed the role of institutional quality in driving capital flows (for example, Gelos and Wei, 2005, and Alfaro et al., 2008). However, with the exception of some studies on examining the role of capital controls (see, e.g. Montiel and Reinhart, 1999, and the summary in Binici et al., 2010), little attention has been paid to the role of policies.

This dearth of studies on capital flows and policies is surprising given that there has been a considerable growth in the theoretical literature on optimal policies to manage boom-bust-cycle risks associated with changing external financial conditions (see, e.g., Cavallino, 2019, Jeanne and Korinek, 2010, Liu and Spiegel, 2015, Ghilardi and Peiris, 2016, Bianchi et al., 2016, Bianchi and Mendoza, 2020, Unsal, 2013, Benigno et al., 2013, among others).

In this paper, we propose a new method to help fill some of these gaps. We use a quantile regression approach to estimate the entire probability distribution of *future* portfolio flows over different time horizons as a function of current global financial conditions, domestic structural characteristics, policy frameworks, and current policy responses. In this framework, estimated

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[1] For an analysis of the behavior of gross capital flows during tranquil and turbulent times, see Broner et al. (2013).

probability densities of future capital flows enable a quantitative evaluation and forecasting of risks to portfolio flows. To address endogeneity concerns, our analysis of policies is based on well-identified policy shocks—namely residuals from estimated policy rules.

Our results show that different country characteristics matter for risks to capital flows in the short- and medium term. We find that more flexible exchange rate regimes are linked to higher risks of both large in- and outflows in the immediate aftermath of an adverse global shock. In the medium term (i.e. over a period of two years), however, more flexible exchange rate regimes seem to support a larger rebound of flows. Countries with better institutions, more transparent central banks, and deeper financial sector development face fewer large in- and outflows in response to global shocks in the medium term (although this is not the case in the short term).

Consistent with the recent theoretical models with financial frictions in FX markets, foreign exchange interventions seem to help mitigate downside risks to portfolio inflows caused by worsening global conditions, but this effect is limited to the short term. A tightening of capital flow measures in response to an adverse global shock is found to be counterproductive (i.e., it exacerbates the risk of large outflows of capital) in the short term. This could be because capital flow measures were not sufficiently comprehensive, leading to leakages, or due to negative signaling effects of such measures. We find little evidence for the effectiveness of monetary policy in shielding countries from risks caused by global shocks, while macroprudential policies appear to have sizeable beneficial effects both in the short- and medium term.

Overall, our findings highlight the usefulness of applying quantile regressions and the "at-Risk" approach to study policies and capital flows: we find that several of the policy actions or policy frameworks may have a considerable impact on the upper or lower tails of the predicted distributions, thus mitigating risks to future flows in the presence of adverse global shocks. Moreover, there are important intertemporal patterns in the effects. These aspects would have been missed by using a standard approach which focuses only on the short-term behavior of average flows.

The rest of the paper is structured as follows. Section II motivates in more detail our approach followed by a description of the data used. In Section III, we develop our specific hypotheses and present the empirical results. Section IV offers concluding remarks.

II. A New Framework for Capital Flows Analysis

### A. MOTIVATION AND RELATION TO LITERATURE

In this paper, we estimate the empirical distributions of future capital flows conditional on policy actions and frameworks. Estimating expected future distributions of capital flows using a quantile-regression approach is useful for three main reasons.

First, previous empirical work indicates that the role of both domestic (pull) and global (push) factors in explaining capital flows differs between episodes of retrenchments, average flows, and capital flow surges (Ghosh et al., 2014, and Calderón and Kubota, 2019). This is also in line with theoretical predictions; for example, nonlinearities are likely to be important during periods of sudden stops, when financial constraints become binding (see, e.g., Mendoza, 2010). Our quantile regression approach allows for such differential effects across capital flows episodes.

Second, from a policy-maker's perspective, the main concern is typically not to assess the expected median responses of capital flows to global shocks and domestic policies but to evaluate risks of sharp outflows or surges. Sudden stops in capital flows entail large welfare costs (see, e.g. Bianchi, 2011). Capital flow surges, in turn, can overwhelm the capacity of the domestic financial system, feed overborrowing, and sow the seeds of future crises (Mendoza, 2010). This consideration motivates our aim to derive full probability distributions of capital flows.

Third, the effects of both external and domestic factors (country characteristics and policies) on capital flows are likely to have a time-varying pattern, with short-term effects differing from medium-term ones (see, e.g., Unsal 2013 for a theoretical illustration of such effects). Moreover, global shocks themselves tend to display persistence (Figure 1). This implies that a global shock today can help predict capital flows tomorrow. At the same time, even shocks that are less persistent can alter flows over longer horizons—for example, when some investors face frictions in liquidating existing positions or opening new ones. For this reason, we consider the impact of global shocks on portfolio flows at different future horizons.

Figure 1: Persistence of Global Financial Shocks

Sources: St Louis Fed and own calculations.

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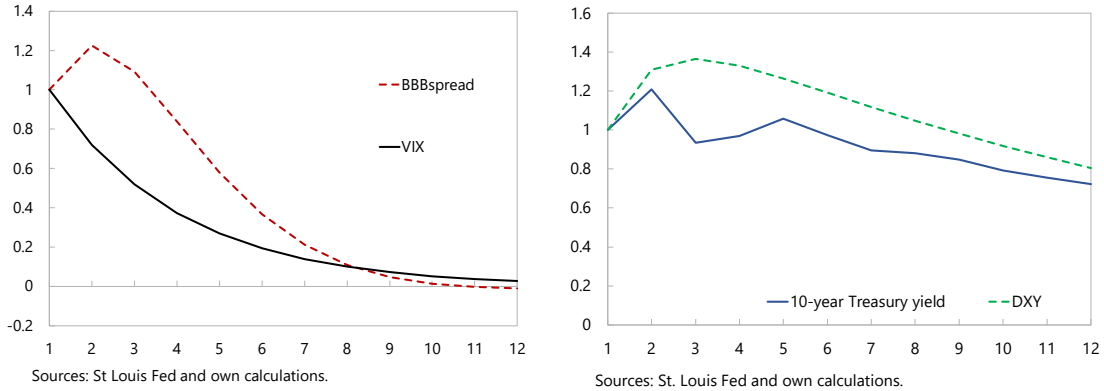
Notes: Figure 1 shows impulse responses, over 12 quarters (horizontal axis), of U.S. corporate BBB spread, U.S. 10-year Tresury yield, DXY Dollar Index and VIX Index to a 1 percentage point increase in the U.S. corporate BBB spread or U.S. 10-year Tresury yield, or a 1 point increase in the DXY and VIX Index, resppectively. The impulse responses are based on AR(2) models for DXY and BBB spread, AR(1) for VIX and AR(4) for the 10-year Treasury yield.

B.   KEY CONCEPTS

To provide intuition for our framework, consider a stylized probability density of future capital flows to a given emerging market (Figure 2, Panel A). The black dashed line in Panel A represents the initial state, where the mass of the density is to the right, indicating positive inflows in most states of the world, and only a small probability of outflows (represented by the small black and red checked area to the left of the origin). The dotted vertical line shows the median predicted flows of 2 percent of GDP, as an example. The red density represents a subsequent state where the outlook for capital flows has deteriorated (say, due to an adverse external shock). In this example, the median falls to 1.5 percent of GDP, and the probability of capital outflows is substantially higher, reflected in a larger dashed area in red.

Figure 2: Analysis Framework for Capital Flows

A) Monitoring Capital Flows: Shift in Predicted Capital Flows Density after a Shock
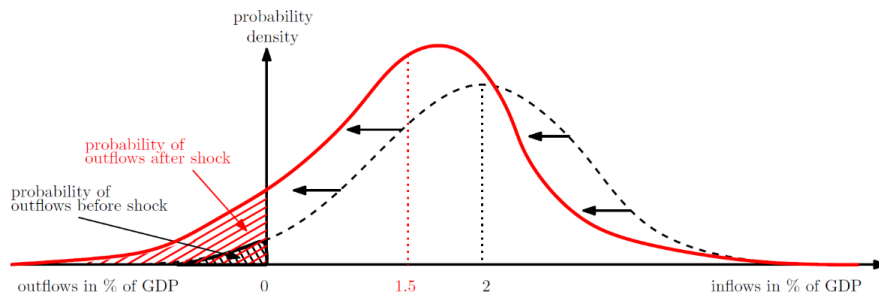
B) Managing Capital Flows: Domestic Policies and Resilience to Global Shocks
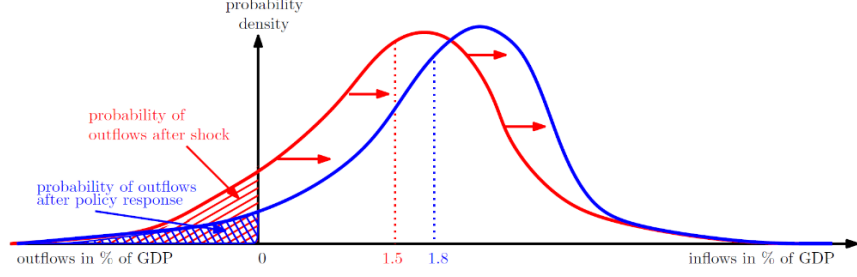
Policy actions may affect the expected post-shock distribution of capital flows (Panel B of Figure 2). The red density function in panel B shows the same post-shock distribution of future capital inflows as in Panel A. Suppose next that in response to an adverse global shock, the central bank takes some mitigating actions—for example, by intervening in the foreign exchange market. In our stylized example, such a policy action could not only increase the expected median inflows *conditional on a negative global shock* (blue density function) from 1.5 to 1.8 percent of GDP, but it could also reduce the tail risks associated with the global shock (the left tail of the post-shock flows distribution becomes thinner and the probability of net capital outflows declines, as shown by the blue and red checked area).

In this framework, risks to capital flows can be quantified in two ways. First, we can compute the *probability* that capital flows will fall below a certain threshold, say below zero. Second, we can estimate the *volume of outflows* that would be reached or exceeded for a given probability, which we call "capital flows at risk" (CaR). The financial risk management literature on Value-at-Risk and Adrian et al. (2019) on Growth-at-Risk have focused on the 5th percentile of the distribution.

C. ECONOMETRIC SPECIFICATION

To construct and analyze the distributions of future capital flows, we proceed in two steps. First, we estimate future flows using a quantile regression framework similar in spirit to the recent analysis on Growth-at-Risk (Adrian et al., 2018 and 2019, and IMF, 2017 and 2018).[2] We then use estimates for a range of quantiles to construct an empirical distribution of predicted capital flows during a specified period in the future.

Consider a quantile regression of cumulative quarterly future capital inflows (in percent of GDP) between quarters t and $t+h$, denoted by $\bar{y}_{t:t+h}$, on a range of domestic and global factors X_t. In such a regression, the regression slope β_h^α is chosen to minimize the quantile-weighted absolute value of errors:

$$(1)\ \hat{\beta}_h^\alpha = argmin \sum_{t=1}^{T-h} \left(\alpha \times 1_{\bar{y}_{t:t+h} > \beta X_t} |\bar{y}_{t:t+h} - \beta X_t| + (1-\alpha) \times 1_{\bar{y}_{t:t+h} < \beta X_t} |\bar{y}_{t:t+h} - \beta X_t| \right),$$

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[2] Chari et al. (2020a) build on the method proposed here in the analysis of implications of risk-off/risk on episodes for capital flows. Recently, Eguren-Martin et al. (2020) have also used the framework to examine push- and pull drivers of capital flows.

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where $1_{()}$ stands for an indicator function, and where α=0.05, 0.1, 0.15, …,0.95 denotes the percentile. The predicted value from the quantile regression is defined as a quantile α of $\bar{y}_{t:t+h}$ conditional on the vector X_t:

$$(2) \; \hat{Q}_{\bar{y}_{t:t+h}}(\alpha) = \hat{\beta}_h^\alpha X_t.$$

We next use the results from quantile regressions to obtain empirical forward-looking probability density functions of capital flows. Following Adrian et al. (2019) we fit a skewed-*t* distribution to the empirical distribution of predicted future flows consisting of fitted values from equation (2). Azzalini and Capitanio (2003) propose a skewed-*t* distribution:

$$(3) \; f(y; \; \mu, \sigma, \theta, \vartheta) = \frac{2}{\sigma} dT\left(\frac{y-\mu}{\sigma}; \vartheta\right) T\left(\theta \frac{y-\mu}{\sigma} \sqrt{\frac{\vartheta+1}{\vartheta+\frac{y-\mu}{\sigma}}}; \vartheta + 1\right),$$

where $dT(.)$ and $T(.)$ denote the probability density function and cumulative density function of the skewed-*t* distribution, described by the four moment parameters $(\mu, \sigma, \theta, \vartheta)$. The skewed-t distribution is a very flexible function that nests both the normal- and standard t-distributions. Thus, it allows us to be broadly agnostic about the shape of the distribution of future flows. To fit the distribution, we use a minimum distance estimator and the algorithm proposed by Azzalini (2019).

III.   Cross-Country Panel Analysis

We conduct cross-country quantile panel regressions, which allows us to investigate the role of country characteristics and policies as mitigants or amplifiers of risks to portfolio flows. The questions we are interested in are: Can domestic policies and structural characteristics smooth the impact of global financial conditions on future portfolio inflows? Which policies are most effective in reducing the tail risks to future portfolio flows? Is there an intertemporal trade-off? We focus on the reaction of capital inflows in response to a tightening of global financial conditions.

In line with much of the recent literature, we focus on gross capital flows, and specifically on non-resident portfolio flows ("gross portfolio inflows"). The post-crisis literature emphasizes that gross inflows are the dominant driver of overall capital flows to emerging markets and matter most for financial stability considerations (e.g., Borio and Disyatat, 2010; Broner et al., 2013, Obstfeld, 2012). In terms of the composition of capital flows, we focus on portfolio (debt and equity) flows because they are the most volatile and sensitive to external factors (Koepke, 2019). By contrast, foreign direct investment flows are little affected by the types of drivers we consider, while banking flows (classified as "other investment" in the balance of payments) have been dwarfed by portfolio debt flows in the post-crisis period (Cerutti and Hong, 2018).

Policies

Models with frictions in foreign exchange (FX) markets typically entail a role for intervention in dampening in- and outflows. For example, in Cavallino (2019), central banks' FX purchases in response to inflow pressures limit the rise in the real interest and exchange rate and the size of inflows. Interventions are effective because of limits to arbitrage by financial intermediaries, as in Gabaix and Maggiori (2015). Conversely, FX sales can be expected to limit outflows in response to an adverse shock. Qualitatively similar predictions are obtained in models that emphasize other mechanisms, such as, for example, Adrian et al. (2020) and Liu and Spiegel (2015).

Similarly, a broad class of models suggest that macroprudential policies can help mitigate capital in- and outflows in response to changes in global financial conditions Bianchi et al. (2016), for example, examine optimal macroprudential policy in a model with regime changes in global financial conditions, domestic collateral constraints, and crises. Therein, time-varying macroprudential policy in the form of a tax on debt can considerably reduce the volatility of capital flows; debt taxes are high when global liquidity conditions are loose, limiting excessive buildup of debt, and vice versa.[3] Macroprudential policy thereby reduces the incidence of large swings in capital flows. In a different setup, without crises, Unsal (2013) discusses how a tightening of macroprudential policies in response to looser global financial conditions mitigates the impact on domestic borrowing costs, thereby lowering inflows and smoothing their pattern.

In practice, however, macroprudential policy may be more effective in reducing the likelihood and size of capital flows surges than that of large outflows. While the mitigating impact of macroprudential policies on domestic credit is by now well documented, the evidence is so far weaker for loosening actions, albeit partly because such actions have been rarer (Alam et al., 2019, Akinci and Olmstead-Rumsey, 2018, Kuttner and Shim, 2016, Fendoğlu, 2017). Overall, we expect modest, but not necessarily strong effects of macroprudential policies in response to adverse shocks.

A tightening of monetary policy in response to a worsening in global financial conditions should in principle be expected to dampen outflows by increasing the attractiveness of domestic assets (e.g. Davis and Presno, 2017, Liu and Spiegel, 2015, Unsal, 2013).[4] To the best of our knowledge, although the role of domestic monetary policy in influencing capital inflows has not

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[3] In the model, macroprudential policy corrects a pecuniary externality that stems from the fact that agents do not internalize the negative effects of individual borrowing decisions made during booms on collateral prices in crises.

[4] In the presence of credit- and price frictions, "divine coincidence" does typically not hold, and it can be optimal for the central bank to deviate from a focus on price stability to dampen capital outflows (see e.g. Davis and Presno 2017). In addition, such a tightening may be needed when inflation expectations are not well anchored (Adrian et al 2020).

yet been empirically examined, the evidence on interest rate differentials suggests that these are not important drivers of capital flows (Koepke 2019).

Capital flow management measures (CFMs) can be expected to exert a dampening effect on gross in- or outflows (Jeanne and Korinek, 2010, Adrian et al., 2020, Davis and Presno, 2017, Liu and Spiegel, 2015, among many others). For example, the introduction of outflow restrictions might prevent capital from flowing out from a country, while potentially reducing new inflows when the tide turns. Similarly, CFMs designed to stem inflows may reduce surges, while also reducing a country's vulnerability to large outflows since it may help prevent the buildup of domestic financial imbalances. However, it is also possible that the introduction of either type of CFMs might have a negative signaling effect and cause larger foreign capital withdrawals, especially if the capital controls are not sufficiently comprehensive or are practically difficult to enforce. Empirically, so far, however, there is little evidence that CFMs affect capital flows strongly, although they seem to affect the composition of flows (see e.g. Forbes and Warnock, 2012, Magud et al., 2018).[5]

Structural country characteristics

We expect good institutional frameworks and more transparency to mitigate the effect of global shocks since better institutions should increase investors' trust in domestic policies and fundamentals (Brandao-Marques et al., 2018). Similarly, in Caballero and Simsek (2020), the assumption that fickle banks withdraw from foreign countries if the foreign country experiences a liquidity shock is motivated by factors that may affect foreigners during domestic distress including asymmetric information, deteriorating property rights, and different regulatory regimes.

More developed domestic financial markets can influence capital flows in two opposing ways. Theoretical models generating large capital flow volatility typically rely on domestic market imperfections, such as collateral constraints that induce debt deflation mechanisms or fire sales (Caballero and Krishnamurthy, 2001, Bianchi et al., 2016), suggesting that more developed financial markets should feature lower capital flows volatility. Different effects are, however, conceivable in the face of an adverse shocks. On the one hand, deeper markets might mitigate the impact of capital outflows on asset prices and thus discourage outflows (see also Banerjee et al., 2016). On the other hand, deeper markets allow investors to move in- and out of emerging markets at a faster pace than shallow markets. In Aghion et al. (2004) economies at an intermediate level of financial development exhibit more volatility than either very developed or very underdeveloped economies. Empirically, the existing literature documents that deeper financial markets are associated with larger median short-term flows (e.g., Reinhardt et al., 2013).

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[5] A forthcoming paper by Cecchetti et al. (2021) finds that pre-existing macroprudential and capital controls are effective in influencing capital flows, while reactive policies to surges and sudden outflows are not.

Similarly, while a more open capital account should encourage larger inflows, it might also lead to larger outflows during risk-off episodes. Regarding the role of the exchange rate regime, different effects are also possible. However, given the evidence that sudden stops are less frequent with flexible exchange rates (Ghosh et al., 2015), we expect the risk of very large outflows to be lower under flexible rates following an adverse shock.

B. SPECIFICATION AND DATA

We expand specification (1) to a panel quantile regression and use the fixed-effects quantile regression estimator described in Kato et al. (2012). Cumulative future gross portfolio inflows (in percent of GDP) to country i between quarters t and $t+h$, $\bar{y}_{i,t:t+h}$, are regressed on a range of domestic and global factors. More specifically, the vector $X_{i,t}$ in equation (1) consists of:

$$X_{i,t} = \left[1_{(i)}, y_{i,t-1}, BBB_t^{US}, P_{i,t}, P_{i,t} \times BBB_t^{US}, Domestic\ Controls_{i,t-1}, Growth_{t-1}^{US} \right], (4)$$

where $y_{i,t-1}$ stands for portfolio inflows to country i in the previous quarter. We include past inflows to control for potential persistence of portfolio flows, but all the results we report hold when this lagged term is not included. We consider cumulative flows over horizons from 1 to 8 quarters ahead, $h=1,2...8$.[6] The data source for gross capital flows is the IMF's Financial Flow Analytics database (see Appendix A for data sources).

$Domestic\ Controls_{i,t-1}$ capture country-specific controls: i) lagged year-on-year GDP growth; ii) a lagged measure of financial integration with global markets; and iii) the lagged short-term external-debt-to-reserves ratio—our proxy for external debt vulnerabilities. Since the latter variable is available only at an annual frequency, we include the value from the previous year. Higher domestic GDP growth today should increase portfolio inflows at short horizons, but might signal lower inflows in the medium term, since good economic conditions today are likely to be followed by a cyclical slowdown down the road. We expect short-term external debt to have different effects on capital flows at different horizons and at different percentiles. For example, a higher level of debt today can increase financing needs—and thus capital inflows—in the short term but lead to a decline of flows in the medium term due to concerns about debt sustainability. These negative confidence effects might be particularly important for tail risk events, observed at the low percentiles of future flows, caused by sudden changes in investors' risk sentiment.

We also control for the integration with global financial markets. Various papers have indicated that inclusion in global markets matters for the behavior of capital flows.[7] For example, Cerutti et

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[6] Past applications of quantile local projections to study the impact of external factors and the role of policies include Stolbov and Shchepeleva (2020) for external political uncertainty shocks and growth, and Linneman and Winkler (2016) for fiscal policy and growth.

[7] See Mendoza and Smith (2014) for a theoretical framework of financial integration, capital flows, leverage and financial crises.

al. (2019) show that exposure to global investors increases the sensitivity of capital flows to external shocks. Raddatz et al. (2017) find that inclusion in bond equity benchmark indices affects countries' capital flows, asset prices, and exchange rates. Integration with global markets should also reflect different aspects of domestic financial markets, such as liquidity, institutional frameworks, and openness of capital account.[8] In practice, financial integration indicators usually focus on the cross-border co-movement in asset prices, based on the observation that increasing financial integration should lead to declining international portfolio diversification benefits (Billio et al., 2017). Our preferred measure of financial integration, which also controls for industry-level heterogeneity, is the financial segmentation indicator constructed following Bekaert et al. (2011); it is available for 18 countries in our sample (Table A1).[9] A higher value of the segmentation indicator is associated with *lower* integration with global markets. Later, we test the robustness of the results by replacing this variable by financial market development and capital account openness indices, in which case the sample size increases to 35 economies.[10] In all regressions, we also include quantile-specific country fixed effects ($1_{(i)}$).

To keep the framework parsimonious, we focus on a single measure of global financial conditions, the U.S. corporate BBB yield (BBB_t^{US}). Changes in the BBB yield can be driven by different global developments, such as a rise in the risk sentiment of global investors or a U.S. monetary policy shock,[11] with an increase in the BBB yield expected to adversely affect the outlook for portfolio flows to emerging market economies, at least in the short term. In the robustness section, we also consider a specification with the CBOE Volatility Index (VIX) index instead of the BBB yield. In all regressions we control for lagged U.S. GDP growth ($Growth_{t-1}^{US}$), a proxy for the economic cycle in advanced economies.

To investigate the role of domestic policies, $P_{i,t}$, in shaping the impact of changes in global financial conditions on portfolio inflows, we interact each policy with the global variable ($BBB_t^{US} \times P_{i,t}$). We estimate equation (1) with one domestic policy at a time, to ensure high enough number of degrees of freedom particularly in regressions of tail percentiles. If a policy mitigates the negative impact of a higher BBB yield on future portfolio inflows at a given percentile α, the coefficient on the interaction term should have a positive sign. In the analysis, we distinguish between policy frameworks (or structural characteristics) and policy actions. Policy actions include changes in i) monetary policy, ii) macroprudential policies (MaPPs), iii) foreign exchange interventions (FXIs), and iv) capital flow management measures (CFMs). As for policy frameworks and country characteristics, we consider financial market development,

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[8] Aizenman et al. (2016) show that more financially developed economies are more exposed, at least in the short-term, to external news announcements. Brandao-Marques et al. (2018) find that higher private- and public sector transparency and better accounting standards are associated with a more muted response of peripheral asset markets to shocks from global financial centers.

[9] This is because computation of the integration indicator requires detailed information on stock market data at the industry (segment) level.

[10] Since capital account openness and financial market depth are highly correlated in many countries, we prefer to use only the measure of financial integration (which arguably reflects both dimensions) in our preferred specification.

[11] Most recently, Chari et al. (2020b) show that U.S. monetary policy shocks, identified with high -frequency Treasury futures data, affect both asset prices in- and capital flow volumes to EMs.

the exchange rate regime, capital account openness, and measures of transparency and quality of domestic institutions. Whenever the policy framework variable is available at an annual frequency only, we use the value from the last year (i.e. we include a fourth lag, $P_{i,t-4}$).

Given that the four types of policy *actions* we consider are often deployed by emerging markets (EMs) in response to (or in order to prevent) large movements of capital flows, we face an endogeneity problem, which complicates any causal inference.[12] It is therefore key to obtain properly identified policy actions that do not reflect endogenous reactions to current capital flows and the economic environment. Here, we follow a similar approach as in Brandao-Marques et al. (2020) and Forbes and Klein (2015) in estimating policy functions for each instrument, and in using the residuals from such regressions as the policy shocks. Appendix A describes the first-stage regressions and construction of the policy shocks in detail.

We measure institutional quality through three indicators: Rule of Law index, Central Bank Transparency index (both from World Bank) and Transparency International's Transparency index. For financial development, we use the index described in Svirydzenka (2016), which summarizes the development of financial institutions and financial markets in terms of their depth, access, and efficiency. The degree of exchange-rate flexibility is captured by the IMF's de facto classification from the AREAER. We use quarterly data from 1996Q4 to 2018Q4 for 35 emerging market and developing countries. Appendix A provides data descriptions. Since our country panel is unbalanced, to compute the fit in panel regressions, we use the algorithmic method for unbalanced panels described in detail in Koenker and d'Orey (1987, 1994) and Koenker (2005). We also apply bootstrapping methods to construct standard errors, which we cluster at the country level and correct for potentially serially correlated error terms.

C. RESULTS

Quantile regressions of future portfolio flows excluding interactions with the policy variables show that increases in the U.S. corporate BBB yield have a statistically significant and negative impact on future portfolio inflows. This is true across different quantiles and particularly at shorter horizons, with the effect two times stronger at the lower tail quantiles than for the median future flows (Figure 3).[13] Over longer horizons, the negative impact of the higher BBB yield persists for upper quantiles, implying lower upside risks to portfolio flows. The U.S. GDP growth is negatively and (statistically significantly) associated with future portfolio inflows across quantiles and horizons (not shown). Higher levels of FX debt relative to reserves are associated with a higher likelihood of very strong inflows (positive coefficient at upper percentiles), consistent with larger financing needs of more indebted countries; and with a higher likelihood of very low or negative flows (negative coefficient at lower percentiles)—although the latter effect is not statistically significant for most horizons. Finally, integration with global

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[12] Mano and Sgherri (2020) use quantile local projections to estimate the entire distribution of a variety of future policy *responses* to portfolio flow shocks in 20 emerging markets and understand the determinants of different policy choices across countries.
[13] The difference in the coefficients at 5th and 50th quantiles is statistically significant.

markets (reverse of financial market segmentation) is positively and statistically significantly associated with median and upper percentiles of future portfolio inflows.

Figure 3: Impact of BBB yield on future portfolio flows at different horizons
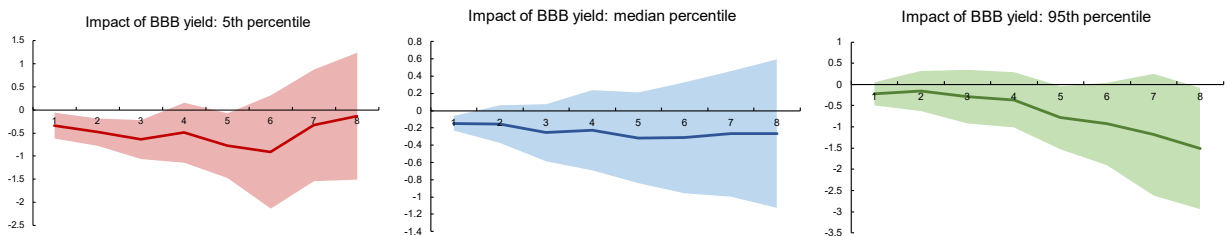
Notes: Figure 3 shows coefficients on BBB_t^{US} in equation (4) for 5th, 50th and 95th quantiles (α=0.05, 0.5, 0.95), when no domestic policy action or a policy framework is included. The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.

Next, we move to the regressions that include policy variables and look at the interactions of policy variables with the U.S. corporate BBB yield. To keep the discussion contained, Figures 4 and 6 show coefficients on the interaction terms, scaled by the sample standard deviations of the policy variables, from those regressions at horizons $h=1,2...8$ for three percentiles: q=5, 50, 95, while, Tables B1-B8 in Appendix B show the results for all percentiles we consider. We interpret the bottom and top 5th quantiles as representing lower and upper tail risks to portfolio inflows.

To quantify the overall effect on the predicted density of future flows, Figures 5 and 7 show the impact of a structural characteristic or a policy action through *both* the interaction term with BBB yield and through the standalone term on the distributions of predicted portfolio flows, conditional on a one-standard deviation increase in the U.S. corporate BBB yield.

Policies

A monetary policy tightening in response to a worsening of global financial conditions is associated with *milder downside risks* to portfolio flows over a horizon of more than one year, as reflected in a positive coefficient on the interaction term with the BBB yield at the 5th percentile. At the same time, higher interest rates do not seem to affect the outlook for median flows or the upside risks of future flows.

FX sales and easing of MaPPs in the face of an adverse shock also appear to be effective in *reducing downside risks* to portfolio flows. While FX sales are associated with improved outlook for median flows as well, an easing of MaPPs increases both the median and the upper tail of the predicted future flows. The results for FX interventions might explain why many countries build reserves that may appear excessive. They are also consistent with the findings of Ehlers and Takáts (2013) and Cecchetti et al. (2021) that FXIs have a stabilizing effect on capital flows.

Interestingly, a tightening of capital flow measures in response to an adverse global shock is associated with *higher downside risks* to portfolio flows. These results suggest that attempts to

reduce outflows after a global shock through outflow controls may backfire: an unexpected tightening of CFMs is associated with an increased likelihood of a sudden stop after a rise in the BBB yield. At the same time, consistent with the past literature that focused on average flows (see e.g. Binici et al. 2010), CFMs do not seem to have a significant effect on the median future flows (or on upper tail risks to flows).[14]

Figure 4. Panel Regression with Policy Actions—Interaction Terms with the U.S. corporate BBB yield.
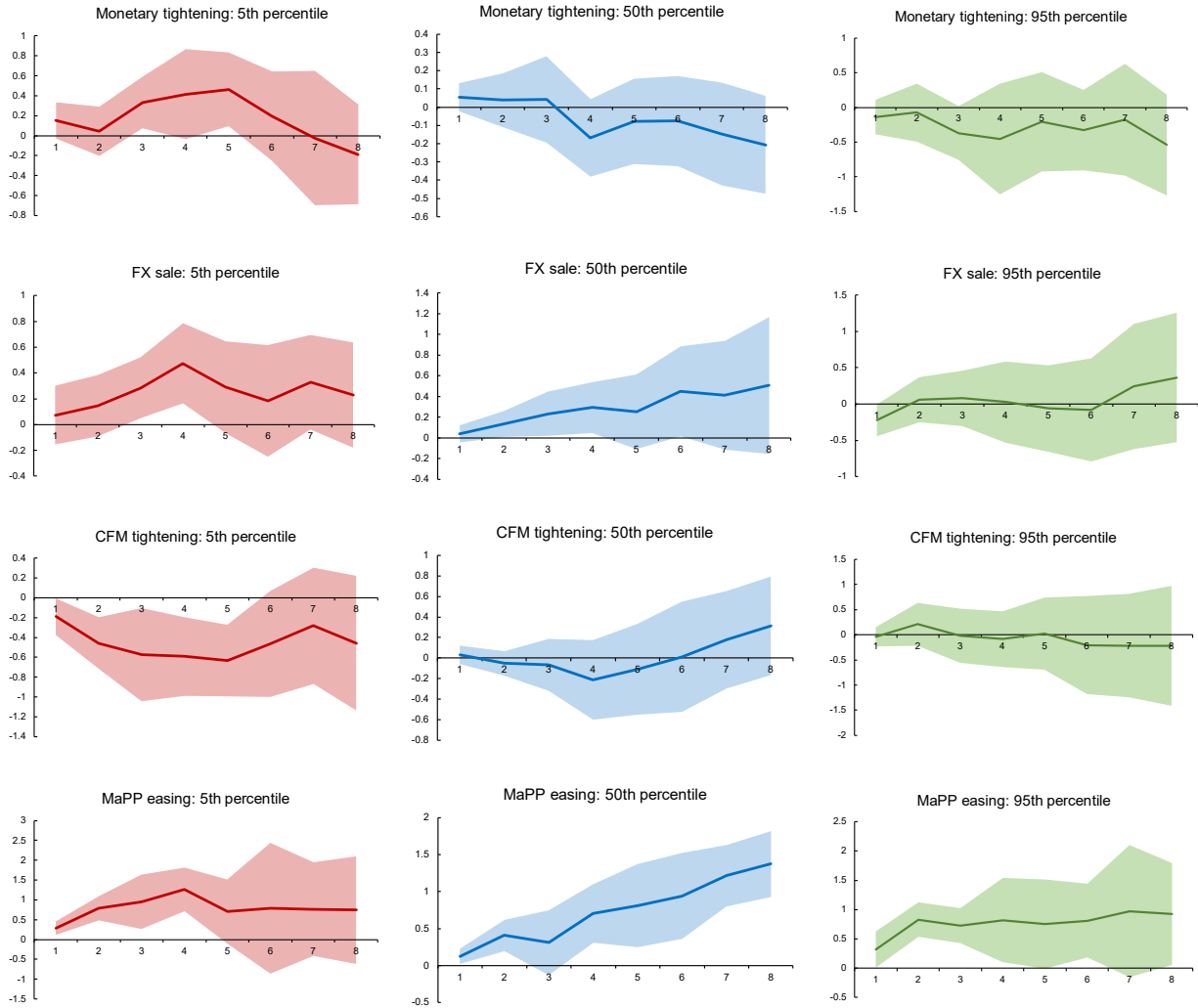
Notes: Figure 4 shows coefficients on the interaction term between a policy variable and the U.S. corporate BBB yield, $P_{i,t} \times BBB_t^{US}$ in eq. (4), scaled by the sample standard deviation of the domestic variable, for 5th, 50th and 95th percentiles (α=0.05, 0.5, 0.95). The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.

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[14] The results are very similar when we look at inflows CFMs and outflows CFMs separately. However, we find that the use of outflow and inflow CFMs is highly correlated in many countries in our sample.

Figure 5. Panel Regressions with Policy Actions—Predicted Density of Future Gross Portfolio Inflows.
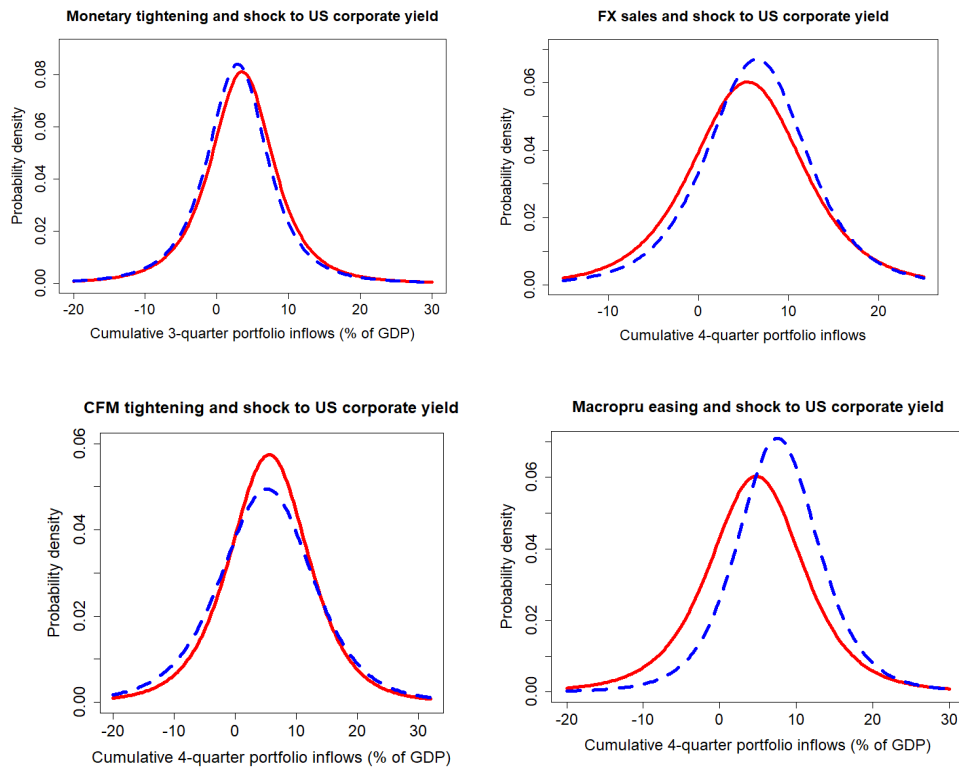
Notes: Red solid lines show distributions of future portfolio inflows after a one-standard deviation (or 160bp) increase in the U.S. corporate BBB yield when the policy variable is set to zero. Blue dashed lines show distributions when the policy action (monetary policy tightening, FX sales, CFM tightening, macroprudential policy easing) is equal to two standard deviations. In both cases, all other control variables are set at the sample averages.

Quantitatively, the overall positive effects of FX, and in particular, macroprudential interventions are sizeable, while those of monetary policy are not. Figure 5 computes the total effect of policy interventions on the predicted density of future flows (over a 4-quarter horizon of FX, CFMs and MaPPs, and a 3-quarter horizon for monetary policy). An unexpected sale of FX reserves (an unexpected MaPP easing) of 1.5 percent of GDP (of two standard deviations in the sample) is associated with a reduction in the probability of net outflows over the next four quarters from around 22 percent to 15.7 percent (from around 24 percent to 10.6 percent). The bottom 5th percentile improves from around -8 percent of GDP to -5.3 percent of GDP. In comparison, monetary policy interventions do not seem to yield strong results once the impact through the standalone policy term is accounted for.

The effect of the CFM tightening is quantitatively important only for the lower tails of the predicted conditional distribution: after the rise in the BBB yield, the capital outflows at the lowest 5th percentile equal -10.8 percent of GDP following an unexpected (2-standard deviation) CFM tightening, compared to 8 percent without such intervention. The overall probability of

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outflows increases from around 22 percent to 27 percent after a CFM tightening. Possibly, however, these results may be driven by other factors that we are insufficiently controlling for. For example, countries that adopt capital controls in the face of adverse global shocks may suffer from a worse political environment and higher policy uncertainty. Moreover, the result may also reflect reverse causality: policy makers may have put in place capital controls anticipating heavy outflow pressures. Another possibility is that the implemented capital controls may not have been sufficiently comprehensive or practically enforceable.

Structural country characteristics

At short horizons, greater exchange rate flexibility is associated with higher probabilities of large in- and outflows in response to adverse global financial shocks (Figure 6, top row). The interaction term with BBB_t^{US} is statistically significant and negative at the bottom tail percentiles, and positive at upper tail percentiles. This higher volatility of conditional short-term inflows may be explained by greater uncertainty about the effects of global shocks on the exchange rate level and its pass-through to the domestic economy in countries with more flexible exchange rates.[15] At the longer horizons, however, only the positive effect present for the upper percentiles persists (Figure 6 and Tables B1-B8 in Appendix B).

This pattern is clearly visible when looking at the whole predicted distribution of cumulative flows (conditional on a BBB yield spike) at short- and medium-term horizons. For more flexible exchange rates, two-quarters ahead, the distribution has fatter tails (Figure 7, upper left chart), but in the medium term (eight quarters ahead) the distribution is characterized by higher median flows, and a higher likelihood of very large flows (Figure 7, upper right chart). Quantitatively, the probability of net outflows within the next two quarters after a one-standard deviation increase in the U.S. BBB yield is estimated at 25.7 for countries with low exchange rate flexibility (exchange rate regime variable set at the value equal to the lower 20th percentile in our sample), compared to 35.2 percent for countries with high exchange rate flexibility (exchange rate regime variable set at the 80th percentile in the sample). The 5th and 95th percentiles of the predicted conditional flows are equal to -5 percent and 9.5 percent of GDP for the first group of countries, versus -8 percent and 11.5 percent of GDP for the second group. In comparison, over the 8-quarter horizon the 5th percentile, at -8 percent of GDP, is the same independently of the exchange rate flexibility, while greater exchange flexibility is associated with a lower probability of cumulative net outflows (16 percent versus 14.2 percent of GDP) and with a higher 95th percentile of the predicted density (27 percent versus 32.75 percent of GDP).

A greater degree of financial development is associated with a more positive outlook for median future flows and a higher likelihood of very large flows immediately after a tightening of global financial conditions, but not with reduced lower tail risks. These effects become stronger at

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[15] Ghosh et al. (2014) find that countries with more fixed exchange regimes tend to attract higher net capital flows. They explain it by the implicit guarantee of a fixed exchange rate that is associated with higher control of the exchange rate.

longer horizons, implying a higher likelihood of a strong *rebound* in capital flows after an adverse shock to global financial conditions. At longer horizons, these positive effects also expand to the lower tail of the predicted distribution. In other words, economies with more developed financial markets tend to display both a higher likelihood of a persistent rebound of inflows and a lower probability of protracted weak flows. The middle left chart in Figure 7 shows the total effect of financial market development on the predicted conditional distribution of cumulative 8-quarters flows, including the effect through the standalone term. Consistent with the above results, the distribution is characterized by significantly higher median flows, and a higher likelihood of very large flows when domestic financial markets are more developed.

We also find that countries with more open capital accounts experience, on average, lower short-term median flows and fewer large inflows immediately after an adverse global financial shock, while the likelihood of large outflows remains unchanged (Figure 6, third row). This negative effect could reflect the fact that it is easier to pull out capital from countries with more open capital accounts. Interestingly, however, our results suggest that this effect is limited to the median- and upper percentiles of the predicted distribution, and that it fades away over time. Consistent with the negative short-term effects, the middle right chart of Figure 7 shows that the conditional distribution of predicted cumulative 4-quarter portfolio flows has a lower median and an upper tail with a considerably smaller probability mass for countries with greater capital account openness compared to countries with more capital account restrictions.

Finally, we find some (albeit weaker) evidence for the importance of institutional factors in mitigating the impact of global shocks on portfolio inflows. Figure 6, bottom row shows results for the Rule of Law. In general, greater institutional quality is associated with higher gross inflows across quantiles and horizons, but those effects are statistically significant only for lower percentiles at longer horizons for the Rule of Law and Central Bank Transparency indices. In other words, greater institutional quality seems to be associated with a lower probability of protracted weak flows. Figure 7 (bottom chart) demonstrates that the impact is potentially quantitatively significant: countries with the value of the Rule of Law index equal to the 80th percentile in the sample have a 4 percent probability of experiencing cumulative net outflows over the next 8 quarters (with the 5th percentile equal 0.25 percent of GDP) compared to 27 percent (and 5th percentile of -17 percent of GDP) for countries at the 20th percentile of the Rule-of-Law index in the sample.

Figure 6. Panel Regression with Structural Characteristics and Policy Frameworks—Interaction Terms with the U.S. corporate BBB yield.
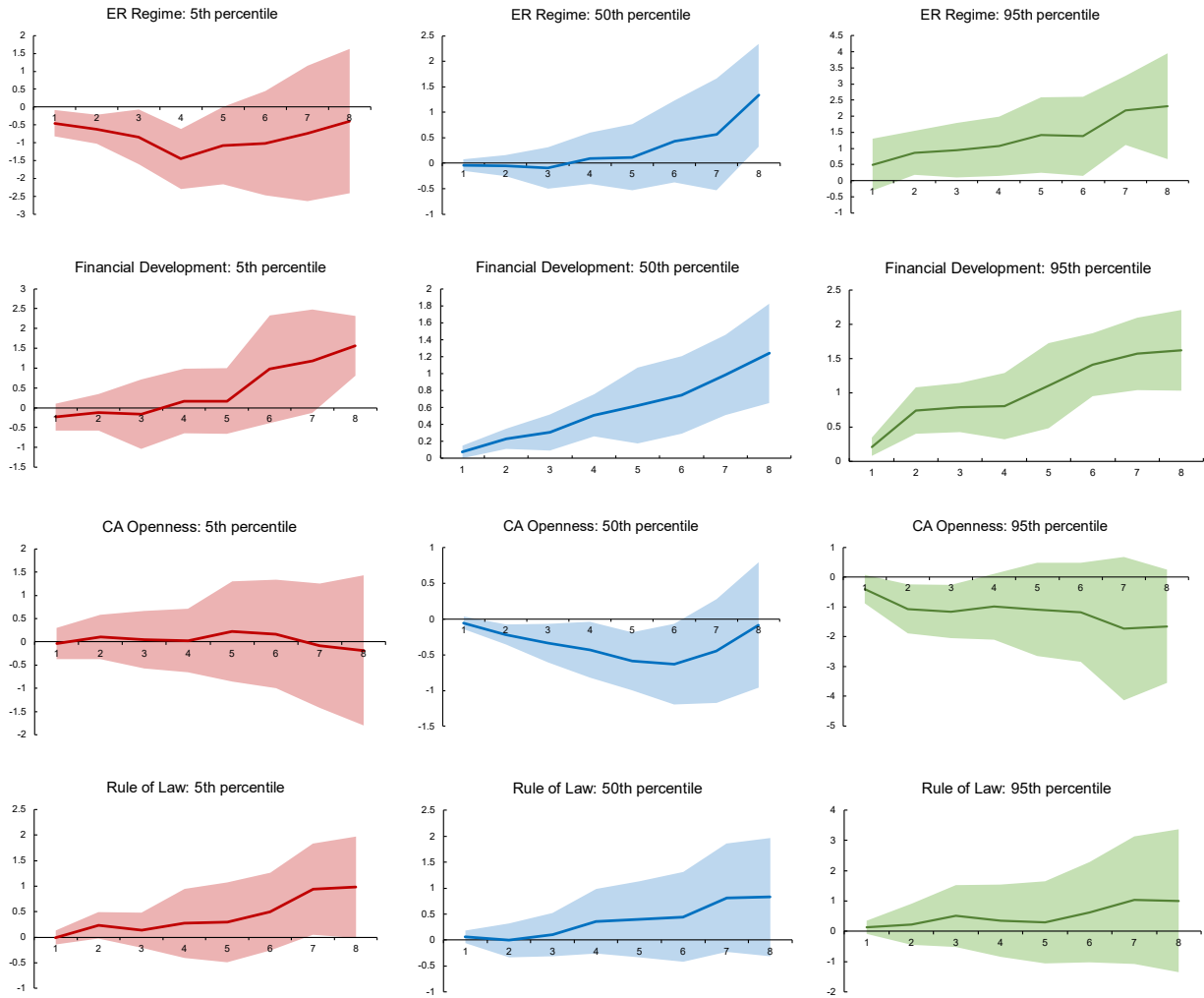
Notes: Figure 6 shows coefficients on the interaction term between a structural characteristics/policy framework variable and the U.S. corporate BBB yield, $P_{i,t} \times BBB_t^{US}$ in eq. (4), scaled by the sample standard deviation of the domestic variable, for 5th, 50th and 95th percentiles (α=0.05, 0.5, 0.95). The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals. For ER regimes, higher values denote higher exchange-rate flexibility.

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Figure 7. Panel Regressions with Structural Characteristics and Policy Frameworks—Predicted Density of Future Gross Portfolio Inflows.
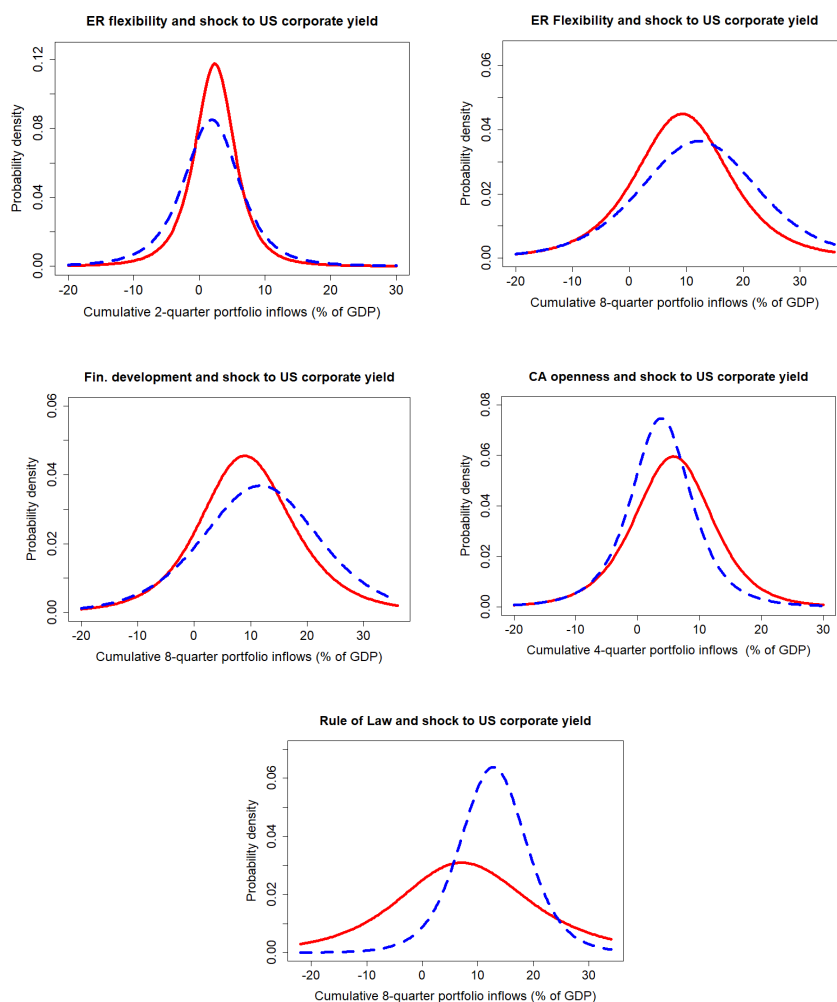
Notes: Red solid lines show distributions of future portfolio inflows after a one-standard deviation (or 160bp) increase in the U.S. corporate BBB yield when a structural characteristic/policy framework variable (Exchange Rate Regime, Financial Market Development, Capital Account Openness, Rule of Law Index) is set at the value equal to 20th percentile in the sample. Blue dashed lines show distributions when the structural characteristic is set at 80th percentile in the sample. In both cases, all other control variables are set at the sample averages.

While there is no well-established goodness of fit measure for quantile regressions, Koenker and Machado (1999) propose a "quasi R-squared" based on a comparison to a model with country-specific constant terms: Tables B1-B8 in Appendix B report the measure of fit computed this way for our baseline regressions with policy and policy framework variables. The quasi R-squared remains relatively high, around 0.6-0.8, across percentiles and horizons and, most importantly, for many domestic policies and structural characteristics it is considerably above the quasi R-squared for the model without any policy variables and their interaction terms with the BBB yield (reported in Table B9 in Appendix B).

Tables B1-B8 in Appendix B also report test results for the hypothesis of jointly significant impact of the policy or policy framework variables and their interaction term with the U.S. corporate BBB yield ($BBB_t^{US} \times P_{i,t} + P_{i,t}$). For a broad range of percentiles, these tests reject the null hypothesis of zero combined impact, thus favoring model specifications with domestic policies and structural characteristics.

D. SUMMARY OF FINDINGS

Our integrated econometric approach has allowed us to analyze the impact of policies in the short and medium-term on portfolio flows in response to a deterioration in global financial conditions. Different policies seem to matter at different horizons and for different types of risks, and the results suggest that some policies involve important tradeoffs. One example is the finding that more flexible exchange rate regimes are linked to higher risks of both large in- and outflows in the immediate aftermath of a negative global shock, but in the medium term such regimes seem to support a larger rebound of flows. Figure 8 summarizes the results of the policy analysis in this section graphically.

It is also clear that high-frequency policy actions, such as interest rate changes, macroprudential or FX interventions are more important at the shorter horizons in mitigating downside risks to portfolio flows than policy frameworks or structural country characteristics. In other words, good institutional frameworks are not able to shield countries from the increased volatility of portfolio flows in the immediate aftermath of global shocks. However, they do seem to contribute to a more rapid bounce-back of foreign flows in the medium term.

Figure 8: Domestic Policies and Structural Characteristics and the Impact of Global Shocks on Gross Portfolio Flows

	inflows within one year			inflows within two years		
	low percentiles	middle percentiles	upper percentiles	low percentiles	middle percentiles	upper percentiles
Structural characteristics						
Exchange rate regime flexibility	red		green		green-dashed	green
Financial market development		green		green	green	green
Institutional quality				green-dashed	green-dashed	
CA openness		red	red		red-lines	
Policies						
Monetary policy (tightening)	green-dashed					
Macroprudential policy (easing)	green	green	green	green-dashed	green	green
FX intervention (sale)	green	green-dashed				
CFM (tightening)	red			red-lines		

Notes: Figure 8 shows the impact of different domestic policies and structural characteristics on mitigating or exacerbating the effect of a global financial shock on the distribution of future gross portfolio inflows within one year and within two years (interaction term with the U.S. corporate BBB yield). Red solid cells correspond to negative (i.e. exacerbating global shocks) and highly statistically significant impact of a domestic variable, red cells with horizontal lines to a negative but somewhat less statistically significant impact. Green solid cells denote positive (i.e. mitigating global shocks) and highly statistically significant impact of a domestic variable, green dashed cells a positive but somewhat less statistically significant impact.

Our approach has also allowed us to unearth asymmetric effects on the distribution of future portfolio inflows of policies and policy frameworks. Looking at policies, foreign exchange interventions seem to help mitigate *downside* risks to portfolio inflows caused by worsening global conditions, but they do not have a significant impact on median future flows. Similarly, a tightening of capital flow measures in response to an adverse global shock exacerbates the downside risks to portfolio inflows, while leaving median predicted flows unchanged. Greater capital account openness is associated with a higher likelihood of a strong rebound of flows after an adverse global shock, but it does not seem to increase the likelihood of weak or negative flows. We leave it to future research to investigate the channels through which these asymmetric results arise.

Although we have discussed our findings in the context of a worsening of global financial conditions, they can also be interpreted in a symmetric manner for the case of a loosening of external financial conditions. For example, the results suggest that in response to easier global financial conditions, FX purchases can be expected to dampen inflows in the short run. This symmetry is imposed in the estimation by construction; allowing for asymmetric effects would not only have complicated an already complex estimation further, but, in particular, it would have run into degree-of-freedom constraints, given our data sample. However, exploring such asymmetric effects would also be a worthwhile endeavor for future research.

E. OUT-OF-SAMPLE EVIDENCE AND ROBUSTNESS

In this section, we first discuss the goodness of fit of our baseline results of the predictive distributions. Next, we comment on the alternative specifications we have considered as robustness exercises.

Following Adrian et al. (2019), we present two methods for evaluating the out-of-sample performance of our predicted conditional distributions. While perhaps less relevant for our purposes given the use of panel data in this paper, such methods might be particularly useful when considering single-country specifications. First, we compare the in-sample forecasts of 4-quarters ahead cumulative gross portfolio flows for an average country in the sample, with real-time forecasts. Figure 9 shows the results of this exercise for 5th, 50th and 95th percentiles for the period 2010-2017, when using the baseline model without domestic policies or structural characteristics. Apart from the short period between 2012-2014 when the out-of-sample forecasts suggest higher 5th and 50th percentiles of average future flows, the two sets of forecasts are hard to distinguish from each other.

Figure 9: Domestic Policies and Structural Characteristics and the
Impact of Global Shocks on Gross Portfolio Flows

In- and out-of-sample forecasts for the average
country in the sample
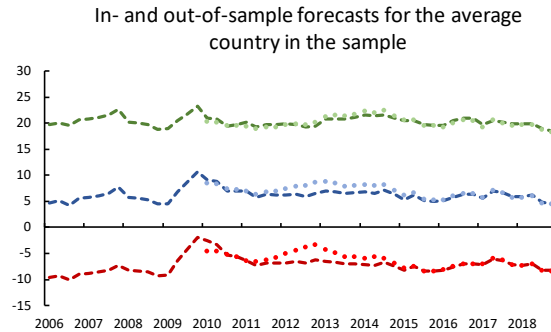
Notes: Figure 9 compares the in-sample (dashed lines) and out-of-sample (dotted lines) forecasts of 5th, median, and 95th percentiles (red, blue and green lines, respectively) of cumulative 4-quarters ahead gross portfolio inflows for an average country in the sample, between 2010-2017.

Next, we assess the accuracy of the density forecasts from models *with* policy variables, by comparing predictive scores for a model with and one without these variables (and their interaction terms with the BBB yield). For each horizon, the predictive score is computed by evaluating the predictive distribution generated by a model at the realized value of the dependent variable. A higher predictive score of one model versus another indicates a more accurate prediction.

Since averaging country-specific policy interventions is likely to net out their effect in many periods, we instead compute the predictive scores for selected individual countries (based on our panel regression model).[16] Figure 10 plots the scores for South Korea when the dependent variable is cumulative portfolio flows in the next 4 quarters. The predictive scores for the distribution conditional on a broader set of controls are mostly above the scores for the distribution conditional on the narrower set of controls, suggesting that the former model is often more accurate, and rarely less accurate.[17]

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[16] When assessing the impact of structural characteristics in our empirical analysis, we take advantage of the cross-section variation of those variables, since most of them move only slowly over time. Thus, predictive scores for the models with structural characteristics for either the average country in the sample or for individual countries would not be meaningful.

[17] More broadly for our sample, the country-level performance of real-time density forecasts based on different model specifications depends on the frequency of use of alternative policy tools.

Figure 10: Predictive scores: South Korea

South Korea: predictive scores for the model with monetary policy

South Korea: predictive scores for the model with macroprudential policy

South Korea: predictive scores for the model with FX interventions

South Korea: predictive scores for the model with CFMs
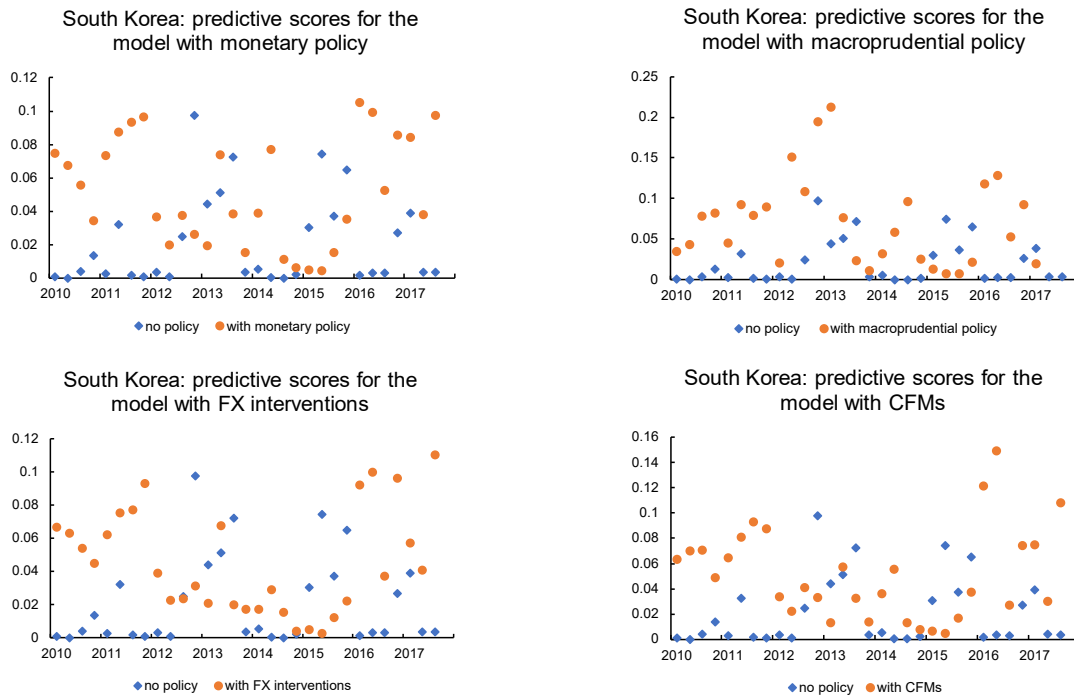
Notes: Figure 10 shows predictive scores for the out of sample density forecasts for South Korea for 2010Q1-2017Q3 when using the model with no policy variables (blue diamonds) and when using the model with monetary, macroprudential, FXI or CFM policy surprises and their interaction terms with the U.S. corporate BBB yield (orange dots).

We also conduct a range of robustness exercises. First, we run the regressions based on a larger sample of 25-35 economies (depending on the specification), when replacing the segmentation indicator by financial market development and capital account openness variables. The results are broadly in line with the findings for our preferred specification, although the exchange rate regime becomes insignificant in the medium term, and the interaction term between the U.S. corporate BBB yield and the financial development index becomes negative and significant for bottom percentiles at the shorter horizons (Figures B1 and B2 in Appendix B). The Rule of Law variable becomes less significant, but Central Bank Transparency Index is now associated with a positive and more significant impact on median flows and on upper risks to flows at longer horizons. We also run the regressions when clustering standard errors at the 2-year-country level (not shown) instead of the country level. The vast majority of the results remains unchanged, although the interaction of the BBB yield with the monetary policy variable is now not statistically significant across most quantiles. The results are also robust to controlling for i) the domestic interest rate, ii) the interest rate differential versus the fed funds rate, or iii) increasing the number of lags of gross portfolio inflows to four, although in the two last cases monetary policy variable ceases to be significant for most quantiles (not shown).

Results are broadly robust to replacing the U.S. corporate BBB yield with the VIX index (Figures B3 and B4 in Appendix B). One difference compared to our baseline specification is that the interaction of FX interventions with the VIX index is somewhat less statistically

significant at low percentiles. While a MaPP easing is less significant in improving the 5th percentile of the conditional distribution of future flows, it continues to affect positively a broad range of lower percentiles, particularly at shorter horizons (not shown). Finally, the relationship between greater capital account openness and lower upside risks to portfolio flows, conditional on a rise in the VIX index today, is less statistically significant too.

IV. Conclusions

We have proposed an approach to predict the entire future probability distribution of capital flows to emerging markets based on domestic structural characteristics, policies, and global shocks. The method allows for a range of useful applications, including the assessment of the impact of policy actions to mitigate the risks of capital outflows or inflow surges in the face of global shocks.

Our results indicate that domestic structural characteristics, policy frameworks, and policy actions have different effects in shaping the response of portfolio inflows in response to an adverse global shock. For example, more flexible exchange rate regimes are linked to higher risks of both large in- and outflows in the immediate aftermath of a negative global shock, but more flexible exchange rate regimes support a larger rebound of flows in the medium term. Risks do not seem to be alleviated by better institutions and more transparency in the short term, while the mitigating effects of these factors become notable over the medium term.

Similarly, foreign exchange interventions seem to help mitigate downside risks to portfolio inflows caused by the changes in global conditions, but this effect is limited to the short term. A tightening of capital flow measures in response to an adverse global shock is associated with larger outflows in the short term, but not at longer horizons. Finally, we find little evidence for the effectiveness of monetary policy in shielding countries from capital outflows and surges driven by global shocks.

Our results highlight the merit in applying quantile regressions and the "at-risk" approach to study policies and their effects on capital flows: We find that several of the policy actions or policy frameworks might influence the upper or lower tails of the predicted distributions, thus mitigating risks to future flows in the presence of adverse global shocks. These effects would have been missed when following the standard approach and focusing on average flows only.

The capital-flows-at-risk approach provides a promising framework for further research. In particular, further work could examine the role of fiscal policies and the differential effects of structural characteristics, policies, and global variables on different types of capital flows, such as bank lending and foreign direct investment. The effects of combining different policies could also be explored. Moreover, higher-frequency fund flow data could be analyzed to shed further light on how investor behavior affects downside risks to capital flows, particularly given the rise

of benchmark-driven institutional and social media-driven retail investors in recent years. The framework could also usefully be applied to bilateral capital flows data to understand how downside risks differ across source and destination countries. [18] Finally, the presence of asymmetric effects in the face of a tightening vs. an easing of global financial conditions could also be investigated.

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[18] See Arslanalp and Tsuda (2015) and McQuade and Schmitz (2019).

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Appendix A

A. DATA

We use quarterly data from 1996Q4 to 2018Q4 for 35 emerging market and developing countries. For the structural variables that are only available on an annual basis, we simply assume that all quarterly values within one year are the same. Table A1 lists all countries that are included our sample.[19]

Table A1: List of Countries

Region	Countries: full sample	Countries: when controlling for financial integration
Emerging Europe and Central Asia	Bulgaria, Bosnia and Herzegovina, Belarus, Georgia, Hungary, Kazakhstan, North Macedonia, Poland, Romania, Russia, Serbia, Ukraine	Bulgaria, Hungary, Poland, Romania, Russia
Asia and Pacific	India, Indonesia, Republic of Korea, Malaysia, Philippines, Thailand	India, Indonesia, Republic of Korea, Malaysia, Philippines, Thailand
Middle East and Africa	Egypt, Morocco, Turkey, South Africa	Egypt, Turkey, South Africa
Central and South America	Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Jamaica, Mexico, Panama, Peru, El Salvador	Brazil, Chile, Colombia, Mexico, Peru

Dependent Variable. The dependent variable is gross portfolio inflows as percent of GDP and comes from the IMF's Financial Flow Analytics (FFA) database. To assess the short-term impact, we look at two-quarter average inflows h quarters ahead, with $h=2$. That is, for $h=2$ we look at average inflows in the first and second quarters ahead. For the medium-term analysis, we use average quarterly portfolio inflows over 4 quarters at $h=8$ quarters ahead.

Domestic Factors. Data on foreign reserves and external debt are taken from the IMF's Assessing Reserve Adequacy (ARA) database and the World Bank's Quarterly External Debt Statistics database. We use the IMF's International Financial Statistics (IFS) and World Economic Outlook (WEO) databases for macroeconomic variables, such as GDP growth, policy rates, and exchange rates. GDP per capita is measured in constant international dollars based on purchasing power parity and comes from the World Bank's International Comparison Program database. Capital account openness is measured by the Chinn-Ito Index, computed using the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database. To control for the level of financial development, we apply the IMF's Financial Market Development Index (for details see Svirydzenka, 2016). To measure the level of a country's integration with global financial markets, we follow Bekaert et al. (2011) and extend their market segmentation indicator until 2018. We use a three-year moving average of the quarterly indicator in the regressions.

Global Factors. The BBB-rated U.S. corporate bond yield and spread, and the VIX index come from the Federal Reserve Bank of St. Louis. U.S. 10-year Treasury yields (de-trended using an HP filter) and the U.S. dollar strength (measured by the DXY dollar index) are from Bloomberg.

Structural Country Characteristics. We use a range of data sources for the structural country characteristics, including the World Bank's World Development Indicators (WDI) and the Worldwide Governance Indicators (WGI) databases, which contain Rule of Law, Political Stability, Central Bank Transparency, Government

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[19] When collecting data, we started with a sample of 60 countries. Due to data limitations, and after eliminating outliers (e.g., we dropped Argentina, Ecuador, Bolivia, Pakistan, and Vietnam as the time series for portfolio inflows showed some unreliable patterns) we were left with 35 economies.

Effectiveness indicators. To capture corruption perceptions, we use the index by Transparency International. The exchange rate regime indicator is taken from the IMF's AREAER database.

Domestic Policies. We take the domestic policy rates from the IMF's International Financial Statistics. The FX interventions come from official publications by national authorities and the FRED database. For countries whose data is not available, we manually constructed a proxy measure following Dominguez (2012) and Adler, Lisack, and Mano (2015). The capital flows measures are taken from the AREAER database, and the macroprudential policy indicators are constructed using the iMaPP database (Alam et al, 2019). Table A2 describes the definitions and the construction of policy variables in detail.

Table A2: Construction of Policy Variables

Variable	Construction	Data source
Policy interest rate	Quarterly average of the domestic policy rate (nominal)	IMF International Financial Statistics
FX intervention	Whenever possible, the FX intervention variable is based on actual interventions data from central banks. A positive value means an increase in FX assets (an FX purchase), and a negative value—a decline in FX assets (an FX sale); we scale the variable by GDP. When official data on FX interventions are not available, we follow Dominguez (2012) and Adler, Lisack, and Mano (2015), in using a valuation-adjusted measure of the change in the central bank's net foreign assets.	Central bank website, FRED database, IMF International Financial Statistics, Thomson Reuters Datastream, Haver Analytics, IMF's COFER database
Macroprudential policy	The iMaPP database records policy actions across different macroprudential tools subcategories. A tightening action is recorded as 1, and an easing is recorded as -1 (and zero otherwise). For our purposes, we construct the macroprudential indicator as a sum of actions related to borrowing (LTV, DSTI, DTI, LIT limits) and credit-volume restrictions in a given quarter. The difference in the level of the indicator compared to the last quarter gives the magnitude of easing or tightening.	iMaPP database (Alam et al. 2019)
Capital flow management indicator	We use a quarterly broad restrictiveness index based on the AREAER report, constructed by Baba et al. (2021).[20] The index is an average of binary indicators of restrictiveness in 62 categories of capital transactions. This broad restrictiveness index can have a value between zero and 1 and higher values represent more restricted cross-border capital flows. We derive an indicator of CFM actions by looking at the difference in the level of the restrictiveness indicator compared to the last quarter: An easing is assigned a -1 value, while a tightening is recorded as a +1 (and zero in other cases).	IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)

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[20] Another database on capital control measures that uses the AREAER reports is Fernández et al. (2016). We decided to use data from Baba et al. (2021) since it includes more recent data, and is of quarterly frequency (whereas the data in Fernández et al. are annual).

Number of Countries that Introduced Macroprudential Policy Tools
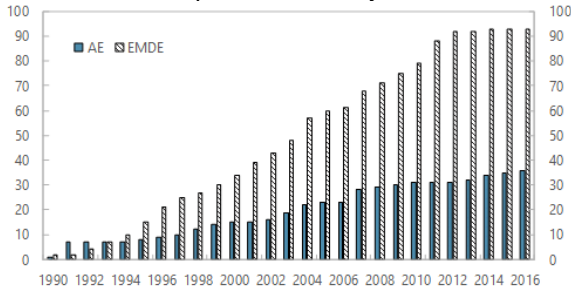
Application of Capital Controls (Number of Countries, 2014–18)
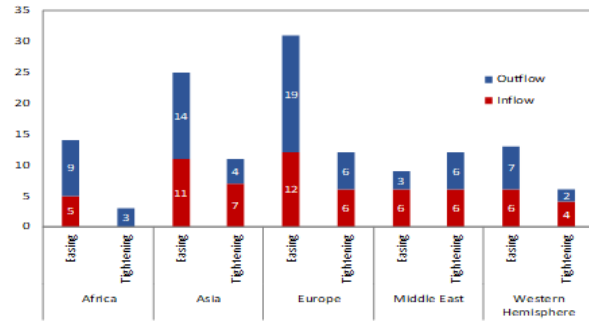
Policy Shocks. For each of the policy variables defined in Table A2, we run separate country-level regressions of the variable of interest on a range of explanatory variables listed in Table A3 below. We define monetary policy and FXI shocks as residuals from those first-stage regressions. For CFMs and macroprudential policies, we construct the policy shock variable in quarter t as a sum of the residual in the current quarter t and of the residuals in the last three quarters, $t-1$, $t-2$, $t-3$. This is in line with recent evidence in Acosta-Henao et al. (2020), who document that changes in CFMs (and macroprudential policies) occur rather infrequently, but when they do—they display very little mean reversion.

Table A.3: Construction of Policy Shocks

Dependent variable	Explanatory variables	Details of the specification
Domestic policy rate (q/q change)	One-year-ahead Consensus inflation and GDP forecasts, two lags of: domestic policy rate, U.S. corporate BBB yield, detrended U.S. 10-year yield (using HP filter), VIX index, gross portfolio inflows (in % of GDP), CPI inflation, real GDP growth, nominal effective exchange rate.	Country by country OLS regressions.
Index of macroprudential measures which takes values {-2,-1,0,1,2} if, in net terms, there were more than one loosening measures, one loosening measure, no change, one tightening measure, or more than two tightening measures in the quarter, respectively.	Two lags of: U.S. corporate BBB yield, detrended U.S. 10-year yield (using HP filter), VIX index, gross portfolio inflows (in % of GDP), real GDP growth, 1 lag of credit to GDP gap (deviation from trend as in Hamilton (2018)), 2 lags of the dependent variable.	Panel ordered probit regression with country fixed effects. The policy shock is recovered as follows: $$\hat{\varepsilon}_{it}^{MPM} = MPM_{it} - \sum_{k=-2}^{2} \hat{p}_k k$$ where MPM_{it} is the dependent variable, and $\hat{p}_k$ is the probability of $MPM_{it} = k$, with k in {-2,-1,0,1,2}, estimated through the probit regression.
Index of FXI actions which takes values {-1,0,1} if there was a sale, no change, or a purchase of FX, respectively.	Variables used in the first column of Table 2 in Forbes and Klein (2015), one lag of: the BBB yield, change in the fed funds rate, VIX index, gross portfolio inflows (in % of GDP), exchange rate volatility, dollar exchange rate deviation from trend using Hamilton's (2018) approach.	Panel ordered probit regression with country fixed effects. The policy shock is recovered as follows: $$\hat{\varepsilon}_{it}^{FXI} = FXI_{it} - \sum_{k=-1}^{1} \hat{p}_k k$$ where FXI_{it} is the dependent variable, and $\hat{p}_k$ is the probability of $FXI_{it} = k$, with k in {-1,0,1}, estimated through the probit regression.
Index of CFM actions which takes values {-1,0,1} if there was an easing (decline), no change, or a tightening (increase) in the CFM restrictiveness indicator, respectively.	Variables used in the first column of Table 2 in Forbes and Klein (2015), one lag of: the BBB yield, change in the fed funds rate, VIX index, gross portfolio inflows (in % of GDP), exchange rate volatility, dollar exchange rate deviation from trend using Hamilton's (2018) approach.	Panel ordered probit regression with country fixed effects. The policy shock is recovered as follows: $$\hat{\varepsilon}_{it}^{CFM} = CFM_{it} - \sum_{k=-1}^{1} \hat{p}_k k$$ where CFM_{it} is the dependent variable, and $\hat{p}_k$ is the probability of $CFM_{it} = k$, with k in {-1,0,1}, estimated through the probit regression.

Appendix B

Table B1: Panel Regression Results, 1 quarter ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in 1 quarter ahead

Domestic Policy or Policy Framework		5	10	20	30	40	50	60	70	80	90	95	Number of observations
						Percentile							
Exchange rate regime	standalone term	0.14	0.07	-0.01	-0.08	-0.06	0.04	0.03	0.00	-0.19	-0.56	-0.92	1449
		(0.50)	(0.18)	(0.22)	(0.17)	(0.15)	(0.16)	(0.16)	(0.18)	(0.26)	(0.60)	(0.86)	
	interaction with BBB_t^{US}	-0.17**	-0.12***	-0.06**	-0.03	-0.01	-0.02	-0.02	-0.01	0.02	0.09	0.19	
		(0.09)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.04)	(0.11)	(0.16)	
	Quasi-R²	0.66	0.63	0.61	0.60	0.61	0.61	0.63	0.64	0.66	0.69	0.73	
	F-test p value	0.00	0.00	0.00	0.01	0.40	0.86	0.63	0.64	0.33	0.01	0.00	
Financial market development	standalone term	-2.90	-7.50	-4.12	-1.74	-3.27	-2.53	-3.81	-5.03	-5.70	-6.88	-6.39	1449
		(10.53)	(6.10)	(4.12)	(2.85)	(2.55)	(2.40)	(2.33)	(3.60)	(3.62)	(6.07)	(7.68)	
	interaction with BBB_t^{US}	-1.56	-0.01	-0.01	-0.09	0.41	0.51*	0.75**	0.80*	1.07*	1.47***	1.42***	
		(1.38)	(0.87)	(0.64)	(0.40)	(0.26)	(0.29)	(0.37)	(0.41)	(0.63)	(0.54)	(0.54)	
	Quasi-R²	0.65	0.63	0.62	0.62	0.62	0.63	0.64	0.65	0.67	0.70	0.74	
	F-test p value	0.01	0.05	0.05	0.34	0.42	0.04	0.04	0.00	0.01	0.02	0.00	
Transparency International Index	standalone term	-0.19	-0.67*	-0.29	-0.43	-0.25	-0.38	-0.41	-0.51	-0.58	-1.26	-1.10	1394
		(0.69)	(0.37)	(0.31)	(0.26)	(0.38)	(0.49)	(0.45)	(0.39)	(0.67)	(0.76)	(0.77)	
	interaction with BBB_t^{US}	-0.05	0.00	-0.02	0.00	0.00	0.02	0.03	0.00	0.00	0.09	0.12	
		(0.07)	(0.04)	(0.04)	(0.04)	(0.05)	(0.07)	(0.07)	(0.05)	(0.08)	(0.08)	(0.11)	
	Quasi-R²	0.66	0.64	0.63	0.63	0.63	0.64	0.65	0.67	0.69	0.72	0.75	
	F-test p value	0.31	0.00	0.00	0.01	0.19	0.24	0.21	0.02	0.06	0.00	0.34	
Central Bank Transparency	standalone term	-0.05	-0.08	-0.11	-0.11	-0.19	-0.24	-0.12	-0.31	-0.32	-0.50	-0.83	1158
		(0.44)	(0.21)	(0.19)	(0.16)	(0.17)	(0.19)	(0.19)	(0.28)	(0.34)	(0.50)	(0.69)	
	interaction with BBB_t^{US}	-0.04	-0.03	-0.02	-0.02	0.00	0.02	0.00	0.03	0.03	0.03	0.08	
		(0.06)	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.04)	(0.05)	(0.07)	(0.09)	
	Quasi-R²	0.71	0.69	0.69	0.69	0.69	0.70	0.71	0.72	0.74	0.77	0.79	
	F-test p value	0.00	0.01	0.00	0.00	0.01	0.15	0.34	0.12	0.21	0.04	0.09	
Rule of Law	standalone term	2.72	1.26	1.80**	1.00	0.43	0.31	0.19	0.16	0.17	-3.18	-3.83*	1449
		(1.91)	(1.18)	(0.82)	(0.70)	(1.04)	(0.91)	(0.87)	(1.39)	(1.58)	(2.17)	(2.03)	
	interaction with BBB_t^{US}	0.00	0.07	-0.04	0.00	0.07	0.09	0.07	0.04	0.01	0.29	0.19	
		(0.12)	(0.11)	(0.09)	(0.08)	(0.12)	(0.11)	(0.10)	(0.17)	(0.19)	(0.21)	(0.20)	
	Quasi-R²	0.65	0.63	0.62	0.62	0.62	0.63	0.64	0.65	0.67	0.70	0.74	
	F-test p value	0.00	0.00	0.00	0.00	0.02	0.02	0.15	0.64	0.13	0.73	0.11	
CA openness	standalone term	-0.03	-0.11	0.21	0.15	0.09	0.02	0.17	0.07	0.40	0.50	1.32	1449
		(0.90)	(0.46)	(0.29)	(0.30)	(0.24)	(0.24)	(0.33)	(0.34)	(0.49)	(0.62)	(1.31)	
	interaction with BBB_t^{US}	-0.02	-0.02	-0.05	-0.04	-0.04	-0.04	-0.06	-0.06	-0.12	-0.17*	-0.28	
		(0.13)	(0.08)	(0.05)	(0.04)	(0.03)	(0.03)	(0.05)	(0.05)	(0.09)	(0.10)	(0.19)	
	Quasi-R²	0.65	0.63	0.62	0.62	0.62	0.63	0.64	0.65	0.67	0.71	0.74	
	F-test p value	0.74	0.42	0.74	0.76	0.74	0.55	0.50	0.47	0.00	0.06	0.02	
Monetary policy	standalone term	-1.29	-0.56	-0.59	-0.56	-0.46	-0.45	-0.36	-0.50	0.22	1.21	0.83	1312
		(0.80)	(0.53)	(0.31)	(0.31)	(0.25)	(0.29)	(0.31)	(0.30)	(0.37)	(0.57)	(0.98)	
	interaction with BBB_t^{US}	0.15	0.05	0.07	0.07	0.06	0.05	0.03	0.04	-0.07	-0.19	-0.14	
		(0.11)	(0.09)	(0.05)	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)	(0.07)	(0.10)	(0.15)	
	Quasi-R²	0.67	0.65	0.64	0.64	0.64	0.65	0.66	0.67	0.69	0.72	0.75	
	F-test p value	0.00	0.00	0.00	0.03	0.00	0.03	0.04	0.08	0.08	0.32	0.44	
Macroprudential policy	standalone term	-2.27	-1.22	-1.39	-1.12	-1.16	-1.25	-1.91	-2.64	-2.45	-2.87	-3.33	1154
		(0.90)	(1.43)	(0.98)	(0.47)	(0.47)	(0.47)	(0.44)	(0.77)	(0.88)	(0.73)	(1.77)	
	interaction with BBB_t^{US}	0.5***	0.26	0.26	0.21**	0.21**	0.21**	0.32***	0.45***	0.46***	0.49***	0.55*	
		(0.17)	(0.36)	(0.22)	(0.09)	(0.09)	(0.10)	(0.09)	(0.15)	(0.15)	(0.11)	(0.30)	
	Quasi-R²	0.70	0.68	0.67	0.67	0.67	0.68	0.69	0.71	0.73	0.76	0.79	
	F-test p value	0.56	0.17	0.21	0.18	0.04	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-0.57	-0.64	-0.58	-0.45	-0.19	-0.27	-0.30	0.08	0.40	0.65	1.22	1114
		(0.80)	(0.43)	(0.54)	(0.28)	(0.30)	(0.38)	(0.48)	(0.38)	(0.55)	(0.94)	(0.92)	
	interaction with BBB_t^{US}	0.09	0.09	0.09	0.07	0.02	0.05	0.05	-0.03	-0.10	-0.19	-0.27	
		(0.17)	(0.09)	(0.08)	(0.05)	(0.05)	(0.05)	(0.07)	(0.07)	(0.09)	(0.15)	(0.17)	
	Quasi-R²	0.73	0.71	0.69	0.69	0.69	0.70	0.71	0.73	0.75	0.78	0.81	
	F-test p value	0.34	0.16	0.36	0.21	0.38	0.78	0.89	0.30	0.15	0.11	0.04	
CFM	standalone term	4.61	3.15	-0.09	0.94	0.80	-0.83	-1.87	-1.05	-0.34	2.59	2.31	1040
		(2.75)	(2.68)	(1.93)	(1.55)	(1.41)	(1.54)	(1.41)	(2.49)	(1.92)	(2.08)	(3.45)	
	interaction with BBB_t^{US}	-0.95*	-0.76	-0.09	-0.20	-0.16	0.16	0.29	0.26	0.23	-0.34	-0.19	
		(0.51)	(0.48)	(0.31)	(0.27)	(0.25)	(0.29)	(0.28)	(0.45)	(0.35)	(0.38)	(0.57)	
	Quasi-R²	0.75	0.73	0.72	0.72	0.72	0.73	0.74	0.75	0.77	0.80	0.82	
	F-test p value	0.00	0.06	0.02	0.38	0.84	0.66	0.49	0.31	0.25	0.25	0.60	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B1 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next quarter. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B2: Panel Regression Results, 2 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-2 ahead

Domestic Policy or Policy Framework		5	10	20	30	40	Percentile 50	60	70	80	90	95	Number of observations
Exchange rate regime	standalone term	0.18	0.04	0.00	-0.15	-0.19	-0.18	-0.15	-0.19	-0.93**	-1.37**	-1.40	1431
		(0.60)	(0.49)	(0.36)	(0.34)	(0.32)	(0.41)	(0.41)	(0.41)	(0.43)	(0.64)	(0.87)	
	interaction with BBB_t^{US}	-0.24***	-0.21***	-0.12***	-0.05	-0.02	-0.02	0.00	0.04	0.17**	0.23**	0.33**	
		(0.09)	(0.06)	(0.04)	(0.04)	(0.04)	(0.05)	(0.07)	(0.08)	(0.08)	(0.10)	(0.15)	
	Quasi-R^2	0.67	0.64	0.62	0.62	0.62	0.63	0.64	0.65	0.67	0.70	0.72	
	F-test p value	0.00	0.00	0.00	0.01	0.00	0.27	0.56	0.15	0.00	0.00	0.00	
Financial market development	standalone term	-3.51	-9.08	-18.52***	-12.01***	-13.11***	-10.32***	-6.47	-8.47*	-12.60**	-14.74	-33.45**	1431
		(13.96)	(9.50)	(6.20)	(3.74)	(3.86)	(3.63)	(5.53)	(5.13)	(6.18)	(14.41)	(15.81)	
	interaction with BBB_t^{US}	-0.79	-0.34	1.59*	1.20*	1.48***	1.55***	1.38**	1.85***	2.53***	2.52***	4.94***	
		(1.93)	(0.99)	(0.91)	(0.64)	(0.52)	(0.44)	(0.65)	(0.56)	(0.80)	(0.97)	(1.35)	
	Quasi-R^2	0.66	0.64	0.63	0.63	0.63	0.64	0.65	0.66	0.68	0.70	0.72	
	F-test p value	0.52	0.23	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-2.06	-1.83**	-1.12	-1.02	-1.13	-0.50	-0.82	-1.37	-1.88*	-2.95*	-2.78	1393
		(1.37)	(0.73)	(0.72)	(0.69)	(0.74)	(0.81)	(0.93)	(1.00)	(1.02)	(1.58)	(2.73)	
	interaction with BBB_t^{US}	0.11	0.10	0.04	0.04	0.06	-0.01	0.01	0.06	0.13	0.24	0.20	
		(0.11)	(0.10)	(0.11)	(0.12)	(0.12)	(0.11)	(0.13)	(0.12)	(0.11)	(0.21)	(0.37)	
	Quasi-R^2	0.67	0.65	0.64	0.64	0.65	0.66	0.67	0.68	0.69	0.72	0.74	
	F-test p value	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.00	0.00	0.04	
Central Bank Transparency	standalone term	-1.02	-0.96	-0.21	-0.70*	-0.54	-0.50	-0.38	-0.45	-0.58	-1.01	-1.52	1158
		(0.97)	(0.61)	(0.38)	(0.40)	(0.35)	(0.46)	(0.45)	(0.48)	(0.53)	(1.04)	(1.20)	
	interaction with BBB_t^{US}	0.03	0.03	-0.05	0.06	0.05	0.03	0.02	0.03	0.05	0.09	0.18	
		(0.12)	(0.07)	(0.06)	(0.06)	(0.05)	(0.06)	(0.06)	(0.08)	(0.09)	(0.15)	(0.17)	
	Quasi-R^2	0.72	0.70	0.70	0.70	0.71	0.71	0.72	0.73	0.74	0.76	0.78	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.01	0.23	0.18	0.29	0.00	0.00	
Rule of Law	standalone term	2.86	2.72	2.28	1.24	1.33	1.90	0.67	-1.69	-2.24	-5.74	-7.38	1431
		(2.67)	(1.84)	(2.77)	(1.93)	(1.90)	(2.09)	(2.20)	(2.81)	(2.49)	(3.55)	(5.39)	
	interaction with BBB_t^{US}	0.35	0.27*	0.11	0.12	0.14	-0.01	0.11	0.31	0.25	0.44	0.34	
		(0.22)	(0.16)	(0.34)	(0.23)	(0.24)	(0.29)	(0.30)	(0.29)	(0.26)	(0.34)	(0.60)	
	Quasi-R^2	0.66	0.64	0.63	0.63	0.63	0.64	0.65	0.66	0.67	0.70	0.72	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.75	0.14	0.76	
CA openness	standalone term	-0.84	-0.40	0.25	0.26	0.39	0.54	0.48	0.64	1.50**	2.81**	3.66*	1431
		(1.29)	(1.06)	(0.72)	(0.65)	(0.50)	(0.50)	(0.59)	(0.59)	(0.70)	(1.47)	(2.22)	
	interaction with BBB_t^{US}	0.07	0.03	-0.08	-0.10	-0.12*	-0.15**	-0.18**	-0.25***	-0.38***	-0.58***	-0.74**	
		(0.19)	(0.15)	(0.10)	(0.09)	(0.07)	(0.06)	(0.08)	(0.07)	(0.10)	(0.19)	(0.29)	
	Quasi-R^2	0.66	0.63	0.62	0.63	0.63	0.64	0.65	0.66	0.68	0.70	0.72	
	F-test p value	0.23	0.75	0.92	0.55	0.44	0.06	0.00	0.01	0.00	0.00	0.00	
Monetary policy	standalone term	-0.41	-0.40	-0.65	-1.00	-0.41	-0.52	-0.42	-0.42	0.71	1.21	0.56	1310
		(1.00)	(0.75)	(0.63)	(0.43)	(0.59)	(0.56)	(0.51)	(0.48)	(0.62)	(0.86)	(1.42)	
	interaction with BBB_t^{US}	0.04	0.02	0.05	0.11	0.03	0.04	0.03	0.04	-0.13	-0.21	-0.07	
		(0.14)	(0.10)	(0.09)	(0.06)	(0.09)	(0.09)	(0.08)	(0.08)	(0.09)	(0.14)	(0.23)	
	Quasi-R^2	0.67	0.65	0.65	0.65	0.65	0.66	0.67	0.68	0.69	0.72	0.74	
	F-test p value	0.39	0.22	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.22	0.27	
Macroprudential policy	standalone term	-5.98***	-4.00***	-3.14***	-2.44**	-2.89**	-4.00***	-4.69***	-4.57****	-4.65***	-6.28***	-7.72***	1153
		(1.45)	(1.21)	(0.88)	(1.19)	(1.36)	(1.39)	(1.27)	(0.89)	(1.04)	(0.74)	(1.68)	
	interaction with BBB_t^{US}	1.36***	1.02***	0.68***	0.50**	0.50**	0.70***	0.82***	0.81***	0.86***	1.18***	1.43***	
		(0.28)	(0.27)	(0.18)	(0.21)	(0.23)	(0.23)	(0.23)	(0.15)	(0.18)	(0.12)	(0.30)	
	Quasi-R^2	0.71	0.69	0.68	0.68	0.69	0.70	0.71	0.72	0.73	0.76	0.77	
	F-test p value	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-0.64	-1.37*	-1.43*	-0.87	-0.89	-1.01	-0.45	-0.09	0.25	-1.08	-0.59	1113
		(0.93)	(0.80)	(0.77)	(0.58)	(0.58)	(0.61)	(0.69)	(0.68)	(0.90)	(1.25)	(1.21)	
	interaction with BBB_t^{US}	0.18	0.25	0.26*	0.15	0.14*	0.16*	0.06	0.00	-0.09	0.13	0.07	
		(0.20)	(0.16)	(0.14)	(0.09)	(0.08)	(0.09)	(0.10)	(0.11)	(0.15)	(0.21)	(0.22)	
	Quasi-R^2	0.73	0.72	0.70	0.70	0.71	0.71	0.72	0.73	0.75	0.77	0.79	
	F-test p value	0.18	0.01	0.00	0.03	0.00	0.14	0.30	0.62	0.37	0.12	0.01	
CFM	standalone term	12.40***	8.43	3.72	2.80	2.73	1.50	0.23	-1.22	0.45	-0.63	-4.15	1039
		(4.47)	(5.55)	(3.89)	(2.57)	(2.30)	(2.08)	(2.65)	(3.16)	(3.09)	(6.53)	(8.09)	
	interaction with BBB_t^{US}	-2.29***	-1.66*	-0.73	-0.52	-0.45	-0.26	-0.08	0.23	0.05	0.38	1.04	
		(0.79)	(0.94)	(0.68)	(0.45)	(0.39)	(0.35)	(0.43)	(0.49)	(0.53)	(1.07)	(1.30)	
	Quasi-R^2	0.75	0.74	0.73	0.73	0.73	0.74	0.75	0.76	0.77	0.79	0.81	
	F-test p value	0.01	0.00	0.34	0.46	0.61	0.68	0.67	0.63	0.64	0.39	0.21	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B2 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 2 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B3: Panel Regression Results, 3 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-3 ahead

or Policy Framework		5	10	20	30	40	50	60	70	80	90	95	Number of observations
						Percentile							
Exchange rate regime	standalone term	0.33	-0.26	-0.18	-0.11	-0.20	0.07	-0.27	-1.09	-1.07*	-0.87	-1.59	1412
		(1.15)	(0.56)	(0.45)	(0.52)	(0.70)	(0.59)	(0.73)	(0.68)	(0.64)	(1.12)	(1.46)	
	interaction with BBB_t^{US}	-0.32**	-0.17*	-0.12**	-0.06	-0.02	-0.04	0.04	0.18*	0.18*	0.22	0.36	
		(0.16)	(0.09)	(0.06)	(0.07)	(0.10)	(0.09)	(0.12)	(0.11)	(0.10)	(0.16)	(0.23)	
	Quasi-R^2	0.66	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.67	0.68	0.70	
	F-test p value	0.00	0.00	0.00	0.00	0.14	0.43	0.60	0.03	0.00	0.00	0.00	
Financial market development	standalone term	-15.05	-23.28**	-23.02***	-19.13**	-19.79***	-16.30***	-15.35**	-14.16	-16.73*	-28.60**	-32.93**	1412
		(19.78)	(11.33)	(8.65)	(7.52)	(6.77)	(6.29)	(6.41)	(8.62)	(9.21)	(13.11)	(15.01)	
	interaction with BBB_t^{US}	-1.08	0.85	2.31**	2.35***	2.64***	2.04***	2.45***	2.69**	2.80***	5.22***	5.24***	
		(3.62)	(1.72)	(1.10)	(0.64)	(0.80)	(0.87)	(0.59)	(1.06)	(1.09)	(1.12)	(1.40)	
	Quasi-R^2	0.65	0.64	0.63	0.63	0.64	0.64	0.65	0.65	0.67	0.69	0.70	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-2.45	-1.67	-2.57**	-1.90**	-1.44	-0.98	-1.37	-2.30	-2.42	-3.45	-3.87	1392
		(1.73)	(1.20)	(1.10)	(0.97)	(1.04)	(1.04)	(1.50)	(1.84)	(1.91)	(3.20)	(4.21)	
	interaction with BBB_t^{US}	0.08	0.02	0.20	0.12	0.04	-0.02	-0.01	0.09	0.10	0.18	0.32	
		(0.15)	(0.19)	(0.17)	(0.14)	(0.15)	(0.14)	(0.20)	(0.26)	(0.25)	(0.40)	(0.54)	
	Quasi-R^2	0.66	0.65	0.65	0.65	0.65	0.66	0.66	0.67	0.69	0.71	0.72	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-0.75	-1.45	-1.35*	-1.036*	-0.47	-0.59	-0.65	-0.72	-1.09	-0.78	-1.09	1158
		(1.38)	(1.35)	(0.74)	(0.55)	(0.55)	(0.56)	(0.79)	(1.05)	(1.16)	(1.37)	(1.83)	
	interaction with BBB_t^{US}	-0.02	0.11	0.09	0.08	0.02	0.04	0.07	0.11	0.08	0.04	0.15	
		(0.17)	(0.17)	(0.10)	(0.08)	(0.08)	(0.09)	(0.12)	(0.16)	(0.17)	(0.20)	(0.28)	
	Quasi-R^2	0.71	0.70	0.70	0.70	0.71	0.71	0.72	0.72	0.74	0.75	0.77	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.04	0.18	0.17	0.09	0.02	0.06	
Rule of Law	standalone term	5.13	4.33	1.31	2.69	1.84	1.53	-0.34	-1.00	-1.68	-9.61	-13.85	1412
		(4.83)	(3.83)	(3.09)	(3.29)	(2.50)	(2.62)	(3.30)	(3.63)	(4.07)	(6.04)	(8.70)	
	interaction with BBB_t^{US}	0.21	0.35	0.51	0.26	0.25	0.15	0.29	0.26	0.11	0.64	0.75	
		(0.30)	(0.36)	(0.38)	(0.39)	(0.32)	(0.38)	(0.47)	(0.45)	(0.48)	(0.74)	(0.89)	
	Quasi-R^2	0.65	0.64	0.63	0.63	0.64	0.64	0.64	0.65	0.67	0.69	0.70	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.55	0.57	0.09	0.16	
CA openness	standalone term	-0.51	-0.37	-0.55	0.35	0.42	0.73	0.77	1.27	1.62	2.71	3.67	1412
		(1.82)	(1.54)	(1.09)	(0.96)	(0.89)	(0.75)	(0.65)	(0.88)	(1.34)	(1.73)	(3.03)	
	interaction with BBB_t^{US}	0.03	0.01	0.00	-0.12	-0.16	-0.23**	-0.27***	-0.37***	-0.45**	-0.62***	-0.80**	
		(0.24)	(0.22)	(0.16)	(0.13)	(0.14)	(0.12)	(0.09)	(0.13)	(0.18)	(0.20)	(0.36)	
	Quasi-R^2	0.65	0.63	0.63	0.63	0.63	0.64	0.65	0.66	0.67	0.69	0.70	
	F-test p value	0.96	0.23	0.17	0.38	0.17	0.05	0.03	0.00	0.00	0.00	0.00	
Monetary policy	standalone term	-2.47***	-1.82***	-0.97	-0.80	-0.54	-0.49	-0.04	1.10	1.66	3.08*	2.76*	1302
		(0.95)	(0.69)	(0.67)	(0.59)	(0.76)	(0.90)	(0.72)	(0.84)	(1.29)	(1.55)	(1.46)	
	interaction with BBB_t^{US}	0.33**	0.23**	0.09	0.09	0.04	0.04	-0.03	-0.21	-0.28	-0.46*	-0.37	
		(0.15)	(0.12)	(0.11)	(0.09)	(0.11)	(0.14)	(0.12)	(0.13)	(0.20)	(0.27)	(0.23)	
	Quasi-R^2	0.67	0.66	0.65	0.65	0.65	0.66	0.66	0.67	0.69	0.71	0.72	
	F-test p value	0.00	0.00	0.01	0.03	0.00	0.03	0.21	0.01	0.09	0.24	0.61	
Macroprudential policy	standalone term	-6.82**	-5.43***	-4.57**	-3.30618	-4.42**	-3.23122	-5.22**	-5.36***	-6.02***	-6.60***	-7.42***	1152
		(2.79)	(1.88)	(2.03)	(2.10)	(2.17)	(2.62)	(2.45)	(1.56)	(1.45)	(2.11)	(1.85)	
	interaction with BBB_t^{US}	1.64***	1.22***	0.98**	0.632576	0.79**	0.532845	0.93**	0.95***	1.08***	1.186***	1.26***	
		(0.60)	(0.47)	(0.45)	(0.39)	(0.43)	(0.46)	(0.43)	(0.26)	(0.23)	(0.30)	(0.27)	
	Quasi-R^2	0.70	0.69	0.68	0.68	0.69	0.70	0.70	0.71	0.72	0.74	0.75	
	F-test p value	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-1.48*	-1.67*	-1.81**	-1.45	-1.86**	-1.61*	-1.14	-0.91	-0.39	0.33	-1.32	1111
		(0.82)	(1.01)	(0.88)	(0.94)	(0.90)	(0.95)	(0.76)	(0.84)	(1.36)	(1.63)	(1.19)	
	interaction with BBB_t^{US}	0.34**	0.37*	0.34**	0.30**	0.34**	0.28*	0.22**	0.16	0.09	-0.22	0.09	
		(0.17)	(0.20)	(0.16)	(0.15)	(0.14)	(0.14)	(0.11)	(0.14)	(0.24)	(0.27)	(0.22)	
	Quasi-R^2	0.73	0.72	0.71	0.71	0.71	0.71	0.72	0.73	0.74	0.77	0.78	
	F-test p value	0.17	0.01	0.00	0.00	0.00	0.03	0.11	0.14	0.50	0.00	0.00	
CFM	standalone term	14.56*	15.83**	6.56	4.32	2.88	2.19	0.83	0.75	0.15	-4.98	3.13	1038
		(8.42)	(7.30)	(5.04)	(4.65)	(4.36)	(4.03)	(4.09)	(4.24)	(5.28)	(7.40)	(10.29)	
	interaction with BBB_t^{US}	-2.86*	-2.99**	-1.25	-0.82	-0.44	-0.33	-0.14	-0.02	0.24	1.09	-0.10	
		(1.57)	(1.32)	(0.85)	(0.84)	(0.80)	(0.71)	(0.69)	(0.66)	(0.88)	(1.15)	(1.57)	
	Quasi-R^2	0.76	0.74	0.73	0.73	0.73	0.74	0.74	0.75	0.77	0.79	0.80	
	F-test p value	0.00	0.00	0.17	0.24	0.99	0.86	0.98	0.69	0.36	0.07	0.27	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B3 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 3 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B4: Panel Regression Results, 4 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-4 ahead

or Policy Framework		Percentile											Number of observations
		5	10	20	30	40	50	60	70	80	90	95	
Exchange rate regime	standalone term	1.96	-0.49	-0.08	-0.18	-0.29	-0.50	-0.63	-0.85	-0.90	-1.90	-2.47*	1393
		(1.26)	(0.83)	(0.73)	(0.72)	(0.82)	(0.87)	(0.85)	(0.90)	(0.97)	(1.21)	(1.43)	
	interaction with BBB_t^{US}	-0.56***	-0.13	-0.11	-0.03	0.01	0.04	0.08	0.15	0.20	0.40**	0.41**	
		(0.19)	(0.11)	(0.11)	(0.10)	(0.11)	(0.12)	(0.13)	(0.13)	(0.14)	(0.18)	(0.19)	
	Quasi-R^2	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.69	0.70	
	F-test p value	0.00	0.00	0.00	0.00	0.07	0.11	0.04	0.02	0.00	0.00	0.00	
Financial market development	standalone term	-31.05*	-27.94*	-27.68**	-25.36***	-25.24***	-25.65***	-25.27***	-25.54***	-26.71**	-35.96***	-45.92***	1393
		(15.86)	(15.42)	(10.86)	(9.65)	(6.22)	(7.93)	(8.98)	(9.76)	(11.60)	(13.26)	(17.16)	
	interaction with BBB_t^{US}	1.13	2.18	2.05	3.03***	3.17***	3.40***	4.14***	4.39***	4.26***	5.32***	5.35***	
		(3.24)	(2.52)	(1.37)	(1.00)	(1.06)	(1.11)	(1.05)	(0.97)	(1.20)	(1.43)	(1.94)	
	Quasi-R^2	0.65	0.64	0.64	0.63	0.63	0.64	0.64	0.65	0.67	0.69	0.70	
	F-test p value	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-3.17	-3.04	-3.54***	-2.57**	-2.44*	-2.48	-3.12	-3.22	-3.82	-4.76	-4.82	1386
		(2.49)	(1.97)	(1.36)	(1.26)	(1.31)	(1.68)	(2.00)	(2.37)	(2.70)	(3.39)	(4.74)	
	interaction with BBB_t^{US}	0.23	0.17	0.22	0.11	0.13	0.12	0.20	0.15	0.14	0.31	0.28	
		(0.20)	(0.17)	(0.18)	(0.19)	(0.24)	(0.26)	(0.27)	(0.32)	(0.43)	(0.49)	(0.71)	
	Quasi-R^2	0.66	0.65	0.65	0.64	0.65	0.65	0.66	0.67	0.68	0.71	0.71	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-1.35	-1.61	-1.46	-1.75	-1.29	-1.10	-1.04	-0.89	-0.73	-1.83	-1.50	1158
		(1.51)	(1.49)	(0.99)	(1.02)	(0.94)	(1.03)	(1.41)	(1.31)	(1.33)	(1.44)	(1.41)	
	interaction with BBB_t^{US}	0.09	0.09	0.09	0.15	0.11	0.11	0.12	0.10	0.03	0.14	0.14	
		(0.16)	(0.19)	(0.14)	(0.15)	(0.13)	(0.14)	(0.19)	(0.20)	(0.21)	(0.21)	(0.21)	
	Quasi-R^2	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.72	0.73	0.75	0.77	
	F-test p value	0.01	0.00	0.00	0.00	0.00	0.01	0.04	0.08	0.07	0.00	0.06	
Rule of Law	standalone term	2.40	4.38	1.87	2.46	1.77	0.06	-1.35	-1.03	-4.24	-10.44	-11.82	1393
		(7.20)	(4.11)	(3.77)	(3.54)	(3.28)	(3.90)	(4.29)	(5.74)	(7.03)	(8.21)	(11.19)	
	interaction with BBB_t^{US}	0.41	0.45	0.61	0.52	0.52	0.54	0.41	0.23	0.56	0.61	0.52	
		(0.61)	(0.40)	(0.46)	(0.49)	(0.48)	(0.55)	(0.53)	(0.67)	(0.90)	(0.83)	(1.03)	
	Quasi-R^2	0.65	0.64	0.64	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.70	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.90	0.64	0.20	0.24	
CA openness	standalone term	-0.26	-0.06	-0.47	0.80	0.64	0.81	1.18	1.46	1.87	2.70	3.07	1393
		(2.22)	(1.90)	(1.31)	(1.33)	(1.15)	(1.04)	(1.21)	(0.94)	(1.51)	(2.08)	(3.85)	
	interaction with BBB_t^{US}	0.02	-0.05	-0.01	-0.25	-0.25	-0.30**	-0.39**	-0.44***	-0.50**	-0.65**	-0.68	
		(0.26)	(0.25)	(0.20)	(0.20)	(0.17)	(0.15)	(0.16)	(0.12)	(0.22)	(0.27)	(0.47)	
	Quasi-R^2	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.67	0.69	0.70	
	F-test p value	0.81	0.71	0.25	0.55	0.03	0.02	0.01	0.00	0.00	0.00	0.00	
Monetary policy	standalone term	-3.19*	-2.66**	-1.49**	-0.48	0.11	0.70	0.72	1.68	1.48	2.37	3.26	1291
		(1.70)	(1.22)	(0.72)	(0.92)	(0.93)	(0.86)	(0.93)	(1.06)	(1.35)	(1.57)	(3.06)	
	interaction with BBB_t^{US}	0.42	0.36*	0.18	0.02	-0.09	-0.17	-0.19	-0.32**	-0.26	-0.37*	-0.45	
		(0.27)	(0.19)	(0.11)	(0.14)	(0.14)	(0.13)	(0.13)	(0.15)	(0.20)	(0.22)	(0.47)	
	Quasi-R^2	0.67	0.66	0.66	0.65	0.65	0.66	0.66	0.67	0.69	0.71	0.72	
	F-test p value	0.00	0.00	0.02	0.00	0.17	0.00	0.08	0.01	0.00	0.07	0.00	
Macroprudential policy	standalone term	-9.44***	-8.11***	-6.22**	-5.27	-6.31***	-6.74***	-7.37***	-7.82***	-7.84***	-8.29***	-8.37***	1151
		(2.22)	(2.47)	(2.49)	(3.51)	(2.39)	(2.18)	(2.02)	(1.63)	(1.57)	(1.93)	(2.80)	
	interaction with BBB_t^{US}	2.18***	1.81***	1.230**	0.990337	1.19***	1.21***	1.36***	1.40***	1.38***	1.47***	1.41**	
		(0.57)	(0.55)	(0.51)	(0.68)	(0.41)	(0.40)	(0.36)	(0.26)	(0.23)	(0.28)	(0.65)	
	Quasi-R^2	0.70	0.69	0.68	0.68	0.69	0.69	0.70	0.71	0.72	0.74	0.75	
	F-test p value	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-3.01**	-2.24**	-1.89*	-1.51	-2.11	-1.64	-1.39	-1.37	-1.18	0.21	-0.94	1099
		(1.33)	(0.97)	(1.00)	(1.32)	(1.28)	(1.18)	(1.12)	(1.44)	(1.68)	(1.78)	(2.38)	
	interaction with BBB_t^{US}	0.57**	0.49***	0.33**	0.28614	0.40*	0.35*	0.23	0.20	0.13	-0.19	0.03	
		(0.23)	(0.17)	(0.16)	(0.20)	(0.21)	(0.18)	(0.18)	(0.23)	(0.28)	(0.31)	(0.41)	
	Quasi-R^2	0.73	0.72	0.71	0.71	0.71	0.72	0.72	0.73	0.75	0.77	0.78	
	F-test p value	0.01	0.00	0.03	0.06	0.00	0.02	0.03	0.00	0.01	0.01	0.06	
CFM	standalone term	15.23**	12.33***	9.03*	6.68	4.77	5.38	2.37	0.89	0.75	-3.76	2.37	1034
		(6.74)	(4.45)	(4.93)	(6.49)	(7.01)	(6.29)	(6.01)	(7.61)	(7.29)	(6.51)	(9.40)	
	interaction with BBB_t^{US}	-2.96***	-2.37***	-1.72*	-1.26	-0.97	-1.08	-0.46	0.11	0.18	1.05	-0.44	
		(1.09)	(0.79)	(0.88)	(1.10)	(1.21)	(1.11)	(0.96)	(1.24)	(1.23)	(1.14)	(1.50)	
	Quasi-R^2	0.75	0.74	0.73	0.73	0.73	0.74	0.74	0.75	0.77	0.79	0.80	
	F-test p value	0.00	0.00	0.03	0.15	0.49	0.47	0.92	0.41	0.42	0.10	0.76	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B4 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 4 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B5: Panel Regression Results, 5 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-5 ahead

or Policy Framework		Percentile											Number of observations
		5	10	20	30	40	50	60	70	80	90	95	
Exchange rate regime	standalone term	1.47	-0.12	0.04	-0.62	-0.29	-0.33	-0.79	-0.73	-1.95	-2.48*	-2.98	1374
		(1.01)	(1.02)	(0.96)	(1.01)	(0.98)	(1.04)	(1.04)	(1.25)	(1.42)	(1.38)	(2.62)	
	interaction with BBB_t^{US}	-0.41*	-0.10	-0.09	0.08	0.05	0.05	0.16	0.19	0.38**	0.48***	0.55**	
		(0.24)	(0.15)	(0.14)	(0.14)	(0.14)	(0.15)	(0.15)	(0.19)	(0.18)	(0.15)	(0.27)	
	Quasi-R²	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.69	
	F-test p value	0.08	0.04	0.03	0.12	0.65	0.36	0.04	0.01	0.00	0.00	0.00	
Financial market development	standalone term	-24.39	-41.30**	-37.35**	-29.30***	-29.85***	-32.18**	-39.40***	-31.86***	-35.07***	-44.31***	-56.92**	1374
		(19.14)	(19.15)	(15.87)	(10.90)	(9.77)	(13.31)	(11.54)	(11.13)	(12.17)	(15.35)	(24.82)	
	interaction with BBB_t^{US}	1.11	3.72	4.55**	3.88***	2.99**	4.18**	5.35***	5.49***	5.47***	6.35***	7.33***	
		(3.30)	(2.65)	(1.91)	(1.23)	(1.25)	(1.79)	(1.56)	(1.58)	(1.38)	(1.69)	(2.53)	
	Quasi-R²	0.65	0.65	0.64	0.63	0.64	0.64	0.64	0.65	0.66	0.69	0.69	
	F-test p value	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-3.12	-4.02	-3.74	-3.73**	-4.01***	-4.26**	-4.32*	-3.77	-3.63	-4.65	-5.13	1367
		(3.76)	(3.22)	(2.69)	(1.82)	(1.55)	(1.90)	(2.62)	(3.18)	(3.60)	(4.81)	(5.45)	
	interaction with BBB_t^{US}	0.20	0.21	0.28	0.26	0.27	0.33	0.25	0.15	0.07	0.34	0.32	
		(0.25)	(0.27)	(0.29)	(0.29)	(0.25)	(0.32)	(0.36)	(0.46)	(0.51)	(0.61)	(0.73)	
	Quasi-R²	0.66	0.65	0.64	0.64	0.65	0.65	0.66	0.66	0.68	0.70	0.70	
	F-test p value	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-1.22	-2.17	-2.45*	-2.25	-1.26	-1.33	-0.73	-1.15	-1.29	-1.78	-1.00	1158
		(2.95)	(2.02)	(1.47)	(1.47)	(1.13)	(1.28)	(1.55)	(1.65)	(2.09)	(1.98)	(2.17)	
	interaction with BBB_t^{US}	0.11	0.19	0.22	0.19	0.10	0.13	0.04	0.09	0.06	0.18	0.14	
		(0.35)	(0.23)	(0.21)	(0.20)	(0.16)	(0.18)	(0.22)	(0.25)	(0.33)	(0.27)	(0.29)	
	Quasi-R²	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.71	0.73	0.75	0.76	
	F-test p value	0.10	0.00	0.00	0.00	0.00	0.02	0.10	0.03	0.01	0.10	0.62	
Rule of Law	standalone term	7.50	4.73	1.92	1.63	-0.31	-0.12	-2.49	-1.57	-1.06	-10.27	-11.08	1374
		(7.39)	(6.72)	(5.11)	(4.11)	(3.47)	(4.33)	(6.40)	(7.98)	(8.79)	(11.05)	(14.32)	
	interaction with BBB_t^{US}	0.44	0.66	0.98	0.97*	0.87*	0.60	0.58	0.33	0.13	0.59	0.44	
		(0.61)	(0.83)	(0.76)	(0.55)	(0.51)	(0.60)	(0.84)	(1.00)	(1.06)	(1.13)	(1.24)	
	Quasi-R²	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.65	0.66	0.68	0.69	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.23	0.54	0.48	0.15	
CA openness	standalone term	-1.11	-0.64	-0.43	-0.19	0.61	0.97	1.51	1.01	1.24	3.06	4.32	1374
		(3.63)	(2.83)	(2.13)	(1.97)	(1.52)	(1.43)	(1.24)	(1.36)	(1.89)	(3.58)	(5.28)	
	interaction with BBB_t^{US}	0.15	0.07	-0.09	-0.11	-0.32	-0.41**	-0.49***	-0.41**	-0.48*	-0.66	-0.75	
		(0.43)	(0.37)	(0.33)	(0.31)	(0.22)	(0.19)	(0.15)	(0.18)	(0.26)	(0.53)	(0.68)	
	Quasi-R²	0.65	0.64	0.63	0.63	0.63	0.64	0.65	0.65	0.66	0.68	0.69	
	F-test p value	0.80	0.95	0.81	0.03	0.09	0.02	0.00	0.01	0.00	0.00	0.00	
Monetary policy	standalone term	-3.17**	-2.31*	-1.85**	-0.65	-0.48	0.10	0.91	1.76	3.13	2.38	1.24	1276
		(1.51)	(1.39)	(0.84)	(1.04)	(0.92)	(0.86)	(1.13)	(1.25)	(1.91)	(2.35)	(2.74)	
	interaction with BBB_t^{US}	0.46**	0.30	0.28**	0.08	0.02	-0.08	-0.16	-0.30	-0.49*	-0.36	-0.20	
		(0.23)	(0.21)	(0.13)	(0.16)	(0.14)	(0.14)	(0.16)	(0.18)	(0.27)	(0.34)	(0.41)	
	Quasi-R²	0.67	0.66	0.66	0.65	0.66	0.66	0.66	0.67	0.68	0.70	0.71	
	F-test p value	0.60	0.00	0.00	0.32	0.05	0.07	0.66	0.15	0.14	0.30	0.84	
Macroprudential policy	standalone term	-5.59	-6.23**	-8.24**	-7.80**	-5.56	-7.22**	-6.68***	-7.26***	-7.65**	-7.51*	-7.26*	1150
		(3.69)	(2.61)	(3.23)	(3.84)	(3.61)	(3.14)	(2.55)	(2.56)	(3.07)	(4.32)	(3.95)	
	interaction with BBB_t^{US}	1.23	1.29**	1.71***	1.63**	1.12	1.40**	1.28***	1.31***	1.46***	1.38**	1.29	
		(0.80)	(0.55)	(0.61)	(0.82)	(0.73)	(0.61)	(0.47)	(0.49)	(0.55)	(0.69)	(0.82)	
	Quasi-R²	0.70	0.69	0.68	0.68	0.69	0.69	0.69	0.70	0.71	0.73	0.74	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	
FXI	standalone term	-1.63	-1.64	-0.53	-1.46	-1.35	-1.27	-1.50	-1.11	-1.19	-0.06	-0.92	1085
		(1.60)	(1.26)	(1.48)	(1.42)	(1.37)	(1.54)	(1.77)	(1.51)	(1.81)	(2.15)	(2.34)	
	interaction with BBB_t^{US}	0.34	0.32*	0.15	0.28	0.28	0.30	0.32	0.17	0.12	-0.15	-0.07	
		(0.27)	(0.19)	(0.23)	(0.22)	(0.22)	(0.25)	(0.29)	(0.26)	(0.30)	(0.37)	(0.39)	
	Quasi-R²	0.73	0.72	0.71	0.71	0.71	0.72	0.72	0.73	0.74	0.77	0.78	
	F-test p value	0.09	0.18	0.23	0.19	0.10	0.05	0.01	0.06	0.00	0.00	0.03	
CFM	standalone term	16.22***	13.56**	12.49**	7.68	4.36	2.82	-3.49	-1.37	-2.85	-4.60	-0.73	1020
		(6.20)	(5.76)	(5.87)	(6.24)	(8.24)	(8.74)	(7.36)	(6.79)	(8.67)	(10.29)	(13.06)	
	interaction with BBB_t^{US}	-3.18***	-2.66**	-2.34**	-1.49	-0.95	-0.55	0.64	0.41	0.99	1.10	0.12	
		(1.09)	(1.02)	(1.04)	(1.05)	(1.30)	(1.39)	(1.07)	(1.06)	(1.28)	(1.68)	(2.21)	
	Quasi-R²	0.75	0.74	0.74	0.73	0.73	0.74	0.74	0.75	0.76	0.78	0.79	
	F-test p value	0.00	0.01	0.01	0.03	0.04	0.90	0.53	0.41	0.04	0.17	0.86	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B5 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the 5 two quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B6: Panel Regression Results, 6 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-6 ahead

or Policy Framework		5	10	20	30	40	50	60	70	80	90	95	Number of observations
						Percentile							
Exchange rate regime	standalone term	1.42	0.27	-0.25	-0.22	-0.22	-0.81	-1.22	-2.08	-2.60*	-2.62	-2.48	
		(1.76)	(1.11)	(1.34)	(1.23)	(1.32)	(1.13)	(1.29)	(1.61)	(1.50)	(1.75)	(2.74)	
	interaction with BBB_t^{US}	-0.39	-0.11	0.04	0.08	0.05	0.16	0.27	0.40**	0.53***	0.60***	0.53*	1355
		(0.34)	(0.18)	(0.20)	(0.17)	(0.17)	(0.18)	(0.22)	(0.20)	(0.15)	(0.13)	(0.28)	
	Quasi-R²	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.69	
	F-test p value	0.43	0.02	0.11	0.07	0.50	0.01	0.01	0.00	0.00	0.00	0.00	
Financial market development	standalone term	-50.81	-46.64**	-43.83**	-32.03**	-40.35***	-39.08***	-47.09***	-41.54***	-42.40***	-51.34***	-68.10***	
		(35.01)	(23.48)	(18.36)	(12.51)	(14.16)	(14.76)	(14.71)	(11.52)	(11.08)	(18.81)	(24.17)	
	interaction with BBB_t^{US}	6.50	5.60	5.59***	3.69**	4.63**	4.99***	6.66***	7.54***	6.81***	7.52***	9.40***	1355
		(5.62)	(3.87)	(2.10)	(1.61)	(1.85)	(1.90)	(1.80)	(1.85)	(1.64)	(2.00)	(1.82)	
	Quasi-R²	0.65	0.65	0.64	0.64	0.64	0.64	0.64	0.65	0.66	0.68	0.69	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-5.99	-5.88*	-4.73	-4.83**	-5.54***	-5.07**	-4.70*	-3.42	-4.30	-5.24	-6.21	
		(4.40)	(3.38)	(2.97)	(2.15)	(1.78)	(2.30)	(2.82)	(3.51)	(4.26)	(5.16)	(5.51)	
	interaction with BBB_t^{US}	0.50	0.43	0.30	0.31	0.45	0.38	0.29	0.11	0.17	0.25	0.57	1348
		(0.38)	(0.32)	(0.30)	(0.30)	(0.31)	(0.37)	(0.40)	(0.49)	(0.68)	(0.73)	(0.84)	
	Quasi-R²	0.65	0.65	0.64	0.64	0.65	0.65	0.65	0.66	0.67	0.69	0.69	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-4.17	-3.27	-2.45	-2.31	-1.78	-1.61	-1.26	-1.62	-1.68	-1.40	-1.16	
		(3.29)	(2.10)	(1.72)	(1.51)	(1.47)	(1.74)	(1.91)	(2.29)	(2.61)	(2.52)	(2.18)	
	interaction with BBB_t^{US}	0.43	0.30	0.18	0.24	0.17	0.16	0.16	0.16	0.17	0.15	0.17	1157
		(0.40)	(0.25)	(0.23)	(0.21)	(0.19)	(0.25)	(0.27)	(0.34)	(0.40)	(0.35)	(0.29)	
	Quasi-R²	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.72	0.74	0.75	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.06	0.50	
Rule of Law	standalone term	9.66	4.17	1.66	0.51	-1.56	-1.53	-1.42	-1.58	-4.63	-12.24	-12.54	
		(9.39)	(6.65)	(4.94)	(4.96)	(4.77)	(5.68)	(7.74)	(9.93)	(10.50)	(13.61)	(15.55)	
	interaction with BBB_t^{US}	0.75	0.98	0.98	1.06*	1.17*	0.66	0.52	0.15	0.25	0.77	0.94	1355
		(0.69)	(0.76)	(0.62)	(0.62)	(0.71)	(0.80)	(0.89)	(1.11)	(1.18)	(1.45)	(1.55)	
	Quasi-R²	0.65	0.65	0.64	0.64	0.64	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.04	0.74	0.55	0.61	0.05	0.00	
CA openness	standalone term	-0.02	-0.41	-0.72	0.01	-0.01	1.03	0.96	0.97	2.50	4.74	5.09	
		(4.06)	(3.35)	(2.84)	(2.24)	(1.94)	(1.81)	(1.69)	(2.11)	(2.79)	(4.36)	(5.56)	
	interaction with BBB_t^{US}	0.12	-0.01	0.00	-0.15	-0.24	-0.43*	-0.43*	-0.42	-0.59	-0.81	-0.81	1355
		(0.48)	(0.41)	(0.41)	(0.35)	(0.28)	(0.23)	(0.22)	(0.28)	(0.40)	(0.58)	(0.70)	
	Quasi-R²	0.64	0.64	0.64	0.63	0.64	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.02	0.96	0.44	0.15	0.08	0.01	0.01	0.02	0.00	0.00	0.00	
Monetary policy	standalone term	-1.21	-1.12	-1.19	-0.26	-0.34	0.25	1.25	2.06	2.89	3.78	1.95	
		(1.60)	(1.59)	(1.18)	(0.87)	(0.92)	(0.96)	(1.16)	(1.47)	(2.37)	(2.41)	(2.15)	
	interaction with BBB_t^{US}	0.20	0.15	0.15	0.00	0.05	-0.08	-0.25	-0.35	-0.49	-0.57	-0.33	1259
		(0.26)	(0.25)	(0.19)	(0.13)	(0.14)	(0.14)	(0.17)	(0.21)	(0.35)	(0.36)	(0.31)	
	Quasi-R²	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.67	0.68	0.70	0.70	
	F-test p value	0.98	0.80	0.01	0.47	0.87	0.79	0.36	0.09	0.02	0.04	0.37	
Macroprudential policy	standalone term	-6.95	-8.41*	-7.92*	-8.20**	-8.94**	-8.19***	-9.54***	-8.90***	-8.30***	-6.31	-7.19	
		(7.37)	(5.04)	(4.30)	(4.08)	(3.75)	(3.07)	(3.01)	(2.63)	(2.41)	(4.21)	(4.82)	
	interaction with BBB_t^{US}	1.36	1.68	1.71*	1.70**	1.74**	1.62***	1.90***	1.71***	1.55***	1.19**	1.39**	1149
		(1.71)	(1.06)	(0.88)	(0.84)	(0.72)	(0.57)	(0.56)	(0.44)	(0.32)	(0.53)	(0.69)	
	Quasi-R²	0.70	0.69	0.68	0.68	0.69	0.69	0.69	0.69	0.70	0.72	0.73	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-0.80	-1.75	-2.09	-1.31	-2.03	-2.95	-3.15	-1.87	-2.07	-0.06	-0.62	
		(1.91)	(2.13)	(1.79)	(1.76)	(2.00)	(2.05)	(1.93)	(1.92)	(2.08)	(2.50)	(2.83)	
	interaction with BBB_t^{US}	0.22	0.38	0.49	0.29	0.40	0.53	0.55*	0.29	0.31	-0.14	-0.10	1070
		(0.33)	(0.34)	(0.30)	(0.29)	(0.32)	(0.33)	(0.32)	(0.33)	(0.35)	(0.42)	(0.51)	
	Quasi-R²	0.73	0.72	0.71	0.71	0.71	0.72	0.72	0.73	0.74	0.76	0.77	
	F-test p value	0.00	0.24	0.00	0.01	0.00	0.00	0.00	0.08	0.10	0.02	0.00	
CFM	standalone term	9.52	9.53	11.53	6.11	-1.41	-0.20	-6.11	-6.28	-10.79	-7.55	6.70	
		(11.58)	(9.53)	(7.45)	(8.08)	(9.04)	(10.19)	(11.48)	(9.11)	(9.68)	(11.71)	(14.75)	
	interaction with BBB_t^{US}	-2.33	-2.16	-2.32*	-1.38	0.05	0.89	1.24	2.23	1.78	-1.03		1005
		(1.93)	(1.55)	(1.34)	(1.28)	(1.36)	(1.55)	(1.70)	(1.39)	(1.54)	(2.12)	(2.86)	
	Quasi-R²	0.75	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.76	0.78	0.79	
	F-test p value	0.00	0.14	0.00	0.12	0.65	0.94	0.40	0.35	0.19	0.18	0.18	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B6 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 6 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B7: Panel Regression Results, 7 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-7 ahead

or Policy Framework		Percentile											Number of observations
		5	10	20	30	40	50	60	70	80	90	95	
Exchange rate regime	standalone term	1.08	-0.41	-0.40	-1.30	-0.83	-0.77	-2.07	-2.90	-3.31	-4.15*	-3.77	1336
		(2.44)	(1.43)	(1.35)	(1.37)	(1.41)	(1.69)	(1.84)	(2.06)	(2.09)	(2.37)	(2.90)	
	interaction with BBB_t^{US}	-0.28	-0.01	0.08	0.26	0.26	0.22	0.46*	0.62***	0.76***	0.90***	0.84***	
		(0.45)	(0.25)	(0.20)	(0.19)	(0.18)	(0.24)	(0.23)	(0.23)	(0.25)	(0.23)	(0.26)	
	$Quasi\text{-}R^2$	0.65	0.64	0.64	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.46	0.24	0.20	0.01	0.04	0.01	0.00	0.00	0.00	0.00	0.00	
Financial market development	standalone term	-61.48	-65.14***	-54.13***	-43.92***	-47.55***	-48.03***	-48.94***	-46.93***	-44.78***	-58.68**	-93.33**	1336
		(41.89)	(25.09)	(18.97)	(15.19)	(14.96)	(17.27)	(15.97)	(15.61)	(16.63)	(23.98)	(36.93)	
	interaction with BBB_t^{US}	7.84	8.75***	7.32***	5.79***	5.73***	6.55***	7.08***	8.32***	9.63***	9.50***	10.45***	
		(5.35)	(3.00)	(2.45)	(1.88)	(1.79)	(2.07)	(2.00)	(2.39)	(2.23)	(2.39)	(2.19)	
	$Quasi\text{-}R^2$	0.65	0.65	0.64	0.64	0.64	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-6.95	-5.41	-6.00**	-6.24***	-7.08***	-7.02***	-6.14*	-4.43	-2.98	-5.36	-4.54	1329
		(4.99)	(4.73)	(2.89)	(1.95)	(2.00)	(2.48)	(3.38)	(4.03)	(4.89)	(6.33)	(6.73)	
	interaction with BBB_t^{US}	0.65	0.40	0.38	0.41	0.52	0.63	0.47	0.20	-0.11	0.26	0.20	
		(0.54)	(0.50)	(0.32)	(0.26)	(0.35)	(0.44)	(0.53)	(0.57)	(0.72)	(0.95)	(1.00)	
	$Quasi\text{-}R^2$	0.65	0.65	0.65	0.64	0.64	0.65	0.65	0.65	0.66	0.68	0.68	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-5.12*	-4.30*	-2.91*	-3.27*	-2.71	-2.48	-1.51	-1.80	-1.48	-1.11	-0.44	1156
		(2.80)	(2.58)	(1.59)	(1.89)	(1.66)	(1.97)	(2.56)	(2.98)	(2.83)	(2.58)	(3.18)	
	interaction with BBB_t^{US}	0.55*	0.45	0.28	0.38	0.32	0.28	0.16	0.20	0.17	0.18	0.07	
		(0.29)	(0.30)	(0.22)	(0.27)	(0.23)	(0.28)	(0.35)	(0.44)	(0.42)	(0.37)	(0.42)	
	$Quasi\text{-}R^2$	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.72	0.73	0.74	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.01	
Rule of Law	standalone term	6.22	0.65	0.42	-2.06	-3.21	-4.76	-0.28	1.72	0.03	-16.96	-19.95	1336
		(9.03)	(7.11)	(6.29)	(5.76)	(5.44)	(6.76)	(8.14)	(10.29)	(12.74)	(17.35)	(18.61)	
	interaction with BBB_t^{US}	1.41*	1.49*	1.18	1.35*	1.45*	1.22	0.50	0.01	-0.25	0.97	1.53	
		(0.80)	(0.80)	(0.78)	(0.72)	(0.79)	(0.88)	(1.11)	(1.16)	(1.50)	(1.72)	(1.79)	
	$Quasi\text{-}R^2$	0.66	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.65	0.67	0.67	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.12	0.58	0.00	0.00	
CA openness	standalone term	-0.12	-0.01	-1.31	-0.14	0.04	0.16	-0.20	0.55	3.02	5.07	7.10	1336
		(4.97)	(3.88)	(3.41)	(2.76)	(2.60)	(2.28)	(2.39)	(3.27)	(3.16)	(5.14)	(6.72)	
	interaction with BBB_t^{US}	-0.06	-0.04	0.11	-0.14	-0.28	-0.31	-0.25	-0.33	-0.66	-0.84	-1.19	
		(0.61)	(0.47)	(0.49)	(0.43)	(0.36)	(0.30)	(0.32)	(0.47)	(0.49)	(0.64)	(0.95)	
	$Quasi\text{-}R^2$	0.64	0.64	0.64	0.63	0.63	0.64	0.64	0.64	0.66	0.67	0.67	
	F-test p value	0.02	0.77	0.95	0.18	0.05	0.07	0.27	0.38	0.00	0.00	0.00	
Monetary policy	standalone term	0.28	0.39	-0.24	0.34	0.76	0.54	1.57	2.44	3.38	4.04	1.47	1241
		(2.38)	(1.27)	(1.31)	(0.98)	(0.95)	(1.01)	(1.12)	(2.00)	(2.70)	(3.24)	(3.02)	
	interaction with BBB_t^{US}	-0.02	-0.03	0.03	-0.07	-0.14	-0.15	-0.29	-0.45	-0.55	-0.62	-0.17	
		(0.39)	(0.20)	(0.20)	(0.14)	(0.14)	(0.16)	(0.16)	(0.29)	(0.39)	(0.45)	(0.49)	
	$Quasi\text{-}R^2$	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.68	0.69	0.69	
	F-test p value	0.90	0.46	0.92	0.98	0.82	0.37	0.35	0.00	0.00	0.00	0.21	
Macroprudential policy	standalone term	-7.08	-7.41	-9.96***	-9.50**	-9.36***	-10.62***	-11.37***	-10.69***	-10.65***	-8.58*	-9.44	1143
		(4.76)	(4.71)	(3.67)	(3.93)	(3.14)	(2.59)	(2.42)	(2.37)	(3.00)	(4.40)	(6.31)	
	interaction with BBB_t^{US}	1.31	1.46	2.01***	1.81**	1.85***	2.093***	2.23***	2.18***	2.07***	1.68**	1.68	
		(1.18)	(0.96)	(0.71)	(0.76)	(0.50)	(0.44)	(0.40)	(0.45)	(0.42)	(0.67)	(1.18)	
	$Quasi\text{-}R^2$	0.70	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.70	0.72	0.72	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FXI	standalone term	-1.48	-1.72	-1.64	-1.58	-1.65	-2.30	-3.25	-3.73	-2.24	-0.55	-2.27	1055
		(1.44)	(1.49)	(2.04)	(2.34)	(2.47)	(2.40)	(2.07)	(2.38)	(3.22)	(2.60)	(3.51)	
	interaction with BBB_t^{US}	0.39	0.40	0.35	0.32	0.38	0.49	0.63*	0.67*	0.28	0.08	0.29	
		(0.25)	(0.24)	(0.34)	(0.38)	(0.39)	(0.38)	(0.34)	(0.38)	(0.50)	(0.43)	(0.61)	
	$Quasi\text{-}R^2$	0.73	0.72	0.72	0.71	0.71	0.71	0.72	0.73	0.74	0.76	0.76	
	F-test p value	0.01	0.10	0.00	0.12	0.20	0.02	0.00	0.02	0.14	0.53	0.01	
CFM	standalone term	4.72	9.41	9.58	0.42	0.50	-6.44	-11.31	-13.44	-9.78	-6.01	6.99	990
		(10.82)	(8.67)	(8.38)	(7.49)	(8.86)	(9.84)	(10.98)	(10.04)	(14.36)	(11.16)	(17.79)	
	interaction with BBB_t^{US}	-1.41	-2.15	-2.04	-0.49	-0.29	0.90	1.85	2.48	2.17	1.57	-1.08	
		(1.74)	(1.43)	(1.36)	(1.27)	(1.40)	(1.44)	(1.57)	(1.51)	(2.52)	(2.12)	(3.94)	
	$Quasi\text{-}R^2$	0.75	0.75	0.74	0.74	0.74	0.74	0.74	0.75	0.76	0.78	0.78	
	F-test p value	0.07	0.04	0.02	0.11	0.55	0.30	0.03	0.00	0.05	0.02	0.47	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B7 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 7 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B8: Panel Regression Results, 8 quarters ahead—Interaction Terms with Domestic Policies and Structural Characteristics

Dependent variable: cumulative gross portfolio inflows (% of GDP) in quarters 1-8 ahead

Domestic Policy or Policy Framework		Percentile											Number of observations
		5	10	20	30	40	50	60	70	80	90	95	
Exchange rate regime	standalone term	0.10	-0.84	-1.86	-2.04	-2.08	-2.26	-2.37	-2.95	-2.83	-3.72	-3.73	1317
		(2.67)	(1.89)	(1.48)	(1.57)	(1.46)	(1.94)	(2.06)	(2.23)	(2.98)	(2.35)	(3.23)	
	interaction with BBB_t^{US}	-0.15	0.09	0.29	0.38	0.45**	0.51**	0.55**	0.64**	0.74*	0.96***	0.89**	
		(0.48)	(0.32)	(0.21)	(0.24)	(0.19)	(0.24)	(0.23)	(0.29)	(0.42)	(0.24)	(0.35)	
	Quasi-R^2	0.65	0.64	0.64	0.63	0.64	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.53	0.61	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Financial market development	standalone term	-95.04***	-71.32***	-62.17***	-51.73***	-52.80***	-62.26***	-55.27***	-50.25***	-50.22***	-63.35**	-72.91**	1317
		(34.28)	(24.21)	(18.95)	(18.68)	(17.25)	(16.85)	(18.93)	(16.45)	(16.87)	(27.51)	(38.21)	
	interaction with BBB_t^{US}	10.39***	9.32***	8.44***	6.95**	7.32***	8.28***	7.99***	9.11***	9.80***	11.03***	10.82***	
		(3.40)	(2.68)	(2.27)	(2.82)	(2.46)	(2.22)	(2.65)	(2.55)	(2.38)	(2.50)	(2.53)	
	Quasi-R^2	0.66	0.65	0.65	0.64	0.64	0.64	0.64	0.65	0.66	0.68	0.68	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transparency International Index	standalone term	-7.93	-6.76	-7.72*	-8.75***	-8.65***	-8.04***	-7.22*	-5.25	-4.35	-6.09	-8.00	1310
		(5.34)	(5.14)	(3.95)	(2.39)	(2.35)	(2.86)	(3.84)	(4.48)	(6.30)	(7.01)	(7.53)	
	interaction with BBB_t^{US}	0.71	0.50	0.53	0.65*	0.71*	0.67	0.60	0.35	0.19	0.40	0.71	
		(0.62)	(0.56)	(0.49)	(0.32)	(0.39)	(0.55)	(0.61)	(0.62)	(0.96)	(0.94)	(1.08)	
	Quasi-R^2	0.65	0.65	0.65	0.65	0.64	0.64	0.64	0.65	0.66	0.67	0.67	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Central Bank Transparency	standalone term	-5.54	-5.02**	-4.23*	-3.43*	-2.94	-2.78	-2.05	-2.34	-1.79	-2.19	-0.81	1155
		(3.68)	(2.51)	(2.41)	(1.95)	(1.96)	(2.45)	(3.19)	(3.20)	(3.19)	(3.87)	(2.89)	
	interaction with BBB_t^{US}	0.58	0.53*	0.52*	0.42	0.37	0.35	0.24	0.25	0.26	0.34	0.09	
		(0.45)	(0.30)	(0.31)	(0.28)	(0.28)	(0.34)	(0.44)	(0.44)	(0.45)	(0.52)	(0.37)	
	Quasi-R^2	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.73	0.73	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	
Rule of Law	standalone term	7.58	1.51	-2.39	-3.65	-5.16	-5.59	-0.70	-3.13	-3.26	-19.33	-21.86	1317
		(7.96)	(6.86)	(6.69)	(5.84)	(5.66)	(7.77)	(9.88)	(11.86)	(14.13)	(18.71)	(20.16)	
	interaction with BBB_t^{US}	1.47*	1.73**	1.70*	1.64**	1.58**	1.23	0.64	0.68	0.13	1.20	1.50	
		(0.89)	(0.85)	(0.96)	(0.81)	(0.77)	(1.09)	(1.27)	(1.27)	(1.70)	(1.77)	(2.05)	
	Quasi-R^2	0.66	0.66	0.64	0.64	0.64	0.64	0.64	0.64	0.65	0.67	0.67	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.04	0.11	0.24	0.98	0.00	0.00	
CA openness	standalone term	-0.11	-0.36	-0.62	-0.64	-1.34	-1.13	-0.13	0.43	2.45	5.37	7.74	1317
		(5.40)	(4.59)	(3.86)	(3.17)	(2.93)	(2.76)	(2.70)	(2.89)	(3.14)	(5.90)	(5.61)	
	interaction with BBB_t^{US}	-0.13	-0.06	-0.03	-0.08	-0.02	-0.06	-0.20	-0.28	-0.51	-0.83	-1.14	
		(0.69)	(0.59)	(0.56)	(0.50)	(0.40)	(0.36)	(0.36)	(0.37)	(0.43)	(0.75)	(0.73)	
	Quasi-R^2	0.65	0.64	0.64	0.63	0.63	0.64	0.64	0.64	0.65	0.67	0.67	
	F-test p value	0.01	0.35	0.88	0.12	0.04	0.12	0.02	0.05	0.05	0.00	0.00	
Monetary policy	standalone term	1.29	-0.14	0.66	1.20	0.64	1.17	1.75	3.26	3.35	2.73	3.70	1223
		(2.13)	(1.87)	(1.70)	(1.43)	(1.10)	(1.16)	(1.51)	(2.37)	(2.54)	(3.11)	(2.69)	
	interaction with BBB_t^{US}	-0.19	0.06	-0.07	-0.18	-0.12	-0.21	-0.31	-0.53	-0.56	-0.41	-0.54	
		(0.32)	(0.29)	(0.24)	(0.21)	(0.18)	(0.17)	(0.23)	(0.34)	(0.36)	(0.45)	(0.42)	
	Quasi-R^2	0.67	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.68	0.69	0.69	
	F-test p value	0.56	0.47	0.71	0.21	0.54	0.21	0.07	0.07	0.00	0.14	0.00	
Macroprudential policy	standalone term	-7.37	-12.10**	-11.66**	-12.70***	-12.11***	-12.39***	-11.76***	-11.93***	-12.21***	-10.98*	-9.28	1125
		(6.12)	(5.43)	(4.73)	(4.01)	(2.98)	(3.00)	(2.62)	(2.31)	(2.87)	(5.78)	(6.27)	
	interaction with BBB_t^{US}	1.28	2.32**	2.24**	2.24***	2.26***	2.37***	2.23***	2.247***	2.25***	1.97**	1.60	
		(1.32)	(1.14)	(0.89)	(0.69)	(0.50)	(0.49)	(0.50)	(0.31)	(0.38)	(0.92)	(1.01)	
	Quasi-R^2	0.70	0.70	0.69	0.69	0.69	0.69	0.69	0.69	0.70	0.71	0.72	
	F-test p value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
FXI	standalone term	-0.76	-1.68	-2.29	-2.11	-2.23	-3.65	-3.82	-4.28	-2.99	-2.53	-3.02	1040
		(1.35)	(1.57)	(1.90)	(2.50)	(2.38)	(2.82)	(2.77)	(2.94)	(2.80)	(3.48)	(3.44)	
	interaction with BBB_t^{US}	0.27	0.41	0.48	0.39	0.43	0.60	0.61	0.67	0.49	0.40	0.43	
		(0.28)	(0.29)	(0.35)	(0.41)	(0.39)	(0.46)	(0.44)	(0.48)	(0.45)	(0.56)	(0.56)	
	Quasi-R^2	0.73	0.72	0.72	0.71	0.71	0.71	0.72	0.72	0.74	0.76	0.76	
	F-test p value	0.16	0.06	0.00	0.22	0.50	0.10	0.00	0.01	0.11	0.23	0.31	
CFM	standalone term	8.72	8.21	11.49	3.94	-3.04	-10.76	-17.80*	-13.42	-9.20	4.01	8.14	975
		(10.73)	(8.64)	(8.30)	(9.14)	(9.15)	(9.76)	(10.54)	(11.59)	(13.69)	(13.18)	(17.34)	
	interaction with BBB_t^{US}	-2.29	-2.17	-2.33*	-0.97	0.33	1.57	2.85*	2.35	2.29	-0.11	-1.11	
		(1.96)	(1.62)	(1.36)	(1.47)	(1.34)	(1.43)	(1.56)	(1.65)	(2.23)	(2.49)	(3.61)	
	Quasi-R^2	0.75	0.75	0.74	0.74	0.74	0.74	0.74	0.74	0.76	0.77	0.78	
	F-test p value	0.00	0.01	0.00	0.21	0.73	0.22	0.00	0.12	0.00	0.00	0.42	

Bootstrapped standard errors (clustered at country level) *** p<0.01, ** p<0.05, * p<0.1

Notes: Table B8 presents coefficients (standard errors in parentheses) on the standalone policy or policy framework variable and on its interaction term with the U.S. corporate BBB yield from a regression of cumulative portfolio flows (in % of GDP) in the next 8 quarters. The quasi-R squared is a goodness of fit measure based on comparison to a model with country-specific constant term. See Koenker and Machado (1999) for details. The F-test a Wald test, computed as in Bassett and Koenker (1982), of the null hypothesis that the joint effect of the policy/structural characteristic variable *and* the interaction term with the U.S. corporate BBB yield is equal to zero.

Table B9 Quasi R-squared from the baseline regression without policy variables

|	Percentile										
	5	10	20	30	40	50	60	70	80	90	95
	0.64	0.61	0.60	0.60	0.61	0.61	0.63	0.64	0.66	0.69	0.73
	0.65	0.63	0.62	0.62	0.62	0.63	0.64	0.65	0.67	0.69	0.71
	0.65	0.63	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.69
Quasi-R²	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.69
	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.68	0.69
	0.64	0.64	0.63	0.63	0.63	0.64	0.64	0.64	0.65	0.68	0.68
	0.64	0.64	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.67	0.67
	0.65	0.64	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.67

Notes: Table B9 presents quasi R-squared for the baseline regression (4) when policy variables are not included. See Koenker and Machado (1999) for details.

Figure B1. Panel Regression, Extended Sample—Interaction Terms of the U.S. corporate BBB yield with Policy Actions.
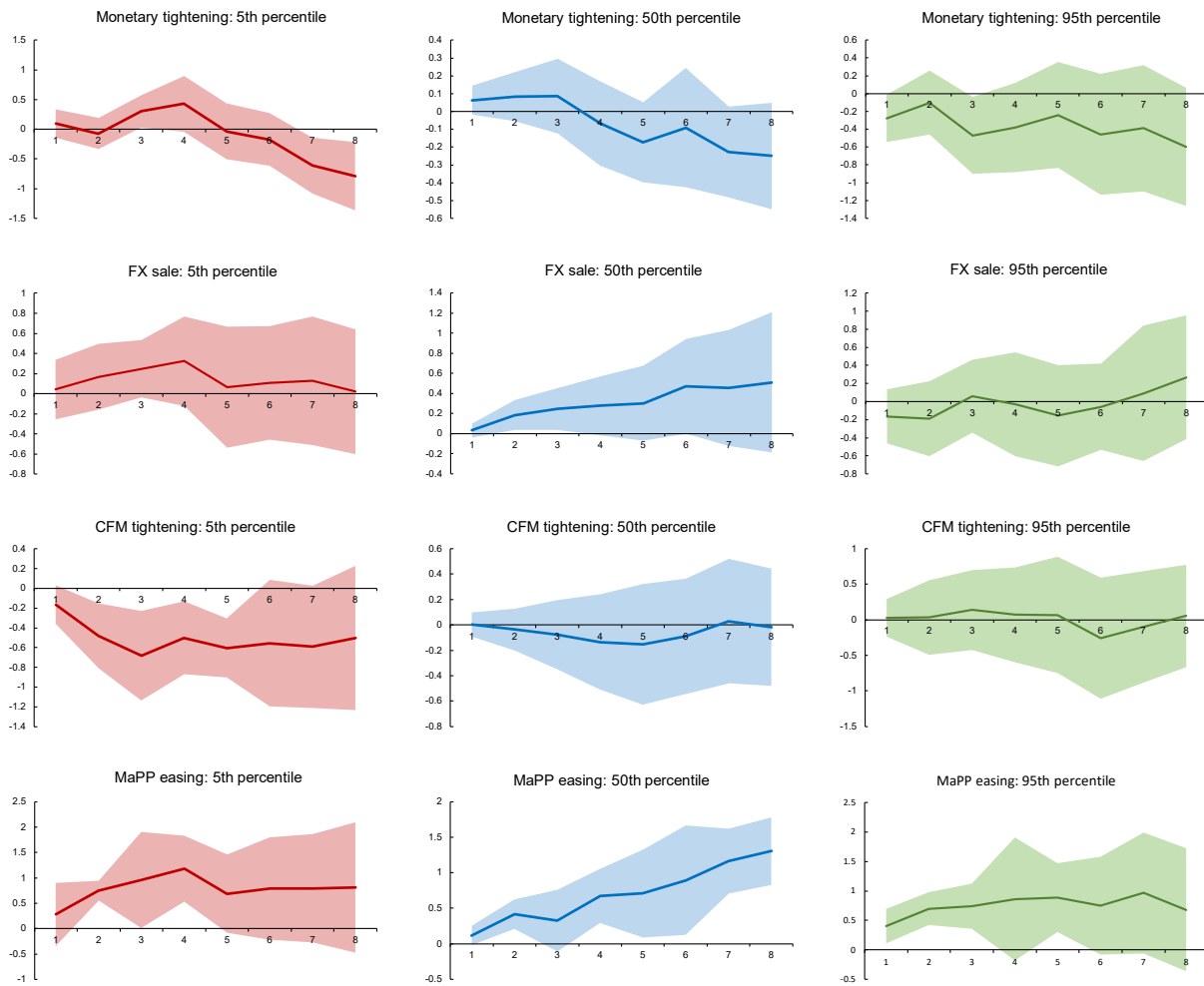
Notes: Figure B1 shows coefficients on the interaction term between a policy variable and the U.S. corporate BBB yield, $P_{i,t} \times BBB_t^{US}$ in eq. (4), scaled by the sample standard deviation of a given domestic variable, for 5th, 50th and 95th percentiles (α=0.05, 0.5, 0.95) based on a panel regression, where the financial segmentation variable is replaced by capital account openness (measured by the Chinn-Ito Index) and Financial Market Development variable. The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.

Figure B2. Panel Regression, Extended Sample—Interaction Terms of the U.S. corporate BBB yield with Structural Characteristics and Policy Frameworks.
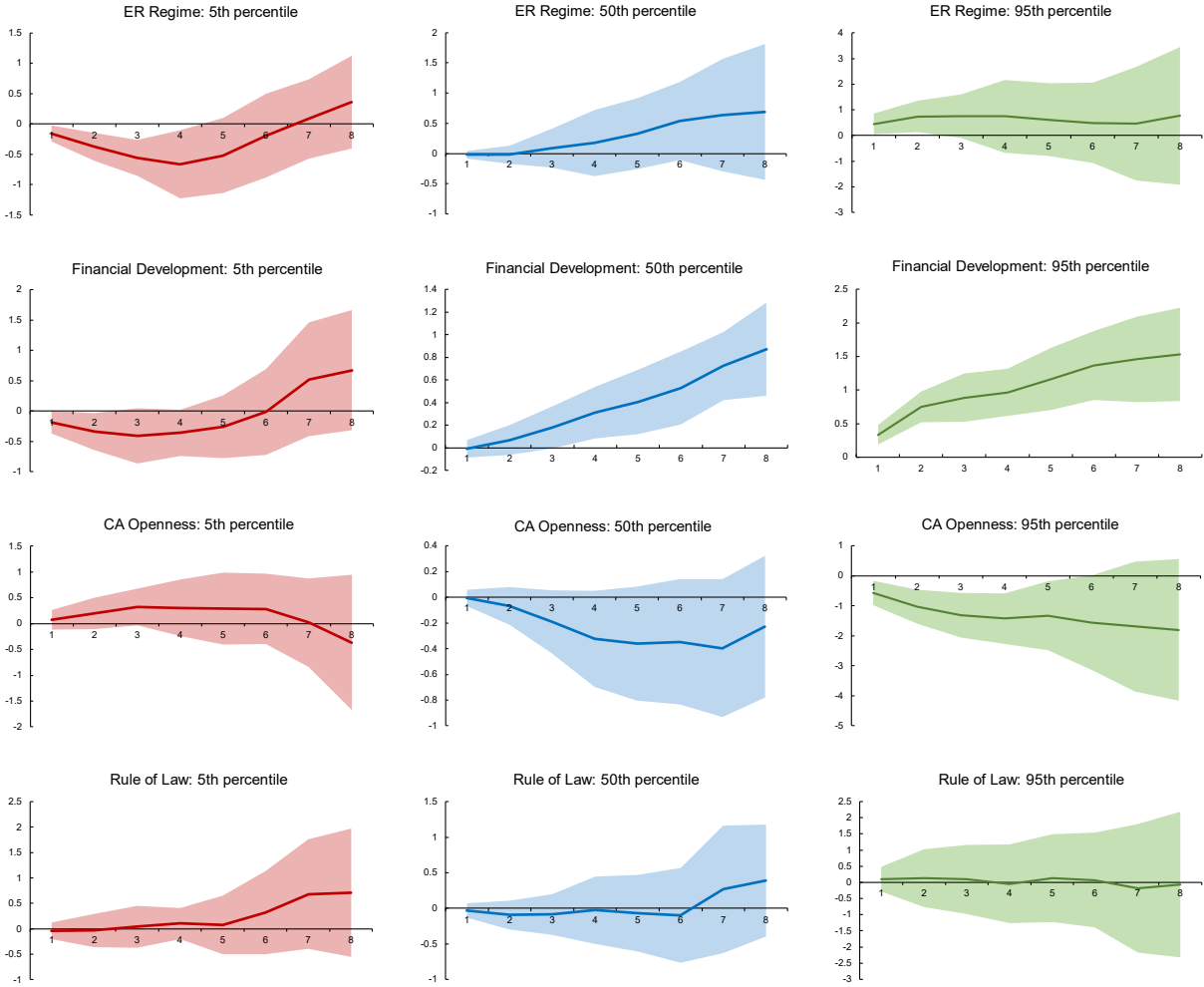
Notes: Figure B2 shows coefficients on the interaction term between a structural characteristic or policy framework variable and the U.S. corporate BBB yield, $P_{i,t} \times BBB_t^{US}$ in eq. (4), scaled by the sample standard deviation of a given domestic variable, for 5th, 50th and 95th percentiles ($\alpha=0.05$, 0.5, 0.95) based on a panel regression, where the financial segmentation variable is replaced by capital account openness (measured by the Chinn-Ito Index) and Financial Market Development variable. The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.

Figure B3. Panel Regression, VIX index—Interaction Terms of the VIX index with Policy Actions.

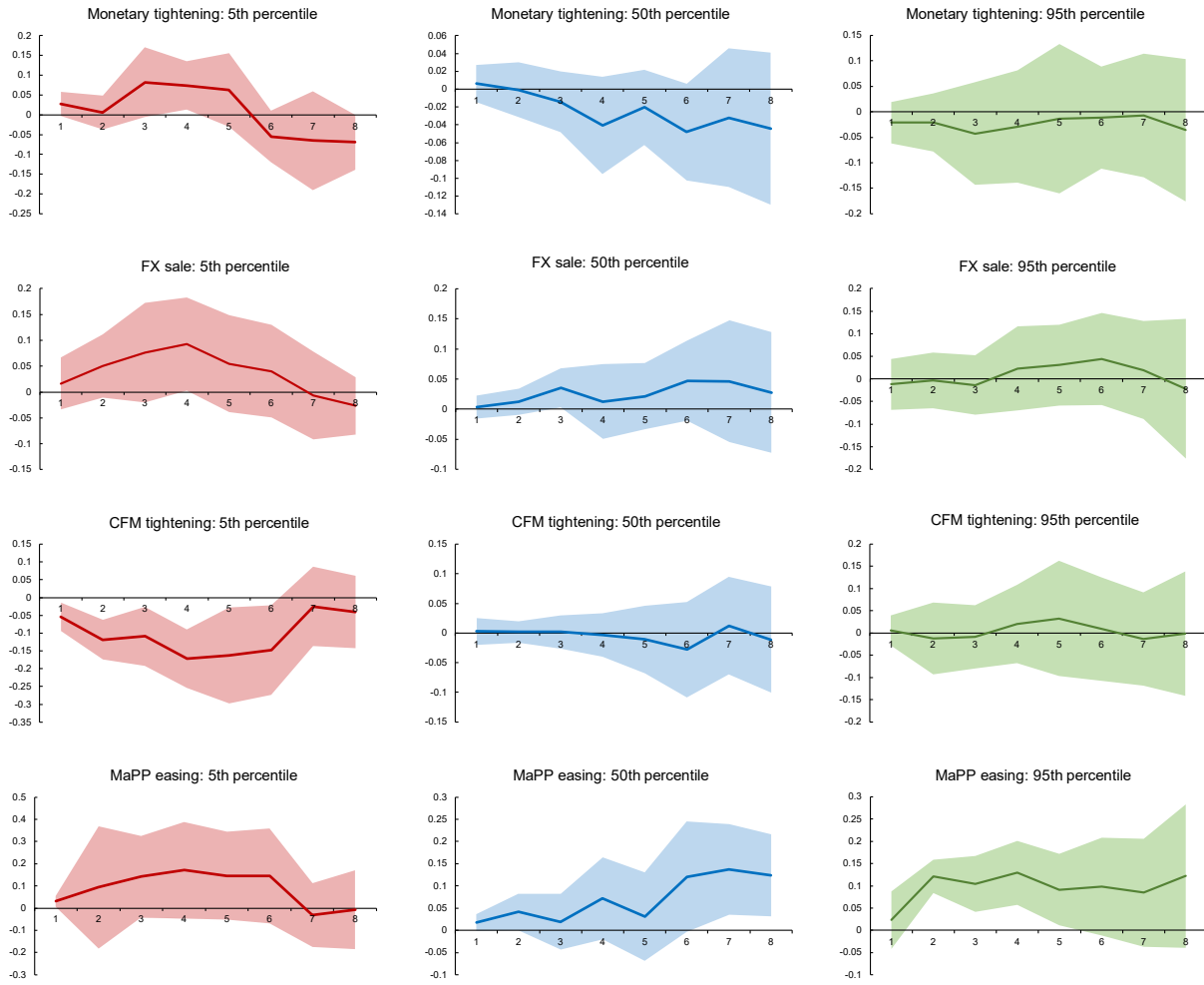Notes: Figure B3 shows coefficients on the interaction term between a policy variable and the VIX index, $P_{i,t} \times VIX_t$ in eq. (4), scaled by the sample standard deviation of a given domestic variable, for 5th, 50th and 95th percentiles (α=0.05, 0.5, 0.95) based on a panel regression, where we replace the U.S. corporate BBB yield with the VIX index. The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.
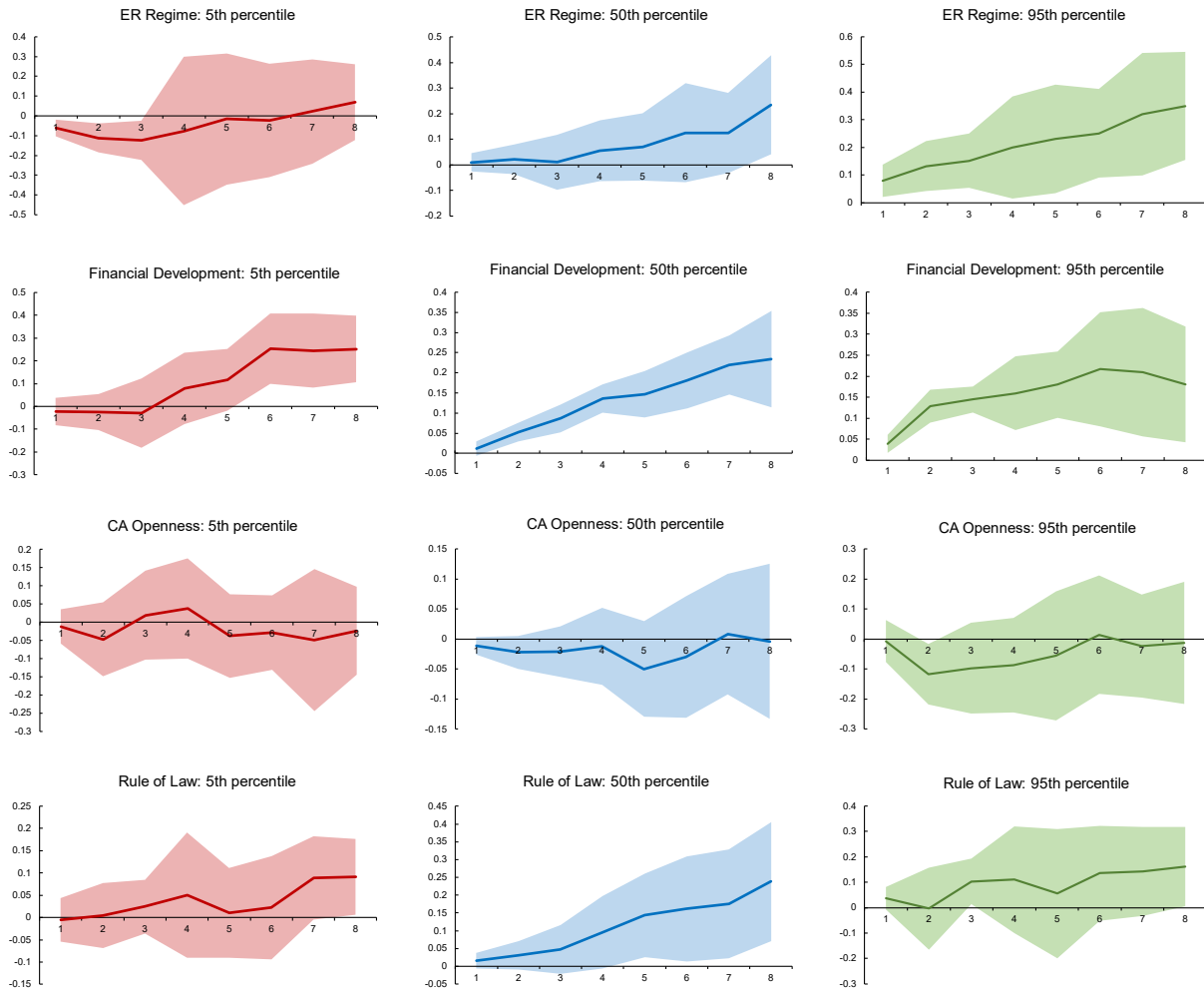
Figure B4. Panel Regression, VIX index—Interaction Terms of the VIX index with Structural Characteristics and Policy Frameworks.

Notes: Figure B4 shows coefficients on the interaction term between a structural characteristic or policy framework variable and the VIX index, $P_{i,t} \times VIX_t$ in eq. (4), scaled by the sample standard deviation of a given domestic variable, for 5th, 50th and 95th percentiles (α=0.05, 0.5, 0.95) based on a panel regression, where we replace the U.S. corporate BBB yield with the VIX index. The horizontal axis shows the horizon of the cumulative gross portfolio flows in the regression: from gross portfolio inflows in the next quarter to cumulative gross portfolio inflows in quarters 1–8 ahead. The shaded areas show 90 percent confidence intervals.