# When Rhetoric Moves Markets: U.S. Populism and Geoeconomic Risk in Foreign Exchange

Ilias Filippou  Arie E. Gozluklu  My T. Nguyen  Mark P. Taylor

*This version*: March 26, 2026

**Abstract**

We construct a media-based index of U.S. populist rhetoric—the Aggregate Populist Rhetoric (APR) Index—from major newspapers, using a dictionary augmented with terms extracted from Donald Trump's tweets, and study its implications for foreign exchange markets. We develop a nominal asset-pricing framework in which populist rhetoric raises the perceived hazard of a shift from globalization to autarky, increasing expected currency excess returns, especially in more financially segmented economies. Consistent with this mechanism, currencies with more negative APR exposure depreciate contemporaneously when APR rises, and country-level cross-sectional regressions show that APR betas are negatively priced in expected currency returns. Cross-country differences in APR exposure are systematically related to measures of financial globalization and financial segmentation. Currency portfolios sorted on APR exposure generate significant return spreads, and APR improves the performance of standard currency strategies whereas related political-risk measures do not. The results identify U.S. populist rhetoric as a source of geoeconomic risk in foreign exchange.

*Keywords*: populism, geoeconomics, fragmentation, exchange rates, currency risk premia.
*JEL Classification*: F31, F44, G12, G14, G15.

---

**Affiliations and contact details:** Ilias Filippou: Herbert Wertheim College of Business, Florida State University, ifilippou@fsu.edu. Arie E. Gozluklu: Warwick Business School, University of Warwick, arie.gozluklu@wbs.ac.uk. My T. Nguyen: College of Business and Management, VinUniversity, my.nt2@vinuni.edu.vn. Mark P. Taylor (corresponding author): John M. Olin School of Business, Washington University in St. Louis; and Centre for Economic Policy Research (CEPR), mark.p.taylor@wustl.edu.
**Acknowledgements:** We thank Anders Anderson (discussant), Isha Agarwal (discussant), Pasquale Della Corte (discussant), Jesús Gorrín, Roman Kozhan, Evgenia Passari, and Lubos Pastor, as well as participants at the European Finance Association (EFA) 2024 meeting, the European Economic Association (EEA) 2023 meeting, the American Finance Association (AFA) 2021 conference, the Midwest Finance Association (MFA) 2021 conference, the Financial Management Association (FMA) Annual Meeting 2020, and the Australasian Finance and Banking Conference (AFBC) 2025. The paper was previously circulated under the title "US Populism and Currency Risk Premia." Any remaining errors are the authors' responsibility.

*"We reject the ideology of globalism, and we embrace the doctrine of patriotism."*

Donald J. Trump, Remarks to the United Nations General Assembly, Sept. 25, 2018

# 1 Introduction

Populism has become an important force in political and economic life, especially with the rise of anti-globalist and anti-establishment rhetoric in major advanced economies and, most notably, in the United States during the Trump era. A rapidly growing literature has examined populism and its consequences, mostly in political science and economics (e.g., Guriev and Papaioannou, 2022). Yet its implications for financial markets remain largely unexplored.[1] A central challenge for empirical work is to measure this elusive phenomenon at relatively high frequencies, such as the monthly frequency typically used in asset-pricing analysis.

The foreign exchange (FX) market is especially well suited to this investigation because currencies are issued on behalf of sovereigns and are therefore tightly linked to political developments.[2] Its depth, liquidity, and global integration make it highly sensitive to shifts in political risk. The United States is particularly relevant in this context because of the size of its economy and the central role of the U.S. dollar as the dominant vehicle currency (Maggiori, Neiman, and Schreger, 2019). The election of Donald Trump in 2016 illustrates how strongly U.S. politics, and contemporary populism in particular (Hawkins and Littvay, 2019), can reverberate through currency markets: the Mexican peso fell to its lowest level against the U.S. dollar in two decades, while other currencies moved sharply as investors

[1] A notable theoretical exception is Pástor and Veronesi (2021), which models the effect of populism on the market price of risk for real financial assets, in particular equities. In Section 3, we adapt their mechanism to a nominal asset-pricing framework to derive predictions for exchange rates and currency excess returns.

[2] The FX market is the largest asset market in the world by trading volume: daily turnover averaged $9.6 trillion in April 2025 according to the Bank for International Settlements (2025) triennial survey.

reassessed the implications of a more protectionist and anti-globalist U.S. policy stance. This motivates our central question: how is U.S. populism—a growing political tendency with amplified reach through social media—linked to the cross-section of currency excess returns?

Our central empirical finding is that currencies with negative APR betas, that is, negative exposure to our *Aggregate Populist Rhetoric* index (APR), yield low excess returns during periods of heightened U.S. populist rhetoric, while currencies with positive APR betas provide hedging value in those states. Consistent with standard asset-pricing logic, investors require higher expected premia to hold currencies with negative APR betas, which perform poorly when APR is high, whereas currencies with positive APR betas, which hedge high-APR states, earn lower expected returns. A trading strategy that goes long in currencies with low exposure to U.S. populism and short in currencies with high exposure generates economically and statistically significant profits. We rationalize these findings within models emphasizing the role of "gravity" in shaping the currency return factor structure (Hassan, Loualiche, Pecora, and Ward, 2023; Lustig and Richmond, 2020; Richmond, 2019). Consistent with our theoretical mechanism, APR betas are systematically related to financial integration with the U.S.: they are more negative where financial globalization is lower and segmentation from the U.S. is higher, and more positive where integration is stronger. This pattern implies that more peripheral or segmented countries are especially vulnerable to rising U.S. populist rhetoric and therefore command higher risk premia (Fernández-Villaverde, Mineyama, and Song, 2025). We also show that these results are robust to a wide range of checks.[3]

The main contribution of our paper is fourfold. First, we construct a novel media-based measure of U.S. populist rhetoric—the *Aggregate Populist Rhetoric* (APR) Index—from major

[3]These include alternative factor specifications, portfolio construction methods, econometric procedures, transaction cost adjustments, and evidence from CLS FX order flows.

U.S. newspapers, using a dictionary that explicitly combines traditional and modern populist language. While existing approaches typically quantify populism by scoring political leaders' speeches (Hawkins, Aguilar, Silva, Jenne, Kocijan, and Kaltwasser, 2019; TeamPopulism, 2025) or by using vote shares for populist parties (Bayerlein, Funke, and Trebesch, 2019; Rooduijn, Van Kessel, Froio, Pirro, De Lange, Halikiopoulou, Lewis, Mudde, and Taggart, 2019), our approach instead measures populist rhetoric as it is transmitted through the media over a long horizon, thereby capturing fluctuations that extend beyond any single leader or party. Following Jagers and Walgrave (2007) and Bonikowski and Gidron (2015), we conceptualize populism as a political style or rhetoric, which motivates our measurement strategy. To capture the contemporary, short-form register of populist discourse, we augment the Bonikowski and Gidron (2015) dictionary with a tweet-based social-media lexicon extracted from Donald Trump's tweets using bi-term topic modeling, and we then apply this augmented lexicon to newspaper coverage throughout our sample. The resulting index provides a new way to measure populist rhetoric at monthly frequency for financial applications.

Second, we provide one of the first comprehensive empirical analyses of how populist media attention interacts with financial globalization in shaping FX markets. We build on the framework of Pástor and Veronesi (2021), in which populist politics raise the perceived likelihood of a shift from globalization toward autarky and thereby alter the pricing of risk in integrated asset markets. A central implication of their model is that such shifts widen cross-country gaps in market prices of risk, depressing the global price of risk and raising political risk premia in real asset markets. We adapt this mechanism to a nominal asset-pricing framework for exchange rates by embedding a time-varying probability of a globalization-to-autarky regime switch directly into the stochastic discount factor (SDF). Populism is often cast as the antithesis of globalization and, in practice, as with the Trump administration, is associated with tariffs and trade barriers. Our focus on U.S. populist

rhetoric is deliberate rather than incidental: in the asymmetric structure inherited from Pástor and Veronesi (2021), the United States occupies the financially central role, so shifts in U.S. populism alter the perceived probability of a breakdown in global risk sharing and therefore have system-wide implications for the cross-section of foreign currency premia. Within this framework, the expected nominal currency excess return rises with the perceived probability of a shift to autarky, yielding clear and testable predictions for the cross-section of currencies when U.S. populist rhetoric proxies for this probability.

Third, our analysis connects directly to the emerging literature on *geoeconomics*, which studies how economic and financial linkages are deployed as instruments of statecraft (Clayton, Maggiori, and Schreger, 2025, 2024). We show that political rhetoric itself can function as a geoeconomic force: U.S. populism raises the perceived probability of a globalization-to-autarky regime shift, amplifying perceptions of fragmentation risk and thereby altering the effective participation constraints—that is, the incentive conditions under which global investors are willing to bear FX risk exposures—ultimately generating priced currency excess returns.

Fourth, we demonstrate that APR exposure provides substantial and distinct diversification benefits. A portfolio that combines the long-dollar, carry, and momentum factors achieves materially higher risk-adjusted performance when augmented with APR exposure. In a direct horse race against alternative political risk measures, APR is the only addition that consistently improves performance, whereas portfolios augmented with Trade Policy Uncertainty (TPU) or Government Policy Sentiment (GPS) fail to add value and often reduce efficiency. This confirms that APR captures a geoeconomic risk dimension not subsumed by other political uncertainty measures and delivers genuine marginal value to currency investors.

The remainder of the paper proceeds as follows. Section 2 surveys four literatures relevant to our analysis: the measurement of populism; its economic and political drivers; the transmission of politics into asset prices; and the emerging field of geoeconomics. Section 3 embeds the regime-switch mechanism of Pástor and Veronesi (2021) in a nominal exchange-rate framework and derives testable predictions for currency excess returns. Section 4 constructs the Aggregate Populist Rhetoric (APR) Index by augmenting the Bonikowski and Gidron (2015) dictionary with a short-text ("Populism 2.0") extension and scaling by newspaper coverage. Section 5 describes the FX data, the rolling estimation of APR betas, and the formation of APR-sorted portfolios. Section 6 presents the main results: APR exposure comoves with financial globalization and segmentation, is negatively priced in the cross-section of currency excess returns, and provides substantial diversification benefits that are distinct from alternative political risk measures. Section 7 reports a range of robustness tests, and Section 8 concludes.

## 2 Literature Review

Our paper relates to four main strands of the literature: political-science approaches to measuring populism; the drivers and macroeconomic consequences of populism; political influences on asset prices and predictability in FX markets; and the emerging field of geoeconomics, which studies how economic linkages are used as instruments of statecraft.

We begin with the political-science research on measuring populism. Early studies often labeled actors as populist without systematic criteria (Hawkins, 2009). Later work developed dictionary approaches: Jagers and Walgrave (2007), Rooduijn and Pauwels (2011), Balcere (2014), and Bos and Brants (2014) used manual textual analysis to code anti-elite or people-centric statements, while Bonikowski and Gidron (2015) constructed a dictionary from more than 2,400 U.S. presidential campaign speeches between 1952 and 1996. These approaches improved rigor but remained labor-intensive, subject to coder bias, and limited in sample size. Recent contributions have turned to automated text methods, following the approach of Baker, Bloom, and Davis (2016) in constructing the Economic Policy Uncertainty (EPU) index and Caldara and Iacoviello (2022) in developing the Geopolitical Risk (GPR) index. More advanced natural-language-processing methods, including supervised classifiers and transformer architectures, have been applied to large corpora of political speeches and social-media posts (e.g., Hawkins, Carlin, Littvay, and Kaltwasser, 2019; Barrenchea and Lupu, 2018). Our Aggregate Populist Rhetoric (APR) Index extends this line of work by measuring populist rhetoric as reported in leading U.S. newspapers, rather than focusing on the discourse of specific leaders, and by linking this measure directly to financial markets. Unlike prior dictionaries, and to capture the contemporary social-media style of populist language, we augment the Bonikowski and Gidron (2015) lexicon with terms identified from Donald Trump's Twitter feed using bi-

term topic modeling (Yan, Guo, Lan, and Cheng, 2013; Filippou, Gozluklu, Nguyen, and Viswanath-Natraj, 2025).

A second strand of the literature examines the drivers and consequences of populism. Rodrik (2018) emphasizes how globalization shocks provoke political backlash by widening inequality between skilled and unskilled workers, global professionals and local producers, and elites and ordinary citizens. Empirical support comes from Guiso, Herrera, Morelli, and Sonno (2018) and Colantone and Stanig (2018). Other research explores the macroeconomic consequences of populism for growth and distribution (Dornbusch and Edwards, 2007; Sachs, 1989; Funke, Schularick, and Trebesch, 2023). Pástor and Veronesi (2021) provide a theoretical link to asset pricing, showing that populist shifts toward autarky alter the market price of risk for equities. Building on that insight, our paper is the first to embed regime-change risk into a *nominal* asset-pricing framework for exchange rates, deriving predictions for currency excess returns when the probability of a globalization-to-autarky shift varies over time.

A third strand focuses on political influences on asset prices more broadly, as well as predictability in FX markets. Santa-Clara and Valkanov (2003) document a "presidential puzzle" in U.S. stock returns—the empirical finding that returns have been significantly higher under Democratic than Republican administrations—while Sattler (2013) show that partisan outcomes affect equity prices in settings with limited political constraints, that is, when institutional checks and balances are weak. Similar effects are found outside the U.S. (e.g., Döpke and Pierdzioch, 2006; Cahan, Malone, Powell, and Choti, 2005; Worthington, 2009). In currency markets, predictability has been established using carry, momentum, and value strategies (Lustig, Roussanov, and Verdelhan, 2011; Menkhoff, Sarno, Schmeling, and Schrimpf, 2012b; Asness, Moskowitz, and Pedersen, 2013; Menkhoff, Sarno, Schmeling, and Schrimpf, 2017), with explanations proposed in terms of global imbalances (Corte,

Riddiough, and Sarno, 2016), output gaps (Colacito, Riddiough, and Sarno, 2020), forward-looking policy rules (Filippou and Taylor, 2023), correlation risk (Mueller, Stathopoulos, and Vedolin, 2017), and global FX volatility (Menkhoff, Sarno, Schmeling, and Schrimpf, 2012a). Recent work identifies a strong U.S. dollar factor (Nucera, Sarno, and Zinna, 2024) and highlights gravity as a key element of the factor structure (Hassan et al., 2023; Lustig and Richmond, 2020; Richmond, 2019). Filippou, Taylor, and Wang (2024) show that media sentiment predicts the cross-section of currency returns, while Filippou, Gozluklu, and Taylor (2018) link global political risk to momentum profits. Our contribution differs by focusing specifically on populist rhetoric as a distinct political risk factor for currency markets.

A fourth and rapidly growing strand of research concerns *geoeconomics*, broadly defined as the use of economic and financial linkages for geopolitical ends (Clayton et al., 2025, 2024).[4] Clayton et al. (2025) set out a foundational research agenda for geoeconomics, showing how threats and inducements, transmitted through trade, finance, and payment systems, can be modeled within modern economic frameworks, with fragmentation of global linkages a central consequence when such measures push countries toward autarky or induce anticipatory shifts in production and trade patterns (Clayton et al., 2024). Recent empirical contributions include studies that highlight the central role of international currencies and capital allocation (Maggiori, Neiman, and Schreger, 2020), document the rise of the dollar and the relative decline of the euro in global portfolios (Maggiori et al., 2019), and assemble a comprehensive history of official cross-border lending as an instrument of economic statecraft (Horn, Reinhart, and Trebesch, 2020). Together, these studies underscore how different facets of geoeconomic power interact with, and sometimes

[4]The term is often traced back to Luttwak (1990); see also Mallin and Sidaway (2024) for a recent genealogy of the concept.

accelerate, processes of economic and financial fragmentation.[5] We extend this line of inquiry by showing that political rhetoric itself can operate as a geoeconomic instrument: U.S. populism raises the perceived likelihood of a globalization-to-autarky regime shift, heightens fragmentation risk, and in turn modifies the incentive constraints under which global investors are willing to hold FX exposures, thereby producing priced currency excess returns. In this way, we link the conceptual insights of the geoeconomics literature to new asset-pricing evidence in currency markets.

Taken together, these literatures highlight four gaps. First, while political science and economics have developed a variety of tools to measure populism, few are specifically designed for financial applications. Second, although political influences on asset prices have been documented, the impact of populism on exchange rates remains unexplored. Third, despite extensive evidence on FX return predictability, little work connects systematic variation in currency premia to political rhetoric. Fourth, the emerging geoeconomics literature has begun to formalize how economic linkages can be deployed as instruments of statecraft, yet it has not considered how political rhetoric may operate as a geoeconomic channel. By integrating these strands, our paper introduces a new measure of populist rhetoric based on U.S. media coverage and embeds it within a theoretical framework that links populism to expected currency returns and to broader processes of economic and financial fragmentation.

[5] See also related work on sanctions, export controls, and the political economy of sovereign debt as instruments of geoeconomic influence, e.g. Farrell and Newman (2019); Trebesch and Zettelmeyer (2018).

# 3 Theoretical Framework and Testable Hypotheses

To interpret the empirical relationship between U.S. populism and currency returns, we develop a theoretical framework that connects the literature on populism and inequality to nominal exchange-rate determination. Our approach builds on the work of Pástor and Veronesi (2021), who link political shifts toward populism to changes in the market price of risk for real assets, and applies their regime-switch mechanism in a nominal asset-pricing environment with stochastic discount factors (SDFs) that govern exchange rates. This application formalizes how the perceived probability of a globalization-to-autarky regime switch translates into variation in nominal currency excess returns, and how the strength of this effect depends on a country's degree of financial integration. In this sense, our framework connects populist shocks to the broader geoeconomics of fragmentation, showing how political rhetoric can alter participation constraints in international markets—that is, the conditions under which states or investors comply with cross-border arrangements when threats or inducements shift their relative costs and benefits.

Subsection 3.1 presents the framework and derives a decomposition of expected currency excess returns into a diffusive component and a regime-change component tied to the intensity of populist shocks. Subsection 3.2 then formulates testable hypotheses, emphasizing how populism-induced regime risk should affect both average currency premia and their heterogeneity across more versus less financially integrated countries.

## 3.1 Theoretical Framework

Pástor and Veronesi (2021) (henceforth PV) study a model with two countries—US and RoW—populated by heterogeneous agents who dislike within-country inequality.[6] Voters

[6]We use 'US' to denote the model country corresponding to the United States; 'U.S.' refers to the actual country in the data, the United States.

face a regime choice between *globalization*, with international financial integration, higher aggregate consumption, and more domestic inequality, and *autarky*, with financial segmentation, lower consumption, and less inequality. While increasing consumption raises utility, growing inequality lowers it and attracts voters toward the populist agenda.

In PV's calibration, US agents are on average less risk-averse than RoW agents, because of a higher degree of financial development in US, so under globalization US borrows from RoW and takes on a larger share of risky claims, while RoW lends and holds safer assets. Cross-border trade compresses the cross-country wedge in market prices of risk: the more risk-averse RoW can offload part of its consumption risk to the less risk-averse US investor, and US prices risk with respect to *global* rather than purely domestic shocks.

Autarky shuts down this mechanism. With markets segmented, each country absorbs its own endowment risk locally. Because US agents are less risk-averse, the compensation they require to bear domestic risk falls relative to the integrated benchmark, whereas more risk-averse RoW agents—no longer able to offload risk—require higher compensation. Hence, the gap between RoW and US market prices of risk widens under autarky. The inequality channel explains why voters may at times prefer autarky; the pricing comparison is driven by who bears risk once international risk-sharing collapses.

We extend this mechanism from real to nominal asset pricing by embedding regime-change risk directly into the nominal SDFs of US and RoW within the standard asset-market view of exchange rates. Casting the PV insight in nominal terms highlights how differences in the way US and RoW investors price a potential shift to autarky translate into expected currency premia.

### 3.1.1 Nominal Exchange Rates and Regime Risk

Under the standard intertemporal asset-pricing view of exchange rates (Lustig and Verdelhan, 2007; Burnside and Graveline, 2020), no arbitrage requires that pricing any traded foreign payoff with the foreign (RoW) stochastic discount factor (SDF) be equivalent to first converting that payoff into domestic (US) currency and then pricing it with the domestic SDF:

$$\mathbb{E}_t\Big(M^{\text{RoW}}_{t,t+1}R^{\text{RoW}}_{t+1}\Big) = \mathbb{E}_t\Big(M^{\text{US}}_{t,t+1}\tfrac{S_t}{S_{t+1}}R^{\text{RoW}}_{t+1}\Big), \tag{1}$$

for any traded foreign gross return $R^{\text{RoW}}_{t+1}$, where $S_t$ is the RoW-currency price of one unit of US currency, and $M^k_{t,t+1}$ denotes the nominal SDF for $k \in \{\text{US}, \text{RoW}\}$.[7] More generally, for each country $k$, asset prices satisfy the familiar Euler equation, the canonical consumption-based asset-pricing restriction going back to Lucas (1978):

$$1 = \mathbb{E}_t\Big[M^k_{t,t+1}R^k_{t+1}\Big], \qquad k \in \{\text{US}, \text{RoW}\}. \tag{2}$$

Applying (2) to the instantaneous riskless bond with gross return $R^k_{f,t,t+\mathrm{d}t} = 1 + i^k_t\,\mathrm{d}t$ yields

$$\mathbb{E}_t\Big[M^k_{t,t+\mathrm{d}t}R^k_{f,t,t+\mathrm{d}t}\Big] = 1 \quad \Rightarrow \quad i^k_t = -\frac{1}{\mathrm{d}t}\log\mathbb{E}_t\Big[M^k_{t,t+\mathrm{d}t}\Big], \tag{3}$$

which links the instantaneous nominal riskless rate to the SDF.

This representation provides the bridge from Pástor and Veronesi (2021) to exchange rates. Although their model does not itself deliver a direct prediction for nominal currency movements, once differences in domestic and foreign pricing kernels are embedded in an international SDF framework, exchange rates reflect the relative valuation of states across countries. In particular, under complete markets—or, more generally, under the integrated

[7] Throughout we work under the physical measure $\mathbb{P}$.

minimum-entropy selection in incomplete but internationally integrated markets, as shown by Sandulescu, Trojani, and Vedolin (2021)—the pricing relation in (1) holds state by state:

$$\frac{S_{t+\mathrm{d}t}}{S_t} = \frac{M^{\mathrm{RoW}}_{t,t+\mathrm{d}t}}{M^{\mathrm{US}}_{t,t+\mathrm{d}t}}, \tag{4}$$

so that, taking logs and passing to the limit as $\mathrm{d}t \to 0$,

$$\mathrm{d}s_t = \mathrm{d}\log M^{\mathrm{RoW}}_t - \mathrm{d}\log M^{\mathrm{US}}_t, \tag{5}$$

where $s_t \equiv \log S_t$ denotes the log spot exchange rate. Thus, exchange-rate movements are pinned down by the relative behavior of the foreign and domestic nominal SDFs. This observation is central for our purposes: if populist rhetoric changes how US and RoW investors price a shift from globalization to autarky, those differences show up directly in expected currency premia, while financial segmentation weakens cross-country risk sharing and lowers cross-country SDF comovement, which is precisely the channel we emphasize empirically.

For $k \in \{\mathrm{US}, \mathrm{RoW}\}$, we model the nominal log-SDF as a jump-diffusion process in which the jump component captures the possibility of a discrete regime shift from globalization to autarky. The idea is that populist rhetoric does not merely move beliefs about continuous macroeconomic fundamentals; it also changes the perceived probability of a rare but economically consequential breakdown in international risk sharing. We capture that possibility through a common Poisson jump with time-varying intensity $\lambda_t$, where $\lambda_t$ measures the perceived likelihood of a switch to autarky, and through country-specific

jump loadings $\Lambda_t^k$, which determine how strongly that regime change affects the marginal valuation of payoffs in country $k$:[8]

$$\mathrm{d}\log M_t^k = -\Big(i_t^k + \tfrac{1}{2}(\Gamma_t^k)^\top \Sigma_t \Gamma_t^k + \lambda_t\big(\mathrm{e}^{-\Lambda_t^k} - 1\big)\Big)\,\mathrm{d}t - (\Gamma_t^k)^\top \mathrm{d}W_t - \Lambda_t^k\,\mathrm{d}N_t, \tag{6}$$

where $i_t^k$ is the nominal instantaneous riskless rate, $\Gamma_t^k$ is the diffusion risk-price vector, $\Lambda_t^k$ is the country-specific jump loading, $W_t$ is an $m$-dimensional Brownian motion with instantaneous covariance $\Sigma_t$ (possibly correlated across countries), and $N_t$ is a Poisson counting process with predictable time-varying intensity $\lambda_t$, independent of $W_t$. We model the globalization-to-autarky switch with a single shared Poisson jump process $N_t$, since it represents one geopolitical regime event that can affect all countries at once, while allowing its pricing implications to differ across countries through through $\Lambda_t^k$. Over $[t, t+\mathrm{d}t)$, the conditional arrival probability is $\lambda_t\,\mathrm{d}t$, so $\mathbb{E}_t[\mathrm{d}N_t] = \lambda_t\,\mathrm{d}t$ and $\mathrm{Var}_t(\mathrm{d}N_t) = \lambda_t\,\mathrm{d}t$.

For notational clarity, we absorb the deterministic drift terms in (6) into the short rate and redefine $i_t^k$ accordingly.[9] Then

$$\mathrm{d}\log M_t^k = -i_t^k\,\mathrm{d}t - (\Gamma_t^k)^\top \mathrm{d}W_t - \Lambda_t^k\,\mathrm{d}N_t, \tag{7}$$

When a regime switch occurs ($\Delta N_t = 1$), the SDF for country $k$ jumps by

$$\Delta \log M_t^k \equiv \log M_{t+}^k - \log M_{t-}^k = -\Lambda_t^k, \qquad \text{so} \qquad M_{t+}^k = M_{t-}^k\,\mathrm{e}^{-\Lambda_t^k}.$$

[8] The drift includes the Itô correction $\frac{1}{2}(\Gamma_t^k)^\top \Sigma_t \Gamma_t^k$ and the jump compensator $\lambda_t\big(\mathrm{e}^{-\Lambda_t^k} - 1\big)$ so that $\log \mathbb{E}_t[M_{t,t+\mathrm{d}t}^k] = -i_t^k\,\mathrm{d}t$, consistent with (3).

[9] This is a benign reparameterization: replacing $i_t^k$ in (7) with the effective rate $i_t^k + \frac{1}{2}(\Gamma_t^k)^\top \Sigma_t \Gamma_t^k + \lambda_t(\mathrm{e}^{-\Lambda_t^k} - 1)$ reproduces (6). All subsequent pricing relations, including the FX identity and results under CIP, are unchanged.

The sign of $\Lambda_t^k$ is country-specific and economically determined. If autarky raises marginal utility in country $k$, so that safe payoffs become more valuable, then the SDF jumps *up* and $\Lambda_t^k < 0$ ($\Delta \log M_t^k > 0$; US in PV). If autarky lowers the value of the sure claim, the SDF jumps *down* and $\Lambda_t^k > 0$ ($\Delta \log M_t^k < 0$; RoW in PV). Through the short-rate–SDF link in (3), this corresponds to falling US yields and rising RoW yields in autarky, consistent with PV.

From (5) and (7), the log spot rate evolves as

$$\mathrm{d}s_t = \left(i_t^{\mathrm{US}} - i_t^{\mathrm{RoW}}\right)\mathrm{d}t + \left(\Gamma_t^{\mathrm{US}} - \Gamma_t^{\mathrm{RoW}}\right)^\top \mathrm{d}W_t + \left(\Lambda_t^{\mathrm{US}} - \Lambda_t^{\mathrm{RoW}}\right)\mathrm{d}N_t, \tag{8}$$

where $\mathbb{E}_t[\mathrm{d}W_t] = 0$, $\mathbb{E}_t[\mathrm{d}N_t] = \lambda_t\,\mathrm{d}t$, $\mathbb{E}_t[\mathrm{d}W_t\,\mathrm{d}N_t] = 0$, and $\mathrm{Var}_t(\mathrm{d}N_t) = \lambda_t\,\mathrm{d}t$. Hence the expected change in the log exchange rate is

$$\mathbb{E}_t[\mathrm{d}s_t] = \left(i_t^{\mathrm{US}} - i_t^{\mathrm{RoW}}\right)\mathrm{d}t + \lambda_t\left(\Lambda_t^{\mathrm{US}} - \Lambda_t^{\mathrm{RoW}}\right)\mathrm{d}t. \tag{9}$$

Consider the excess return on a long–US-currency (short–RoW) forward position over an infinitesimal horizon, where $f_t$ denotes the log forward rate, so that $f_t - s_t$ is the log forward premium:

$$\mathrm{d}rx_t \equiv (f_t - s_t) - \mathrm{d}s_t. \tag{10}$$

We use covered interest parity (CIP), which implies

$$f_t - s_t = i_t^{\mathrm{US}} - i_t^{\mathrm{RoW}}, \tag{11}$$

over the same horizon $\mathrm{d}t$.[10] Combining (10), (11), and (8) yields the infinitesimal forward excess return:

$$\mathrm{d}rx_t = -\left(\Gamma_t^{\mathrm{US}} - \Gamma_t^{\mathrm{RoW}}\right)^\top \mathrm{d}W_t - \left(\Lambda_t^{\mathrm{US}} - \Lambda_t^{\mathrm{RoW}}\right)\mathrm{d}N_t. \tag{12}$$

Taking expectations and computing variance,

$$\mathbb{E}_t[\mathrm{d}rx_t] = \lambda_t\left(\Lambda_t^{\mathrm{RoW}} - \Lambda_t^{\mathrm{US}}\right)\mathrm{d}t, \tag{13}$$

$$\mathrm{Var}_t(\mathrm{d}rx_t) = \left(\Gamma_t^{\mathrm{US}} - \Gamma_t^{\mathrm{RoW}}\right)^\top \Sigma_t\left(\Gamma_t^{\mathrm{US}} - \Gamma_t^{\mathrm{RoW}}\right)\mathrm{d}t + \lambda_t\left(\Lambda_t^{\mathrm{US}} - \Lambda_t^{\mathrm{RoW}}\right)^2\mathrm{d}t, \tag{14}$$

where the covariance term is zero because $\mathrm{d}W_t$ has mean zero and is independent of $\mathrm{d}N_t$.

Equation (13) shows that the conditional expected nominal currency excess return is determined by the regime-change channel: it scales with the regime-switch intensity $\lambda_t$ and the cross-country gap $\Lambda_t^{\mathrm{RoW}} - \Lambda_t^{\mathrm{US}}$.[11] Under the PV sign convention ($\Lambda_t^{\mathrm{RoW}} > 0$, $\Lambda_t^{\mathrm{US}} < 0$), this gap equals $|\Lambda_t^{\mathrm{RoW}}| + |\Lambda_t^{\mathrm{US}}| > 0$, so $\mathbb{E}_t[\mathrm{d}rx_t] > 0$ whenever $\lambda_t > 0$. More generally, the expected excess return is zero whenever either $\lambda_t = 0$ or $\Lambda_t^{\mathrm{RoW}} = \Lambda_t^{\mathrm{US}}$; the integrated-markets limiting case $\Lambda_t^{\mathrm{US}} = \Lambda_t^{\mathrm{RoW}} = 0$ is a natural special case. The key intuition is straightforward. A rise in $\lambda_t$ increases the perceived likelihood of a breakdown in international risk sharing. Under the PV mechanism, such a regime shift affects US and RoW asymmetrically, implying that the gap in their jump loadings, $\Lambda_t^{\mathrm{RoW}} - \Lambda_t^{\mathrm{US}}$, governs the response of expected currency excess returns. Because financial segmentation magnifies

[10] For expositional clarity we assume CIP holds, so that the nominal forward premium equals the short-term interest differential. While CIP was a tight arbitrage condition prior to the Global Financial Crisis (GFC), persistent deviations have emerged in the post-GFC period due to intermediary balance-sheet constraints; see, e.g., Du, Tepper, and Verdelhan, 2018; Avdjiev, Du, Koch, and Shin, 2019; Maggiori, 2017; Gabaix and Maggiori, 2015. Our focus here is on the information-driven risk-sharing channel emphasized in PV. Results are robust to using CIP-adjusted forwards that include the CIP basis.

[11] While diffusion risk prices, through the Itô correction, and jump compensators both affect the interest differential—see footnote 9—and hence the forward premium, these contributions cancel when computing the expected excess return, leaving only the regime-jump component.

this gap, the effect of a rise in $\lambda_t$ is strongest precisely where cross-border risk sharing is weakest.

**Proposition 1** (Nominal Currency Risk Premia under Populism Risk)**.** *In the PV framework, applied to nominal exchange rates with regime-change intensity $\lambda_t$:*

*(a) In general, $\frac{\partial}{\partial \lambda_t}\mathbb{E}_t[\mathrm{d}rx_t] = \left(\Lambda_t^{\mathrm{RoW}} - \Lambda_t^{\mathrm{US}}\right)\mathrm{d}t$. Under the PV sign convention ($\Lambda_t^{\mathrm{RoW}} > 0$, $\Lambda_t^{\mathrm{US}} < 0$), this derivative is strictly positive, so the expected nominal currency excess return increases with $\lambda_t$.*

*(b) Greater financial segmentation raises the magnitudes $|\Lambda_t^{\mathrm{US}}|$ and $|\Lambda_t^{\mathrm{RoW}}|$, thereby amplifying the sensitivity of the expected excess return to $\lambda_t$ via the sum $|\Lambda_t^{\mathrm{RoW}}| + |\Lambda_t^{\mathrm{US}}|$.*

Proposition 1 formalizes the central mechanism of the model. A rise in $\lambda_t$ raises the expected excess return on the long-USD/short-RoW forward position because autarky reallocates risk asymmetrically between US and RoW. Financial segmentation strengthens this response by widening the cross-country jump-loading gap.

## 3.2 Testable Hypotheses

Building on Section 3.1—specifically the currency excess-return decomposition in (13) and Proposition 1—we test two central predictions. First, the expected nominal currency excess return on a long–US-currency (short–RoW) forward position increases with the perceived probability of a globalization-to-autarky regime switch, captured by the jump intensity $\lambda_t$. Second, the sensitivity of excess returns to $\lambda_t$ is stronger for countries that are more financially segmented, reflecting geoeconomic fragmentation. In the data, we proxy time variation in $\lambda_t$ using the Aggregate Populist Rhetoric (APR) index, which measures the emphasis on populism in U.S. public discourse. Cross-country variation in the gap

$(\Lambda_t^{\text{RoW}} - \Lambda_t^{\text{US}})$ is proxied by measures of financial segmentation, namely (i) the KOF financial globalization index (Dreher, 2006; Gygli, Haelg, Potrafke, and Sturm, 2019) and (ii) the correlation of permanent SDF components across countries as in Sandulescu et al. (2021).[12] Consistent with SDF decompositions into permanent and transitory parts (Sandulescu et al., 2021), we interpret the jump term as loading on the systematic, or permanent, channel, but invoke this only to motivate our segmentation proxies rather than as a separate structural assumption.

Because media coverage is a primary information source for investors, rising emphasis on populist rhetoric functions as a public signal that the U.S. economy may be tilting toward autarky. In geoeconomic terms, higher APR values proxy for elevated fragmentation risk, that is, a higher perceived $\lambda_t$, which in interaction with financial segmentation determines the cross-sectional pattern of expected currency excess returns.

**Hypothesis 1** (Time-series and cross-sectional pricing)**.** *Proposition 1(a) predicts that an increase in $\lambda_t$ raises expected currency excess returns, except in the integrated-markets limiting case $\Lambda_t^{\text{US}} = \Lambda_t^{\text{RoW}} = 0$. In the data, this implies two testable predictions:*

*(a) Higher APR coincides with contemporaneous depreciation of high-exposure currencies.*

*(b) APR betas are negatively priced in the cross-section: currencies that underperform in high-APR states command higher expected excess returns going forward.*

We test Hypothesis 1 by constructing portfolios sorted on APR betas and by running cross-sectional predictive regressions of currency excess returns on past APR betas. We then estimate the market price of risk associated with the APR factor. To mitigate concerns about reverse causality or attention effects, for example news reacting to FX, we focus on

[12]The KOF indices are named after the Konjunkturforschungsstelle (KOF), the Swiss Economic Institute at the Swiss Federal Institute of Technology Zurich (ETH Zurich), where they were developed.

publication-time APR measures, control for competing uncertainty indices, and link APR spikes to well-known events.

**Hypothesis 2** (Heterogeneity by financial segmentation)**.** *Proposition 1(b) predicts that the sensitivity of expected excess returns to U.S. populism, $\lambda_t$, is stronger in more financially segmented countries, that is, where the absolute jump loading $|\Lambda_t^{\text{RoW}}|$ is larger. Segmentation magnifies the gap in effective financial constraints: under the Pástor–Veronesi sign convention $\Lambda_t^{\text{RoW}} > 0$ and $\Lambda_t^{\text{US}} < 0$, the wedge satisfies $\Lambda_t^{\text{RoW}} - \Lambda_t^{\text{US}} = |\Lambda_t^{\text{RoW}}| + |\Lambda_t^{\text{US}}|$. We therefore hypothesize that less financially integrated countries will exhibit a stronger loading on U.S. populism. Because rising U.S. populism represents a geoeconomic threat to financial globalization, we expect these less integrated countries to have more negative APR betas, that is, to load more strongly in absolute value on the APR factor.*

We test Hypothesis 2 by regressing cross-country APR betas on (i) the KOF financial globalization index and (ii) the correlation of permanent SDF components between the U.S. and foreign countries, while controlling for distance and size measures (Lustig and Richmond, 2020; Hassan, 2013). This directly operationalizes the segmentation channel in Proposition 1(b).

Finally, to ensure robustness, we re-estimate our main specifications controlling for standard FX risk factors—the long-dollar, carry, and momentum factors (e.g., Lustig et al., 2011; Asness et al., 2013; Koijen, Moskowitz, Pedersen, and Vrugt, 2018; Menkhoff et al., 2017; Nucera et al., 2024)—as well as volatility and liquidity factors (Menkhoff et al., 2012a), and we verify that the results survive reasonable transaction-cost adjustments.

# 4 U.S. Populist Rhetoric Index

This section describes the construction of our Aggregate Populist Rhetoric (APR) Index. We begin from an established populism dictionary and extend it to capture the modern, short-form style of populist discourse conveyed through social media. We then apply the combined dictionary to U.S. newspaper archives to generate a monthly time series of populist rhetoric, which we interpret as a measure of geoeconomic pressure that amplifies perceptions of fragmentation risk.

## 4.1 Populism Dictionary Construction

**Baseline dictionary (campaign speeches).** Our baseline relies on the populist dictionary developed by Bonikowski and Gidron (2015), constructed from more than 2,400 U.S. presidential campaign speeches between 1952 and 1996. To reduce false positives when classifying newspaper articles, we use the short version of their dictionary, which retains only the strongest-performing terms. The resulting set contains 26 terms ranging from unigrams to up to four-grams. Although some economically salient terms, such as *tariffs*, *tax cuts*, and *immigration*, may be underrepresented (Rodrik, 2021), the dictionary's rhetorical coverage makes it a natural starting point. The terms are listed in Panel A of Table 1.

[TABLE 1 ABOUT HERE]

**Populism 2.0 extension (social media, short texts).** Modern U.S. populism is extensively communicated through short-form social media. To capture this "Populism 2.0" (Gerbaudo, 2018; Kioupkiolis, 2019), we extend the dictionary using Donald Trump's tweets. We obtain the complete archive from thetrumparchive, covering June 16, 2015 (candidacy announcement) through August 20, 2019. We extract candidate terms using

the bi-term topic modeling (BTM) algorithm of Yan et al. (2013), which is designed to discover co-occurrence structure in short texts. The tweet corpus is cleaned with standard text-processing filters, including lowercasing and stop-word and number removal, and we set the number of topics to ten. The BTM outputs per-topic keyword probabilities; five topics exhibit clear populist content. We summarize their most informative terms in Figure 1. To limit false positives, we exclude generic tokens, such as *news*, *fake*, and *media*, while retaining informative bigrams and trigrams, such as *fake news* and *fake news media*. The extension adds terms such as *tariffs*, *border security*, and *illegal immigration*, as well as recurrent slogans such as *Make America Great Again* (MAGA). Panel B of Table 1 lists the additions.

[FIGURE 1 ABOUT HERE]

## 4.2 Newspapers

We apply the combined dictionary to digital archives of major U.S. newspapers. Our primary source is the *New York Times* (NYT), available via Factiva from January 1984 through December 2020. The NYT is widely regarded as a national newspaper of record and provides broad, consistent coverage over nearly four decades, enabling us to capture long-run dynamics in populist rhetoric, including earlier episodes such as the Reagan era and the 1990s anti-globalization movements.

To address concerns about outlet-specific slant and enhance the robustness of our main findings, we construct a second APR index spanning January 2000 through December 2020 using five major newspapers with diverse political orientations: the NYT, the *Washington Post*, the *New York Daily News*, the *New York Post*, and *USA Today*.[13] Digital archives for these

[13] Although the NYT is often viewed as left-leaning (Levy, 2021), the inclusion of more centrist (*USA Today*) and conservative (*New York Post*) outlets helps balance coverage and ensures the index reflects broad political discourse.

additional outlets are available via Factiva beginning in 2000, limiting the sample period for this broader measure. Nonetheless, this multi-source index mitigates single-outlet bias and provides a more comprehensive measure of populist attention across the U.S. media landscape. As we show in Section 6, results strengthen considerably when using this broader-coverage measure.

### 4.3 Constructing the APR Index

We classify an article as "populist" if it appears in the U.S. politics or economics sections and contains at least one dictionary term, from either Bonikowski and Gidron 2015 or our Populism 2.0 extension, in its title or body. Using Factiva, we count monthly populist articles for the NYT sample and for the five-newspaper panel. Following Baker et al. (2016), we scale raw counts by the total number of politics and economics articles in the same month to account for time-varying news volume across outlets. The resulting ratio is our Aggregate Populist Rhetoric (APR) Index. Figure 2 plots the index.

[FIGURE 2 ABOUT HERE]

The APR Index exhibits distinct spikes aligned with well-known episodes featuring populist rhetoric. It rises in the late 1980s, during the Reagan era, peaks around 2000 amid the Seattle WTO protests and the Gore and McCain campaigns, increases again during 2010–2012 with the Tea Party and Occupy Wall Street movement, and reaches its sharpest spike during the 2016 election cycle, remaining elevated through the first Trump presidency. These dynamics map naturally into periods of heightened geoeconomic tension and fragmentation.

For comparison, we also construct split indices using only the Bonikowski and Gidron (2015) terms (PR BG) and only the Populism 2.0 additions (PR P2.0). Figure 3 shows

that these series capture different dynamics: PR BG spikes around the late-1990s Seattle protests, whereas PR P2.0 rises earlier with the ascent of conservative populists in the mid-1990s and peaks under Trump.

[FIGURE 3 ABOUT HERE]

## 4.4 Properties of the APR Index

Panel A of Table 2 reports summary statistics for APR and its components. APR and PR BG are similar in mean and variance, while PR P2.0 exhibits greater skewness and kurtosis. All levels and first differences are stationary according to augmented Dickey–Fuller tests.

Panel B examines correlations with established political and economic risk measures. APR is only weakly related to the Geopolitical Risk Index (Caldara and Iacoviello, 2022), consistent with that index's focus on wars and terrorism rather than anti-establishment rhetoric. APR is also essentially orthogonal to the Macroeconomic Uncertainty Index (Jurado, Ludvigson, and Ng, 2015) and the Economic Policy Uncertainty Index (Baker et al., 2016). By contrast, the measures most closely correlated with APR are Government Policy Sentiment (GPS) from Liu and Shaliastovich (2022) and Trade Policy Uncertainty (TPU) from Caldara, Iacoviello, Molligo, Prestipino, and Raffo (2020). GPS, derived from the University of Michigan Surveys of Consumers, captures households' perceptions of whether government policies are favorable or unfavorable for the economy, while TPU measures newspaper coverage of trade-policy uncertainty.

The strongest overlap arises between the PR P2.0 component and TPU: their correlation is 0.74, reflecting a shared emphasis on protectionist language. Yet this topical overlap masks an important difference in asset-pricing content. As we show in Section 6, APR robustly predicts currency returns, whereas TPU- and GPS-based strategies deliver economically

small and statistically weak spreads. Moreover, augmenting standard currency factors with TPU or GPS reduces portfolio performance, whereas augmenting them with APR substantially improves it. This divergence indicates that APR captures a distinct dimension of geoeconomic risk—related to perceived fragmentation and regime-shift probability—that is not subsumed by trade-policy uncertainty or government-policy sentiment despite their topical overlap.

Panel C of Table 2 presents analogous results for first differences. Overall, APR captures a dimension of political rhetoric that is not subsumed by standard uncertainty measures and provides a geoeconomic signal of potential fragmentation pressures in global financial markets.

[TABLE 2 ABOUT HERE]

# 5 Currency Data and Portfolio Construction

This section describes the exchange-rate data, the construction of excess returns, and the design of currency portfolios sorted on exposure to U.S. populism. The goal is to identify whether populist rhetoric acts as a geoeconomic risk factor that shapes cross-currency returns and reflects underlying processes of financial fragmentation.

## 5.1 Currency Data

Our sample covers a broad set of developed and emerging economies. The full list includes Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Kuwait, Malaysia, Mexico, the Netherlands, New

Zealand, Norway, the Philippines, Poland, Portugal, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, Thailand, Ukraine, and the United Kingdom.[14] Euro-area countries are dropped from the sample after adopting the euro. Our monthly data run from January 1984 through December 2020.[15] This broad coverage ensures that both core and more peripheral currencies are represented, allowing us to study how fragmentation of financial linkages interacts with populist shocks.

[14]We remove observations for currencies that exhibit large and persistent deviations from covered interest parity (CIP).

[15]We use the 25 countries shown in bold in the original list to estimate the model-free foreign SDF in the post-2007 sample, following Sandulescu et al. (2021). We thank Mirela Sandulescu for generously sharing replication codes.

## 5.2 Currency Excess Returns

Exchange-rate data are drawn from Barclays and Reuters, accessed via Thomson Reuters Datastream (Eikon). Let $S_t$ denote the spot exchange rate, measured as units of foreign currency per U.S. dollar, and $F_t$ the one-month forward rate at time $t$. By this convention, an increase in $S_t$ implies an appreciation of the dollar. The realized excess return on a dollar forward position against currency $i$ between $t$ and $t+1$ is

$$rx_{t+1} = f_t - s_{t+1}, \tag{15}$$

where $s_{t+1}$ and $f_t$ denote the log spot rate at $t+1$ and the log one-month forward rate at $t$, respectively. Equivalently, the excess return can be expressed as

$$rx_{t+1} = f_t - s_t - (s_{t+1} - s_t),$$

that is, the forward discount at $t$ minus the subsequent depreciation of the foreign currency. Under CIP, this can be written as

$$rx_{i,t+1} \simeq i_t^* - i_t - (s_{t+1} - s_t),$$

where $i_t^*$ and $i_t$ denote the foreign and U.S. risk-free interest rates, respectively.[16] This standard measure provides the basis for assessing whether populism-induced shifts in perceived regime risk translate into systematic currency premia.

[16]The euro is included in the sample beginning with its launch in January 1999.

## 5.3 Control Variables

We control for several measures of uncertainty and policy risk. EPU is the Economic Policy Uncertainty index of Baker et al. (2016); $UNC^m$, $UNC^q$, and $UNC^y$ are the 1-, 3-, and 12-month-ahead macroeconomic uncertainty indices of Jurado et al. (2015); GPR is the Geopolitical Risk index of Caldara and Iacoviello (2022); VIX is the CBOE Volatility Index; TPU is the Trade Policy Uncertainty index of Caldara et al. (2020); and GPS is the Government Policy Sentiment index of (Liu and Shaliastovich, 2022).

## 5.4 Portfolios Sorted on APR Betas

To examine whether U.S. populism is a priced factor in currency markets, we sort currencies into portfolios by their exposure to the APR Index. If populism represents a geoeconomic shock that heightens fragmentation risk, there should be meaningful dispersion in expected returns between low-beta and high-beta currencies, and the low-minus-high ($LMH$) spread should deliver positive excess returns.

**Rolling betas.** We measure each currency's exposure to U.S. populism by regressing its excess returns on the APR Index:

$$rx_{i,t} = \alpha_{i,t} + \beta_{i,t}^{APR} APR_t + \epsilon_{i,t}, \tag{16}$$

where $rx_{i,t}$ is the realized excess return on currency $i$ in month $t$, and $APR_t$ is the APR Index in the same month. Estimation is conducted in a 60-month rolling window, with a minimum of 36 observations. The resulting slope coefficient, $\beta_{i,t}^{APR}$, is interpreted as the time-varying populism beta. Currencies with more negative betas experience greater losses

when populism rises, and thus have higher exposure to U.S. populism as a fragmentation risk.

**Populism portfolios.** At the end of each month $t$, we sort currencies into five portfolios according to their lagged, that is $t-1$, APR betas. The first portfolio ($P_1$) contains currencies with the lowest betas, while the fifth portfolio ($P_5$) contains those with the highest betas. Portfolios are rebalanced monthly. We then construct the zero-cost spread portfolio $LMH$, which takes a long position in $P_1$ and a short position in $P_5$. If populism exposure is priced as a geoeconomic risk factor, $LMH$ should earn a statistically significant excess return, reflecting compensation for bearing rhetoric-driven fragmentation risk.

**Carry-trade and long-dollar portfolios.** At the end of each month $t$, we sort currencies into five portfolios according to their lagged ($t-1$) forward discounts. Portfolio $P_1$ contains currencies with the lowest forward discounts, while portfolio $P_5$ contains currencies with the highest forward discounts. Portfolios are rebalanced monthly. We then construct the zero-cost carry portfolio, denoted *CAR*, which takes a long position in $P_5$ and a short position in $P_1$. We also construct a long-dollar portfolio, denoted $DOL$, defined as the equal-weighted average excess return from holding the U.S. dollar against all available foreign currencies each month.

**Momentum portfolios.** At the end of each month $t$, we sort currencies into five portfolios according to their lagged, that is $t-1$, excess returns. Portfolio $P_1$ contains past loser currencies, while portfolio $P_5$ contains past winner currencies. Portfolios are rebalanced monthly. We then construct the zero-cost momentum spread portfolio, winners minus losers, which takes a long position in $P_5$ and a short position in $P_1$.

# 6 Empirical Results

This section evaluates the empirical implications of the model in four steps. First, we examine the *contemporaneous* response of exchange rates to rises in APR. Treating higher APR as a proxy for a higher perceived autarky hazard $\lambda_t$, we test whether currencies with greater APR exposure depreciate on impact when U.S. populist rhetoric rises. Second, we examine whether APR exposure is systematically related to financial globalization and segmentation, as predicted by Proposition 1(b). Third, we study the pricing implications of APR risk using APR-sorted currency portfolios and country-level cross-sectional regressions. Finally, we assess whether APR delivers marginal diversification benefits relative to the two alternative measures most closely related to it in the data, namely Trade Policy Uncertainty (TPU) and Government Policy Sentiment (GPS).

## 6.1 Contemporaneous Depreciation and APR Shocks

Hypothesis 1(a) predicts that higher APR coincides with contemporaneous depreciation of currencies with greater exposure to U.S. populist rhetoric. We test this directly using panel regressions in which monthly spot-rate changes are interacted with pre-estimated APR betas.

We begin with the continuous interaction specification:

$$\Delta s_{i,t} = \alpha_i + \tau_t + \gamma \left( \widehat{\beta}_{i,t}^{APR} \cdot APR_t \right) + \mathbf{b}^\top \mathbf{X}_{i,t} + u_{i,t}, \tag{17}$$

where $\Delta s_{i,t} \equiv s_{i,t} - s_{i,t-1}$ is the log spot-rate change, with positive values indicating foreign-currency depreciation against the U.S. dollar; $\alpha_i$ and $\tau_t$ are currency and month fixed effects; $\widehat{\beta}_{i,t}^{APR}$ is the rolling APR beta estimated using a 60-month window; $APR_t$ is the publication-time APR index in month $t$; and $\mathbf{X}_{i,t}$ includes optional controls for the long-dollar, carry, and momentum factors, as well as TPU, GPS, and VIX. Standard errors are clustered by currency.

The month fixed effects absorb the average impact of APR across all currencies, along with common global shocks and broad dollar moves. The coefficient of interest, $\gamma$, therefore identifies whether currencies with different APR exposures respond differentially to a contemporaneous increase in APR. For currency $i$, the marginal effect of APR on spot depreciation is

$$\frac{\partial \Delta s_{i,t}}{\partial APR_t} = \gamma \, \widehat{\beta}_{i,t}^{APR}.$$

Since low-beta currencies have more negative APR betas, Hypothesis 1(a) predicts $\gamma < 0$: when APR rises, currencies with more negative APR betas should depreciate more sharply.

Tables 3 and 4 report estimates of (17) for the full sample and the recent sample, respectively. In the full sample, the coefficient on the interaction term is negative and

statistically significant in every specification, ranging from −0.067 in column (1) to −0.098 in column (7). In the recent sample, the estimates are even larger in magnitude, ranging from −0.044 to −0.148, and remain strongly significant as controls are added. Thus, currencies with more negative APR betas depreciate more sharply when APR rises, exactly as predicted by the model.

[TABLE 3 ABOUT HERE]

[TABLE 4 ABOUT HERE]

To allow for possible nonlinearities and to make the cross-sectional pattern more transparent, we also estimate a binned specification based on APR-beta quintiles. Each month, currencies are sorted into quintiles $Q^k_{i,t}$, $k = 1, \ldots, 5$, according to $\widehat{\beta}^{APR}_{i,t}$, where $Q^1_{i,t}$ contains the most negative APR betas and $Q^5_{i,t}$ the most positive. We then estimate

$$\Delta s_{i,t} = \alpha_i + \tau_t + \sum_{k=2}^{5} \gamma_k \left( Q^k_{i,t} \cdot APR_t \right) + \mathbf{b}^\top \mathbf{X}_{i,t} + u_{i,t}, \tag{18}$$

with $Q^1_{i,t}$ omitted as the baseline category. The coefficients $\gamma_k$ therefore measure the differential response of each quintile relative to the lowest-beta currencies.

Tables 5 and 6 show a clear monotone pattern. In the full sample, the interaction coefficients increase steadily across quintiles, with $Q^3$, $Q^4$, and $Q^5$ all positive and statistically significant in the richer specifications. The filtered investable sample yields very similar, and if anything slightly stronger, results. Figure 4 summarizes this pattern visually: relative to the omitted low-beta quintile, higher-beta currencies depreciate significantly less when APR rises. Put differently, the currencies with the most negative APR betas bear the brunt of populism shocks on impact, while currencies with more positive betas provide partial hedging value in high-APR states.

[TABLE 5 ABOUT HERE]

[TABLE 6 ABOUT HERE]

[FIGURE 4 ABOUT HERE]

Taken together, the continuous and binned interaction results provide direct support for Hypothesis 1(a). APR shocks generate systematic cross-sectional dispersion in contemporaneous currency movements: currencies that underperform in high-APR states, namely those with more negative APR betas, depreciate sharply when populist rhetoric rises, whereas high-beta currencies depreciate less and may provide partial insurance.

## 6.2 Globalization and U.S. Populism

A central theoretical question is whether U.S. populism simply predicts dollar appreciation or instead generates *cross-sectional variation* across foreign currencies. Our framework predicts the latter: although populist rhetoric originates in the United States, its currency-market effects vary systematically across countries through differences in financial segmentation. More peripheral or segmented economies bear more local risk when populism threatens to disrupt cross-border risk sharing, generating stronger depreciation pressures and higher expected returns. This cross-sectional heterogeneity, formalized in Proposition 1(b) and Hypothesis 2, distinguishes our mechanism from a simple dollar-factor story. Guided by the gravity view of exchange-rate factor structure (Lustig and Richmond, 2020), we therefore test whether APR betas covary with empirical measures of segmentation.

Globalization has multiple dimensions—economic, social, and political (Dreher, 2006; Gygli et al., 2019). The KOF indices operationalize these dimensions, and within the

economic dimension distinguish between trade and financial openness. We test whether countries' average APR betas covary with these measures.[17]

Figure 5 shows a strong positive relation between average APR betas and the KOF *financial* globalization index; other KOF dimensions are reported in Appendix Figure A.4. The slope is positive and significant, with a cross-sectional $R^2$ of 0.20. Less financially globalized countries have more negative APR betas and therefore depreciate more when U.S. populism rises. This pattern is consistent with Hypothesis 2, which predicts that populism acts as a geoeconomic shock that intensifies fragmentation pressures and loads more heavily on less integrated countries.

[FIGURE 5 ABOUT HERE]

We verify this result in a multivariate setting with standard controls—country size (Hassan, 2013) and geographic distance to the U.S. (Lustig and Richmond, 2020). Specifically, we run contemporaneous cross-country regressions of the form

$$\hat{\beta}_i^{APR} = \delta_1 + \delta_2 \,\text{KOF Financial Globalization}_i + \delta_3 \mathbf{X}_i + \varepsilon_i, \tag{19}$$

where $\hat{\beta}_i^{APR}$ is the time-series average of rolling APR betas from (16), and $\mathbf{X}_i$ includes average log GDP share, log distance to the U.S., and government effectiveness. Table 7 reports slope estimates, with heteroskedasticity-robust (White, 1980) $t$-statistics in parentheses, over 1984–2020. The coefficient on financial globalization is positive and significant across specifications, and the adjusted $R^2$ ranges from 17% to 49%, indicating that financial openness explains a sizable share of cross-country variation in APR exposure.

[TABLE 7 ABOUT HERE]

[17] Appendix Figures A.2, A.3, and A.5 plot APR betas against geographic distance to the U.S. (Lustig and Richmond, 2020), country size (Hassan, 2013), and institutional quality (accountability, regulatory quality, government effectiveness, and rule of law).

The KOF index captures overall external financial linkages, but not specifically integration with the U.S. financial system. Following Sandulescu et al. (2021), we therefore use an alternative proxy for bilateral fragmentation: the correlation between the *permanent* components of the U.S. and foreign SDFs. We construct model-free SDFs from domestic asset returns, including equities, long- and short-maturity government bonds, and FX returns deflated by CPI, and obtain permanent components using the minimum-dispersion approach of Sandulescu et al. (2021). Formally, for country $i$,

$$\begin{aligned} \underline{M_i}(\alpha) &= \arg\min_{M_i} \frac{1}{\alpha(\alpha-1)} \log \mathbb{E}\left[M_i^{\alpha}\right] \\ \text{s.t.} \quad & \mathbb{E}[M_i \mathbf{R_i}] = \mathbf{1}, \quad M_i > 0, \end{aligned} \tag{20}$$

with special cases $\alpha = 0$ (minimum entropy) and $\alpha = 2$ (minimum variance). Segmentation is introduced by excluding foreign stocks and long bonds from country $i$'s span. Figure 6 shows that APR betas are strongly related to the correlation of the U.S. and foreign *permanent* minimum-entropy SDF components,[18] again consistent with Hypothesis 2.

[FIGURE 6 ABOUT HERE]

Table 8 reports the corresponding cross-sectional regressions:

$$\hat{\beta}_i^{APR} = \delta_1 + \delta_2 \,\mathrm{corr}(M_{\mathrm{US}}^P, M_i^P) + \delta_3 \mathbf{X}_i + \varepsilon_i, \tag{21}$$

estimated over 2007–2020 for the subset of countries described in Section 5.1. The correlation coefficient is positive and significant, with $R^2 \approx 0.17$, reinforcing the bilateral fragmentation channel.

[TABLE 8 ABOUT HERE]

[18] Results are similar with minimum-variance SDFs.

## 6.3 Populism-Sorted Currency Portfolios

We next sort currencies on APR exposure and examine portfolio performance. Table 9 reports summary statistics for the full sample (Panel A) and the recent sample (Panel B).

[TABLE 9 ABOUT HERE]

*Panel A (Full Sample).* For the full-sample NYT-based APR portfolios, average betas rise monotonically from $P_1$ to $P_5$, from about $-0.47\%$ to $0.30\%$. Returns decline with APR beta: $P_1$ earns a positive and statistically significant average excess return of 3.09%, while $P_5$ slightly underperforms. The $LMH$ spread is positive and significant, with an annualized average excess return of 3.19%, a Newey–West $t$-statistic of 2.19, and a Sharpe ratio of 0.38. Decomposing the spread shows that it is driven primarily by spot-rate changes rather than by forward discounts, consistent with APR capturing a geoeconomic risk that is reflected mainly in currency valuation.

The interpretation follows directly from Proposition 1 and Hypothesis 1. $P_1$ currencies, with negative APR betas, perform poorly in high-APR states and therefore command higher expected excess returns ex ante. By contrast, $P_5$ currencies, with positive APR betas, hedge high-APR states and earn lower expected returns.

*Panel B (Recent Sample).* In the more recent sample, where APR is constructed from the full set of five newspapers, the negative relation between average returns and APR betas becomes stronger. The $LMH$ spread remains statistically significant, annualized 5.21% with $t = 2.63$, and achieves a Sharpe ratio of 0.62, comparable to or exceeding typical carry and momentum strategies. In this sample, the spread reflects both spot-rate changes and forward discounts, although the spot component remains economically important. These results reinforce the conclusion that APR exposure is priced in the cross section of currency returns.

Figure 7 plots the volatility-adjusted cumulative $LMH$ return,[19] which tends to perform especially well during the George W. Bush and Donald Trump administrations.

[FIGURE 7 ABOUT HERE]

## 6.4 Populism-Sorted Portfolios and Standard Currency Strategies

The next question is whether the returns to the APR-sorted spread portfolio are subsumed by standard currency strategies. To assess this, we regress the $LMH_{APR}$ portfolio on the long-dollar, carry, and momentum factors. Panel A of Table 10 shows that the loading on the long-dollar factor is insignificant, while the intercept is economically and statistically meaningful, at about 0.3% per month ($t = 2.08$). Adding the carry factor leaves the alpha significant, and including momentum makes the alpha larger and more precisely estimated ($t = 3.44$). Panel B reports a similar pattern for the recent sample. Taken together, these results indicate that the $LMH_{APR}$ portfolio earns positive abnormal returns relative to conventional currency factors, consistent with compensation for a distinct geoeconomic risk.

[TABLE 10 ABOUT HERE]

[19] We scale by the ratio of annualized S&P 500 volatility to $LMH$ volatility.

## 6.5 Country-Level Asset Pricing Tests

We next estimate the cross-sectional price of APR risk using individual currencies as test assets.

**Test assets.** Using individual currencies rather than portfolios preserves cross-sectional dispersion in estimated betas and can yield more efficient estimates of risk prices (Ang, Liu, and Schwarz, 2018; Bali, Brown, and Tang, 2017); see also Barroso, Kho, Rouxelin, and Yang (2021) for applications in currency markets.

**Cross-sectional predictive regressions.** Using $\hat{\beta}_{i,t}^{APR}$ from (16), we run monthly cross-sectional regressions of the form

$$rx_{i,t+1} = \lambda_{0,t} + \lambda_{1,t}\,\hat{\beta}_{i,t}^{APR} + \lambda_{2,t} X_{i,t} + \epsilon_{i,t+1}, \tag{22}$$

where $X_{i,t}$ includes currency-level volatility and illiquidity controls, following Menkhoff et al. (2012a). Table 11 reports the time-series averages of the estimated risk prices, together with Newey–West $t$-statistics and cross-sectional $R^2$ values.

[TABLE 11 ABOUT HERE]

*Panel A (Full Sample).* The univariate specification yields a significantly negative price of APR risk ($\lambda_{APR} \approx -0.006$, $t = -2.94$), implying that currencies with lower APR betas earn higher expected returns in the following month. Moving from $P_1$ to $P_5$, with an average difference of $\Delta\beta^{APR} \approx 0.77$ percentage points, implies a decline in expected return of roughly 0.46% per month. Adding volatility or illiquidity controls leaves the estimated APR risk price negative and statistically significant; in the specification with both controls, the $t$-statistic remains $-2.64$.

*Panel B (Recent Sample)*. In the recent sample, APR betas remain negatively and significantly priced in both the univariate and multivariate specifications, although the estimates are somewhat smaller in magnitude and less precisely estimated than in the full sample. Taken together, these results indicate that APR exposure is a priced source of cross-sectional variation in currency excess returns, consistent with its interpretation as a geoeconomic risk factor associated with fragmentation pressures.

## 6.6 Diversification Benefits and Marginal Contribution

A central question is whether APR represents a genuinely distinct risk factor or merely repackages existing policy-uncertainty measures. To address this directly, we assess whether the APR portfolio improves the performance of standard currency investment strategies and compare it with the two alternative measures most closely related to APR in the data, TPU and GPS.

Table 12 reports the annualized mean excess return, annualized standard deviation, and Sharpe ratio for portfolios that combine the long-dollar, carry, and momentum factors, both alone and augmented with APR, TPU, or GPS. Panel A presents results for the full sample, January 1984 to December 2020, based on *The New York Times*, and Panel B presents results for the recent sample, January 2000 to December 2020, based on five major newspapers.

[TABLE 12 ABOUT HERE]

The baseline portfolio that combines the long-dollar, carry, and momentum factors achieves annualized Sharpe ratios of 0.94 in the full sample and 0.84 in the recent sample. Augmenting this strategy with APR substantially improves risk-adjusted performance: the Sharpe ratio rises to 1.08 in both samples, representing increases of 15% in the full sample

and 29% in the recent sample. These are economically large gains, pushing the strategy's risk-adjusted performance well above standard benchmarks.

The horse race with the two closest alternative measures is decisive. Adding TPU reduces the Sharpe ratio to 0.74 in the full sample and 0.58 in the recent sample. Adding GPS reduces it further, to 0.64 and 0.42, respectively. Thus, among the measures most closely related to APR, only APR consistently improves portfolio performance; TPU and GPS both detract from it.

The improvement from APR therefore cannot be attributed to generic "political uncertainty" or "policy sentiment." Instead, APR appears to capture a distinct dimension of geoeconomic risk—the perceived probability of a globalization-to-autarky regime shift—that is imperfectly correlated with standard FX factors and provides genuine diversification value. This is consistent with our theoretical framework, in which populist rhetoric signals fragmentation risk that alters participation constraints in international markets and generates priced currency premia orthogonal to both traditional currency factors and broader uncertainty measures.

# 7 Robustness

This section shows that our main results are robust to a broad set of additional checks. We proceed in seven steps. First, we relate APR to firm-level exposure to trade globalization. Second, we control for standard currency factors in cross-sectional pricing specifications. Third, we restrict the sample to an investable currency universe using standard market-friction filters. Fourth, we run two-pass Fama–MacBeth asset-pricing tests with alternative factor sets. Fifth, we implement the three-pass Fama–MacBeth procedure of Giglio and Xiu (2021). Sixth, we account for realistic transaction costs. Seventh, we examine trading activity using data from CLS, the large international FX settlement system. Taken together, these results show that the APR premium is robust and consistent with a priced geoeconomic shock associated with fragmentation risk.

**Firm-level exposure to globalization and the APR index.** In the Pástor and Veronesi (2021) framework, populist shifts proxy a move from globalization to autarky. If APR captures that risk, it should comove with outcomes tied to trade integration. Following Barrot, Loualiche, and Sauvagnat (2019), we sort U.S. manufacturing firms into quintiles by shipping costs, measured as a percentage of importer price, where lower shipping costs indicate greater exposure to trade globalization. We then compute correlations between quintile returns, both equally weighted and value weighted, the low-minus-high ($LMH$) firm portfolio, and APR. Table 13 reports the results.

[TABLE 13 ABOUT HERE]

In Panel A, the low-cost, high-globalization portfolio is positively correlated with APR, and the correlation declines almost monotonically from $P_1$ to $P_5$. The high-cost portfolio is negatively correlated with APR, indicating that firms with less trade exposure tend to hedge

against rising populist rhetoric. These patterns remain in the value-weighted portfolios and after controlling for the Fama–French three and five factors in Panels B and C. This exercise speaks primarily to trade globalization on the equity side; by contrast, our main FX results load on *financial* globalization and its potential fragmentation, as documented in Figure 5.

**Alternative pricing factors.** We next test whether APR exposure is incremental to standard currency factors. Let $DOL$ denote the long-dollar factor, defined as the average excess return from holding foreign currencies against the U.S. dollar, let $CAR$ denote the standard carry factor (Lustig et al., 2011), and let $MOM$ denote the momentum factor. We augment the cross-sectional predictive regression as follows:

$$rx_{i,t+1} = \lambda_{0,t} + \lambda_{1,t}\hat{\beta}_{i,t}^{APR} + \lambda_{2,t}\hat{\beta}_{i,t}^{DOL} + \lambda_{3,t}\hat{\beta}_{i,t}^{CAR} + \lambda_{4,t}\hat{\beta}_{i,t}^{MOM} + \epsilon_{i,t+1}. \tag{23}$$

Table 14 reports the results.

[TABLE 14 ABOUT HERE]

In the full sample (Panel A), the price of APR risk is negative and significant in the univariate case ($\lambda_{APR} = -0.007$, Newey–West $t = -2.44$), remains significant after controlling for the long-dollar factor, and becomes even stronger when the carry and momentum factors are added. The price of long-dollar risk is insignificant, consistent with the existing literature. The recent sample (Panel B) yields the same qualitative conclusion: APR exposure predicts the cross section beyond standard currency factors, reinforcing its interpretation as compensation for a distinct geoeconomic risk.

**Filtered sample.** Trading frictions can impair investability. Following Della Corte, Sarno, Schmeling, and Wagner (2022), we begin with 48 countries and exclude country-month

observations with fixed or quasi-fixed exchange-rate regimes and with capital-account restrictions, identified using negative Chinn–Ito values. Portfolio sorts on APR betas for this filtered sample are reported in Table A.5 of the Internet Appendix.

The $LMH$ portfolio continues to earn positive and statistically significant excess returns in both the full and recent samples, indicating that the premium is not driven by non-investable segments of the currency universe or by mechanically segmented exchange-rate regimes.

**Fama–MacBeth asset-pricing tests.** We next estimate risk prices using standard two-pass Fama–MacBeth regressions with test assets given by six APR-sorted currency portfolios, formed on lagged APR betas. We compare two sets of specifications. First, in the two-factor case, we compare a model that includes the long-dollar factor with a model that includes the APR factor. Second, in the three-factor case, we compare a benchmark model with the long-dollar, carry, and momentum factors to an alternative model in which the long-dollar factor is replaced by the APR factor. Table 15 reports the second-pass estimates, together with Newey–West $t$-statistics, RMSE, cross-sectional $R^2$, and the GRS statistic.

[TABLE 15 ABOUT HERE]

The results support the view that APR captures a distinct source of priced currency risk. In the full sample, the APR factor is significantly priced in the two-factor specification, whereas the long-dollar factor is not. In the three-factor comparison, replacing the long-dollar factor with APR improves model fit, raising the cross-sectional $R^2$ and lowering the GRS statistic. The same qualitative pattern holds in the recent sample, where the pricing role of APR remains evident and the gains in fit are, if anything, stronger. Overall, these results suggest that APR contains information about the cross section of currency returns that is not captured by the standard long-dollar factor.

**Three-pass Fama–MacBeth.** We next implement the three-pass procedure of Giglio and Xiu (2021), which is designed to mitigate measurement-error and omitted-factor concerns in linear factor-pricing tests. The 48 test assets consist of six portfolios each for carry, short-horizon momentum, long-horizon momentum, APR, value, global volatility, global liquidity, and uncertainty. We again compare two-factor models featuring either the long-dollar factor or the APR factor, and three-factor models in which the benchmark long-dollar, carry, and momentum specification is contrasted with an alternative in which the long-dollar factor is replaced by APR. Table 16 summarizes the results.

[TABLE 16 ABOUT HERE]

The three-pass estimates reinforce the main message from the baseline Fama–MacBeth tests. The APR factor remains significantly priced, and specifications that include APR consistently outperform their counterparts that rely on the long-dollar factor. In the three-factor comparison, the model with APR delivers a substantially higher fitted $R^2$ than the benchmark model with the long-dollar factor; in the full sample, for example, $R^2_{APR} \approx 0.96$ versus $R^2_{DOL} \approx 0.07$. The same pattern is present in the recent sample. Taken together, these results indicate that the pricing content of APR is not an artifact of estimation error and is robust to a richer cross section of test assets.

**Transaction costs.** Quoted FX spreads overstate effective trading costs. Following Menkhoff et al. (2012b) and Menkhoff et al. (2017), and consistent with Gilmore and Hayashi (2011) and Cespa, Gargano, Riddiough, and Sarno (2022), we scale WM/R quoted spreads by 25% to approximate effective spreads. Table 17 shows that the price of APR risk remains negative and significant in cross-sectional regressions after transaction-cost adjustments (Panel A). APR-sorted spread portfolios that go long low-APR-beta currencies and short high-APR-beta currencies continue to earn economically and statistically significant excess

returns after costs (Panel B). Hence, the geoeconomic premium is not subsumed by trading frictions.

[TABLE 17 ABOUT HERE]

**CLS FX order flows.** Finally, we examine how APR exposure varies with trading activity. We use CLS aggregated spot-flow data from Quandl across up to 16 U.S. bilateral currency pairs, covering more than half of global FX settlement volume.[20] We construct monthly abnormal volume as the deviation from the trailing 12-month moving average and estimate

$$\hat{\beta}_{i,t}^{APR} = \alpha_i + \tau_t + \delta_2 \,\text{AbnormalVolume}_{i,t} + \varepsilon_{i,t}, \tag{24}$$

with currency ($\alpha_i$) fixed effects and time ($\tau_t$) fixed effects; standard errors are clustered by currency. Table 18 reports a significant negative association between APR betas and total buy-side spot abnormal volume ($\delta_2 < 0$, $t = -2.54$). When we decompose flows by participant type, the effect is driven by funds: higher APR exposure is associated with lower fund abnormal trading volume. This pattern is consistent with de-risking in high-APR states and with our interpretation of APR as a geoeconomic fragmentation shock.

[TABLE 18 ABOUT HERE]

[20] Pairs include Australia, Canada, the Euro Area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, Hungary, South Africa, Iceland, Mexico, Hong Kong, Singapore, and Denmark.

# 8 Conclusion

This paper studies whether political rhetoric risk is priced in currency markets. We construct a newspaper-based measure of U.S. populist rhetoric—the Aggregate Populist Rhetoric (APR) Index—and embed it in a nominal asset-pricing framework with regime-switching risk. The index, constructed from major U.S. newspapers, rises sharply during canonical populist episodes and covaries cross-sectionally with measures of financial segmentation vis-à-vis the United States, including lower KOF financial globalization and weaker correlation of permanent stochastic discount factor components.

On the theoretical side, we adapt Pástor and Veronesi (2021) to the exchange-rate setting and show that an increase in populist rhetoric raises the perceived hazard of a globalization-to-autarky regime switch. This hazard loads on the jump component of the cross-country SDF differential and increases expected currency excess returns, with stronger effects when cross-border risk sharing is limited. In this way, the paper connects political rhetoric to the emerging literature on geoeconomics by showing how rhetoric can operate as a geoeconomic force through its effect on perceived fragmentation risk.

Empirically, we first document the contemporaneous response of exchange rates to APR shocks. Panel regressions of monthly spot-rate changes show that when APR rises, currencies with more negative APR betas depreciate more sharply on impact, whereas currencies with more positive APR betas depreciate less and can provide partial hedging value. These contemporaneous responses line up closely with the cross-sectional pattern of ex ante APR exposures and provide direct support for the mechanism highlighted in the model.

We then turn to expected-return implications. Sorting currencies by APR exposure yields a monotone spread in average excess returns, and the resulting low-minus-high

($LMH$) portfolio delivers economically large and statistically significant returns, with a Sharpe ratio of 0.62 in the recent sample. Cross-sectional predictive regressions confirm that APR betas are negatively priced: currencies that are most vulnerable when populist rhetoric rises subsequently earn higher excess returns. These results are strongest in the post-2000 period and remain robust in an investable filtered sample.

A central result of the paper is that APR does not operate merely as a dollar-wide shock. Instead, its effects vary systematically with financial segmentation. Countries with lower financial globalization and weaker permanent-SDF correlation with the United States exhibit more negative APR betas, larger contemporaneous depreciations when APR rises, and higher expected returns thereafter. This segmentation channel, predicted by the model and confirmed in the data, explains why more peripheral currencies are especially exposed to rising U.S. populist rhetoric.

We also show that APR provides economically meaningful diversification benefits. Augmenting a standard currency portfolio based on the long-dollar, carry, and momentum factors with APR raises the annualized Sharpe ratio above 1.0, an improvement of 15–29% depending on the sample. In the relevant horse race against the two alternative measures most closely related to APR in the data, Trade Policy Uncertainty (TPU) and Government Policy Sentiment (GPS), only APR consistently improves performance. This finding supports the interpretation that APR captures a distinct form of geoeconomic risk rather than a generic policy-uncertainty signal.

These findings are robust to a wide range of additional checks, including controls for standard currency factors, alternative asset-pricing procedures, investability filters, transaction-cost adjustments, and evidence from CLS order flows showing that funds reduce trading activity in currencies with high APR exposure.

Overall, the paper identifies a new dimension of political risk in international asset pricing. By linking populist rhetoric to nominal SDF dynamics, documenting both its contemporaneous effect on exchange rates and its role in shaping expected currency returns, and situating these results within the broader geoeconomics agenda, the paper provides a bridge between political communication, fragmentation risk, and international finance. More broadly, the APR Index offers a scalable way to study how rhetoric transmits politically induced regime risk into asset prices, opening new directions for research on political shocks, statecraft, and global financial markets.

# References


Ang, A., J. Liu, and K. Schwarz (2018). Using stocks or portfolios in tests of factor models. In *AFA 2009 San Francisco Meetings Paper*.

Asness, C. S., T. J. Moskowitz, and L. H. Pedersen (2013). Value and momentum everywhere. *The journal of finance 68*(3), 929–985.

Avdjiev, S., W. Du, C. Koch, and H. S. Shin (2019). The dollar, bank leverage, and deviations from covered interest parity. *American Economic Review: Insights 1*(2), 193–208.

Baker, S. R., N. Bloom, and S. J. Davis (2016). Measuring economic policy uncertainty. *The Quarterly Journal of Economics 131*(4), 1593–1636.

Balcere, I. (2014). Populism in the manifestos of latvian political parties: Increasingly used but ineffective? *Journal of Baltic Studies 45*(4), 477–497.

Bali, T. G., S. J. Brown, and Y. Tang (2017). Is economic uncertainty priced in the cross-section of stock returns? *Journal of Financial Economics 126*(3), 471–489.

Bank for International Settlements (2025, September). Triennial Central Bank Survey of foreign exchange and Over-the-counter (OTC) derivatives markets in 2025. Technical report, Bank for International Settlements, Basel. Available at https://www.bis.org/statistics/rpfx25.htm.

Barrenchea, R. T. and N. Lupu (2018). Populism and the use of digital media in latin america. *Electoral Studies 55*, 25–33. Applies supervised text methods to classify populist rhetoric in online content.

Barroso, P., F. Kho, F. Rouxelin, and L. Yang (2021). Cutting the gordian knot of carry and imbalances. *Available at SSRN 3232396*.

Barrot, J.-N., E. Loualiche, and J. Sauvagnat (2019). The globalization risk premium. *The Journal of Finance 74*(5), 2391–2439.

Bayerlein, M., M. Funke, and C. Trebesch (2019). Populism and economic upheavals since 1870: A quantitative analysis.

Bonikowski, B. and N. Gidron (2015). The populist style in american politics: Presidential campaign discourse, 1952–1996. *Social Forces 94*(4), 1593–1621.

Bos, L. and K. Brants (2014). Populist rhetoric in politics and media: A longitudinal study of the netherlands. *European Journal of Communication 29*(6), 703–719.

Burnside, A. C. and J. J. Graveline (2020). On the asset market view of exchange rates. *The Review of Financial Studies 33*(1), 239–260.

Cahan, J., C. B. Malone, J. G. Powell, and U. W. Choti (2005). Stock market political cycles in a small, two-party democracy. *Applied Economics Letters 12*(12), 735–740.

Caldara, D. and M. Iacoviello (2022). Measuring geopolitical risk. *American Economic Review 112*(4), 1194–1225.

Caldara, D., M. Iacoviello, P. Molligo, A. Prestipino, and A. Raffo (2020). The economic effects of trade policy uncertainty. *Journal of Monetary Economics 109*, 38–59.

Cespa, G., A. Gargano, S. J. Riddiough, and L. Sarno (2022). Foreign exchange volume. *The Review of Financial Studies 35*(5), 2386–2427.

Clayton, C., M. Maggiori, and J. Schreger (2024). A theory of economic coercion and fragmentation. *Available at SSRN 4767131*.

Clayton, C., M. Maggiori, and J. Schreger (2025, May). Putting economics back into geoeconomics. Research Paper 5204460, Columbia Business School. Last revised June 5, 2025; SSRN / also NBER WP 33681.

Colacito, R., S. J. Riddiough, and L. Sarno (2020). Business cycles and currency returns. *Journal of Financial Economics 137*(3), 659–678.

Colantone, I. and P. Stanig (2018). The trade origins of economic nationalism: Import competition and voting behavior in western europe. *American Journal of Political Science 62*(4), 936–953.

Corte, P. D., S. J. Riddiough, and L. Sarno (2016). Currency premia and global imbalances. *The Review of Financial Studies 29*(8), 2161–2193.

Della Corte, P., L. Sarno, M. Schmeling, and C. Wagner (2022). Exchange rates and sovereign risk. *Management Science 68*(8), 5591–5617.

Döpke, J. and C. Pierdzioch (2006). Politics and the stock market: Evidence from germany. *European Journal of Political Economy 22*(4), 925–943.

Dornbusch, R. and S. Edwards (2007). *The macroeconomics of populism in Latin America*. University of Chicago Press.

Dreher, A. (2006). Does globalization affect growth? evidence from a new index of globalization. *Applied economics 38*(10), 1091–1110.

Du, W., A. Tepper, and A. Verdelhan (2018). Deviations from covered interest rate parity. *Journal of Finance 73*(3), 915–957.

Farrell, H. and A. L. Newman (2019, July). Weaponized interdependence: How global economic networks shape state coercion. *International Security 44*(1), 42–79.

Fernández-Villaverde, J., T. Mineyama, and D. Song (2025). Are we fragmented yet? measuring geopolitical fragmentation and its causal effect. Technical report, National Bureau of Economic Research.

Filippou, I., A. E. Gozluklu, M. T. Nguyen, and G. Viswanath-Natraj (2025). Signal in the noise: Trump tweets and the currency market. *Journal of International Money and Finance*, 103343.

Filippou, I., A. E. Gozluklu, and M. P. Taylor (2018). Global political risk and currency momentum. *Journal of Financial and Quantitative Analysis 53*(5), 2227–2259.

Filippou, I. and M. P. Taylor (2023). Forward-looking policy rules and currency premia. *Journal of Financial and Quantitative Analysis 58*(1), 449–483.

Filippou, I., M. P. Taylor, and Z. Wang (2024). Media sentiment and currency reversals. *Journal of Financial and Quantitative Analysis 59*(3), 1401–1429.

Funke, M., M. Schularick, and C. Trebesch (2023). Populist leaders and the economy. *American Economic Review 113*(12), 3249–3288.

Gabaix, X. and M. Maggiori (2015). International liquidity and exchange rate dynamics. *Quarterly Journal of Economics 130*(3), 1369–1420.

Gerbaudo, P. (2018). Social media and populism: an elective affinity? *Media, culture & society 40*(5), 745–753.

Giglio, S. and D. Xiu (2021). Asset pricing with omitted factors. *Journal of Political Economy 129*(7), 1947–1990.

Gilmore, S. and F. Hayashi (2011). Emerging market currency excess returns. *American Economic Journal: Macroeconomics 3*(4), 85–111.

Guiso, L., H. Herrera, M. Morelli, and T. Sonno (2018). Populism: Demand and supply. *Essays on Globalisation and Conflicts, Populism and Firm Heterogeneity*, 59.

Guriev, S. and E. Papaioannou (2022). The political economy of populism. *Journal of Economic Literature 60*(3), 753–832.

Gygli, S., F. Haelg, N. Potrafke, and J.-E. Sturm (2019). The kof globalisation index–revisited. *The Review of International Organizations 14*, 543–574.

Hassan, R., E. Loualiche, A. R. Pecora, and C. Ward (2023). International trade and the risk in bilateral exchange rates. *Journal of Financial Economics 150*(2), 103711.

Hassan, T. A. (2013). Country size, currency unions, and international asset returns. *The Journal of Finance 68*(6), 2269–2308.

Hawkins, K. and L. Littvay (2019). *Contemporary US populism in comparative perspective*. Cambridge University Press.

Hawkins, K. A. (2009). Is chávez populist? measuring populist discourse in comparative perspective. *Comparative Political Studies 42*(8), 1040–1067.

Hawkins, K. A., R. Aguilar, B. C. Silva, E. K. Jenne, B. Kocijan, and C. R. Kaltwasser (2019). Measuring populist discourse: The global populism database. In *EPSA Annual Conference in Belfast, UK, June*, pp. 20–22.

Hawkins, K. A., R. E. Carlin, L. Littvay, and C. R. Kaltwasser (2019). The ideational approach to populism: Concept, theory, and analysis. In *The Ideational Approach to Populism: Concept, Theory, and Analysis*, pp. 1–24. Routledge. Includes automated text analysis applications for populism measurement.

Horn, S., C. M. Reinhart, and C. Trebesch (2020, June). Coping with disasters: Two centuries of international official lending. NBER Working Paper 27343, National Bureau of Economic Research.

Jagers, J. and S. Walgrave (2007). Populism as political communication style: An empirical study of political parties' discourse in belgium. *European Journal of Political Research 46*(3), 319–345.

Jurado, K., S. C. Ludvigson, and S. Ng (2015). Measuring uncertainty. *American Economic Review 105*(3), 1177–1216.

Kioupkiolis, A. (2019). Populism 2.0: New movements towards progressive populism 1. In *The Populist Radical Left in Europe*, pp. 168–193. Routledge.

Koijen, R. S., T. J. Moskowitz, L. H. Pedersen, and E. B. Vrugt (2018). Carry. *Journal of Financial Economics 127*(2), 197–225.

Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. *American economic review 111*(3), 831–870.

Liu, Y. and I. Shaliastovich (2022). Government policy approval and exchange rates. *Journal of Financial Economics 143*(1), 303–331.

Lucas, Robert E., J. (1978). Asset prices in an exchange economy. *Econometrica 46*(6), 1429–1445.

Lustig, H. and R. J. Richmond (2020). Gravity in the exchange rate factor structure. *The Review of Financial Studies 33*(8), 3492–3540.

Lustig, H., N. Roussanov, and A. Verdelhan (2011). Common risk factors in currency markets. *The Review of Financial Studies 24*(11), 3731–3777.

Lustig, H. and A. Verdelhan (2007). The cross section of foreign currency risk premia and consumption growth risk. *American Economic Review 97*(1), 89–117.

Luttwak, E. N. (1990). From geopolitics to geo-economics: Logic of conflict, grammar of commerce. *The National Interest 20*, 17–23.

Maggiori, M. (2017). Financial intermediation, international risk sharing, and reserve currencies. *American Economic Review 107*(10), 3038–3071.

Maggiori, M., B. Neiman, and J. Schreger (2019). The rise of the dollar and the fall of the euro as international currencies. *AEA Papers  Proceedings 109*, 521–526.

Maggiori, M., B. Neiman, and J. Schreger (2020). International currencies and capital allocation. *Journal of Political Economy 128*(6), 2019–2066.

Mallin, F. and J. D. Sidaway (2024). Critical geoeconomics: A genealogy of writing politics, economy and space. *Transactions of the Institute of British Geographers 49*(3), 522–537.

Menkhoff, L., L. Sarno, M. Schmeling, and A. Schrimpf (2012a). Carry trades and global foreign exchange volatility. *The Journal of Finance 67*(2), 681–718.

Menkhoff, L., L. Sarno, M. Schmeling, and A. Schrimpf (2012b). Currency momentum strategies. *Journal of Financial Economics 106*(3), 660–684.

Menkhoff, L., L. Sarno, M. Schmeling, and A. Schrimpf (2017). Currency value. *The Review of Financial Studies 30*(2), 416–441.

Mueller, P., A. Stathopoulos, and A. Vedolin (2017). International correlation risk. *Journal of Financial Economics 126*(2), 270–299.

Newey, W. K. and K. D. West (1987). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica 55*(3), 703–708.

Nucera, F., L. Sarno, and G. Zinna (2024). Currency risk premiums redux. *The Review of Financial Studies 37*(2), 356–408.

Pástor, L. and P. Veronesi (2021). Inequality aversion, populism, and the backlash against globalization. *The Journal of Finance 76*(6), 2857–2906.

Richmond, R. J. (2019). Trade network centrality and currency risk premia. *The Journal of Finance 74*(3), 1315–1361.

Rodrik, D. (2018). Is populism necessarily bad economics? *AEA Papers and Proceedings 108*(May), 196–199.

Rodrik, D. (2021). Why does globalization fuel populism? economics, culture, and the rise of right-wing populism. *Annual Review of Economics 13*, 133–170.

Rooduijn, M. and T. Pauwels (2011). Measuring populism: Comparing two methods of content analysis. *West European Politics 34*(6), 1272–1283.

Rooduijn, M., S. Van Kessel, C. Froio, A. Pirro, S. De Lange, D. Halikiopoulou, P. Lewis, C. Mudde, and P. Taggart (2019). The populist: An overview of populist, far right, far left and eurosceptic parties in europe.

Sachs, J. D. (1989). Social conflict and populist policies in latin america.

Sandulescu, M., F. Trojani, and A. Vedolin (2021). Model-free international stochastic discount factors. *The Journal of Finance 76*(2), 935–976.

Santa-Clara, P. and R. Valkanov (2003). The presidential puzzle: Political cycles and the stock market. *The Journal of Finance 58*(5), 1841–1872.

Sattler, T. (2013). Do markets punish left governments? *The Journal of Politics 75*(2), 343–356.

TeamPopulism (2025, October). Team populism: https://populism.byu.edu/. Accessed: 2025-10-31.

Trebesch, C. and J. Zettelmeyer (2018). Ecb interventions in distressed sovereign debt markets: The case of greek bonds. *IMF Economic Review 66*(2), 287–332.

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: journal of the Econometric Society*, 817–838.

Worthington, A. C. (2009). Political cycles in the australian stock market since federation. *Australian Economic Review 42*(4), 397–409.

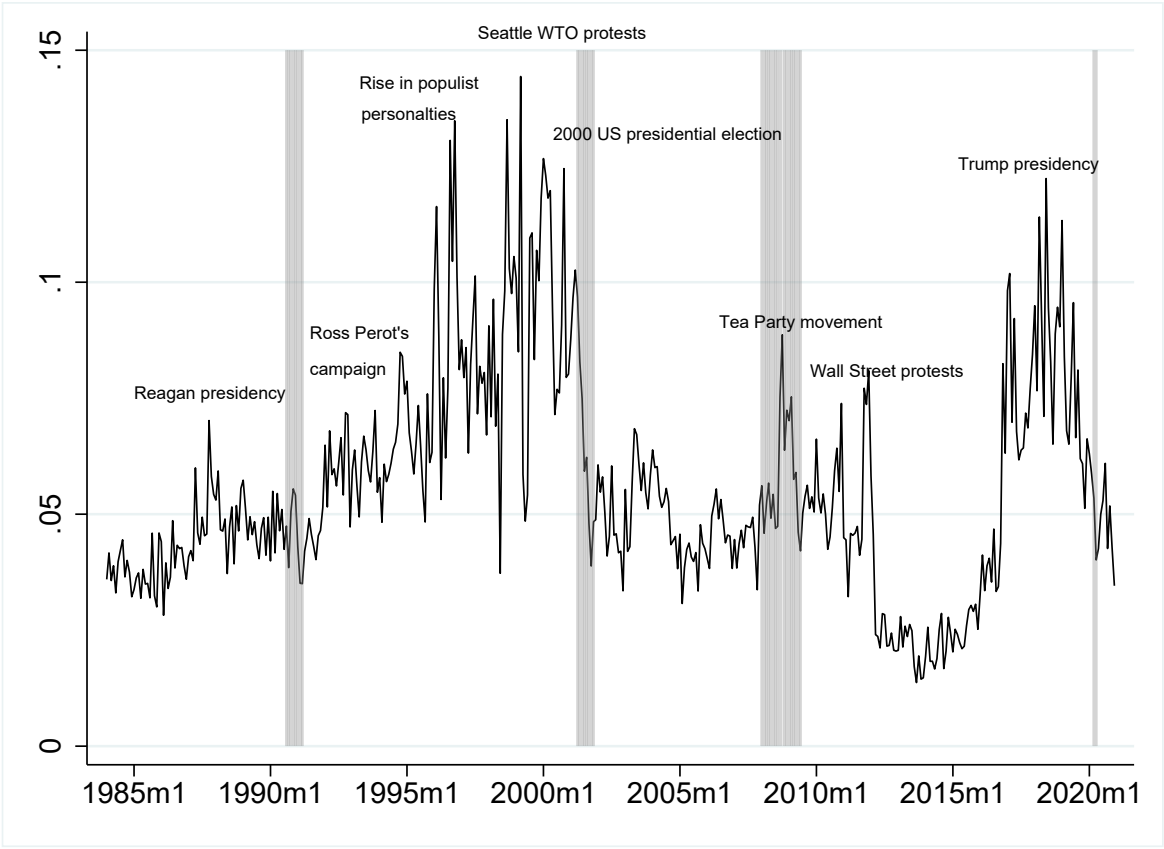
Yan, X., J. Guo, Y. Lan, and X. Cheng (2013). A biterm topic model for short texts. In *Proceedings of the 22nd international conference on World Wide Web*, pp. 1445–1456.

**Figure 1. Top Keywords from Populism Topics**



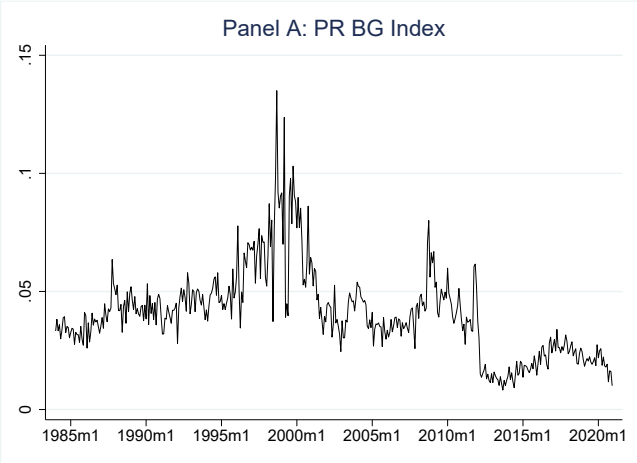

*Notes:* The figure displays the top keywords associated with selected populism topics identified by the bi–term topic model. Word clouds illustrate the most frequent and distinctive terms for each topic, with font size proportional to relative frequency within that topic. Shown here are Topics 1, 3, 5, 6, and 10, which correspond to core dimensions of populist rhetoric.

**Figure 2. U.S. Aggregate Populist Rhetoric (APR) Index**

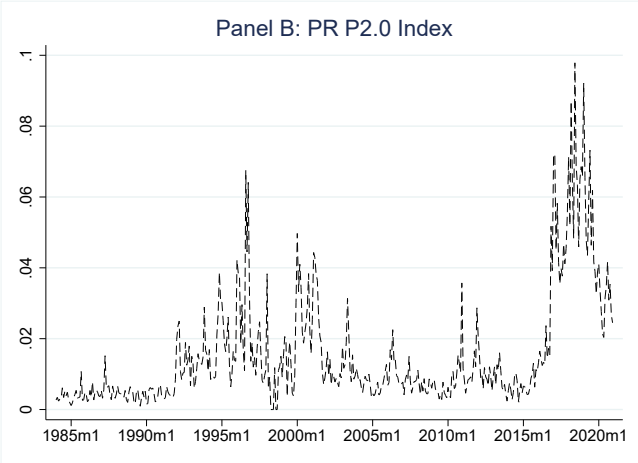



*Notes:* The figure reports our U.S. Aggregate Populist Rhetoric (APR) Index. The index is based on scaled monthly counts of articles containing populist rhetoric reported by *The New York Times* between 1984 and December 2020.

**Figure 3. Populist Rhetoric Index based on Bonikowski and Gidron (2015) (PR BG) and tweets (PR P2.0)**



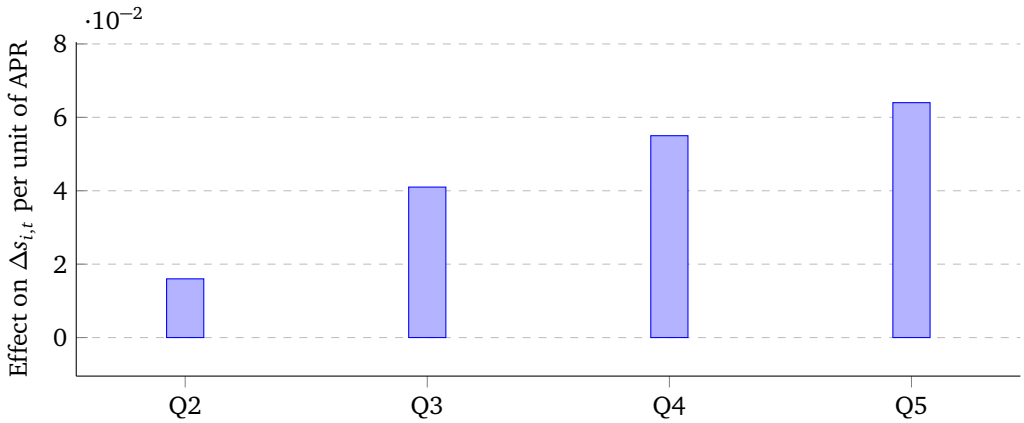

**(a) PR BG Index**




**(b) PR P2.0 Index**

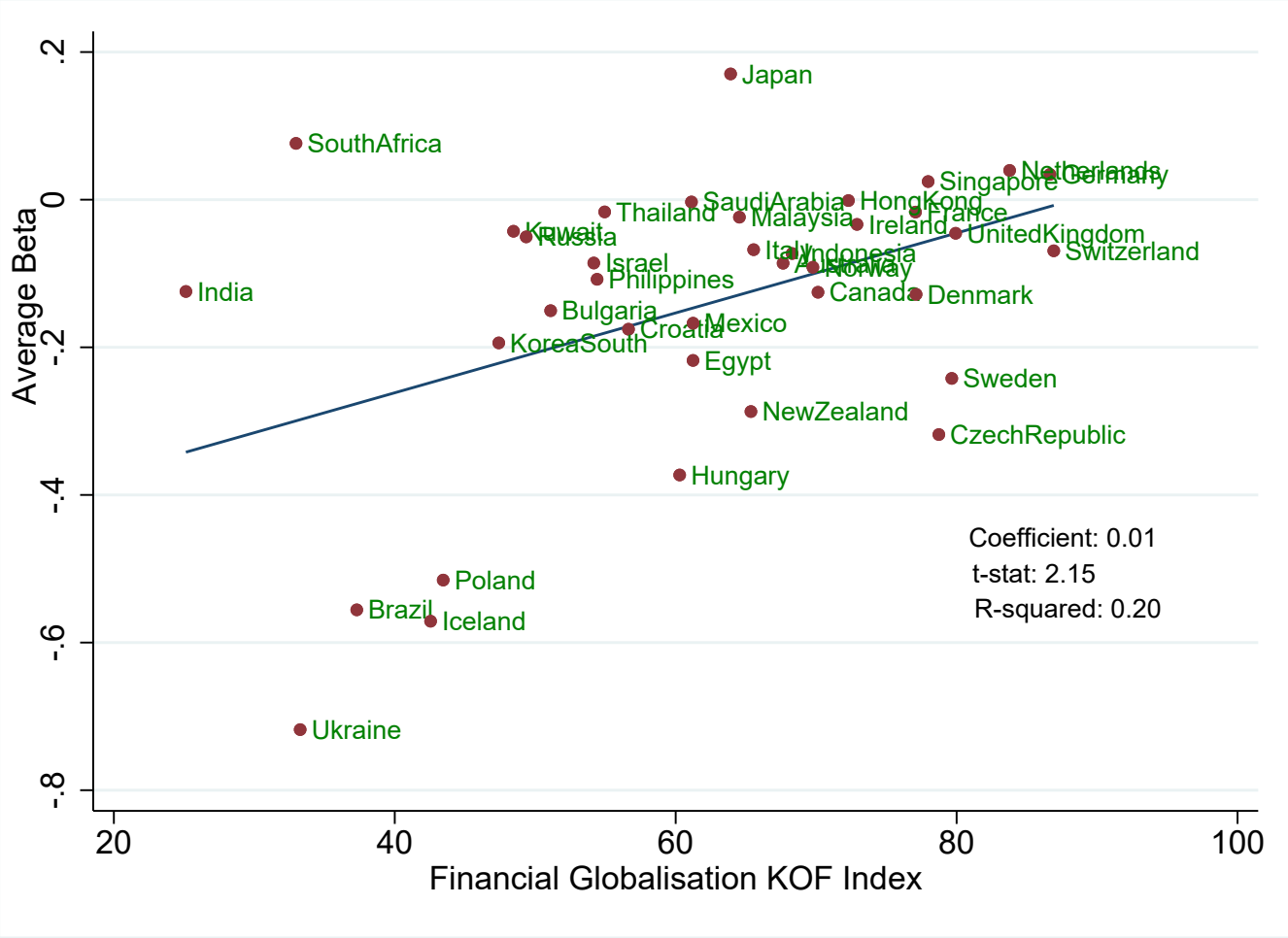
*Notes:* The figure compares two alternative measures of populist rhetoric. Panel A reports the PR BG Index constructed using the populism dictionary of Bonikowski and Gidron (2015), while Panel B reports the PR P2.0 Index based on populism-related tweets. Both indices are scaled monthly time series spanning 1984–2020.

**Figure 4. Differential Spot Responses to APR Shocks by APR-Beta Quintile**



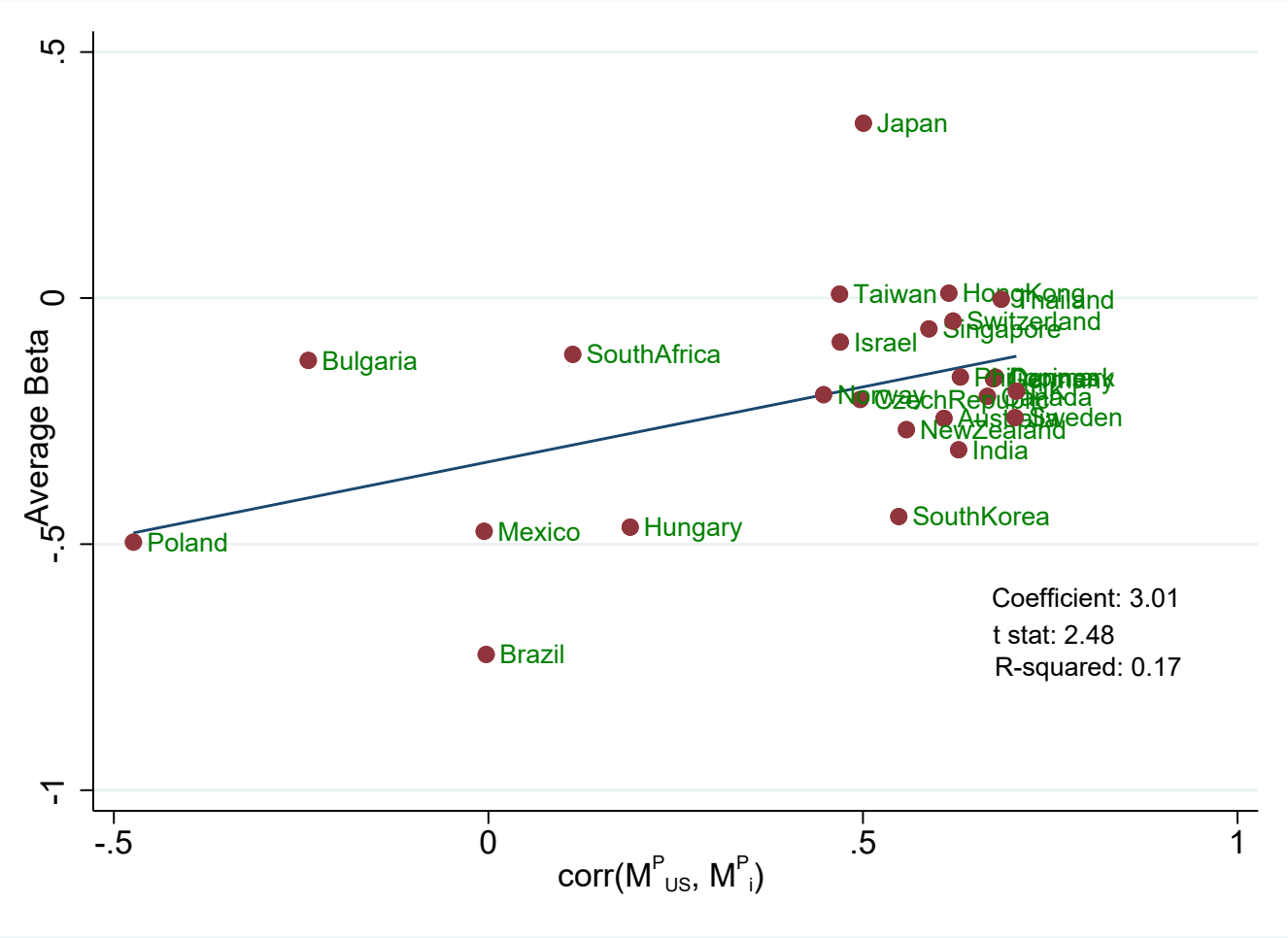

Notes: This figure plots the estimated coefficients on the interaction terms $Q_{k,t} \cdot APR_t$ for quintiles $k = 2, \ldots, 5$ of APR betas, with $Q_{1,t}$ (most negative APR betas) omitted as the baseline. Coefficients are from the filtered-sample panel regression with full controls (column (7) of Table 6). The dependent variable is the monthly log spot depreciation $\Delta s_{i,t}$ (foreign per USD). A higher bar indicates that currencies in that quintile depreciate less (or appreciate more) than $Q_{1,t}$ when APR rises.

**Figure 5. Average APR Betas and Financial Globalization**



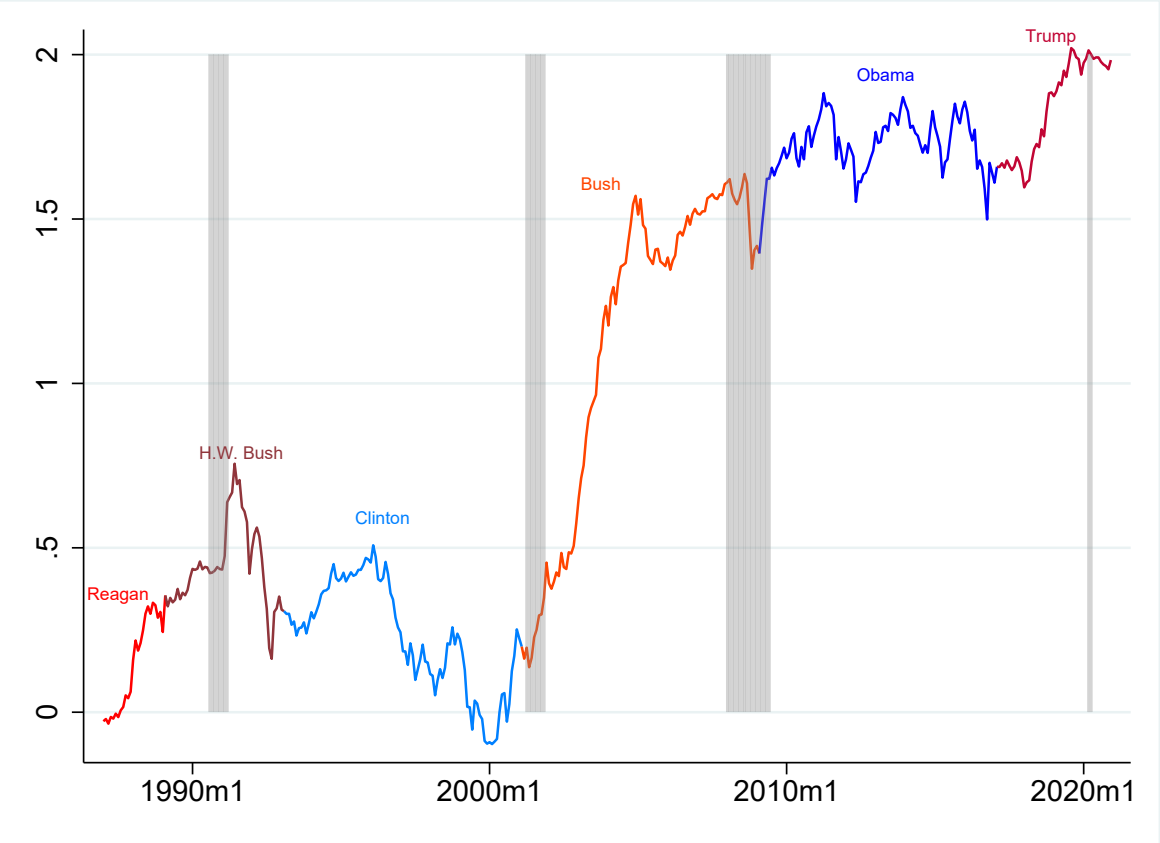

*Notes:* The figure plots the relationship between average APR betas, estimated from New York Times populist rhetoric, and the KOF Financial Globalization Index (Dreher, 2006; Gygli et al., 2019). The sample covers 37 countries from January 1984 to December 2020.

**Figure 6. Average APR Betas and Financial Segmentation**




*Notes:* The figure plots the relationship between average APR betas, estimated from five major U.S. newspapers, and a proxy for financial segmentation based on the correlation of the permanent components of U.S. and foreign model–free (minimum entropy) stochastic discount factors (Sandulescu et al., 2021). The sample covers 25 countries from January 2007 to December 2020.

**Figure 7. Cumulative Return of the APR Portfolio**




*Notes:* The figure reports the cumulative return of the APR portfolio adjusted for volatility. Specifically, the raw portfolio return is scaled by the ratio of the annual market stock return to the annual APR portfolio volatility. The sample spans January 1984 to December 2020.

## Table 1. Populist Dictionary

This table reports the populist terms in the baseline dictionary of Bonikowski and Gidron (2015) (Panel A) and the additional terms that we extract from Donald Trump's tweets to capture the social-media style of modern populist rhetoric (Panel B), which we refer to as the Populism 2.0 dictionary. We use the combined dictionary to identify newspaper articles containing populist rhetoric.

| Bonikowski and Gidron (2015)'s Populist Dictionary | |
|---|---|
| N-grams | Words |
| **Unigrams** | bureaucrat OR millionaire OR baron<br>OR venal OR crooked OR unresponsive OR arrogant |
| **Bigrams** | special interests OR Wall Street OR Main Street<br>OR big corporations OR ordinary taxpayer<br>OR wealthy few OR professional politician<br>OR big interest OR big money OR Washington elite<br>OR rich friend OR power monger OR power grabbing<br>OR easy street OR privileged few<br>OR forgotten Americans OR long nose |
| **Trigrams** | top 1 percent OR average American taxpayer |
| **Four-grams+** | government is too big OR government that forgets the people |
| **(New) Populism 2.0 Dictionary** | |
| N-grams | Words |
| **Unigrams** | tariffs OR maga |
| **Bigrams** | tax cuts OR fake news OR border security<br>OR illegal immigration OR America first |
| **Trigrams** | fake news media |
| **Four-grams+** | make America great again |

## Table 2. Summary Statistics of the APR Index and PR Sub-Indices

This table reports summary statistics for the Aggregate Populist Rhetoric Index (APR) and its two components based on the Bonikowski and Gidron (2015) dictionary (PR BG) and the tweet-based Populism 2.0 dictionary (PR P2.0). Panel A reports the mean, standard deviation, minimum, maximum, skewness, kurtosis, first-order autocorrelation (AC(1)), and augmented Dickey–Fuller $t$-statistic for the index levels and first differences. Panel B reports correlations between APR and standard economic uncertainty, political, and policy-risk measures. EPU is the Economic Policy Uncertainty index of Baker et al. (2016); $UNC^m$, $UNC^q$, and $UNC^y$ are the 1-, 3-, and 12-month-ahead macroeconomic uncertainty indices of Jurado et al. (2015); GPR is the Geopolitical Risk index of Caldara and Iacoviello (2022); VIX is the CBOE Volatility Index; TPU is the Trade Policy Uncertainty index of Caldara et al. (2020); and GPS is the Government Policy Sentiment index of (Liu and Shaliastovich, 2022). Panel C reports the corresponding correlations for first differences. Monthly data are from January 1984 to December 2020.

**Panel A: Populism Indices**

| | APR Index | ΔAPR | PR BG | ΔPR BG | PR P2.0 | ΔPR P2.0 |
|---|---|---|---|---|---|---|
| Mean | 0.05 | 0.02 | 0.04 | 0.02 | 0.01 | 0.13 |
| Std | 0.02 | 0.22 | 0.02 | 0.22 | 0.02 | 0.63 |
| Min | 0.01 | -0.59 | 0.01 | -0.68 | 0.00 | -1.00 |
| Max | 0.14 | 1.38 | 0.14 | 1.28 | 0.10 | 5.17 |
| Skewness | 1.03 | 1.21 | 1.20 | 1.14 | 2.25 | 2.39 |
| Kurtosis | 4.14 | 7.03 | 5.97 | 7.02 | 8.40 | 13.87 |
| AC(1) | 0.82 | -0.32 | 0.82 | -0.35 | 0.85 | -0.23 |
| Dickey–Fuller $t$ | -3.58*** | -12.52*** | -3.64*** | -13.24*** | -3.47*** | -15.80*** |

**Panel B: Index Level Correlations**

| | APR | P2.0 PR | BG PR | EPU | $UNC^m$ | $UNC^q$ | $UNC^y$ | GPR | VIX | TPU | GPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| APR | 1 | | | | | | | | | | |
| P2.0 PR | 0.59*** | 1 | | | | | | | | | |
| BG PR | 0.73*** | -0.10* | 1 | | | | | | | | |
| EPU | -0.05 | 0.26*** | -0.29*** | 1 | | | | | | | |
| $UNC^m$ | -0.05 | -0.05 | -0.02 | 0.56*** | 1 | | | | | | |
| $UNC^q$ | -0.04 | -0.05 | -0.01 | 0.54*** | 0.53*** | 0.99*** | 1 | | | | |
| $UNC^y$ | 0.00 | -0.03 | 0.03 | 0.50*** | 0.98*** | 0.98*** | 1 | | | | |
| GPR | -0.23*** | -0.11* | -0.19*** | 0.14** | 0.01 | 0.02 | 0.00 | 1 | | | |
| VIX | 0.18*** | -0.14** | 0.34*** | 0.42*** | 0.59*** | 0.60*** | 0.60*** | 0.05 | 1 | | |
| TPU | 0.31*** | 0.74*** | -0.24*** | 0.33*** | -0.01 | -0.02 | 0.00 | -0.03 | -0.14** | 1 | |
| GPS | 0.42*** | 0.13*** | 0.42*** | -0.16*** | -0.06 | -0.06 | -0.00 | -0.04 | 0.19** | 0.09* | 1 |

**Panel C: Index Change Correlations**

| | ΔAPR | ΔP2.0 PR | ΔBG PR | ΔEPU | $\Delta UNC^m$ | $\Delta UNC^q$ | $\Delta UNC^y$ | ΔGPR | ΔVIX | ΔTPU | ΔGPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ΔAPR | 1 | | | | | | | | | | |
| ΔP2.0 PR | 0.55*** | 1 | | | | | | | | | |
| ΔBG PR | 0.76*** | 0.04 | 1 | | | | | | | | |
| ΔEPU | 0.06 | 0.04 | 0.00 | 1 | | | | | | | |
| $\Delta UNC^m$ | 0.01 | -0.01 | 0.04 | 0.23*** | 1 | | | | | | |
| $\Delta UNC^q$ | 0.01 | -0.02 | 0.06 | 0.24*** | 0.98*** | 1 | | | | | |
| $\Delta UNC^y$ | 0.02 | -0.04 | 0.07 | 0.22*** | 0.93*** | 0.97*** | 1 | | | | |
| ΔGPR | -0.08 | -0.06 | -0.08 | 0.29*** | 0.12* | 0.12* | 0.08 | 1 | | | |
| ΔVIX | 0.06 | -0.04 | 0.11* | 0.23*** | 0.23*** | 0.26*** | 0.27*** | 0.08 | 1 | | |
| ΔTPU | 0.22*** | 0.19*** | 0.06 | 0.12* | -0.13* | -0.12* | -0.09 | -0.09 | 0.05 | 1 | |
| ΔGPS | -0.10* | -0.10 | -0.07 | -0.06 | -0.08* | -0.08* | -0.09* | -0.01 | -0.03 | -0.03 | 1 |

## Table 3. Contemporaneous Depreciation and APR Shocks — Continuous Interaction, Full Sample

This table reports panel regressions of monthly log spot exchange rate changes, $\Delta s_{i,t}$, on the interaction between the APR beta, $\widehat{\beta}_{i,t}^{APR}$, and the APR index, $APR_t$, using the full sample of currencies and months. The dependent variable is $\Delta s_{i,t}$, where positive values indicate foreign-currency depreciation against the U.S. dollar. All specifications include currency and month fixed effects. Columns (2)–(7) sequentially add controls for the long-dollar, carry, and momentum factors, as well as TPU, GPS, and VIX. The sample runs from January 1984 to December 2020. $t$-statistics clustered by currency are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| $\widehat{\beta}_{i,t}^{APR} \cdot APR_t$ | -0.067*** | -0.085** | -0.084** | -0.085** | -0.092** | -0.091** | -0.098** |
| | (-2.90) | (-2.37) | (-2.38) | (-2.32) | (-2.66) | (-2.42) | (-2.23) |
| Dollar | | -0.007 | -0.008* | -0.008* | -0.008 | -0.008 | -0.010 |
| | | (-1.34) | (-1.81) | (-1.74) | (-1.63) | (-1.71) | (-1.91) |
| Carry | | | 0.003** | 0.003** | 0.003** | 0.003** | 0.003* |
| | | | (2.41) | (2.30) | (2.14) | (2.06) | (1.78) |
| Momentum | | | | -0.001 | -0.001 | -0.001 | -0.003 |
| | | | | (-0.53) | (-0.74) | (-0.96) | (-1.17) |
| TPU | | | | | 1.763** | 1.750** | 2.151*** |
| | | | | | (2.17) | (2.22) | (2.45) |
| GPS | | | | | | 0.177 | 1.258 |
| | | | | | | (0.15) | (1.16) |
| VIX | | | | | | | -0.521 |
| | | | | | | | (-0.61) |
| Constant | 0.004*** | 0.004*** | 0.003** | 0.003* | 0.002 | 0.002 | 0.000 |
| | (3.65) | (3.69) | (2.17) | (2.02) | (1.12) | (1.13) | (0.01) |
| $N$ | 9,849 | 9,809 | 9,809 | 9,809 | 9,809 | 9,704 | 8,507 |
| $R^2$ | 0.027 | 0.029 | 0.030 | 0.030 | 0.031 | 0.031 | 0.036 |

## Table 4. Contemporaneous Depreciation and APR Shocks — Continuous Interaction, Recent Sample

This table reports panel regressions of monthly log spot exchange rate changes, $\Delta s_{i,t}$, on the interaction between the APR beta, $\widehat{\beta}_{i,t}^{APR}$, and the APR index, $APR_t$, using the recent sample. The dependent variable is $\Delta s_{i,t}$, where positive values indicate foreign-currency depreciation against the U.S. dollar. All specifications include currency and month fixed effects. Columns (2)–(7) sequentially add controls for the long-dollar, carry, and momentum factors, as well as TPU, GPS, and VIX. The sample runs from January 2000 to December 2020 and uses the five-newspaper APR index. $t$-statistics clustered by currency are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| $\widehat{\beta}_{i,t}^{APR} \cdot APR_t$ | -0.044** | -0.103*** | -0.098*** | -0.140*** | -0.139*** | -0.138*** | -0.148*** |
| | (-2.05) | (-3.98) | (-3.64) | (-3.84) | (-3.78) | (-3.67) | (-4.21) |
| Dollar | | -0.020*** | -0.020*** | -0.026*** | -0.025*** | -0.025*** | -0.026*** |
| | | (-8.28) | (-7.51) | (-6.38) | (-6.29) | (-6.09) | (-6.39) |
| Carry | | | 0.002 | 0.004*** | 0.003** | 0.003** | 0.004*** |
| | | | (1.16) | (3.19) | (2.66) | (2.62) | (2.69) |
| Momentum | | | | -0.007*** | -0.007*** | -0.007*** | -0.013*** |
| | | | | (-3.63) | (-3.56) | (-3.28) | (-4.02) |
| TPU | | | | | 1.654** | 1.628** | 1.851** |
| | | | | | (2.17) | (2.20) | (2.41) |
| GPS | | | | | | 0.206 | 1.086 |
| | | | | | | (0.17) | (0.78) |
| VIX | | | | | | | -2.308** |
| | | | | | | | (-3.09) |
| Constant | 0.000 | -0.000 | -0.001 | -0.001 | -0.002 | -0.002 | -0.005** |
| | (0.16) | (-0.14) | (-0.80) | (-1.01) | (-1.57) | (-1.52) | (-2.88) |
| $N$ | 6,698 | 6,686 | 6,686 | 6,686 | 6,686 | 6,686 | 6,551 |
| $R^2$ | 0.034 | 0.046 | 0.046 | 0.049 | 0.050 | 0.050 | 0.055 |

## Table 5. Contemporaneous Depreciation and APR Shocks — Binned Interaction, Full Sample

This table reports panel regressions of monthly log spot exchange rate changes, $\Delta s_{i,t}$, on interactions between the APR index, $APR_t$, and quintile indicators $Q_{k,t}$ based on the APR betas, $\widehat{\beta}_{i,t}^{APR}$, using the full sample of currencies and months. In each month, currencies are sorted into quintiles $Q_{k,t}$, $k = 1, \ldots, 5$, according to $\widehat{\beta}_{i,t}^{APR}$; $Q_{1,t}$, corresponding to the most negative APR betas, is the omitted category. The dependent variable is $\Delta s_{i,t}$, where positive values indicate foreign-currency depreciation against the U.S. dollar. All specifications include currency and month fixed effects. Columns (2)–(7) sequentially add controls for the long-dollar, carry, and momentum factors, as well as TPU, GPS, and VIX. The sample runs from January 1984 to December 2020. $t$-statistics clustered by currency are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| $Q_{2,t} \cdot APR_t$ | -0.001 | 0.002 | 0.014 | 0.014 | 0.016 | 0.015 | 0.015 |
| | (-0.05) | (0.13) | (0.92) | (0.94) | (1.08) | (1.01) | (0.72) |
| $Q_{3,t} \cdot APR_t$ | 0.029 | 0.031* | 0.043** | 0.043** | 0.044** | 0.044** | 0.037* |
| | (1.64) | (1.80) | (2.43) | (2.45) | (2.51) | (2.50) | (1.79) |
| $Q_{4,t} \cdot APR_t$ | 0.040*** | 0.040*** | 0.054*** | 0.054*** | 0.056*** | 0.056*** | 0.046*** |
| | (3.31) | (3.48) | (4.50) | (4.57) | (4.57) | (4.56) | (2.62) |
| $Q_{5,t} \cdot APR_t$ | 0.058*** | 0.061*** | 0.074*** | 0.075*** | 0.075*** | 0.075*** | 0.064** |
| | (2.73) | (2.83) | (3.37) | (3.51) | (3.54) | (3.60) | (2.62) |
| Dollar | | -0.004 | -0.006*** | -0.006*** | -0.006** | -0.006** | -0.007*** |
| | | (-1.50) | (-2.76) | (-2.80) | (-2.56) | (-2.90) | (-2.67) |
| Carry | | | 0.004*** | 0.004*** | 0.004*** | 0.003*** | 0.003*** |
| | | | (4.58) | (3.62) | (3.55) | (3.23) | (2.79) |
| Momentum | | | | -0.001 | -0.001 | -0.002 | -0.003 |
| | | | | (-0.35) | (-0.46) | (-1.11) | (-1.19) |
| TPU | | | | | 0.995* | 0.936* | 1.425** |
| | | | | | (1.95) | (1.87) | (2.28) |
| GPS | | | | | | 1.126* | 2.100*** |
| | | | | | | (1.87) | (2.66 ) |
| VIX | | | | | | | -0.658 |
| | | | | | | | (-0.90) |
| Constant | 0.003** | 0.003** | 0.000 | 0.000 | -0.000 | -0.000 | -0.002 |
| | (2.26) | (2.22) | (0.12) | (0.08) | (-0.33) | (-0.24) | (-1.14) |
| $N$ | 9,809 | 9,809 | 9,809 | 9,809 | 9,809 | 9,704 | 8,507 |
| $R^2$ | 0.026 | 0.027 | 0.029 | 0.029 | 0.029 | 0.029 | 0.033 |

## Table 6. Contemporaneous Depreciation and APR Shocks — Binned Interaction, Filtered Investable Sample

This table reports panel regressions of monthly log spot exchange rate changes, $\Delta s_{i,t}$, on interactions between the APR index, $APR_t$, and quintile indicators $Q_{k,t}$ based on the APR betas, $\widehat{\beta}_{i,t}^{APR}$, using a filtered investable sample of currencies. In each month, currencies are sorted into quintiles $Q_{k,t}$, $k = 1,\ldots,5$, according to $\widehat{\beta}_{i,t}^{APR}$; $Q_{1,t}$, corresponding to the most negative APR betas, is the omitted category. The dependent variable is $\Delta s_{i,t}$, where positive values indicate foreign-currency depreciation against the U.S. dollar. All specifications include currency and month fixed effects. Columns (2)–(7) sequentially add controls for the long-dollar, carry, and momentum factors, as well as TPU, GPS, and VIX. The sample runs from January 1984 to December 2020 and is restricted to currencies that satisfy the investability and data-availability screens described in the text. $t$-statistics clustered by currency are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| $Q_{2,t} \cdot APR_t$ | 0.011 | 0.010 | 0.019 | 0.020 | 0.021 | 0.022 | 0.016 |
| | (0.80) | (0.75) | (1.51) | (1.53) | (1.64) | (1.69) | (1.07) |
| $Q_{3,t} \cdot APR_t$ | 0.036** | 0.034** | 0.044*** | 0.044*** | 0.045*** | 0.046*** | 0.040** |
| | (2.21) | (2.13) | (2.88) | (2.91) | (2.88) | (3.00) | (2.48) |
| $Q_{4,t} \cdot APR_t$ | 0.049*** | 0.046*** | 0.059*** | 0.059*** | 0.059*** | 0.061*** | 0.054*** |
| | (3.72) | (3.93) | (5.41) | (5.50) | (5.47) | (5.66) | (4.51) |
| $Q_{5,t} \cdot APR_t$ | 0.060*** | 0.061*** | 0.073*** | 0.073*** | 0.071*** | 0.072*** | 0.063*** |
| | (2.67) | (2.78) | (3.19) | (3.37) | (3.30) | (3.60) | (2.84) |
| Dollar | | -0.006 | -0.007** | -0.007** | -0.007** | -0.005*** | -0.009*** |
| | | (-1.50) | (-2.51) | (-2.58) | (-2.54) | (-3.22) | (-2.95) |
| Carry | | | 0.005*** | 0.005*** | 0.005*** | 0.005*** | 0.005*** |
| | | | (5.19) | (4.12) | (3.70) | (3.51) | (3.61) |
| Momentum | | | | -0.000 | -0.000 | -0.003 | -0.003 |
| | | | | (-0.26) | (-0.30) | (-1.62) | (-1.05) |
| TPU | | | | | 1.660*** | 1.413** | 1.404** |
| | | | | | (2.77) | (2.36) | (2.33) |
| GPS | | | | | | 2.241*** | 2.218*** |
| | | | | | | (3.12) | (2.81) |
| VIX | | | | | | | -0.240 |
| | | | | | | | (0.34) |
| Constant | -0.000 | 0.000 | -0.003** | -0.003** | -0.004*** | -0.004*** | -0.004** |
| | (-0.14) | (0.01) | (-2.28) | (-2.31) | (-2.89) | (-2.81) | (-0.29) |
| $N$ | 7,422 | 7,422 | 7,422 | 7,422 | 7,422 | 7,422 | 7,246 |
| $R^2$ | 0.032 | 0.033 | 0.037 | 0.037 | 0.037 | 0.039 | 0.038 |

## Table 7. Average APR Beta and Financial Globalization

This table reports cross-sectional regressions of average APR betas on the KOF financial globalization index and other country characteristics. The specification is

$$\hat{\beta}_i^{APR} = \delta_1 + \delta_2 \,\text{KOF Financial Globalization}_i + \delta_3 \mathbf{X}_i + \varepsilon_i, \tag{25}$$

where $\hat{\beta}_i^{APR}$ denotes the time-series average of the rolling APR betas for country $i$. The APR betas are estimated from

$$rx_{i,t} = \alpha_{i,t} + \beta_{i,t}^{APR} APR_t + \epsilon_{i,t},$$

where $rx_{i,t}$ is the realised excess return on currency $i$ in month $t$, and $APR_t$ is the APR index in month $t$. The betas are estimated using a 60-month rolling window. The control vector $\mathbf{X}_i$ includes log(GDP share$_i$), log(distance to U.S.$_i$), and institutional quality. Heteroskedasticity-robust White (1980) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. The sample runs from January 1984 to December 2020.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| KOF Financial Globalization$_i$ | 0.005** | 0.004* | 0.005** | 0.008*** |
| | (2.15) | (1.78) | (2.20) | (3.03) |
| log(GDP share$_i$) | | 0.048** | 0.055*** | 0.051** |
| | | (2.09) | (2.79) | (2.34) |
| log(distance to U.S.$_i$) | | | 0.144** | 0.089** |
| | | | (2.57) | (2.53) |
| Institutional Quality$_i$ | | | | −0.080*** |
| | | | | (−3.38) |
| Constant | −0.478*** | −0.194 | −1.508** | −1.161*** |
| | (−2.73) | (−0.85) | (−2.63) | (−3.46) |
| Observations | 37 | 37 | 37 | 34 |
| Adj. $R^2$ | 0.17 | 0.25 | 0.35 | 0.49 |

## Table 8. Average APR Betas and Financial Segmentation

This table reports cross-sectional regressions of average APR betas on the correlation between the permanent components of the U.S. and foreign model-free minimum-entropy SDFs, $\text{corr}(M^P_{US}, M^P_i)$, and other country characteristics. The specification is

$$\hat{\beta}_i^{APR} = \delta_1 + \delta_2 \,\text{corr}(M^P_{US}, M^P_i) + \delta_3 \mathbf{X}_i + \varepsilon_i, \tag{26}$$

where $\hat{\beta}_i^{APR}$ denotes the time-series average of the rolling APR betas for country $i$. The APR betas are estimated from

$$rx_{i,t} = \alpha_{i,t} + \beta_{i,t}^{APR} APR_t + \epsilon_{i,t},$$

where $rx_{i,t}$ is the realised excess return on currency $i$ in month $t$, and $APR_t$ is the APR index in month $t$. The betas are estimated using a 60-month rolling window. The control vector $\mathbf{X}_i$ includes log(GDP share$_i$), log(distance to U.S.$_i$), and institutional quality. Heteroskedasticity-robust White (1980) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. The sample runs from January 2007 to December 2020.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| $\text{corr}(M^P_{US}, M^P_i)$ | 0.305** | 0.350** | 0.313** | 0.324** |
| | (2.48) | (2.84) | (2.24) | (2.21) |
| log(GDP share$_i$) | | −0.021 | −0.011 | −0.001 |
| | | (−0.44) | (−0.21) | (−0.02) |
| log(distance to U.S.$_i$) | | | 0.068 | 0.078 |
| | | | (1.11) | (1.24) |
| Institutional Quality$_i$ | | | | −0.015 |
| | | | | (−0.44) |
| Constant | −0.333*** | −0.507 | −1.044*** | −1.041*** |
| | (−4.38) | (−1.44) | (−3.70) | (−3.34) |
| Observations | 25 | 23 | 23 | 21 |
| Adj. $R^2$ | 0.17 | 0.19 | 0.17 | 0.16 |

## Table 9. Portfolios Sorted on APR Betas

This table reports summary statistics for currency portfolios sorted on exposure to the APR index. Panel A reports results for the full sample, January 1984–December 2020, where the APR index is constructed from *The New York Times*. Panel B reports results for the recent sample, January 2000–December 2020, where the APR index is constructed from five newspapers: *The Washington Post*, *The New York Daily News*, *The New York Post*, *USA Today*, and *The New York Times*. Portfolio $P_1$ contains currencies with the lowest APR betas and portfolio $P_5$ contains currencies with the highest APR betas. $LMH_{APR}$ denotes the zero-cost portfolio that is long $P_1$ and short $P_5$. For each portfolio, the table reports the annualized mean excess return, with Newey–West $t$-statistics in square brackets, the annualized standard deviation (Std), Sharpe ratio (SR), skewness, kurtosis, the decomposition into exchange-rate change and forward discount components, and the average APR beta of the constituent currencies, all in percentage points where applicable.

*Panel A*: Full Sample — *The New York Times*

| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH_{APR}$ |
|---|---|---|---|---|---|---|
| Mean | 3.09 | 2.90 | 0.60 | 0.12 | -0.10 | 3.19 |
| | [2.19] | [2.11] | [0.43] | [0.10] | [-0.07] | [2.19] |
| Std | 8.23 | 8.01 | 8.15 | 7.54 | 7.82 | 8.49 |
| Skewness | -0.53 | -0.09 | -0.50 | -0.56 | -0.72 | -0.16 |
| Kurtosis | 4.86 | 4.46 | 5.28 | 5.45 | 6.16 | 4.37 |
| Exchange rate change | -0.36 | -2.22 | 0.68 | 1.43 | 3.03 | -3.40 |
| | [-0.25] | [-1.56] | [0.46] | [1.04] | [2.15] | [-2.40] |
| Forward discount | 2.72 | 0.68 | 1.28 | 1.56 | 2.94 | -0.22 |
| | [6.96] | [3.33] | [4.28] | [6.10] | [9.47] | [-0.37] |
| SR | 0.38 | 0.36 | 0.07 | 0.02 | -0.01 | 0.38 |
| $\beta^{APR}$ | -0.47 | -0.20 | -0.06 | 0.07 | 0.30 | |

*Panel B*: Recent Sample — Five Newspapers

| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH_{APR}$ |
|---|---|---|---|---|---|---|
| Mean | 4.48 | 1.81 | 0.41 | 1.41 | -0.73 | 5.21 |
| | [2.20] | [0.89] | [0.22] | [0.87] | [-0.43] | [2.63] |
| Std | 8.63 | 8.63 | 7.80 | 6.85 | 7.18 | 8.41 |
| Skewness | -0.53 | -0.09 | -0.50 | -0.56 | -0.72 | -0.16 |
| Kurtosis | 4.86 | 4.46 | 5.28 | 5.45 | 6.16 | 4.37 |
| Exchange rate change | 0.30 | -1.00 | 0.47 | 0.06 | 2.93 | -2.63 |
| | [0.14] | [-0.49] | [0.25] | [0.03] | [1.76] | [-1.38] |
| Forward discount | 4.79 | 0.81 | 0.87 | 1.47 | 2.24 | 2.55 |
| | [7.79] | [3.85] | [3.75] | [4.42] | [5.31] | [2.98] |
| Exchange rate change (*The New York Times*) | 0.11 | -1.82 | 0.22 | 1.63 | 2.62 | -2.51 |
| | [0.05] | [-0.92] | [0.12] | [0.98] | [1.40] | [-1.32] |
| Forward discount (*The New York Times*) | 4.43 | 0.79 | 1.11 | 1.25 | 2.66 | 1.78 |
| | [7.17] | [4.57] | [4.49] | [4.91] | [6.04] | [2.57] |
| SR | 0.52 | 0.21 | 0.05 | 0.21 | -0.10 | 0.62 |
| $\beta^{APR}$ | -0.58 | -0.33 | -0.17 | -0.01 | 0.24 | |

## Table 10. APR Portfolio Regressions on Standard Currency Factors

This table reports time-series regressions of the APR-sorted spread portfolio, $LMH_{APR}$, on standard currency factors. The explanatory variables are the long-dollar factor, the carry factor, and the momentum factor. Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Panel A reports results for the full sample, January 1984–December 2020, based on *The New York Times*. Panel B reports results for the recent sample, January 2000–December 2020, based on the five-newspaper APR index.

| *Panel A*: Full Sample — *The New York Times* | | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| Constant | 0.003** | 0.004*** | 0.004*** |
| | (2.08) | (2.61) | (3.44) |
| $\beta_{DOL}$ | -0.002 | 0.029 | 0.026 |
| | (-0.03) | (0.43) | (0.42) |
| $\beta_{CAR}$ | | -0.149** | -0.157** |
| | | (-1.99) | (-2.22) |
| $\beta_{MOM}$ | | | 0.122 |
| | | | (1.54) |
| Obs | 408 | 408 | 408 |
| Adj. $R^2$ | 0.00 | 0.02 | 0.04 |
| *Panel B*: Recent Sample — Five Newspapers | | | |
| | (1) | (2) | (3) |
| Constant | 0.004** | 0.004* | 0.005** |
| | (2.50) | (1.85) | (2.41) |
| $\beta_{DOL}$ | 0.057 | 0.052 | 0.047 |
| | (0.56) | (0.55) | (0.58) |
| $\beta_{CAR}$ | | 0.037 | -0.002 |
| | | (0.24) | (-0.02) |
| $\beta_{MOM}$ | | | 0.259** |
| | | | (2.02) |
| Obs | 216 | 216 | 216 |
| Adj. $R^2$ | 0.00 | 0.00 | 0.07 |

## Table 11. Cross-Sectional FX Asset Pricing with U.S. Populism

This table reports estimates of the cross-sectional price of APR risk. The dependent variable is the one-month-ahead currency excess return, and the key regressor is the estimated APR beta. Control variables are currency-level volatility and illiquidity, following Menkhoff et al. (2012a). Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Panel A reports results for the full sample, January 1984–December 2020, based on *The New York Times*. Panel B reports results for the recent sample, January 2000–December 2020, based on the five-newspaper APR index.

| *Panel A*: Full Sample — *The New York Times* | | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| $\lambda_{APR}$ | -0.006*** | -0.006*** | -0.005** | -0.006*** |
| | (-2.94) | (-2.64) | (-2.23) | (-2.64) |
| $\lambda_{\text{Volatility}}$ | | 0.238* | | 0.274* |
| | | (1.85) | | (1.94) |
| $\lambda_{\text{Illiquidity}}$ | | | -0.000 | -0.000 |
| | | | (-0.77) | (-0.16) |
| Constant | 0.001 | 0.000 | -0.000 | -0.000 |
| | (0.69) | (0.48) | (-0.23) | (-0.50) |
| Obs | 9,868 | 9,020 | 9,025 | 9,020 |
| $R^2$ | 0.16 | 0.22 | 0.27 | 0.32 |
| *Panel B*: Recent Sample — Five Newspapers | | | | |
| | (1) | (2) | (3) | (4) |
| $\lambda_{APR}$ | -0.012*** | -0.008** | -0.007** | -0.007** |
| | (-3.12) | (-2.18) | (-2.06) | (-2.04) |
| $\lambda_{\text{Volatility}}$ | | 0.131 | | 0.143 |
| | | (1.06) | | (1.14) |
| $\lambda_{\text{Illiquidity}}$ | | | 0.000 | 0.000 |
| | | | (0.09) | (0.49) |
| Constant | 0.001 | 0.001 | 0.000 | 0.000 |
| | (0.53) | (0.56) | (0.32) | (0.14) |
| Obs | 6,665 | 5,843 | 5,845 | 5,843 |
| $R^2$ | 0.13 | 0.17 | 0.21 | 0.25 |

## Table 12. Performance of Alternative Portfolio Strategies

This table reports the annualized mean excess return, annualized standard deviation, and Sharpe ratio for portfolios that combine three standard currency factors: the long-dollar factor ($DOL$), the carry factor ($CAR$), and the momentum factor ($MOM$). We then augment this baseline strategy by adding one of three political or geoeconomic risk portfolios: the Aggregate Populist Rhetoric portfolio ($APR$), the Trade Policy Uncertainty portfolio ($TPU$), or the Government Policy Sentiment portfolio ($GPS$). Panel A reports results for the full sample, January 1984–December 2020, where the APR measure is constructed from *The New York Times*. Panel B reports results for the recent sample, January 2000–December 2020, where the APR measure is constructed from five major newspapers.

| Portfolio | Mean Return (%) | Std. Dev. (%) | Sharpe Ratio |
|---|---|---|---|
| **Panel A: Full Sample — *The New York Times*** | | | |
| $DOL + CAR + MOM$ | 4.764 | 5.082 | 0.938 |
| $DOL + CAR + MOM + APR$ | 4.368 | 4.049 | 1.079 |
| $DOL + CAR + MOM + TPU$ | 3.348 | 4.506 | 0.743 |
| $DOL + CAR + MOM + GPS$ | 2.748 | 4.281 | 0.642 |
| **Panel B: Recent Sample — Five Newspapers** | | | |
| $DOL + CAR + MOM$ | 3.888 | 4.642 | 0.838 |
| $DOL + CAR + MOM + APR$ | 4.212 | 3.893 | 1.082 |
| $DOL + CAR + MOM + TPU$ | 2.436 | 4.185 | 0.582 |
| $DOL + CAR + MOM + GPS$ | 1.848 | 4.403 | 0.420 |

## Table 13. Portfolios of Stocks Sorted by Shipping Costs and the APR Index

This table reports correlations between the APR index and portfolios of U.S. manufacturing stocks sorted by shipping costs. Portfolio $P_1$ contains firms with the lowest shipping costs, while portfolio $P_5$ contains firms with the highest shipping costs. $LMH$ denotes the zero-cost portfolio that is long $P_1$ and short $P_5$. Panel A reports raw pairwise correlations. Panel B reports correlations after controlling for the Fama–French three factors. Panel C reports correlations after controlling for the Fama–French five factors. For the $LMH$ portfolio, $p$-values are reported in parentheses. The data are monthly from January 1984 to December 2020.

*Panel A*: Pairwise Correlations

| | Equally weighted portfolios | | | | | | Value-weighted portfolios | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ |
| APR index | 0.04 | 0.03 | -0.02 | -0.04 | -0.05 | 0.14 | 0.10 | 0.04 | 0.05 | -0.01 | -0.01 | 0.15 |
| | | | | | | (0.00) | | | | | | (0.00) |

*Panel B*: Correlations Controlling for the Fama–French Three Factors

| | Equally weighted portfolios | | | | | | Value-weighted portfolios | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ |
| APR index | 0.13 | 0.11 | 0.00 | -0.06 | -0.10 | 0.18 | 0.23 | 0.09 | 0.12 | 0.004 | 0.00 | 0.18 |
| | | | | | | (0.00) | | | | | | (0.00) |

*Panel C*: Correlations Controlling for the Fama–French Five Factors

| | Equally weighted portfolios | | | | | | Value-weighted portfolios | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH$ |
| APR index | 0.12 | 0.10 | -0.00 | -0.07 | -0.10 | 0.19 | 0.23 | 0.09 | 0.12 | 0.00 | -0.01 | 0.18 |
| | | | | | | (0.00) | | | | | | (0.00) |

## Table 14. Cross-Sectional FX Asset Pricing with U.S. Populism and Standard Currency Factors

This table reports estimates of the cross-sectional price of APR risk controlling for standard currency factors. The key regressor is the estimated APR beta, and the additional controls are the long-dollar factor ($\lambda_{DOL}$), the carry factor ($\lambda_{CAR}$), and the momentum factor ($\lambda_{MOM}$). Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Panel A reports results for the full sample, January 1984–December 2020, based on *The New York Times*. Panel B reports results for the recent sample, January 2000–December 2020, based on the five-newspaper APR index.

| *Panel A*: Full Sample — *The New York Times* | | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| $\lambda_{APR}$ | -0.007** | -0.008*** | -0.008*** | -0.008*** |
| | (-2.44) | (-2.67) | (-2.85) | (-3.37) |
| $\lambda_{DOL}$ | | 0.004 | 0.001 | 0.001 |
| | | (1.46) | (0.56) | (0.52) |
| $\lambda_{CAR}$ | | | 0.003* | 0.002 |
| | | | (1.84) | (1.34) |
| $\lambda_{MOM}$ | | | | 0.003 |
| | | | | (-0.72) |
| Constant | 0.001 | 0.001 | 0.001 | 0.000 |
| | (1.15) | (0.98) | (0.93) | (0.55) |
| Obs | 9,810 | 9,810 | 9,810 | 9,810 |
| $R^2$ | 0.16 | 0.24 | 0.37 | 0.45 |
| *Panel B*: Recent Sample — Five Newspapers | | | | |
| | (1) | (2) | (3) | (4) |
| $\lambda_{APR}$ | -0.012*** | -0.012*** | -0.011*** | -0.012*** |
| | (-2.83) | (-2.87) | (-2.61) | (-2.83) |
| $\lambda_{DOL}$ | | 0.003 | 0.001 | 0.001 |
| | | (0.99) | (0.20) | (0.23) |
| $\lambda_{CAR}$ | | | 0.003* | 0.003* |
| | | | (1.76) | (1.74) |
| $\lambda_{MOM}$ | | | | 0.005* |
| | | | | (1.84) |
| Constant | 0.001 | 0.001 | 0.001 | 0.001 |
| | (0.82) | (0.80) | (0.85) | (1.12) |
| Obs | 6,711 | 6,711 | 6,711 | 6,711 |
| $R^2$ | 0.14 | 0.20 | 0.33 | 0.39 |

## Table 15. FX Asset-Pricing Tests

This table reports Fama–MacBeth asset-pricing tests using APR-sorted currency portfolios as test assets. The test assets are six APR-sorted portfolios, rebalanced monthly. Panels A and C report two alternative two-factor specifications: one with the long-dollar factor ($\lambda_{DOL}$) and one with the APR factor ($\lambda_{APR}$). Panels B and D report two alternative three-factor specifications: a benchmark model with the long-dollar, carry, and momentum factors, and an alternative model in which the long-dollar factor is replaced by the APR factor. Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. We also report the root mean squared error (RMSE), cross-sectional $R^2$, and the GRS statistic. Panels A and B use the full sample, January 1984–December 2020, based on *The New York Times*. Panels C and D use the recent sample, January 2000–December 2020, based on the five-newspaper APR index.

*Panel A*: Two-Factor Model — Full Sample — *The New York Times*

| | $\lambda_{DOL}$ | $\lambda_{APR}$ | RMSE | $R^2$ | GRS |
|---|---|---|---|---|---|
| FMB | 0.003 | -0.003** | 0.000 | 0.68 | 7.87 |
| (NW) | (0.43) | (-2.04) | | | |

*Panel B*: Three-Factor Models — Full Sample — *The New York Times*

| | $\lambda_{DOL}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | RMSE | $R^2$ | GRS |
|---|---|---|---|---|---|---|
| FMB | 0.026 | -0.012 | -0.000 | 0.000 | 0.60 | 18.95 |
| (NW) | (0.99) | (-1.09) | (-0.03) | | | |
| | $\lambda_{APR}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | RMSE | $R^2$ | GRS |
| FMB | -0.003** | 0.003 | -0.010 | 0.001 | 0.72 | 9.31 |
| (NW) | (-2.07) | (0.61) | (-1.05) | | | |

*Panel C*: Two-Factor Model — Recent Sample — Five Newspapers

| | $\lambda_{DOL}$ | $\lambda_{APR}$ | RMSE | $R^2$ | GRS |
|---|---|---|---|---|---|
| FMB | 0.015 | -0.005** | 0.000 | 0.99 | 6.39 |
| (NW) | (1.44) | (-2.36) | | | |

*Panel D*: Three-Factor Models — Recent Sample — Five Newspapers

| | $\lambda_{DOL}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | RMSE | $R^2$ | GRS |
|---|---|---|---|---|---|---|
| FMB | 0.011 | 0.004 | 0.014 | 0.000 | 0.93 | 7.58 |
| (NW) | (0.99) | (-1.09) | (-0.03) | | | |
| | $\lambda_{APR}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | RMSE | $R^2$ | GRS |
| FMB | -0.004** | 0.007* | 0.006 | 0.000 | 0.95 | 2.62 |
| (NW) | (-2.28) | (1.64) | (0.45) | | | |

## Table 16. Three-Pass Fama–MacBeth FX Asset-Pricing Tests

This table reports three-pass Fama–MacBeth asset-pricing tests following Giglio and Xiu (2021). The two-factor specifications compare a model with the long-dollar factor ($\lambda_{DOL}$) to a model with the APR factor ($\lambda_{APR}$). The three-factor specifications compare a benchmark model with the long-dollar, carry, and momentum factors to an alternative model in which the long-dollar factor is replaced by the APR factor. The 48 test assets comprise six carry portfolios, six short-horizon momentum portfolios, six long-horizon momentum portfolios, six APR portfolios, six value portfolios, six global-volatility portfolios, six global-liquidity portfolios, and six uncertainty portfolios. Portfolios are rebalanced monthly. Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. We also report fitted $R^2$ values for each factor. Panels A and B use the full sample, January 1984–December 2020, based on *The New York Times*. Panels C and D use the recent sample, January 2000–December 2020, based on the five-newspaper APR index.

*Panel A*: Two-Factor Model — Full Sample — *The New York Times*

| | $\lambda_{DOL}$ | $\lambda_{APR}$ | | $R^2_{DOL}$ | $R^2_{APR}$ |
|---|---|---|---|---|---|
| FMB | 0.001 | -0.003** | | 0.07 | 0.96 |
| (NW) | (1.67) | (-2.00) | | | |

*Panel B*: Three-Factor Models — Full Sample — *The New York Times*

| | $\lambda_{DOL}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | $R^2_{DOL}$ | $R^2_{CAR}$ | $R^2_{MOM}$ |
|---|---|---|---|---|---|---|
| FMB | 0.001* | 0.005*** | -0.006*** | 0.07 | 0.94 | 0.89 |
| (NW) | (1.67) | (3.31) | (-3.56) | | | |
| | $\lambda_{APR}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | $R^2_{APR}$ | $R^2_{CAR}$ | $R^2_{MOM}$ |
| FMB | -0.003** | 0.005*** | -0.006*** | 0.96 | 0.94 | 0.89 |
| (NW) | (-2.00) | (3.31) | (-3.56) | | | |

*Panel C*: Two-Factor Model — Recent Sample — Five Newspapers

| | $\lambda_{DOL}$ | $\lambda_{APR}$ | | $R^2_{DOL}$ | $R^2_{APR}$ |
|---|---|---|---|---|---|
| FMB | 0.008 | -0.005** | | 0.13 | 0.93 |
| (NW) | (0.72) | (-2.27) | | | |

*Panel D*: Three-Factor Models — Recent Sample — Five Newspapers

| | $\lambda_{DOL}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | $R^2_{DOL}$ | $R^2_{CAR}$ | $R^2_{MOM}$ |
|---|---|---|---|---|---|---|
| FMB | 0.001 | 0.005*** | -0.003 | 0.14 | 0.93 | 0.88 |
| (NW) | (0.72) | (2.84) | (-1.47) | | | |
| | $\lambda_{APR}$ | $\lambda_{CAR}$ | $\lambda_{MOM}$ | $R^2_{APR}$ | $R^2_{CAR}$ | $R^2_{MOM}$ |
| FMB | -0.005** | 0.005*** | -0.003 | 0.93 | 0.93 | 0.88 |
| (NW) | (-2.27) | (2.84) | (-1.47) | | | |

## Table 17. Cross-Sectional FX Asset Pricing with Transaction Costs

This table reports cross-sectional pricing results and APR-sorted portfolio spreads after accounting for transaction costs. Panel A reports estimates of the price of APR risk, $\lambda_{APR}$, from cross-sectional regressions of one-month-ahead currency excess returns on estimated APR betas. Panel B reports the mean excess return and Sharpe ratio of the $LMH$ portfolio formed by going long low-APR-beta currencies and short high-APR-beta currencies. Transaction costs are assumed to equal 25% of the quoted bid–ask spread. Newey–West (Newey and West, 1987) $t$-statistics are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. The full sample runs from January 1984 to December 2020; the recent sample runs from January 2000 to December 2020.

| *Panel A*: Cross-Sectional Regressions | | |
|---|---|---|
| | Full Sample<br>(1) | Recent Sample<br>(2) |
| $\lambda_{APR}$ | -0.006**<br>(-2.07) | -0.010***<br>(-2.69) |
| Constant | 0.00<br>(0.01) | 0.00<br>(0.65) |
| Obs | 8,405 | 5,441 |
| $R^2$ | 0.17 | 0.12 |
| *Panel B*: APR-Sorted Portfolio Spreads | | |
| | Full Sample<br>$LMH$ | Recent Sample<br>$LMH$ |
| Mean | 2.96*<br>(1.66) | 4.23**<br>(2.14) |
| SR | 0.34 | 0.50 |

## Table 18. APR Betas and CLS Trading Volume

This table reports contemporaneous panel regressions of rolling APR betas on abnormal CLS trading volume across participant categories. The estimating equation is

$$\hat{\beta}_{i,t}^{APR} = \alpha_i + \tau_t + \delta_2 \text{Abnormal trading volume}_{i,t} + \varepsilon_{i,t},$$

where $\hat{\beta}_{i,t}^{APR}$ denotes the rolling APR beta for country $i$ in month $t$, estimated from

$$rx_{i,t} = \alpha_i + \tau_t + \beta_{i,t}^{APR} APR_t + \epsilon_{i,t},$$

using a 60-month rolling window. Abnormal trading volume is defined as trading volume in country $i$ at month $t$ minus its average trading volume over the previous 12 months. All regressions include currency fixed effects and time fixed effects. $t$-statistics clustered by currency are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. The data are monthly from September 2012 to August 2019.

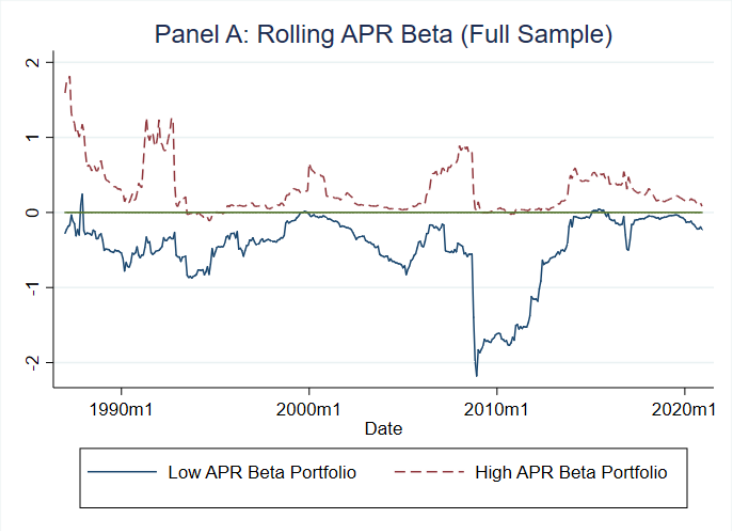
| | (1) Buy Side | (2) Bank | (3) Non-bank Financials | (4) Fund | (5) Corporates |
|---|---|---|---|---|---|
| Abnormal trading volume$_{i,t}$ | −0.010*** | −0.002 | 0.008 | −0.002*** | −0.000 |
| | (−2.54) | (−1.46) | (0.85) | (−4.41) | (−0.96) |
| Constant | −0.088** | −0.088** | −0.086** | −0.087** | −0.086** |
| | (−2.32) | (−2.31) | (−2.31) | (−2.29) | (−2.30) |
| Observations | 1,049 | 1,049 | 1,008 | 1,047 | 1,005 |
| Adj. $R^2$ | 0.15 | 0.15 | 0.14 | 0.15 | 0.15 |
| Currency FE | *YES* | *YES* | *YES* | *YES* | *YES* |
| Time FE | *YES* | *YES* | *YES* | *YES* | *YES* |

Internet Appendix for

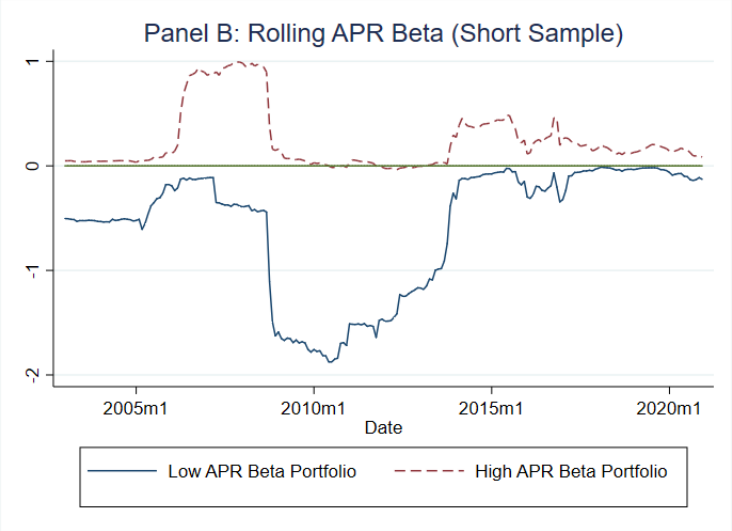
# When Rhetoric Moves Markets: U.S. Populism and Geoeconomic Risk in Foreign Exchange

# A. Additional Figures and Tables

**Figure A.1. Rolling APR Betas of Portfolios**



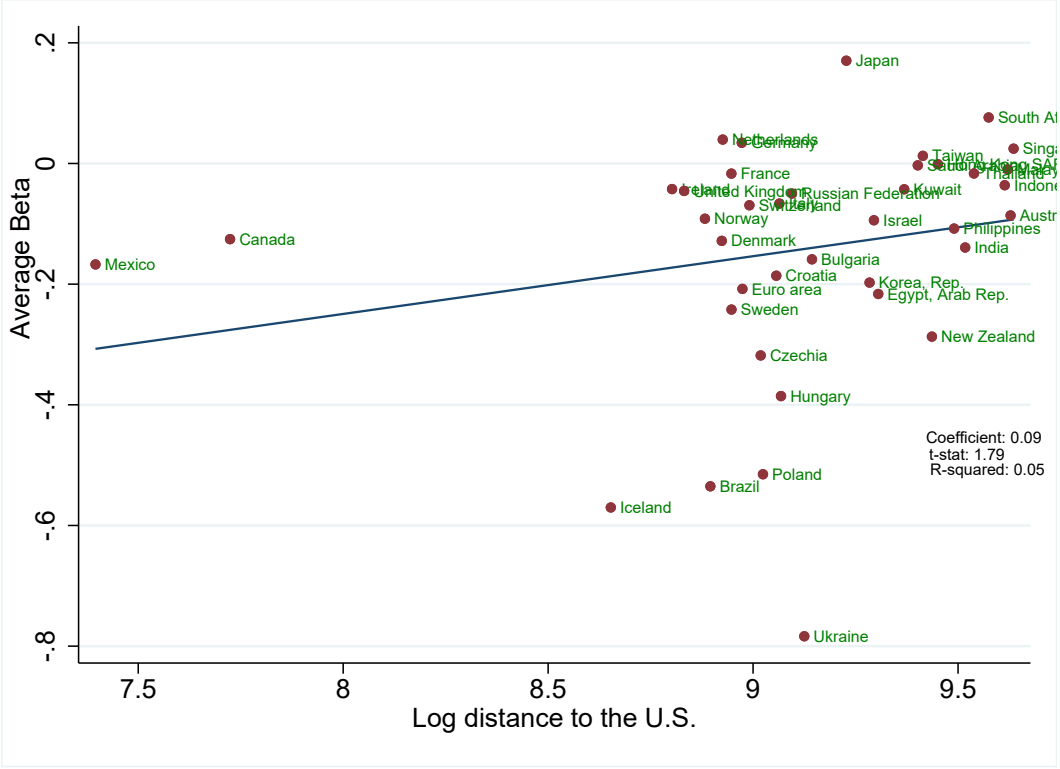

**(a) Full Sample (Panel A)**




**(b) Recent Sample (Panel B)**

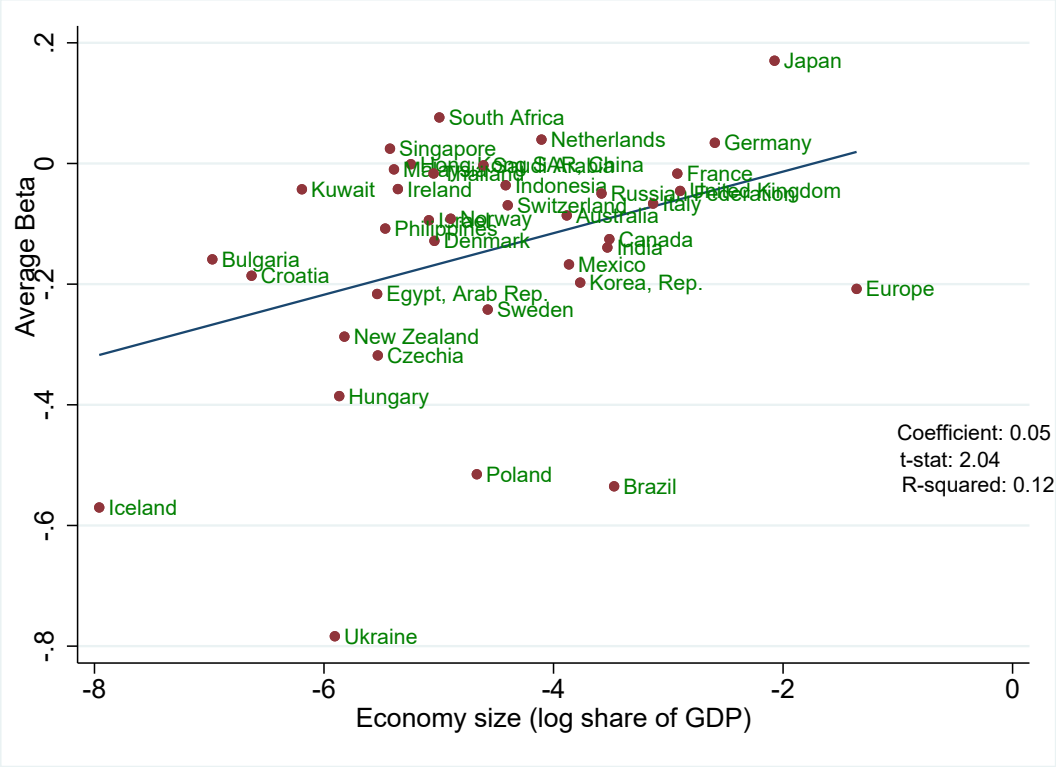
*Notes:* Rolling APR betas for Full Sample (Panel A) and Recent Sample (Panel B). Each panel plots the rolling betas of the low- and high-beta portfolios. Monthly data: January 1984–December 2020 (Panel A) and January 2000–December 2020 (Panel B).

**Figure A.2. Average APR Beta and Distance to the U.S.**



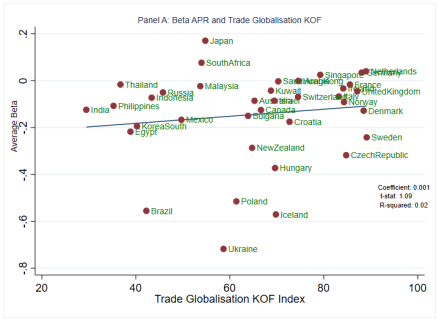

*Notes:* The figure plots the relationship between average APR betas and geographic distance from the United States, measured as the log of bilateral distance in kilometers. The sample spans January 1984 to December 2020.

**Figure A.3. Average APR Beta and Country Size**

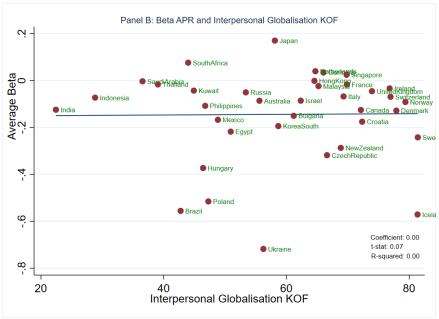



*Notes:* The figure plots the relationship between average APR betas and country size, measured as the log of each country's GDP share. The sample spans January 1984 to December 2020.

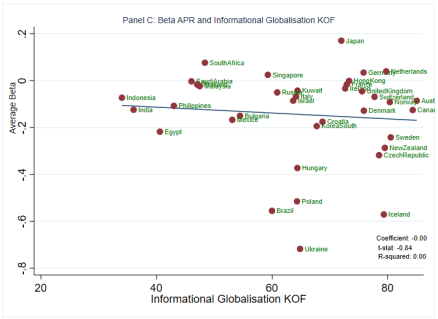
## Figure A.4. Average APR Beta and KOF Globalization Index



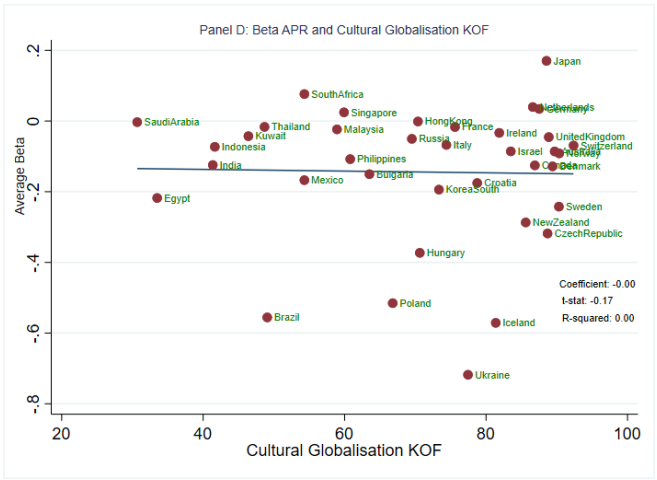

**(a) Trade**



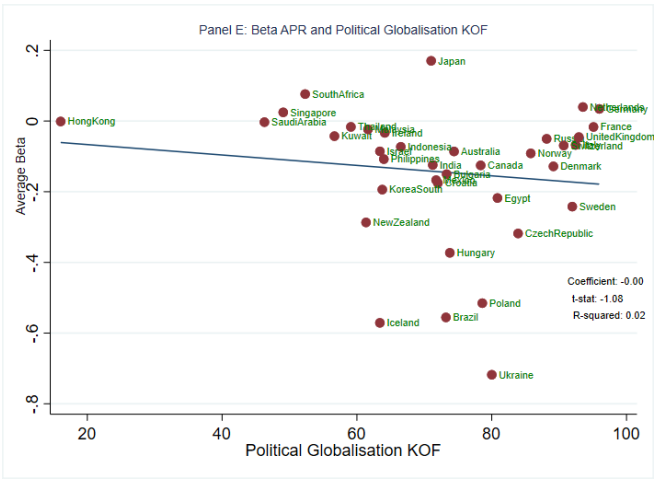

**(b) Interpersonal**




**(c) Information**



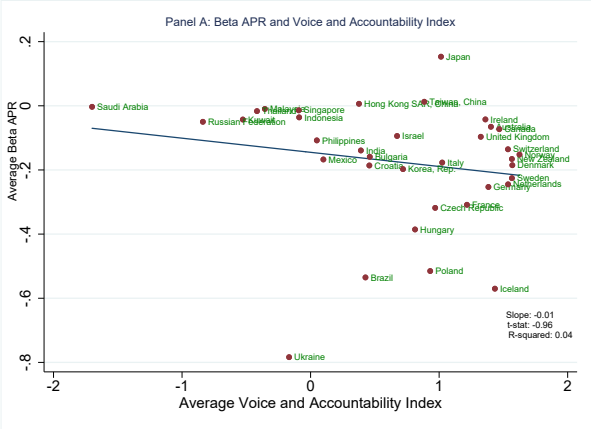

**(d) Cultural**



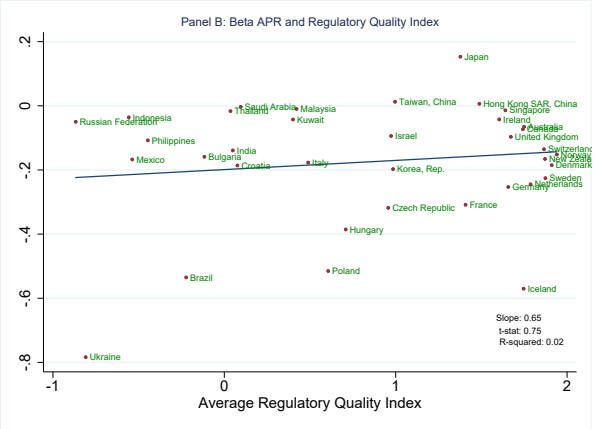

**(e) Political**

*Notes:* Average APR beta vs. KOF Globalization sub-indices (Trade, Interpersonal, Information, Cultural, Political). Monthly data: January 1998–December 2020.

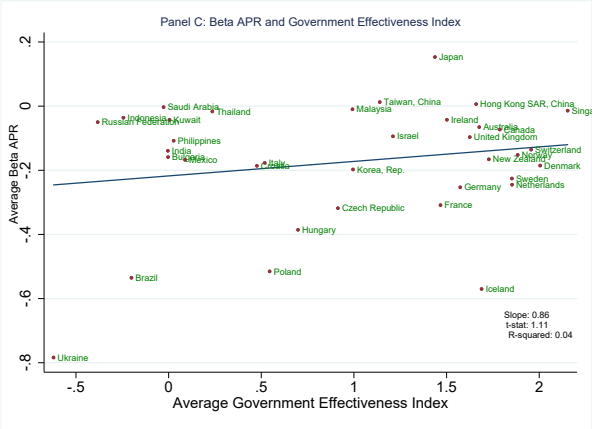
## Figure A.5. Average APR Beta and Institutional Quality



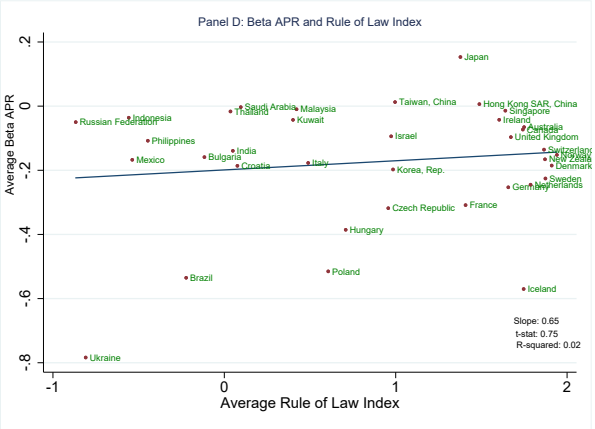

(a) Voice and Accountability




(b) Regulatory Quality




(c) Government Effectiveness




(d) Rule of Law

*Notes:* Average APR beta vs. World Bank institutional quality dimensions (Voice and Accountability, Regulatory Quality, Government Effectiveness, Rule of Law). Monthly data: January 1998–December 2020.

## Table A.1. Portfolios sorted on Trade Policy Uncertainty Betas

This table reports summary statistics for the excess returns of currency portfolios sorted on exposure to APR Index for the Full sample (Jan 1984–Dec 2020, *Panel A*) and Trade Policy Uncertainty from Caldara et al. (2020) (*Panel B*). We construct the APR index in the full sample based on *The New York Times* articles, while the APR index in the recent sample is based on five newspapers, including *The Washington Post*, *The New York Daily News*, *The New York Post*, *USA Today*, and *The New York Times*. Portfolio 1 ($P_1$) contains currencies with the lowest APR Index betas, and Portfolio 5 ($P_5$) contains currencies with the highest APR Index betas. $LMH$ represents the portfolio that is long $P_1$ and short $P_5$. For each portfolio, we report annualized mean and its $t$-statistics (in square brackets), standard deviation (Std), Sharpe ratio (SR), and average betas ($\beta$), all in percentage points. We also report skewness and kurtosis.

| *Panel A*: PR P2.0 Index | | | | | | |
|---|---|---|---|---|---|---|
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH_{APR}$ |
| Mean | 3.08 | 2.14 | 1.58 | 0.31 | -0.47 | 3.55 |
| | [2.38] | [1.67] | [1.22] | [0.22] | [-0.31] | [2.50] |
| Std | 7.52 | 7.47 | 7.51 | 8.26 | 8.88 | 8.26 |
| Skewness | -0.39 | 0.04 | -0.15 | -0.51 | -0.67 | 0.12 |
| Kurtosis | 5.12 | 3.92 | 4.25 | 4.95 | 5.72 | 4.71 |
| SR | 0.41 | 0.29 | 0.21 | 0.04 | -0.05 | 0.43 |
| $\beta^{APR}$ | -0.53 | 0.02 | 0.24 | 0.49 | 0.87 | |
| *Panel B*: Trade Policy Uncertainty | | | | | | |
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $LMH_{TPU}$ |
| Mean | 2.51 | 1.46 | 0.40 | 0.88 | 1.60 | 0.91 |
| | [1.99] | [1.10] | [0.283] | [0.58] | [0.97] | [0.70] |
| Std | 6.79 | 7.47 | 8.04 | 8.31 | 9.13 | 7.56 |
| Skewness | -0.51 | 0.05 | -0.19 | -0.58 | -0.79 | -0.35 |
| Kurtosis | 5.68 | 4.14 | 4.47 | 5.26 | 6.07 | 4.59 |
| SR | 0.38 | 0.37 | 0.20 | 0.11 | 0.18 | 0.12 |

**Table A.2. Distribution of Populism Topic Keywords by Bi-term Topic Modelling**

The table reports results from Bi-term topic modelling implemented on Trump Twitter. These are the 5 populism topics. For each topic, the top 20 key words are reported.

| Topic 1 | Topic 2 | Topic 3 | Topic 4 | Topic 5 |
|---|---|---|---|---|
| american again | tax | news | china | border |
| america | jobs | fake | trade | wall |
| join | american | media | deal | democrats |
| vote | economy | fake news | president | security |
| maga | cuts | news media | korea | country |
| crowd | obamacare | fake news media | united | immigration |
| carolina | republicans | story | north | illegal |
| floria | senate | jobs | north korea | mexico |
| rally | court | country | tariffs | border security |
| love | democrats | failing | meeting | southern |
| iowa | tax cuts | house | country | crime |
| amazing | country | election | iran | southern border |
| south | america | cnn | dollars | stop |
| live | healthcare | dishonest | prime | borders |
| day | supreme | president | minister | laws |
| ohio | supreme court | press | billion | republicans |
| hshire | bill | market | prime minister | strong |
| forward | vote | stock | deals | national |
| poll | house | white | farmers | dems |
| south carolina | taxes | bad | world | illegal immigration |

**Table A.3. Bi-term Topic Modelling on Trump Tweets: Additional Topics Not Used in APR Construction**

This table reports five additional topics obtained from bi-term topic modelling (BTM) implemented on Donald Trump's Twitter archive. For each topic, the top 20 keywords are reported. These topics are not used in constructing the Populism 2.0 extension of the APR dictionary but are presented for completeness.

| Topic 1 | Topic 2 | Topic 3 | Topic 4 | Topic 5 |
|---|---|---|---|---|
| hillary | party | honor | cruz | collusion |
| clinton | republicans | american | ted | fbi |
| crooked | america | law | poll | hunt |
| crooked hillary | job | america | president | witch |
| hillary clinton | republican party | happy | bush | witch hunt |
| endorsement | congratulations | world | ted cruz | democrats |
| interviewed | democrat | enforcement | jeb | russia |
| win | money | nation | wow | mueller |
| enjoy | president | women | rubio | campaign |
| vote | record | law enforcement | john | hillary |
| job | country | day | debate | clinton |
| crime | governor | country | nice | comey |
| bernie | leadership | gold | campaign | report |
| crooked hillary clinton | puerto rico | united | joe | russian |
| total | rico | attack | prime | crooked |
| bad | york | americans | failed | election |
| strong | jobs | heroes | marco | obama |
| president | dollars | national | money | investigation |
| governor | left | prayers | watch | obstruction |

## Table A.4. FX Asset Pricing Tests: Time-series Betas

This table reports time-series beta results for the two-factor model, including the DOL and APR risk factors. Test assets used are 6 APR portfolios. Portfolios are rebalanced monthly. Newey and West (1987) $t$-statistics are reported in square brackets, where *** indicates significance at the 1% level, ** at the 5% level, and * at the 10% level. We also report $R^2$ and Root Mean Squared Error (RMSE). We report the Full (Recent) sample results in Panel A (Panel C). The data are monthly from January 1984 (January 2000 in Panel C) to December 2020.

| *Panel A*: Two-factor model: Full Sample: *The New York Times* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $\beta_1 DOL$ | $\beta_2 DOL$ | $\beta_3 DOL$ | $\beta_4 DOL$ | $\beta_5 DOL$ | $\beta_6 DOL$ | $\beta_1 FRP$ | $\beta_2 FRP$ | $\beta_3 FRP$ | $\beta_4 FRP$ | $\beta_5 FRP$ | $\beta_6 FRP$ |
| FMB | 0.16*** | 0.07 | 0.08 | 0.09* | 0.09** | 0.16*** | -0.55*** | -0.27*** | -0.15* | -0.05 | 0.08 | 0.45*** |
| (NW) | [2.93] | [1.34] | [1.34] | [1.93] | [2.12] | [2.93] | [-7.37] | [-3.47] | [-1.68] | [-0.56] | [1.04] | [6.09] |
| *Panel C*: Two-factor model: Recent Sample: Five Newspapers | | | | | | | | | | | | |
| | $\beta_1 DOL$ | $\beta_2 DOL$ | $\beta_3 DOL$ | $\beta_4 DOL$ | $\beta_5 DOL$ | $\beta_6 DOL$ | $\beta_1 FRP$ | $\beta_2 FRP$ | $\beta_3 FRP$ | $\beta_4 FRP$ | $\beta_5 FRP$ | $\beta_6 FRP$ |
| FMB | 0.13* | 0.02 | -0.03 | 0.03 | 0.07 | 0.12 | -0.63*** | -0.41*** | -0.34*** | -0.20** | -0.11 | 0.37*** |
| (NW) | [1.71] | [0.29] | [-0.43] | [0.49] | [1.19] | [1.71] | [-4.99] | [-3.08] | [-2.97] | [-2.35] | [-1.33] | [2.89] |

## Table A.5. Portfolios Sorted on APR Betas — Filtered Sample

This table reports summary statistics for the excess returns of currency portfolios sorted on exposure to APR Index for the Full sample (Jan 1984–Dec 2020, *Panel A*) and Recent sample (Jan 2000–Dec 2020, *Panel B*). We construct the APR index in the full sample based on *The New York Times* articles, while the APR index in the recent sample is based on five newspapers, including *The Washington Post*, *The New York Daily News*, *The New York Post*, *USA Today*, and *The New York Times*. Portfolio 1 ($P_1$) contains currencies with the lowest APR Index betas, and Portfolio 4 ($P_4$) contains currencies with the highest APR Index betas. $LMH$ represents the portfolio that is long $P_1$ and short $P_4$. For each portfolio, we report annualized mean and its $t$-statistics (in square brackets), standard deviation (Std), and Sharpe ratio (SR), all in percentage points. We also report skewness and kurtosis.

| *Panel A*: Full Sample: *The New York Times* | | | | | |
|---|---|---|---|---|---|
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $LMH_{APR}$ |
| Mean | 5.80 | 1.23 | 0.37 | 1.73 | 4.08 |
| | [3.65] | [0.83] | [0.25] | [1.16] | [2.12] |
| Std | 9.26 | 8.59 | 8.60 | 8.69 | 9.52 |
| Skewness | -0.13 | -0.17 | -0.34 | -0.70 | 0.15 |
| Kurtosis | 5.06 | 4.70 | 4.15 | 5.14 | 4.57 |
| SR | 0.63 | 0.14 | 0.04 | 0.20 | 0.43 |
| *Panel B*: Recent Sample: Five Newspapers | | | | | |
| | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $LMH_{APR}$ |
| Mean | 7.69 | 1.63 | -0.05 | 2.15 | 5.54 |
| | [3.34] | [0.75] | [-0.01] | [2.11] | [2.19] |
| Std | 9.75 | 9.20 | 7.93 | 7.97 | 9.50 |
| Skewness | -0.33 | -0.68 | -0.36 | -0.35 | -0.16 |
| Kurtosis | 5.95 | 5.32 | 3.81 | 4.41 | 4.49 |
| SR | 0.79 | 0.18 | -0.01 | 0.27 | 0.58 |