Tariff Escalation and the Dollar: Convenience Yields and Exchange Rate Adjustment[1]

Hanna Armelius, Stefan Laséen and Åsa Olli Segendorf[2]

March 2026

Standard open-economy models predict that unilateral tariffs appreciate the home currency. Yet large U.S. tariff announcements during the 2024–2025 escalation were followed by dollar depreciation in trade-weighted terms. Using an announcement-based dataset and high-frequency asset prices from the 2018–2019 and 2024–2025 U.S. trade conflicts, we document three empirical regularities that point to a common safe-asset channel. First, exchange rates adjust gradually rather than on impact: local projections reveal persistent post-announcement drifts over subsequent days and weeks, consistent with belief updating and gradual portfolio reallocation. Second, in 2024–2025—but not in 2018–2019—long-maturity G10 covered interest parity (CIP) deviations decline systematically following large tariff announcements, while renminbi CIP deviations rise sharply. This cross-currency asymmetry is consistent with a decline in the relative convenience yield on U.S. Treasuries. Third, responses are nonlinear. Announcements in the upper decile of tariff changes generate substantially larger exchange-rate and bond-market movements and are associated with a weakening rather than an appreciation of the dollar. To interpret these patterns, we develop a stylised settlement-network framework, building on Du, Im, and Schreger (2018), in which sufficiently broad and credible tariff escalation reduces expected participation in dollar-based settlement. Lower participation reduces the convenience yield on U.S. safe assets, generating joint movements in CIP deviations and exchange rates consistent with the empirical patterns.

JEL-codes: F31, F32, F41, F13, E44, G15.
Keywords: Tariffs, Exchange Rates, Convenience Yields, CIP Deviations, Trade Policy Uncertainty, Dollar Dominance, Currency Spillovers.

[1] We are indebted to Charlie Nilsson for help with checking and verifying the tariff announcement and implementation dates. Part of this work was carried out while Stefan was hosted by the Monetary and Financial Analysis Division of Banque de France, whose hospitality and institutional support are gratefully acknowledged. The views expressed in this paper are solely those of the authors and do not necessarily reflect the views of Banque de France, the Eurosystem, or Sveriges Riksbank.
[2] Email: Hanna Armelius: Hanna.Armelius@riksbank.se, Stefan Laseen: Stefan.Laseen@riksbank.se, Åsa Olli Segendorf: Asa.OlliSegendorf @riksbank.se.

1. Introduction

Standard open-economy theory often predicts that unilateral tariffs appreciate the tariff-imposing country's currency. By reducing import demand and improving the terms of trade, tariffs generate expenditure-switching forces that tend to strengthen the domestic currency (Lerner 1936). The strength — and even the sign — of this prediction can depend on monetary regimes, price rigidities, expectations, and strategic retaliation (Mundell 1961, Dornbusch 1987, Eichengreen 1981). Recent work further emphasizes that tariff shocks propagate through general-equilibrium trade networks and heterogeneous-agent environments in ways that can reshape both real and financial transmission (Barattieri, Cacciatore, and Ghironi 2021, Auclert, Rognlie, and Straub 2025). Nevertheless, a tariff-induced appreciation remains a useful benchmark for interpreting exchange-rate responses to unilateral trade actions.

Against this benchmark, the 2024–2025 U.S. tariff escalation presents a puzzle: over the escalation phase, the dollar depreciated in trade-weighted terms, in contrast to the standard benchmark. This pattern suggests that large tariff shocks may affect exchange rates through financial channels operating via the global demand for U.S. safe assets.

This paper studies the short-run exchange-rate and asset-market consequences of U.S. tariff announcements across two episodes — the 2018–2019 trade conflict and the renewed escalation in 2024–2025 — using an announcement-based dataset combined with high-frequency financial-market data. The earlier episode provides variation from many relatively small announcements, while the later episode features fewer but substantially larger measures. This contrast allows us to examine whether the mapping from tariff news to exchange rates and financial prices is stable across policy environments or instead becomes nonlinear when trade actions are large and more consequential.

Our empirical analysis reveals a coherent pattern linking exchange rates, government-bond markets, and safe-asset demand. First, exchange rates do not primarily adjust on impact at the announcement date. Instead, local projections reveal persistent post-announcement drifts in exchange rates over subsequent days and weeks. This gradual adjustment is difficult to reconcile with fully frictionless asset-pricing accounts in which all relevant information is immediately impounded, and is consistent with adjustment frictions, belief updating, or gradual portfolio reallocation in the transmission of tariff news.

Second, movements in international bond markets shift sharply across episodes. In 2024–2025, covered interest parity (CIP) deviations for long-maturity G10 government bonds decline, becoming more negative, following U.S. tariff announcements, consistent with what would be expected if the relative convenience yield on U.S. Treasuries declined, while in 2018–2019 these responses are limited and often statistically weak. These movements coincide with changes in longer-term yields and exchange rates and are consistent, under our interpretation, with a reduction in the relative convenience yield on U.S. Treasuries – that is, a decline in the premium investors are willing to pay for U.S. safe-asset services, as measured by CIP deviations between

government bonds in the framework of Du, Im, and Schreger (2018). A reduction in safe-asset convenience lowers the demand for dollar-denominated safe assets and can place downward pressure on the dollar, linking movements in CIP deviations to the exchange-rate response. This pattern is not universal: CIP deviations for the Chinese renminbi move in the opposite direction, rising sharply as China faces simultaneous trade-channel and capital-account pressure. This cross-currency asymmetry would be difficult to reconcile in a single-channel model.

Third, transmission appears nonlinear in tariff magnitude, and this nonlinearity is closely associated with the most striking aggregate pattern in 2024–2025: in trade-weighted terms the dollar weakens over the escalation phase rather than appreciating. Exchange-rate and bond-market responses are substantially larger for announcements in the upper tail of the tariff-change distribution than for announcements near the median, where responses are statistically indistinguishable from zero. Equity-market volatility, absent in 2018–2019, rises immediately and persistently in the later period. The sign reversal in the dollar, combined with the CIP evidence, is consistent with a safe-asset demand channel that may dominate the conventional expenditure-switching mechanism when tariff measures are large and broadly directed — conditions that characterize the upper decile of our announcement distribution but not episodes near the median.

Relative to existing studies of the 2018–2019 trade conflict, our contribution is to document a coherent set of patterns linking exchange rates and government-bond markets following tariff news, including gradual post-announcement exchange-rate adjustment, systematic movements in long-maturity CIP deviations, and strong nonlinearities when tariff measures are large.

To interpret these findings, we develop a stylised settlement-network framework, presented in Section 5 with full derivation in Appendix A. The theoretical anchor is the bond-pricing framework of Du, Im, and Schreger (2018), which identifies the convenience yield from observed Treasury prices. The framework starts from the idea that global dollar usage in trade invoicing and financial transactions supports the convenience yield on U.S. safe assets (Jiang, Krishnamurthy, and Lustig 2021 and Gopinath and Stein 2021). Tariff shocks erode network participation through three channels — direct trade reduction, third-country retreat from voluntary dollar settlement when tariffs are broad, and reduced U.S. economic centrality — and a logistic signal function governing network quality generates threshold behavior. Network complementarities provide a natural account of magnitude-dependent responses, while gradual belief revision and adjustment frictions in portfolio positions jointly account for the post-announcement drifts.

The paper contributes to three literatures. First, it extends high-frequency studies of the 2018–2019 trade conflict to the 2024–2025 escalation and shows that the later episode features not only different exchange-rate responses but also systematic movements in long-maturity government-bond CIP deviations, a pronounced cross-currency asymmetry between G10 and renminbi, and strong nonlinearities in tariff magnitude. Second, it connects work on trade-policy shocks to research on convenience yields, safe-asset demand, and global

dollar funding conditions (Du, Im, and Schreger 2018, Jiang, Krishnamurthy, and Lustig 2021), providing evidence that tariff news can operate through a financial channel distinct from conventional expenditure-switching mechanisms. Third, it relates these findings to theories of dominant-currency pricing and financial networks (Chahrour and Valchev 2022, Abadi, Fernández-Villaverde and Sanches 2026), and offers a stylised interpretive framework — presented in Section 5 with full technical derivation in Appendix A — that can account for gradual adjustment, sign reversals, cross-currency asymmetry, and threshold effects without claiming to structurally identify the underlying mechanisms.

Throughout, we interpret the evidence cautiously. Our empirical strategy is announcement-based and is designed to characterize dynamic responses rather than to deliver a fully structural decomposition of channels. The paper contributes by documenting cross-episode patterns and providing an integrated interpretation that links exchange rates, CIP deviations, uncertainty, and asset prices in an environment of increasing fragmentation.

The remainder of the paper proceeds as follows. Section 2 describes the data and the construction of tariff-announcement measures. Section 3 outlines the empirical methodology. Section 4 presents the main results. Section 5 introduces the settlement-network framework and uses it to interpret the empirical findings. Section 6 reports robustness and sensitivity analyses. Section 7 concludes.

2. Data and Tariff Surprise Measures

The empirical analysis relies on a measure of tariff surprises that extends the event set constructed by Jeanne and Son (2024). Their baseline measure is obtained from high-frequency tariff news identified through Bloomberg's news service. Specifically, Jeanne and Son query Bloomberg's categorical tagging of news using the intersection of the topic label *Trade Tariffs, Wars* and the importance filter *Hot*, which denotes breaking news deemed to have global impact. From an initial sample of 230 news items, they restrict attention to bilateral U.S.–China tariff actions and obtain a final sample of 112 announcements between January 2018 and December 2019. These announcements, typically released within minutes of official communication, include both government press releases and social media statements, most prominently from the U.S. president. Each observation is coded along two dimensions: (i) the direction of the tariff action (increase or decrease) and (ii) the origin of the measure (United States or China). This classification yields a balanced, though slightly U.S.-skewed, distribution of tariff increases and decreases.

We extend this dataset both in scope and horizon. First, we supplement the Bloomberg-based event set with information from multiple independent timelines of the U.S.–China trade war. These include Wikipedia, South China Morning Post, CNN Business, AP News, Reuters, the Center for Strategic and International Studies (CSIS), and China Briefing News. Each timeline is parsed to extract discrete tariff announcements and matched against Jeanne and Son's coding protocol to ensure consistency. Additional narrative context is drawn from Bown (2025a), who provides a detailed chronological account of the escalation phases. Second, we extend the

sample period from 2018 through end-2025, thereby covering the initiation of tariff actions, their subsequent escalation, and partial unwinding phases under both the Trump and Biden administrations. The use of multiple independent timelines reduces the risk that the event set reflects the perspective of a particular source and helps ensure that the dataset captures the broad set of major tariff announcements documented across these sources.

The resulting dataset expands the original 112 events to a substantially larger set of tariff announcements. As in Jeanne and Son, we classify each event by direction and origin, yielding four mutually exclusive categories: U.S. tariff increases, U.S. tariff decreases, Chinese tariff increases, and Chinese tariff decreases. Tariff magnitude is measured as the implied change in the trade-weighted average tariff rate associated with each announcement.

The coding protocol follows the implicit classification logic of Bown and Kolb (2025a), whose chronological timeline of the first Trump administration's trade actions constitutes one of the primary source documents for the Period 1 event set, and Bown (2025b), whose timeline 2.0 serves the analogous role for the second Trump administration's actions covered in Period 2. An observation is included as a new event if and only if it introduces a material change in announced tariff rate, product coverage, or country scope that was not already on record. Revisions to implementation timing that leave rates and coverage unchanged are not coded as separate events. On days with simultaneous actions by both countries, each country's action is coded independently, following Bown and Kolb's practice of recording bilateral escalations within a single chronological entry while attributing each leg to its respective originator. On days with multiple U.S. actions affecting distinct product categories, the implied tariff change is computed as the change in the aggregate trade-weighted average, following the construction detailed in Table A1, which reports every coding decision transparently alongside the corresponding announcement and implementation dates.

The key methodological contribution relative to Bown and Kolb is the explicit separation of the announcement date from the implementation date as distinct, independently codable fields for every event. Whereas Bown and Kolb document both dates sequentially within a single narrative entry without formalizing the distinction, Table A1 records them separately. This separation is consequential for identification: the empirical analysis anchors the tariff-news indicator to the announcement date — the moment at which new information enters the market — rather than to the implementation date, at which point the tariff burden is realized but the informational content of the original announcement has already been incorporated. Events for which announcement and implementation coincide are flagged accordingly in Table A1.

The extended event set serves as the basis for constructing surprise variables, which are subsequently used in the empirical identification strategy.

3. Methodology

Outcomes, treatments, and samples. We study how tariff announcement news affects daily exchange rates and related financial variables. Let y_t denote an outcome observed at the daily frequency (e.g., the log bilateral exchange rate, the inverse BIS NEER so that higher values indicate depreciation, or a yield/uncertainty index). The treatment s_t is a tariff-news indicator taking value 1 on days with U.S. tariff increase announcements (extended Jeanne–Son/Bown–Kolb timeline), -1 on days a tariff decrease, suspension, exemption, or rollback of previously imposed tariffs is announced and 0 otherwise. We analyze two samples: 2018-01-01–2019-12-31 and 2024-07-01–2025-12-31, to compare the initial trade-war period with the recent episode.

All bilateral exchange rates used as outcomes are expressed as natural logs of units of foreign currency per U.S. dollar, so that an increase indicates dollar appreciation (foreign currency depreciation). BIS NEER indices are transformed to their log inverse, so that an increase likewise indicates depreciation of the domestic currency in trade-weighted terms. Throughout, a positive impulse response coefficient implies depreciation of the non-dollar currency.[3]

Local projections. Following Jordà (2005) as presented in Jordà–Taylor (2025), for each horizon $h = 0,1,..,H$ we estimate the linear projection of the horizon-lead outcome on the announcement at time t and controls measured at time $t-1$:

$$\tilde{y}_{t+h} = \alpha_h + \beta_h s_t + \gamma_h s_t^{CN} + \Gamma_h' x_{t-1} + v_{t+h}, \qquad (1)$$

where $\tilde{y}_{t+h} = \frac{1}{J}\sum_{j=0}^{J-1} y_{t+h}$ is the J (set to 7 if nothing else is indicated) days smoothed horizon-lead outcome, x_{t-1} stacks: outcome persistence $(y_{t-1}, y_{t-2}, .., y_{t-7})$, shock dynamics $(s_{t-1}, s_{t-2}, .., s_{t-7})$, and common global controls (each with 7 lags): trade-policy uncertainty, VIX, geopolitical risk, U.S. 10-year yield, and German 10-year yield. Trade policy announcements made by China (s_t^{CN}) dated in period t is included as a control to absorb the contemporaneous effect of retaliatory actions.[4] Equation (1) is estimated separately for each outcome series and each horizon h in each sample period. We set $H = 90$ days throughout. The moving-average specification, motivated by the smooth local projection approach of Barnichon and Brownlees (2019), improves precision and smooths out the large jumps in daily financial data that can obscure the underlying dynamic response. Figures 1–2 and Appendix 3 confirm that the gradual adjustment documented below is visible in raw, unsmoothed data ($J = 1$) and is not an artifact of the moving-average design.

[3] BIS computes the NEER for China using the onshore CNY rate. Given PBoC's management of CNY, the NEER dynamics partly reflect policy-permitted adjustment rather than fully market-determined depreciation.

[4] Including a larger number of lags (e.g., 14 instead of 7) for all autoregressive and control variables leaves the estimated impulse responses and statistical inference qualitatively and quantitatively unchanged, indicating that the baseline results are not sensitive to the chosen lag length.

The control variables serve distinct identification roles. Trade policy uncertainty (TPU) and the VIX are included as lagged controls to absorb pre-existing uncertainty conditions, not to control for the contemporaneous effect of tariff news (which would introduce endogeneity, since both are responsive to tariff announcements as we document below). Geopolitical risk (GPR) controls for military and security-related shocks that may coincide with tariff events but operate through a different channel—the GPR index, by construction, does not contain trade-policy terms (Caldara and Iacoviello 2022, Table 1), making it well-suited to absorb confounders from simultaneous military crises without competing with the tariff treatment for variation. The U.S. and German 10-year yields control for monetary policy expectations and global rate conditions.

Inference. Because residuals v_{t+h} inherit an $MA(h)$ component, we compute heteroskedasticity- and autocorrelation-consistent (HAC) standard errors using Newey–West, with a conservative lag length that covers the relevant short-run serial correlation at the daily frequency. This is standard for LPs and aligns with the inference guidance in Jordà–Taylor (2025).

Impulse responses. The impulse response at horizon h is defined as the estimated effect of the announcement shock s_t on the outcome y_{t+h}, i.e. the slope coefficient on s_t in (1). Formally,

$$\hat{\mathcal{R}}(h) \equiv \hat{\beta}_h, \tag{2}$$

which we report together with pointwise 68% and 95% confidence intervals based on the HAC standard errors. For log-transformed outcomes (e.g., $100 \times log(NEER)$), $\hat{\beta}_h$ is interpreted as the percent change in the level of the outcome at horizon h in response to a tariff-news day. Positive values imply a depreciation. For yields and uncertainty indices, $\hat{\beta}_h$ corresponds to an index-point move at horizon h. Since equation (1) is estimated in levels, $\hat{\beta}$ should be read as the absolute change in the (logged or level) outcome at horizon h relative to baseline, conditional on the controls.

Identification. Our identification rests on the timing structure of (1): treatment s_t is measured at day t, while the outcome is y_{t+h} with $h > 0$. Conditional on rich lags of the outcome, the treatment, and global financial controls, we assume $E[s_t v_{t+h}] = 0$. Under this as-good-as-random timing at the daily frequency, $\hat{\beta}_h$ traces the dynamic causal response of y_{t+h} to a tariff-news shock. This is the standard LP design for policy/news shocks at high frequency as laid out in Jordà–Taylor (2025), following a broader tradition of event-based identification in asset markets (Andersen, Bollerslev, Diebold, and Vega 2007, Faust, Rogers, Wang, and Wright 2007, Nakamura and Steinsson 2018). This approach also shares the spirit of narrative identification strategies in fiscal policy (Ramey 2011, Romer and Romer 2010), where the timing of policy announcements is used to identify causal effects.

Identification hierarchy across periods. The two sample periods serve complementary roles. Period 1 (2018–2019) provides cleaner causal identification. It contains a larger number of events with substantial variation in

retaliation status, implementation probability, and tariff scope, allowing the local projections to separate tariff effects from confounders with greater statistical power. Period 2 (2024–2025) provides stronger mechanism evidence: the convenience-yield channel—absent or dormant in the earlier period—becomes the dominant transmission channel, producing large and distinctive responses in CIP deviations, term premia, and exchange rates. A potential concern is that the extreme events of April 2025 ("Liberation Day") dominate the Period 2 estimates. The leave-one-out and block-drop exercises in Section 6 address this directly.

Predictability of announcement timing. A necessary condition for our local projection identification is that the timing of tariff announcements is not systematically predictable conditional on the information set available to market participants. We assess this by regressing the announcement indicator on lagged values of the same variables that enter the LP control set—VIX, trade policy uncertainty, geopolitical risk, U.S. and German 10-year yields, and the announcement indicator itself—as well as an extended set including lagged S&P 500 returns and the broad dollar index. Table 1 in Appendix 4 reports results from linear probability, ordered probit, and binary probit specifications using three lags, estimated separately by period.

The linear probability model yields little indication of systematic predictability in either episode. Joint F-tests fail to reject the null that lagged predictors have no explanatory power ($p = 0.12$ and $p = 0.23$ in Period 1 and Period 2 respectively), and R^2 values are close to zero (0.009 and 0.027), indicating very limited explanatory power.

Probit and ordered probit specifications tell a different and more nuanced story, particularly in Period 1. In Panel B, the ordered probit Wald test rejects in Period 1 ($p = 0.030$ and $p = 0.003$ for baseline and extended), while Period 2 does not reject ($p = 0.192$ and $p = 0.024$). The binary probit in Panel C shows AUC values of 0.621–0.656 in Period 1 and 0.784–0.785 in Period 2 – with Period 2 appearing non-negligible at first glance.

Four considerations inform how much weight to place on these findings as a threat to identification. First, with only 27 event days in Period 2 and a binary dependent variable, maximum-likelihood estimators in probit models are susceptible to small-sample upward bias in Wald statistics and, in the extended specification, potential complete or partial separation — both of which can inflate rejection rates even in the absence of genuine predictability. We illustrate this concern through a Monte Carlo experiment. We simulate 500 replications of a Bernoulli process calibrated to the Period 2 environment ($T = 549$ days, event frequency $p = 0.049$). The predictors are iid $N(0,1)$ variables that, by construction, have no predictive power. Using iid predictors provides a conservative benchmark, as persistence in the predictors would generally increase the scope for overfitting in small samples. Figure 27 shows the resulting null distributions of in-sample AUC across lag specifications. The median null AUC rises monotonically from 0.62 with one lag to 0.83 with seven lags as the events-per-parameter ratio (EPP) falls from 5.4 to 0.8, reflecting pure overfitting in the absence of predictive signal. The observed AUC(c) of 0.79 under the three-lag specification lies within the interquartile range of the corresponding null distribution, and the observed AUC(c) of 0.92 under seven lags exceeds the

null distribution, consistent with near-complete separation rather than underlying predictability. These results suggest that the probit AUC values carry little information about true predictability beyond what would be expected under the null given the degree of overparameterization. A further diagnostic is the AUC gap between variant (a) — which includes lagged s(t) — and variant (c), which excludes it. In Period 2 this gap is −0.003, indicating that the announcement indicator itself contributes nothing to discriminatory power and that the elevated AUC(c) is driven entirely by the financial variables. Combined with the Monte Carlo evidence, this is consistent with overfitting rather than genuine predictability.

Second, the predictive power in the nonlinear models is concentrated in lagged TPU, which tends to rise in the days preceding formal announcements as media coverage of trade tensions intensifies, this likely reflects the timing structure of news production rather than financial-market anticipation of policy actions.

Third, the LP specification controls for lagged TPU, GPR, past announcements, VIX, and yields — so any predictable component captured by these observables is absorbed by the conditioning set. Conditional on these controls, the residual timing variation we exploit is arguably close to conditionally exogenous, even if the unconditional announcement probability is somewhat predictable.

Fourth, the linear probability model—which does not suffer from the separation problem and is directly comparable to the LP specification— does not reject the null across all samples and predictor sets.

Hence, the linear probability model finds little evidence of financial-variable predictability, and the apparently significant associations in the nonlinear specifications appear to be driven largely by overparameterisation and lagged media-based uncertainty indices that our LP controls absorb. We cannot rule out residual timing predictability from unobserved variables, and this remains a standard caveat for event-based identification. The robustness exercises in Section 6, including placebo calendars, calendar shifts, and leave-one-out analyses, provide complementary evidence that the estimated responses are unlikely to be artifacts of announcement clustering or generic co-movement.

Overall, we find little robust evidence that announcement timing is predictable based on lagged financial variables. The results are broadly consistent with the maintained assumption of conditional timing exogeneity. We emphasize, however, that failure to reject does not establish exogeneity. The test is informative only about predictability conditional on observables and cannot rule out correlation with unobserved shocks.

4. Empirical Results

Before turning to the regression results, we present a non-parametric event study around tariff-news dates. For transparency, we focus on U.S. tariff-increase announcements ($s_t = 1$) and construct an asymmetric window of $[-14, +21]$ days around each event date t. For outcome series y_t and every event we extract the path $\{y_{t+h}\}_{h=-14}^{21}$ and normalize it to the event level: $\Delta y_{t+h} \equiv y_{t+h} - y_t$.

This normalization implies $\Delta y_t = 0$ for every event and hence for the cross-event mean and median. We then stack all normalized paths and compute, at each relative horizon h, the cross-event mean (solid thick line) and median (thick dashed line). We produce figures separately for the two samples and a side-by-side comparison (P1 vs. P2).

This descriptive design imposes no dynamic structure and makes no identifying assumptions beyond alignment in event time. It is intended to show what moves and when. The Local projections below supply parametric estimates with controls and standard errors.

Figure 1 plots bilateral RMB–USD rates and trade-weighted nominal effective exchange rates (BIS NEER) for China and the United States over a −14/+21-day window. Two results stand out. First, the bilateral RMB–USD series show modest but directionally distinct movements across periods. In Period 1, both the offshore (CNH) and onshore (CNY) renminbi depreciate slightly against the dollar. In Period 2, the CNH appreciates slightly while the CNY remains broadly unchanged. Second, the effective baskets show clearer patterns. In Period 1, China's NEER drifts toward modest depreciation while the U.S. NEER appreciates. In Period 2, both NEERs depreciate by +1½–2% by day +21. Adjustment builds gradually in both periods. The stable bilateral rate combined with depreciating effective baskets implies that the renminbi weakened against third currencies—primarily European—while the PBoC maintained approximate stability against the dollar (see Appendix 1).

Figure 2 presents the corresponding paths for Sweden and the euro area. Period 1 responses are modest, with small Swedish depreciation and mild euro-area appreciation. In Period 2, both baskets appreciate in trade-weighted terms (medians roughly −1% to −3% by +21), again with gradual accumulation.

The Period-2 patterns are consistent with the high-frequency (intra-day) evidence of Hartley and Rebucci (2025), who document dollar depreciation against G10 currencies on "Liberation Day" (April 2, 2025) driven by portfolio rebalancing away from dollar-denominated risky assets. Our event study extends this finding to the medium horizon and across a broader set of announcement dates. The muted Period-1 effects likely reflect low announcement credibility: when markets discounted much of the tariff rhetoric as negotiation noise, exchange rate adjustments remained small. These patterns motivate the parametric analysis below, where we condition on global-risk and rates controls.

Local projection estimates

This section presents the estimated responses of a broad set of dependent variables to tariff announcement events. The dependent variables encompass five categories. First, we consider whether announcements translated into actual tariff implementations, distinguishing between measures imposed by China and the United States on each other as well as on the Rest of the World. Second, we analyze the response of macroeconomic surprise indices, which measure whether incoming data releases exceed or fall short of market

expectations. Third, we examine indicators of uncertainty and risk, including trade policy uncertainty indices, global geopolitical risk, and equity market volatility (VIX). Fourth, we assess responses in financial markets, focusing on long-term yields and term premia for the United States and Germany. Finally, we turn to the foreign exchange market, where we study bilateral exchange rates against the U.S. dollar, effective nominal exchange rate indices, and CIP deviations for government bonds.

The results are presented separately for the two sample periods, 2018–2019 and 2024–2025, before turning to a comparative discussion.

Identification and shock relevance. We begin by assessing whether tariff-announcement dates capture trade-policy–specific information with the intended timing. A potential concern in event-based designs is that announcements may coincide with broader macroeconomic or geopolitical news. While the timing of tariff announcements is not randomly assigned, two features of the data support interpreting our event calendar as capturing salient trade-policy information. First, Figure 6 shows that tariff announcements are followed by sharp and statistically significant increases in the Trade Policy Uncertainty (TPU) index of Caldara et al. (2020), a news-based measure constructed independently of our event calendar and not derived from financial-market prices. The TPU response peaks close to the announcement date and then decays gradually, consistent with an uncertainty shock. The VIX provides a complementary validation in Period 2: equity-market volatility rises immediately and persistently after tariff announcements, confirming that the announcement calendar captures information that is priced by financial markets—not merely reflected in news-based text indices. Second, the sensitivity analysis in Figure 14—leave-one-out exercises, block drops, placebo calendars, and calendar shifts—shows that these dynamics are not driven by a small number of dates, short-lived clusters, generic co-movement, or mis-timed effects.

Tariff Implementations. Figure 4 shows the response of actual tariff implementations following tariff announcements. In Period 1 (blue lines), the responses are close to zero across all dimensions—Chinese tariffs on U.S. and Rest of the World (ROW) exports as well as U.S. tariffs on Chinese and ROW exports. Confidence intervals are wide, and estimates remain statistically insignificant. This suggests that during 2018–2019, announcements largely remained at the stage of signaling or negotiation rather than being realized as actual policy actions.

In sharp contrast, Period 2 (red lines) displays strong and persistent positive responses. Chinese tariffs on U.S. exports and U.S. tariffs on Chinese exports both rise substantially, with coefficients increasing steadily over the horizon. U.S. tariffs on ROW exports also show sustained increases, though of smaller magnitude.

The shape of the implementation profile is informative about the announcement–realization lag and is sensitive to the sample endpoint in a way that illuminates the underlying policy dynamics. In shorter estimation samples ending in mid-2025, the implementation response exhibits a sharp discontinuity at approximately 60 days. This reflects the concentration of escalatory announcements in the weeks preceding "Liberation Day" (April 2,

2025), when a broad set of previously signaled tariff increases were simultaneously realized. The local projection captures this clustering as a delayed but dramatic implementation spike, consistent with a regime in which multiple announcements accumulated before a single coordinated policy action. When the sample is extended through December 2025, this spike is attenuated. Several of the Liberation Day tariffs were partially rolled back or suspended within weeks of implementation, and because de-escalatory announcements were realized more quickly than the original escalations, the average implementation profile becomes smoother and more gradual. The extended sample, by including both the escalation and the partial reversal, provides a more balanced estimate of the average announcement-to-implementation dynamics and reduces the risk that the Liberation Day cluster dominates the estimated profile.

The evidence in Figure 4 points to a clear shift: whereas announcements in Period 1 did not systematically translate into implementations, announcements in Period 2 were far more likely to be realized as policy actions — though the path from announcement to realization was neither instantaneous nor monotonic.

Economic Surprise Indices. An important caveat applies to interpreting economic surprise indices in the aftermath of tariff announcements. Positive surprises may reflect downward revisions in expectations at the time of the announcement rather than genuine improvements in economic outcomes. If markets lower their forecasts in response to tariff news, subsequent data releases are mechanically more likely to exceed revised expectations. With this qualification in mind, the results in Figure 5 are nonetheless informative about the regional pattern. In Period 1, tariff announcements are followed by modest negative responses in the China Economic Surprise Index. In Period 2, the China index rises significantly while the U.S. index turns negative at medium horizons, suggesting an asymmetric bilateral pattern. The Euro Area and World indices show no statistically significant response in period 2, indicating that the effect is bilateral rather than global.

Uncertainty and Risk Measures. Figure 6 presents responses of uncertainty and risk indicators. In both periods, trade policy uncertainty (TPU, left panel) rises strongly following announcements, providing independent validation that tariff-announcement dates coincide with salient trade-policy news. In Period 1, the increases are moderate and short-lived, whereas in Period 2 the responses are larger and more persistent.

The geopolitical risk index (GPR, middle panel) shows no statistically significant response to tariff announcements in either period. In Period 1, GPR is flat throughout the horizon. In Period 2, the point estimates display some movement at longer horizons, but the responses are statistically insignificant and appear to be driven by geopolitical events unrelated to trade policy—most notably the escalation of U.S.–Iran tensions in June 2025, which coincides with the implementation horizon of several tariff announcements. The Caldara and Iacoviello (2022) GPR index is constructed from newspaper articles mentioning military and security-related terms—"war," "troops," "invasion," "terrorist"—and explicitly excludes trade-related terminology such as "price war" (Table 1 in Caldara and Iacoviello 2022). The absence of a significant GPR response is therefore consistent with the index's construction. Tariff announcements are economic-policy events that do not

systematically spill over into the military and security terminology that GPR is designed to capture. GPR remains in our specification as a control variable, where it serves to absorb confounders from military and security-related shocks that may coincide with tariff events, but it is not itself a channel through which tariff announcements transmit to financial markets.

Equity market volatility, measured by the VIX (right panel), exhibits no systematic response in Period 1. In Period 2, tariff announcements are associated with a steady, sustained increase in the VIX across the full horizon. The contrast between TPU and VIX is informative about the nature of tariff transmission. TPU captures genuine policy-discussion uncertainty in both periods. Announcements raised real questions about future trade arrangements regardless of implementation probability. VIX measures priced near-term aggregate equity risk, which need not respond even to salient announcements if their perceived implications for near-term macro stability remain limited. The absence of a VIX response in Period 1 therefore reflects low perceived probability of broad macroeconomic consequences, not an absence of policy uncertainty. In Period 2, the scale and credibility of announced measures were sufficient to translate policy uncertainty into priced aggregate risk.

Long-Term Yields and Term Premia. Figure 7 shows the estimated responses of yields and term premia. In Period 1, both the German 10-year yield and the U.S. zero-coupon 10-year yield remain close to zero throughout the horizon, with wide confidence intervals that preclude inference on either series. U.S. term premia show a modest positive drift across maturities, including at the 10-year horizon, though the responses are not precisely estimated.

In Period 2, the responses diverge sharply across countries. U.S. zero-coupon yields and term premia rise in a unified pattern, with effects building over the first 40–60 days across all maturities—the ACM 1-year, 2-year, and 10-year measures all increase, indicating broad-based upward pressure on U.S. rate compensation. The German 10-year yield, by contrast, is approximately flat throughout the Period 2 horizon, with point estimates hovering near zero and confidence intervals comfortably spanning the origin. This transatlantic divergence is consistent with tariff announcements being priced as a predominantly U.S.-specific risk: markets demanded higher compensation for holding U.S. duration but did not extend that repricing to European sovereign bonds — though, as we discuss below, this divergence is informative but not fully conclusive about the precise channel through which U.S.-specific premia rose.

Exchange Rates. Figures 8–10 summarize the exchange rate responses. In Period 1 (blue lines), bilateral exchange rates against the U.S. dollar (Figure 8) show a mixed pattern. The Chinese renminbi depreciates persistently against the dollar, and the Canadian dollar appreciates steadily over the horizon. For the remaining currencies — euro, sterling, Swedish krona, and yen — responses are small and short-lived, with significance limited to the first 0–10 days at most. Cross rates involving the Chinese renminbi and other major currencies (Figure 9) display more systematic responses already in Period 1, with the renminbi weakening against the euro and sterling and strengthening against the Swedish krona, while the Canadian dollar and yen appreciate

against the renminbi. Effects are shorter-lived than in Period 2 but of comparable magnitude. This subdued pattern indicates that tariff announcements during 2018–2019 had limited immediate impact on exchange rate dynamics. This evidence complements Jeanne and Son (2024), who show that the renminbi nonetheless depreciated substantially during the trade war, largely in response to actual tariff actions rather than announcements.

In Period 2 (red lines), the picture changes. The overall pattern is one of simultaneous dollar weakness and heterogeneous renminbi adjustment against other currencies. The renminbi weakens against the euro and sterling but strengthens against the Swedish krona, indicating that renminbi movements are not uniform across European currencies. The renminbi depreciates against the euro (Figure 9, top row, middle panel), with effects growing steadily over the horizon, while bilateral exchange rates against the U.S. dollar (Figure 8) show more heterogeneous adjustments across currencies. This pattern—the dollar weakening on a trade-weighted basis while European currencies broadly strengthen—is inconsistent with a single-channel model and suggests that the conventional trade-price channel and a portfolio-rebalancing or safe-asset channel operate simultaneously with different signs across currency pairs. Because the bilateral CNY/USD rate is approximately flat under PBoC management, cross-rate movements against European currencies largely reflect dollar weakness against those currencies rather than independent renminbi dynamics. Trade-weighted exchange rate indices (Figure 10) further highlight these asymmetries. The Chinese NEER depreciates strongly and persistently, confirming that announcements translated into broad-based weakening of the renminbi. The Swedish and euro-area NEER appreciates persistently over the full 0–90-day horizon, while the U.S. NEER shows only weakly significant movements.

Covered Interest Rate Parity Deviations. Figure 11 displays the estimated responses of CIP deviations for 10-year government bonds against the United States, constructed by Du and Schreger (2016), Du, Im, and Schreger (2018), Du and Schreger (2022), and Du, Keerati, and Schreger (2025a). Throughout the empirical analysis, we follow Du, Im and Schreger (2018) and define the government bond CIP deviation as $V_{i,n,t} = y^{Gov}_{i,n,t} - y^{Gov}_{USD,n,t} - \rho_{i,n,t} = \Delta y_{i,nt} - \rho_{i,n,t}$, where $\Delta y_{i,nt}$ denotes the government bond yield differential and $\rho_{i,n,t}$ the market-implied forward premium. For G10 countries, these deviations capture primarily the convenience yield differential between U.S. Treasuries and foreign government bonds: a decline indicates that the Treasury premium is shrinking, while an increase indicates that U.S. safe assets are becoming more special relative to the foreign counterpart.[5]

[5] Diamond and Van Tassel (2025) decompose government bond CIP deviations into an arbitrage-friction component and a convenience yield differential and find that the arbitrage-friction component accounts for the bulk of CIP deviation movements during financial crises. Our interpretation of declining CIP deviations as reflecting a fall in the relative Treasury convenience yield is therefore subject to this caveat, though their results pertain to a sample (2004–2020) of financial stress rather than trade-policy shocks of the kind we study.

In Period 1 (blue lines), CIP deviations show little systematic response for most currency pairs. Movements are generally within ±2 basis points and statistically insignificant, consistent with the muted exchange rate and volatility responses documented above. The renminbi is an exception (Figure 12): the CNY deviation drifts gradually upward over the horizon, reaching approximately 8–10 basis points by day 80–90.

In Period 2 (red lines), a clear and heterogeneous pattern emerges. For the six G10 currencies — SEK, EUR, CHF, JPY, CAD, and GBP — CIP deviations generally decline over the event horizon, though with substantial heterogeneity. The decline is strongest for the Swedish krona, the euro and the Swiss franc (5–8 basis points), moderate for the Canadian dollar (2–4 basis points). The Swiss franc decline is somewhat later than for the euro and the krona, turning sharply negative only after day 60–70 before reaching -5 to −6 basis points by day 80–90, suggesting a delayed but ultimately comparable convenience-yield repricing. The euro and the yen increase at first and then fall. The yen is particularly notable in that it initially rises toward +2 basis points in the first 40–60 days — before reverting, suggesting that safe-haven flows temporarily dominate the convenience-yield channel at short horizons. Where the decline is present, it builds over 40–60 days rather than appearing on impact. This decline is consistent with a reduction in the U.S. Treasury premium relative to several advanced-economy government bonds during tariff-announcement episodes. Du, Keerati, and Schreger (2025a) distinguish between dollar convenience — which has remained robust in the post-GFC period — and Treasury convenience, which has undergone a secular decline driven largely by the relative supply of U.S. government debt. Our government bond CIP measure captures the latter. The decline we document suggests that, beyond secular supply-related forces, tariff-announcement episodes are associated with movements in Treasury-related premia in a direction consistent with the mechanism developed in Section 5. Importantly, the baseline level of U.S. Treasury specialness had already declined substantially in the post-GFC period relative to pre-2008 levels, with long-maturity CIP deviations turning negative on average by the mid-2010s (Du, Im, and Schreger 2018, Du and Schreger 2022). The decline documented here is therefore a directional movement away from an already reduced convenience yield, not a departure from a historically elevated baseline. Against this backdrop, the gradual adjustment mirrors the exchange rate drifts documented in Figures 8–10 and suggests that the underlying mechanism — a gradual reassessment of settlement and safe-asset conditions — propagates slowly through settlement and portfolio rebalancing channels.

This cross-currency pattern has a sharp interpretation under the Du–Im–Schreger decomposition. Under that decomposition, the government-bond CIP deviation for currency i can be written as $V_{i,t} = V_{US,t} - V_{i,t}$. Hence, if tariff escalation reduces the relative convenience yield on U.S. Treasuries vis-à-vis other advanced-economy safe assets, CIP deviations against G10 currencies must decline: $\Delta V_{G10,t} < 0$. By contrast, if the same shock simultaneously reduces the relative attractiveness of Chinese assets, then the renminbi convenience yield falls even more relative to Treasuries, implying: $\Delta V_{CN,t} > 0$. The sign pattern $\Delta V_{G10,t} < 0 < \Delta V_{CN,t}$ is therefore not merely descriptive. It is a direct cross-currency implication of the convenience-yield channel and is difficult to reconcile with explanations based solely on common global funding or intermediary-balance-sheet shocks,

which would tend to move CIP deviations in the same direction across currencies. For the onshore renminbi, however, this decomposition requires qualification given capital-account segmentation, as discussed below.

Consistent with this cross-currency restriction, the Chinese renminbi displays a different pattern in Period 2. After remaining close to zero through approximately day 55–60, the CNY deviation rises sharply to 10–15 basis points around day 75–85 before partially reversing. This timing reflects the broader realization phase of the tariff episode, the cumulative sequence of escalation, retaliation, and staged policy modifications, rather than the literal implementation date of any single announcement, which Table A1 shows typically falls within 1–2 weeks of the corresponding announcement.[6] This spike is considerably more abrupt than the gradual positive drift observed in Period 1, and its timing alignment with implementation reinforces the interpretation that the realization of tariffs intensifies direct trade-channel pressure on China as the primary target of U.S. tariff actions. The divergence from the G10 pattern reflects the distinct nature of the shock facing China: as the primary target of U.S. tariffs, Chinese sovereign credit risk and capital-account segmentation increase, pushing the CIP deviation upward even as the Treasury premium falls against other countries. Notably, the G10 deviations decline further at the same implementation horizon where the CNY deviation spikes, reinforcing the interpretation that the two channels — convenience-yield erosion for G10 and direct trade-channel stress for China — intensify jointly at realization. Unlike the G10 deviations, which primarily capture convenience-yield differentials on government bonds, the CNY CIP deviation also reflects capital-control premia and convertibility risk — features documented by Du and Schreger (2022), who show that capital controls create segmentation between onshore yields and the offshore non-deliverable swap market, so that dollar-funding stress that declines G10 deviations instead widens the renminbi deviation as the convertibility premium rises.

Figure 12 also presents results for the offshore renminbi (CNH), which provides a direct test of this interpretation. In sharp contrast to CNY, the CNH deviation in Period 2 turns negative almost immediately following tariff announcements, falling to approximately -3 to -8 basis points across the horizon before partially recovering. At the implementation horizon — where the CNY deviation spikes sharply upward — the CNH deviation exhibits a further decline, consistent with a tightening of offshore dollar-funding conditions. This pattern closely mirrors the G10 response documented above. The CNH deviation behaves more like a freely traded currency subject to the same convenience-yield erosion channel, while the onshore CNY deviation is insulated from this decline by capital controls. The divergence between CNY and CNH in Period 2 therefore provides a direct, market-implied measure of the widening convertibility premium under tariff stress. As trade-channel pressure intensifies, the segmentation between onshore and offshore renminbi markets

[6] As a diagnostic check, we compute the number of tariff events (defined as days with $s_t \neq 0$) that remain admissible in the regression sample at each horizon, given that the dependent variable is observed through June 30, 2025. The number of events declines only gradually with the horizon, from 23 at short horizons to approximately 17-12 at longer horizons. The block-dummy specification in Appendix 4, which partials out Liberation Day outcomes without removing observations, provides complementary evidence that the $h \leq 80$ responses are robust.

deepens, preventing the convenience-yield decline visible in CNH from transmitting to the onshore rate. This comparison validates the G10 mechanism from a different angle — even for China, the relatively more freely-traded offshore rate exhibits the same convenience-yield decline observed across advanced economies — and reinforces the interpretation that the positive onshore CNY response reflects capital-account segmentation rather than a fundamentally different underlying safe-asset dynamic.

The cross-country heterogeneity in CIP responses — strongest for the euro and the Swedish krona, weakest for sterling and the yen — is consistent with Du, Keerati, and Schreger (2025a), who show that the Treasury premium decline after April 2025 was most pronounced against countries with low government debt burdens. This suggests that relative bond supply amplifies the convenience-yield channel: the network-erosion mechanism has a larger impact on the Treasury premium vis-à-vis countries whose government bonds are scarce substitutes.

To shed further light on the mechanisms driving these CIP responses, Figure 13 decomposes the total government bond CIP deviation into its two components: market-implied forward premium (ρ), which captures frictions in FX swap markets and dollar funding conditions, and the government bond yield differential, which captures the relative return on domestic versus U.S. sovereign debt at matched maturities. Throughout, the plotted forward premium series is $\rho_{i,n,t}$ as defined by Du, Keerati, and Schreger (2025a): $\rho_{i,n,t} = irs_{i,n,t} + bs_{i,n,t} - irs_{USD,n,t}$. A positive $\rho_{i,n,t}$ indicates that the cost of synthetic dollar funding via cross-currency swap exceeds the direct dollar rate — elevated dollar-funding premia — which typically coincides with a negative cross-currency basis $bs_{i,n,t}$. For the CNY, ρ is constructed from non-deliverable swap (NDS) rates and embeds capital-account segmentation, a negative move in $\rho_{CNY,n,t}$ at implementation reflects a surge in NDS-implied dollar demand rather than the same funding-stress channel operative for G10 currencies. By construction, the CIP deviation equals the yield differential minus the forward premium, so the decomposition reveals whether the responses documented above are driven primarily by disruptions to dollar funding markets — a financial plumbing channel — or by a repricing of relative sovereign credit and convenience yields — a safe-asset channel. For G10 currencies with open capital accounts, this two-channel decomposition is clean: ρ captures FX swap frictions and Δy captures relative safe-asset pricing. For the Chinese renminbi, ρ is constructed from non-deliverable swap markets and accordingly embeds capital-account segmentation and convertibility risk alongside standard hedging costs, the two-channel interpretation therefore requires qualification for CNY, as discussed below. These two channels have distinct policy and theoretical implications. Movements in ρ reflect short-term strains in intermediation capacity, while movements in bond yield differentials are more directly linked to the convenience-yield erosion mechanism formalized in Section 5. An alternative interpretation of the CIP decline is that it reflects tighter intermediary balance-sheet constraints during tariff-related financial stress rather than a structural shift in Treasury convenience yields — a channel emphasized by Avdjiev et al. (2019) and Gabaix and Maggiori (2015). The two channels are not orthogonal: episodes of dollar-funding stress tighten both the basis and the convenience yield simultaneously. The decomposition in Figure 13

provides partial evidence against a pure balance-sheet interpretation: the yield-differential component moves at longer horizons than the basis component, which is the pattern expected if network-driven convenience yield erosion operates on a slower timescale than intermediary balance-sheet adjustment. Nevertheless, we cannot fully separate the two channels at the horizons we study.

Figure 13 (panel a) presents the decomposition for the euro. In Period 1, all three components remain close to zero throughout the horizon, with overlapping confidence bands that preclude inference on either channel. The small positive CIP response visible in the aggregate measure reflects a modest contribution from both components, but neither is individually significant.

Period 2 tells a richer and more informative story. The aggregate CIP deviation (red) follows a hump-shaped path: it rises to approximately +5 basis points around day 40–50 before declining sharply into negative territory of -3 to -5 basis points by day 70–90. The decomposition reveals that the two phases are driven by distinct mechanisms. The initial positive movement occurs while the forward premium (blue) remains near zero or slightly negative, contributing positively to $V_t = \Delta y_t - \rho$, and the yield differential (green) has not yet declined materially. The subsequent sharp decline into negative territory is then driven by two channels acting in concert: the yield differential falls to -5 to -8 basis points at horizons of 50–70 days, while simultaneously the forward premium rises to +5–8 basis points around day 60–80. Since a falling Δy_t and a rising ρ both reduce $V_t = \Delta y_t - \rho$, the two channels reinforce rather than offset one another in this phase. A declining yield differential at this maturity reflects an erosion of the Treasury yield discount relative to the German Bund: investors are no longer willing to accept as low a yield on U.S. Treasuries relative to Bunds as before, consistent with a reduction in the convenience yield premium that U.S. safe assets command. The rising forward premium is consistent with elevated dollar funding premia and disruptions to FX swap intermediation capacity. The pattern is consistent with a gradual reassessment of U.S. safe-asset demand: tariff announcements appear to shift portfolio allocation away from U.S. Treasuries over time, compressing the Treasury premium at longer horizons, while dollar funding conditions tighten more immediately. The overlapping nature of these two channels — limited initial adjustment giving way to reinforcing safe-asset and funding-market pressures acting in tandem — suggests that funding markets and sovereign bond markets respond to tariff risk through distinct adjustment processes.

Figure 13 (panel b) presents the analogous decomposition for the Chinese renminbi. The pattern differs markedly from the euro, and the contrast is informative about the distinct nature of the shock facing China.

In Period 1, the aggregate CNY CIP deviation drifts gradually upward, reaching approximately +5–8 basis points by day 80–90. The decomposition attributes this drift primarily to the market-implied forward premium, which declines modestly but with wide confidence bands, while the yield differential remains close to zero throughout. Neither component is individually significant, consistent with the characterization of Period 1 as generating limited financial market stress.

Period 2 reveals a fundamentally different transmission structure. The yield differential component (green) declines immediately and sharply from the announcement date, falling to approximately −20 to −35 basis points by day 60–70 before partially recovering. This is by far the dominant driver of the Period 2 decomposition, and its immediacy contrasts sharply with the gradual EUR response. For CNY, a sharply negative yield differential reflects a decline of Chinese sovereign yields relative to U.S. Treasuries — consistent with forced portfolio rebalancing and capital-account pressures that reduce the return differential available to Chinese investors while the U.S. Treasury remains the global benchmark. This immediate yield differential decline reflects capital-control–constrained portfolio dynamics and PBOC rate management rather than a decline in Chinese sovereign credit risk per se. The credit-risk channel, which would push Chinese yields upward, is instead absorbed in the NDS-based forward premium as offshore dollar-funding costs surge. The two channels, onshore yield declines and offshore NDS pressure, operate in opposite directions on Δy and ρ respectively, with their net algebraic outcome determining the sign of V. The market-implied forward premium (blue), by contrast, remains near zero through approximately day 65–70 before declining sharply to −20 to −25 basis points at the implementation horizon, mirroring the spike in the aggregate CIP deviation documented in Figure 11 and 12. This delayed basis collapse is consistent with a sudden tightening of CNY funding conditions and dollar liquidity stress precisely at the moment tariffs are realized.

The aggregate CNY CIP deviation remaining positive while both components turn negative is arithmetically consistent with the identity $V = \Delta y - \rho$: at the implementation horizon, ρ declines more steeply than Δy, so that their difference $V = \Delta y - \rho$ remains positive at approximately 10–15 basis points. Economically, this reflects the structure of China's capital controls: dollar demand in the NDS market surges at implementation, driving ρ to sharply negative values, while onshore Chinese yields decline under domestic policy and portfolio dynamics. The convertibility wedge thus enters through the NDS-based ρ rather than as a residual outside the identity — capital-account segmentation makes ρ more negative than Δy, sustaining the positive aggregate deviation even as both components fall.

An alternative interpretation of the rising U.S. term premia and declining G10 CIP deviations documented in Figures 7 and 11 is that tariff announcements trigger a repricing of U.S. fiscal or sovereign credit risk rather than — or in addition to — a decline in the convenience yield on U.S. Treasuries (a distinct concern from the intermediary balance-sheet channel discussed above). Two features of the data are at least partially informative on this question. First, the transatlantic divergence in Figure 7 is somewhat difficult to reconcile with a purely global risk-off repricing of sovereign debt: if tariff-induced fiscal concerns were driving investors away from government bonds broadly, German Bund yields might be expected to co-move with U.S. yields, yet the German 10-year yield is approximately flat throughout the Period 2 horizon. Second, the decomposition in Figure 13 shows that the decline of G10 CIP deviations at longer horizons is driven primarily by the yield-differential component rather than the market-implied forward premium, a pattern more consistent with a gradual reassessment of relative safe-asset premia than with an acute sovereign risk repricing, though the two

channels are not mutually exclusive. We do not observe U.S. sovereign CDS spreads or other direct measures of U.S. credit risk in our event-study design, and we cannot rule out that part of the term premium increase reflects a fiscal risk channel operating alongside the convenience yield mechanism. We therefore treat the two interpretations as complementary: both are consistent with the finding that large, credible tariff actions generate U.S.-specific financial stress, and both would produce dollar depreciation through the safe-asset demand channel.

A fiscal risk channel, however, faces a cross-currency restriction that is difficult to satisfy. If tariff announcements triggered a broad reassessment of U.S. sovereign creditworthiness, investors would reallocate away from U.S. Treasuries toward safe assets globally — including emerging market sovereign bonds. This predicts CIP deviations rising across all counterparts, advanced and emerging alike. The data are inconsistent with this prediction: while G10 CIP deviations decline, emerging market deviations rise contemporaneously. A pure fiscal risk channel has no natural account of this sign reversal. The convenience yield channel does: tariff escalation reduces U.S. network centrality relative to advanced-economy safe assets while simultaneously increasing sovereign and capital-account stress for the primary tariff target, generating the observed cross-sectional sign pattern as a direct implication rather than a residual.

The EUR and CNY decompositions suggest a two-channel mechanism. For advanced economies, the dominant channel is a gradual convenience-yield repricing that manifests primarily in the yield differential at horizons of 40–70 days, with an initial FX swap disruption at shorter horizons. For China, the dominant channel is an immediate and severe yield differential decline — reflecting direct sovereign and capital-account stress — accompanied by a delayed FX funding shock at implementation. The sequential and asymmetric nature of these responses — gradual convenience-yield repricing for the euro, immediate yield declines and delayed funding stress for the renminbi — suggests that tariff risk transmits through distinct mechanisms depending on whether the counterpart is a broad dollar-network participant or the primary tariff target facing direct trade-channel and capital-flow pressure. Section 5 develops a model that formalizes this distinction.

Cross-sectional evidence on the Treasury-nexus channel

The bilateral decompositions above suggest that the CIP response for advanced-economy currencies operates primarily through the convenience-yield channel, while the renminbi response reflects direct trade-channel and capital-account pressures. To assess whether the magnitude of the convenience-yield response varies systematically with a currency's proximity to the U.S. Treasury market — and to sharpen the distinction between the two channels — we extend the analysis to the full cross-section of G10 and emerging market currencies available in Du, Keerati, and Schreger (2025a).

For each currency we construct a Treasury-nexus proxy based on sovereign credit default swap spreads from Damodaran (2025), normalized to the unit interval so that higher values indicate lower sovereign credit risk. The economic rationale for this proxy follows directly from the DIS decomposition. A currency whose

government bond CIP deviation is dominated by the convenience-yield differential — rather than a credit-risk premium — will be more responsive to tariff-induced erosion of Treasury specialness. Low-CDS sovereigns issue bonds that are close substitutes for U.S. Treasuries in global portfolios; accordingly, a reduction in Treasury convenience should produce a larger and more negative CIP response for such currencies. For high-CDS emerging market sovereigns, the same shock instead widens sovereign credit spreads and raises the relative attractiveness of Treasuries, producing a positive CIP response. The proxy is therefore an indirect but theoretically grounded measure of the share of the government bond CIP deviation attributable to the convenience-yield channel.

Figure 14 plots the estimated peak CIP response against the Treasury-nexus proxy for the 1-, 5-, and 10-year maturities, evaluated at h = 75 trading days — the horizon at which the currency-specific local projections documented above reach their trough for high-nexus G10 currencies. The cross-sectional relationship is negative at all three maturities and sharpens substantially with maturity. At the one-year horizon, the fitted slope is negative, but the cross-sectional dispersion is wide, consistent with the short-maturity CIP deviation reflecting a mix of FX swap frictions and convenience-yield differentials that are difficult to separate in the cross-section. At the five- and ten-year maturities, the relationship becomes considerably more pronounced: high-nexus currencies — CHF, EUR, SEK — cluster in the lower-right quadrant, exhibiting negative peak responses of −3 to −6 basis points, while low-nexus emerging market currencies — COP, HUF, PLN — cluster in the upper-left quadrant with positive responses of +5 to +15 basis points. This distributional pattern directly mirrors the sign restriction $\Delta V_{G10,t} < 0 < \Delta V_{EM,t}$ derived from the DIS decomposition in the preceding section.

Figure 15 aggregates this evidence by partitioning currencies into three groups: high-nexus G10 (EUR, SEK, CHF), lower-nexus G10 (JPY, GBP, CAD), and emerging markets. This partition exploits within-G10 variation that is obscured when G10 currencies are treated as homogeneous. High-nexus G10 currencies exhibit mean peak responses of approximately −1.5 basis points at the one-year maturity, declining monotonically to −3.5 basis points at the ten-year maturity, with confidence intervals lying entirely below zero at five- and ten-year horizons. Low-nexus G10 currencies exhibit responses that are systematically closer to zero across all maturities. The JPY response is consistent with safe-haven demand temporarily counteracting the convenience-yield decline at shorter horizons, as documented in the currency-specific projections above. The emerging market group displays positive mean responses of approximately +2 to +2.5 basis points at five- and ten-year maturities, with wide confidence intervals reflecting heterogeneity within the group. The monotonic ordering — high-nexus G10 most negative, low-nexus G10 near zero, EM positive — holds at all four maturities and is consistent with the nexus proxy tracing a continuous convenience-yield gradient rather than a binary advanced/emerging market distinction.

The cross-sectional evidence corroborates the two-channel mechanism identified in the bilateral decompositions and provides independent support for the convenience-yield interpretation. The cross-sectional

pattern is robust to the exclusion of outlier observations and strengthens with maturity, precisely as expected if short-horizon CIP movements reflect transient funding frictions while longer-horizon movements capture the gradual portfolio rebalancing channel formalized in Section 5.

A potential concern is that the Treasury-nexus proxy — constructed from sovereign CDS spreads — may capture generic risk-off dynamics rather than a convenience-yield gradient. Under a pure risk-off interpretation, high-CDS sovereigns would face widening spreads during any episode of global financial stress, mechanically generating a cross-sectional pattern similar to what we document. Three features of the data argue against this interpretation. First, a generic risk-off shock predicts a cross-sectional gradient that is maturity-invariant: if the pattern reflects sovereign credit repricing, it should be equally visible at short and long maturities. Instead, the cross-sectional slope steepens substantially from the one-year to the ten-year maturity — precisely the pattern expected if long-duration convenience yield differentials, rather than short-run credit spreads, are driving the response. Second, the within-G10 split is inconsistent with a risk-off account: JPY, GBP, and CAD are not obviously riskier sovereigns than EUR, SEK, and CHF, yet they exhibit systematically smaller CIP responses. The within-G10 variation maps instead onto relative government debt burdens, consistent with bond scarcity amplifying the convenience-yield channel as documented by Du, Keerati, and Schreger (2025a). Moreover, the decomposition in Figure 13 speaks directly to which component of the government-bond CIP deviation drives the response. At longer horizons, the yield-differential component — which Du, Im, and Schreger (2018) associate with relative Treasury convenience — dominates, while the forward premium component, which captures FX swap frictions and dollar funding conditions, responds faster but contributes less at the horizons where the cross-sectional gradient is sharpest. This decomposition is precisely what the convenience-yield interpretation predicts and is difficult to reconcile with an account based primarily on intermediary balance-sheet constraints or dollar funding stress. These three features — the maturity gradient, the within-G10 ordering, and the yield-differential dominance at long horizons — collectively predict that replacing tariff announcements with generic risk-off shocks should not reproduce the cross-sectional pattern. The data confirm this directly. [7]

Relation to concurrent evidence. Our results are consistent with two recent contributions. Ostry, Lloyd, and Corsetti (2025) show that the dollar's response depends on whether tariff actions provoke retaliation, with unilateral tariffs appreciating the dollar but reciprocal trade wars producing depreciation. This resonates with our finding of weak dollar responses in Period 1 (low implementation probability) and muted or negative

[7] As a falsification test, replacing the tariff announcement indicator with either geopolitical risk shocks or VIX shocks — using the same local projection design and the same currency cross-section — does not reproduce this pattern. GPR shocks generate a positive short-maturity response for high-nexus G10 currencies, consistent with safe-haven flows into Treasuries, and the cross-sectional slope does not steepen with maturity. VIX shocks similarly generate positive short-maturity CIP responses across all currency groups — reflecting broad safe-haven flows — and do not reproduce the negative short-maturity response for high-nexus G10 currencies nor the monotonic maturity-graded ordering that characterises the tariff case. That neither generic risk-off measure replicates the tariff pattern confirms that the maturity-graded convenience-yield gradient is specific to tariff escalation rather than a feature of financial stress episodes more broadly.

responses in Period 2 (high implementation, rising retaliation risk). Hartley and Rebucci (2025) document intraday dollar depreciation against the G10 on "Liberation Day," attributing it to portfolio rebalancing away from U.S. equities. Their finding that U.S. 10-year yields fell on impact but rose over the subsequent week also helps reconcile our medium-horizon yield increases (peaking around day 50) with the short-run safe-haven bid into Treasuries. Amiti, Gomez, Kong, and Weinstein (2024) use a complementary stock-return approach to assess the aggregate effects of trade-war episodes on firm values.

The results point to an asymmetric exchange rate response to tariff announcements that strengthens over time. In the earlier period, announcement effects were negligible, complementing Jeanne and Son's evidence that actual tariff realizations drove the renminbi's depreciation. In the later period, announcements themselves became market-moving events, producing a clear trade-weighted depreciation of the renminbi and asymmetric bilateral effects across currencies. The shift from signaling to execution—documented by the implementation responses in Figure 4—explains why announcements became more informative over time.

Does tariff magnitude matter? Extensive versus intensive margin

The baseline specification treats all tariff announcements symmetrically. s_t takes value +1 regardless of whether the announced tariff change is 0.5 or 20 percentage points. This binary coding is appropriate if announcements operate primarily as signals of trade-policy intent, but it may miss an intensive margin if the magnitude of the announced tariff change affects the financial-market response. This question is related to the approach in Ostry, Lloyd, and Corsetti (2025), who replace the binary event indicator with a continuous measure of announced tariff changes. To test this, we augment equation (1) with an interaction between the event indicator and the absolute tariff change:

$$\tilde{y}_{t+h} = \alpha_h + \beta_h^1 s_t + \beta_h^2 s_t|\Delta T_t| + \gamma_h s_t^{CN} + \Gamma_h' x_{t-1} + v_{t+h}, \qquad (1')$$

where $|\Delta T_t|$ is the absolute change in the announced average U.S. tariff rate on Chinese imports (from the PIIE database) on day *t*, and all other variables are as in equation (1). The control vector x_{t-1} now also includes lags of the interaction term. The total marginal effect of a tariff-announcement event of magnitude $\boldsymbol{\tau}$ on outcome $\tilde{y}_{t+h}$, relative to a no-announcement baseline ($s_t = 0$), is given by the finite difference

$$\Delta\tilde{y}_{t+h}|_{s_{t:0\to+1}} = \beta_h^1 + \beta_h^2 \boldsymbol{\tau}.$$

Since s_t is discrete, this expression should be understood as a finite difference rather than a derivative. Standard errors are obtained by the delta method applied to the Newey–West variance–covariance matrix. If $\beta_h^2 = 0$, the binary coding is sufficient, and the response is invariant to tariff magnitude. If $\beta_h^2 \neq 0$, the intensive margin matters and the response scales with $\boldsymbol{\tau}$.

We evaluate this derivative at the 10th, 50th, and 90th percentiles of $|\Delta T_t|$ computed across event days with a non-zero tariff change ($|\Delta T_t| > 0$ and $s_t \neq 0$) within each period. In Period 1, the percentiles are modest (p10

= 0.6, p50 = 1.7, p90 = 5.4 percentage points), reflecting the incremental nature of 2018–2019 tariff actions. In Period 2, the distribution spans a much wider range (p10 = 0.1, p50 = 6.3, p90 = 81.9 percentage points), with the 90th percentile capturing Liberation Day–class events.

Figure 16 reports the interaction specification results for two outcome variables: trade policy uncertainty and 10-year government bond CIP deviations against the euro area. A striking common pattern emerges in Period 2. For both variables, the p10 and p50 lines are virtually indistinguishable throughout the entire horizon, while the p90 line diverges sharply. The intensive margin thus operates as a threshold rather than a continuous gradient: tariff magnitude changes at or below the median ($|\Delta T| \approx 6.3$ pp) generate responses statistically indistinguishable from minimal adjustments ($|\Delta T| \approx 0$ pp), and it is only at p90 magnitudes ($|\Delta T| \approx 82$ pp) — corresponding to Liberation Day-class events — that the size of the announced change begins to matter.

At p90, both variables display a two-phase temporal structure: an immediate reaction at announcement ($h \approx 0$–14), a partial reversion during an intermediate phase as markets await policy realization, and a sharp second movement around $h \approx 80$–90 coinciding with the broader realization phase of the tariff episode — encompassing retaliation, staged modifications, and partial rollbacks rather than the literal implementation date of any single announcement, which Table A1 shows typically falls within 1–2 weeks of announcement. The two variables differ, however, in the sign and relative magnitude of these phases.

For TPU, the p90 line spikes sharply at announcement — reaching approximately 500–700 index points above p10 and p50 — before partially subsiding during the intermediate phase. A second, considerably larger spike then occurs at the implementation horizon, reaching approximately 1,000 index points above the lower percentiles. This is consistent with tariff realization generating a renewed and amplified wave of policy uncertainty, and with the index's empirical range in 2025, where daily values reached a sample maximum of approximately 1,900 points against a 2018–2024 average near 150 points. In Period 1, all three percentile lines are much closer together with no systematic p90 divergence, reflecting the modest tariff magnitudes of that episode.

For CIP deviations, the p90 line falls by approximately 5–8 basis points in the first two weeks after announcement — an immediate signal effect entirely absent at lower magnitudes — before partially reverting during the intermediate phase (days 15–55). A second, substantially deeper decline of 40–60 basis points then occurs at horizons of 60–90 days, coinciding with the broader realization phase of the tariff episode – the cumulative sequence of escalation, retaliation, and staged policy modifications. The convenience-yield channel thus responds to both the signaling and the realization stages of the policy process, but it is the implementation stage that drives the dominant movement. At p10 and p50, the CIP response remains near zero throughout, confirming that the mechanism activates only at extreme tariff magnitudes. In Period 1, the three percentile lines remain close together in mildly positive territory throughout, consistent with the conclusion that 2018–2019 tariff magnitudes were insufficient to activate the convenience-yield channel.

The two variables capture distinct but complementary channels of tariff-shock transmission. TPU measures the direct uncertainty effect, which is large at announcement and amplified further at implementation. CIP deviations measure the financial market repricing of U.S. safe-asset premia, which builds more gradually but reaches its largest values at implementation. Both channels activate strongly at extreme tariff magnitudes, and both display the same two-phase temporal structure — a pattern that Section 5 rationalizes through the model's distinction between announcement and realization effects.

Comparative Discussion. The evidence highlights both continuities and shifts across periods. Trade policy uncertainty responds to tariff announcements in both samples, validating the event calendar. But the translation into financial-market outcomes changed: Period 1 responses were muted across implementations, financial markets, and exchange rates, whereas Period 2 announcements were followed by actual policy actions and pronounced market reactions. The selective activation of the VIX in Period 2—absent in Period 1—provides a sharp empirical marker of this shift: equity-market volatility responds more strongly when the financial-market consequences of tariff announcements are perceived as material. This asymmetry motivates the organizing framework developed in Section 5.

Sensitivity analysis. To assess the robustness of our estimates, we conduct a series of sensitivity checks that perturb the tariff-event calendar while leaving the econometric design unchanged. The goal is to verify that the estimated responses are not artifacts of a few special dates, short-lived clusters of announcements, generic co-movement, or mis-timed effects.

Beyond robustness, these exercises also serve as a timing and content check: if our announcement dates were merely proxies for generic market volatility, randomized or shifted calendars would generate similar dynamics.

We probe robustness in four complementary ways. First, we remove one announcement at a time (leave-one-out) to see whether any single date drives the results. Second, we drop short contiguous clusters of announcements (block drops) to test whether outcomes depend on particular announcement episodes. Third, we randomize the timing of announcements while preserving their frequency and sign (placebo calendars) to ask whether the observed responses could equally well be generated by chance. Finally, we shift the entire calendar forward or backward to assess whether markets react in anticipation or with delay relative to the public announcement date.

Across these exercises, robustness is established when the baseline impulse responses retain their magnitude, shape, and persistence. This multi-angle stress test provides assurance that the dynamics we attribute to tariff announcements reflect genuine market responses rather than statistical artifacts.

An additional concern specific to Period 2 is that a small number of extreme events—most notably "Liberation Day" (April 2, 2025)—may dominate the estimated responses. The leave-one-out exercise examines whether the estimated responses are sensitive to any single announcement date. For the nonlinearity result, we

additionally include a horizon-specific block dummy that partials out Liberation Day outcomes — the unusually large movements in the dependent variable in the days following the announcement — without removing the Liberation Day event itself from the right-hand side regressors (see Appendix 4 and Figure 25). The block-dummy estimates are discussed in Appendix 4. For both TPU and EUR CIP deviations they are broadly similar to the baseline at horizons $h \leq 80$, which is consistent with the threshold pattern not being primarily driven by Liberation Day outcome movements. We note, however, that with only 23 event days in Period 2 the Liberation Day cluster remains influential, and these robustness checks should be read as informative rather than conclusive.

Figure 17 reports the robustness checks for the dynamic response of Trade Policy Uncertainty (TPU) following U.S.–China tariff announcements. The baseline local-projection estimates suggest that TPU rises significantly after tariff news, with the increase being both statistically and economically meaningful over horizons of several weeks. The sensitivity probes assess whether these findings are an artifact of a few specific dates, clusters of announcements, generic co-movement, or misaligned timing.

The leave-one-out exercise indicates that no single tariff announcement drives the estimated TPU response. Excluding individual dates produces only minor deviations from the baseline trajectory, and the overall shape and persistence of the response remain intact. Likewise, the block-drop analysis produces a relatively tight episode envelope: removing short clusters of announcements does not alter the dynamics materially, suggesting that the results do not hinge on one or two negotiation rounds but rather on the broader calendar of tariff actions.[8]

Placebo calendars provide a stronger test of informational content. When tariff announcements are reassigned randomly to non-event days, preserving the observed frequency and sign mix, the resulting placebo responses are cantered close to zero. The empirical TPU response lies well outside the 5–95 percent placebo band for a meaningful stretch of horizons, demonstrating that the observed timing of tariff announcements conveys genuine information about uncertainty rather than coincidental co-movement.

Finally, the calendar-shift probes show that the adjustment of TPU is closely aligned with the official announcement dates. Neither forward nor backward shifts of the event calendar yield stronger or more systematic responses, providing little evidence of anticipation or delayed pass-through. Instead, the baseline alignment (k=0) dominates, reinforcing that public announcements are the anchor for market reactions in TPU.

In sum, the sensitivity analysis demonstrates that the estimated increase in trade-policy uncertainty following tariff announcements is robust. The dynamics cannot be attributed to single events, short-lived clusters, generic

[8] The tight block-drop envelope is consistent with the nonlinearity evidence in Figure 14. Block-drop tests whether results are time-localized — removing any single two-week window leaves the TPU response materially unchanged — while the interaction specification tests whether responses scale with tariff magnitude. These are orthogonal questions. A media-based index like TPU can respond to the news flow across the full announcement calendar, generating a stable block-drop envelope, while still exhibiting threshold behavior at p90 magnitudes in the interaction specification.

market volatility, or mis-timed dating. Rather, they reflect a systematic and credible effect of U.S.–China tariff news on perceptions of trade-policy risk.

The robustness exercises reported here focus on TPU, exchange rates, and VIX. We have verified that the CIP results in Figure 11 are similarly stable. No single announcement date drives the estimated decline in G10 CIP deviations or the increase in the CNY deviation in Period 2.

As an additional measurement robustness check, we re-estimate the main specifications using the binary event indicator from Ostry, Lloyd, and Corsetti (2025) as an alternative treatment variable. Their series is constructed from the Peterson Institute tariff timeline of Bown and Kolb (2025) and Bown (2025), restricted to events involving the U.S.'s four largest trading partners, and covers 46 event days in 2018–2020 and 17 event days in 2025. The binary coding follows the same +1/−1 convention as Jeanne and Son (2024) and our own baseline series. Although the two series share the same underlying source material, they are constructed independently and the overlap is partial: of the event days falling within our two estimation windows, 30 coincide with our baseline calendar (Cohen's kappa = 0.60), with remaining discrepancies reflecting differences in scope and in the handling of non-tariff events.

Figure 18 reports the impulse responses for the U.S. trade-weighted dollar, the EUR/USD government bond CIP deviation, and the CNY/USD CIP deviation. All three qualitative patterns are preserved. The dollar depreciates in trade-weighted terms following OLC announcement days in Period 2, with point estimates in the range of 0.3–0.6 percent over the first 60 days. The EUR CIP deviation replicates the two-phase temporal structure documented in Figure 13 — an initial rise followed by a decline into negative territory at longer horizons consistent with convenience-yield erosion. The CNY deviation rises persistently, reproducing the cross-currency asymmetry that distinguishes Period 2 from Period 1. Confidence bands are wider than in the baseline, as expected given that the OLC series contains fewer events in our estimation window, but the directional patterns are robust. These results suggest that our main findings are not an artifact of the coding choices embedded in our baseline announcement dataset.

5. A network model of tariff news, convenience yield, and exchange rates

Taken together, the four empirical patterns documented above are difficult to reconcile in isolation and suggest a common mechanism: tariff news can alter the perceived breadth and durability of the dollar settlement network when sufficiently large or credible, which in turn lowers the convenience yield on U.S. Treasuries and transmits to exchange rates and CIP deviations. We develop a stylised network framework that formalises this mechanism. The full derivation, parameterization, and dynamic simulations are in Appendix 5. Here we summarize the structure, the three qualitative predictions the framework generates, and how they map to the empirical patterns.

Framework Structure and Qualitative Predictions

The framework builds on three components. The framework builds on three components. First, the bond-pricing identity of Du, Im, and Schreger (2018), which pins the convenience yield $k_{USD,n,t}$ on a Treasury security of maturity n to observed Treasury prices. Second, a reduced-form network mechanism in which the convenience yield depends on the expected breadth and durability of participation in the dollar settlement network — drawing on Gopinath and Stein (2021) and Chahrour and Valchev (2022, 2024). Third, the present-value exchange-rate decomposition of Jiang, Krishnamurthy, and Lustig (2021), which links $k_{USD,n,t}$ to the dollar.

This interpretation emphasizes shifts in the global demand for dollar safe-asset services. In this sense, tariff shocks primarily affect what Jiang, Krishnamurthy, and Lustig (2021) refer to as dollar convenience. Treasury convenience, measured from government-bond CIP deviations following Du, Im, and Schreger (2018), can be interpreted as a bond-market manifestation of this broader dollar safe-asset demand. In intermediary-based frameworks such as Du, Keerati, and Schreger (2025), Treasury convenience also depends on the allocation of dealer balance sheet between FX swap intermediation and Treasury financing. These mechanisms are not mutually exclusive: both balance-sheet constraints and shifts in global dollar demand can affect Treasury convenience and thereby government-bond CIP deviations.

In our framework, tariff shocks affect dollar convenience through their impact on the expected breadth and durability of the dollar settlement network. Because both exchange rates and government-bond CIP deviations depend on the underlying demand for dollar safe-asset services, shifts in dollar convenience induced by tariff shocks generate joint movements in the dollar and Treasury-related premia. This structure also motivates the empirical strategy: tariff announcements provide discrete information shocks that shift expectations about future dollar-network participation, allowing the resulting changes in dollar convenience to be traced in high-frequency movements in exchange rates and government-bond CIP deviations.

Tariff shocks erode the network through three channels: reduced U.S.-linked trade volumes, third-country retreat from voluntary dollar settlement when tariffs are broad, and reduced U.S. economic centrality. A logistic signal function governing network quality, combined with a partial-adjustment rule for participation, generates the dynamics.

The framework delivers three qualitative predictions that are not imposed by construction:

Prediction 1 — Threshold activation. The convenience-yield channel activates disproportionately at large tariff magnitudes. When effective network mass remains in the flat region of the signal function — as under median-sized announcements — marginal tariff increments have negligible impact. Only when network mass enters the steep transition region, as under Liberation Day-class events, do convenience-yield losses become large. This is consistent with the threshold pattern in Figure 16.

Prediction 2 — Cross-currency asymmetry. For G10 currencies with open capital accounts, a decline in $k_{USD,n,t}$ compresses $V_{i,n,t} = k_{USD,n,t} - k_{i,n,t} - \hat{l}_{i,n,t} - bs_{i,n,t}$. For China, the direct trade-reduction channel reduces $k_{CNY,n,t}$ simultaneously, and capital controls prevent the convenience-yield decline from transmitting to the onshore rate — keeping $V_{CNY,n,t}$ positive and rising even as G10 deviations fall. This asymmetry, documented in Figures 11–12, would be difficult to generate in a single-channel account.

Prediction 3 — Gradual post-announcement drift. When beliefs about tariff credibility q_t update at announcement, the present-value decomposition implies an immediate exchange-rate adjustment. But as network participation δ_t adjusts sluggishly through institutional and operational frictions, $k_{USD,n,t}$ drifts further downward over days and weeks, generating persistent post-announcement drift beyond the impact response. This is consistent with the event-study patterns in Figures 1–2.

Mapping Predictions to Evidence

The three predictions map directly to the four empirical regularities. The threshold prediction accounts for the nonlinearity documented in Figure 16 and for the shift between periods: Period 1 tariffs were bilateral and of limited credibility, keeping network mass in the flat region; Period 2 tariffs were universal and credible, pushing mass into the transition region. The cross-currency prediction accounts jointly for declining G10 CIP deviations and rising CNY deviations — a pattern the framework generates from the same convenience-yield shock once capital controls are introduced. The drift prediction accounts for the gradual post-announcement exchange-rate adjustment in Figures 1–2 and 8–10 without requiring market inefficiency: the drift reflects either sequential belief updating as implementation risk resolves, or portfolio frictions that prevent immediate full capitalisation of the changed expected convenience-yield path, or both. The CIP decomposition in Figure 13 provides additional support: the yield-differential component Δy_t dominates at longer horizons while ρ_t responds faster at announcement, consistent with the model's distinction between immediate funding-market reactions and slower network-participation adjustment.

The framework does not reproduce the late-horizon sign reversal in the net Treasury Premium $V_{i,n,t}$ documented in Figure 13. Capturing this feature likely requires richer dynamics than the partial-adjustment mechanism provides, and we treat it as an open limitation. The calibration and dynamic simulations are in Appendix 5; Table A3 reports parameter values and Figure A8–A11 the comparative statics and impulse responses.

Limitations

The model is reduced-form by design. Key parameters — including the tariff-to-damage convexity and the GDP spillover elasticity — are assumed rather than estimated, because universal tariffs at these levels have not been observed in a dollar-dominated system. The model abstracts from monetary-policy feedback, fiscal responses, and broader general-equilibrium effects on output. It also abstracts from the explicit acceptance decisions and equilibrium currency competition central to structural dominant-currency models such as Abadi, Fernández-Villaverde, and Sanches (2026). Its scope is confined to how tariff shocks may affect the short-run market pricing of dollar-network convenience within an otherwise dollar-dominated system.

The sixfold increase in ψ between periods is motivated directly by the observable shift in tariff structure: Period 1 actions were concentrated in the bilateral U.S.–China dimension, leaving third-country settlement incentives largely undisturbed, while Period 2 actions targeted rest-of-world partners simultaneously (Table A1). The parameter therefore reflects a verifiable policy difference rather than a free calibration choice. That said, ψ is not independently estimated, and the quantitative results should be read as illustrative.

The reduced-form patterns could in principle also arise from alternative mechanisms, including a U.S. fiscal risk shock or intermediary balance-sheet constraints. A pure fiscal risk channel predicts rising CIP deviations for all counterparts — at odds with the G10 decline. A pure intermediary balance-sheet channel implies ρ_t-dominated responses throughout — at odds with the delayed dominance of Δy_t. Neither offers a natural account of the gradual post-announcement drift. The mechanisms are not mutually exclusive and are not structurally estimated, so these comparisons are suggestive rather than conclusive.

Conclusions

This paper documents how financial markets priced U.S. tariff announcements differently across two episodes: the 2018–2019 trade conflict and the renewed escalation in 2024–2025. In the later episode, the dollar depreciated rather than appreciated, long-maturity G10 CIP deviations decline while renminbi deviations rose, and asset-market responses were an order of magnitude larger – patterns that are difficult to jointly account for within the standard benchmark. A stylized settlement-network framework, based on Du, Im, and Schreger (2018), offers a unified interpretation of these patterns: when tariff measures are large and broadly directed, the resulting erosion of expected dollar-network participation shifts safe-asset demand in ways that dominate conventional expenditure-switching forces.

Four empirical patterns characterize the cross-episode shift. First, exchange rates adjust gradually rather than jumping on impact, with persistent post-announcement drifts over subsequent days and weeks. Second, in 2024–2025 — but not in 2018–2019 — long-maturity G10 CIP deviations decline following U.S. tariff announcements, consistent with a reduction in the relative convenience yield on U.S. Treasuries. Third, CIP responses are asymmetric across currencies: while G10 wedges compress, renminbi deviations rise sharply, indicating heterogeneous pressures across funding and settlement environments. Fourth, transmission is highly nonlinear in tariff magnitude. Announcements at or below the median tariff change generate economically modest and statistically indistinguishable responses, whereas announcements in the upper decile — characteristic of 2024–2025 — trigger exchange-rate and bond-market movements an order of magnitude larger.

To interpret these patterns, we develop a stylised settlement-network framework — presented in Section 5 with full derivation in Appendix A — that links tariff news to exchange rates through safe-asset demand. When sufficiently large and credible tariff measures shift beliefs about dollar-network participation, the resulting decline in Treasury convenience yields compresses long-maturity CIP wedges and weakens the dollar. Network complementarities generate threshold behaviour, adjustment frictions produce gradual post-announcement drifts. The framework is not structurally estimated but serves as a disciplined organizing lens for the empirical regularities documented in the data.

Several broader implications follow.

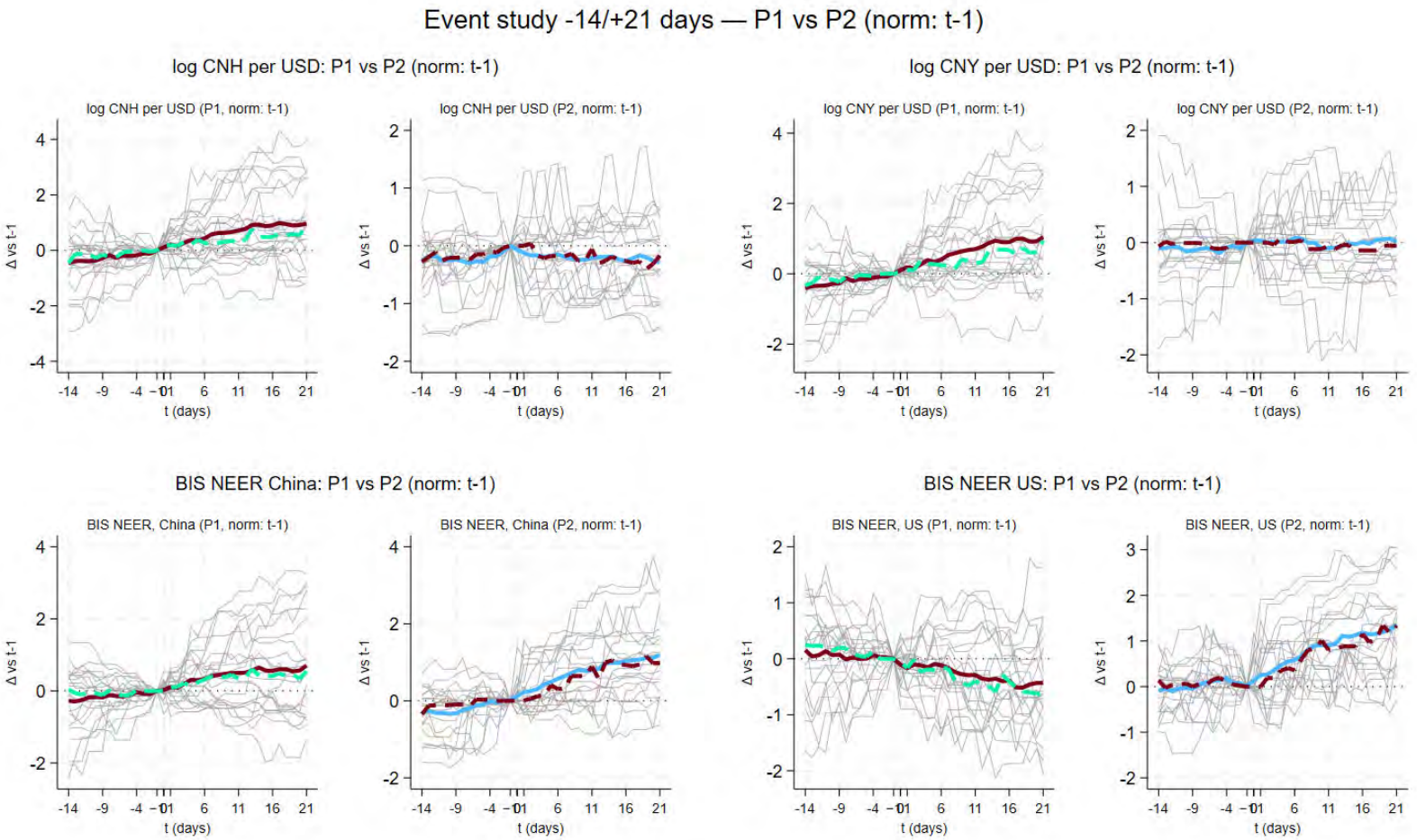
First, the relationship between tariff intensity and financial-market stress appears strongly nonlinear. Moderate measures may remain within the system's absorption capacity, affecting policy uncertainty without materially altering safe-asset demand. Larger and more credible measures, by contrast, coincide with disproportionately large asset-price adjustments. While the precise location of such thresholds is inherently model-dependent, the qualitative distinction between resilient and fragile regimes emerges consistently across the episodes and tariff-magnitude bins we study.

Second, the association between tariff announcements and movements in Treasury-related premia suggests a potential link between trade policy and sovereign financing conditions. If reductions in the convenience yield were to persist, the effective cost of U.S. government borrowing would rise. The evidence presented here is consistent with such a channel, though it does not establish its long-run magnitude. Whether the convenience yield erosion documented here represents a transitory repricing or the beginning of a more persistent shift in Treasury demand is an open question that warrants continued monitoring.

Third, the cross-currency asymmetry in CIP responses underscores the importance of modeling the international monetary system as a network with heterogeneous exposure to trade shocks, capital-account conditions, and safe-asset substitutability. Extending the framework to a multi-currency environment with endogenous settlement choices is a natural direction for future research.

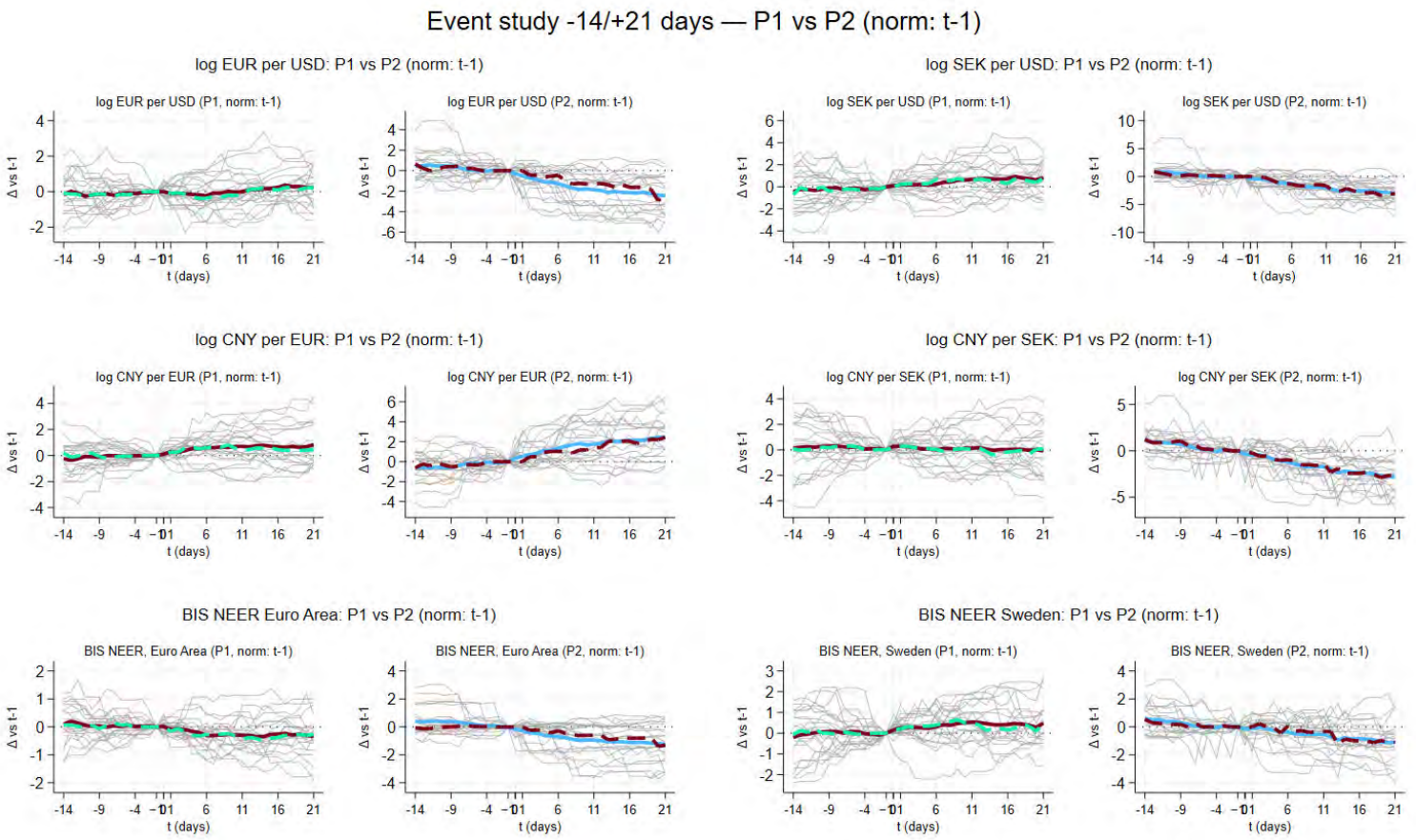
More broadly, the findings suggest that trade policy can operate through financial channels that are distinct from conventional expenditure-switching mechanisms. In environments characterized by large and credible trade interventions, exchange-rate dynamics may be shaped as much by shifts in safe-asset demand and settlement-network participation as by traditional terms-of-trade forces — a channel that the workhorse open-economy models used for policy analysis are not yet equipped to capture. While recent theoretical work — notably Farhi and Maggiori (2018), Jiang, Krishnamurthy, and Lustig (2021), Gopinath and Stein (2021), and Chahrour and Valchev (2022, 2024) — has begun to formalize safe-asset demand, reserve-currency fragility, and network complementarities in international monetary models, integrating these mechanisms into the quantitative frameworks used for monetary and trade-policy analysis remains an open research agenda.

Figure 1. Event Study of Exchange Rate Responses U.S. and China: Period 1 vs Period 2.



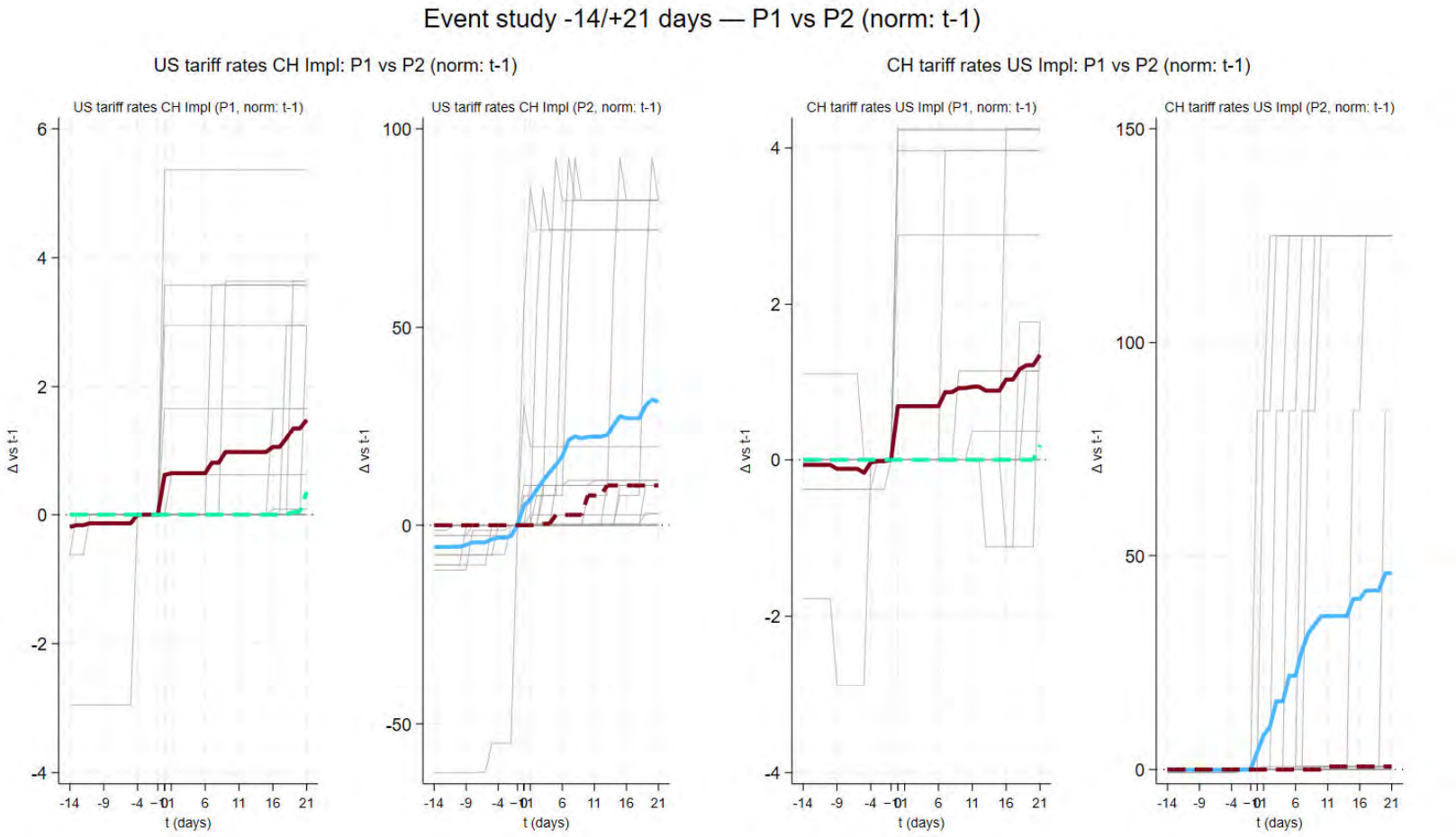
Note: The figure plots event-study estimates of exchange rate responses around tariff-related policy announcements. The x-axis measures days relative to the day prior to the event date (t = −1), and the y-axis shows deviations in percentage points relative to that baseline. Thin grey lines display individual event responses, the solid line the cross-event average, and the dashed line the cross-event median. Each pair of panels compares Period 1 (2018–2019, left) and Period 2 (2024–2025, right) for a given currency. The top row shows bilateral RMB–USD exchange rates (CNH and CNY), while the bottom row shows trade-weighted BIS nominal effective exchange rates (NEER) for China and the United States.

Figure 2. Event Study of Exchange Rate Responses Sweden and the Euro Area: Period 1 vs Period 2.



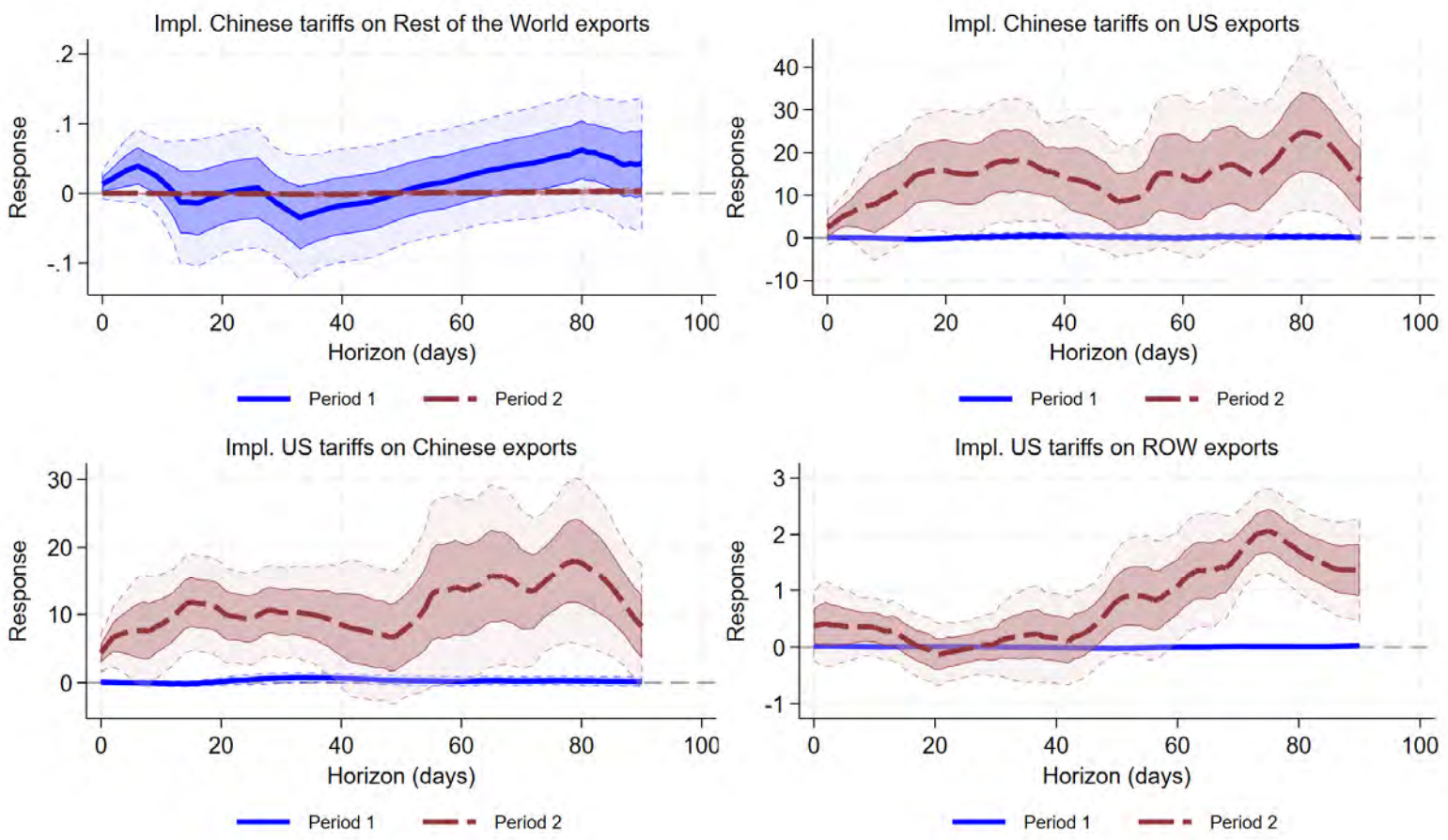
Note: The figure plots event-study estimates of exchange rate responses around tariff-related policy announcements. The x-axis measures days relative to the day prior to the event date (t = −1), and the y-axis shows deviations in percentage points relative to that baseline. Thin grey lines display individual event responses, the solid line the cross-event average, and the dashed line the cross-event median. Each pair of panels compares Period 1 (2018–2019, left) and Period 2 (2024–2025, right) for a given currency. The top and middle rows show bilateral exchange rates (EUR/USD, SEK/USD, CNY/EUR, and CNY/SEK), while the bottom row shows trade-weighted BIS nominal effective exchange rates (NEER) for the euro area and Sweden.

Figure 3. Event Study of Implemented Tariff rates in US and China: Period 1 vs Period 2.



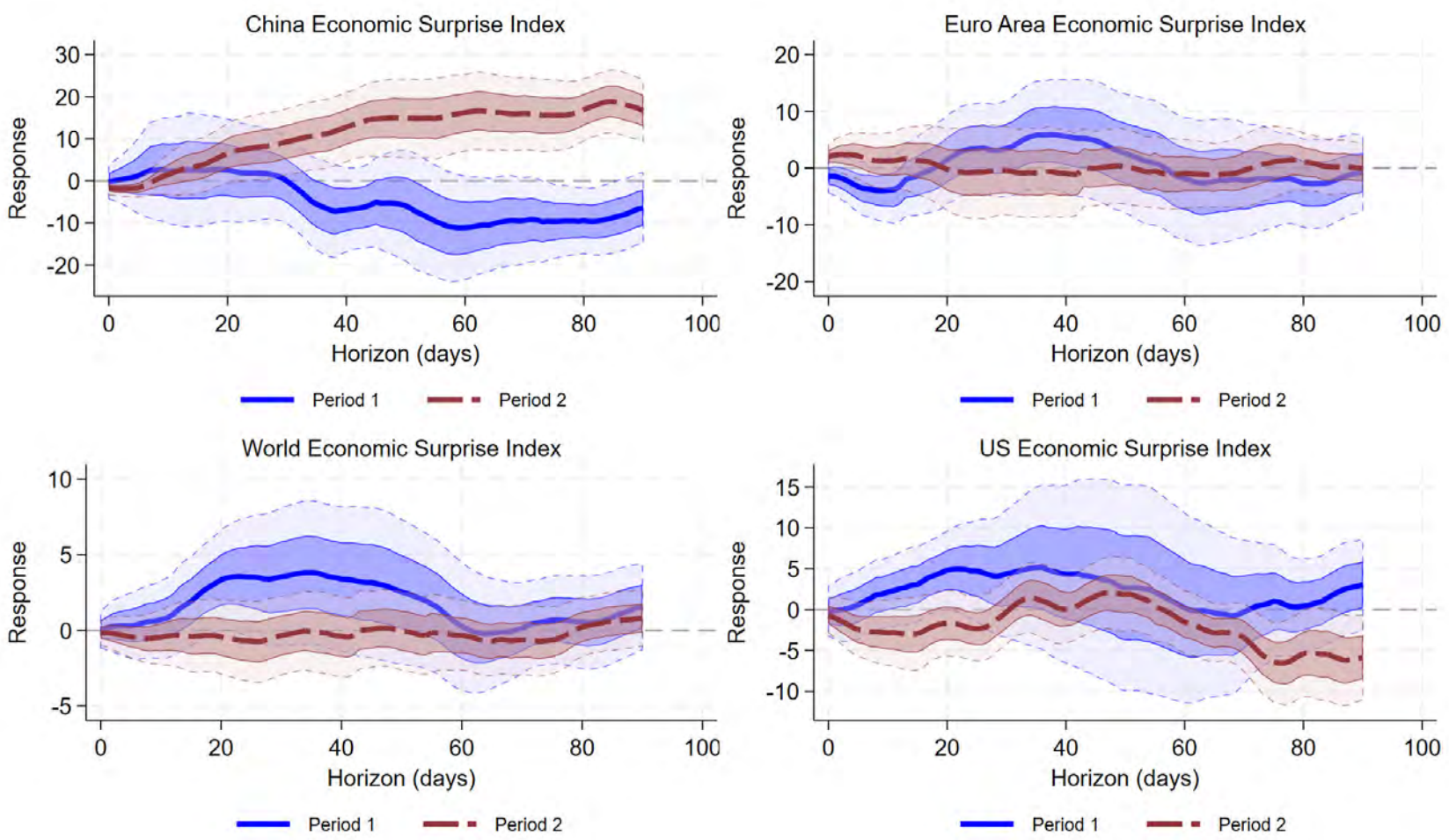
Note: The figure displays tariff rates associated with the events included in the study. The x-axis measures days relative to the event date, while the y-axis shows the tariff rate in percent. Each grey line corresponds to an individual event, the solid line shows the cross-event average, and the dashed line the median. The comparison between Period 1 (2018–2019, left) and Period 2 (2024–2025, right) highlights the higher and broader tariff levels imposed in the later period.

Figure 4. Impulse Response Estimates of Implemented Tariffs Following Tariff Announcements.



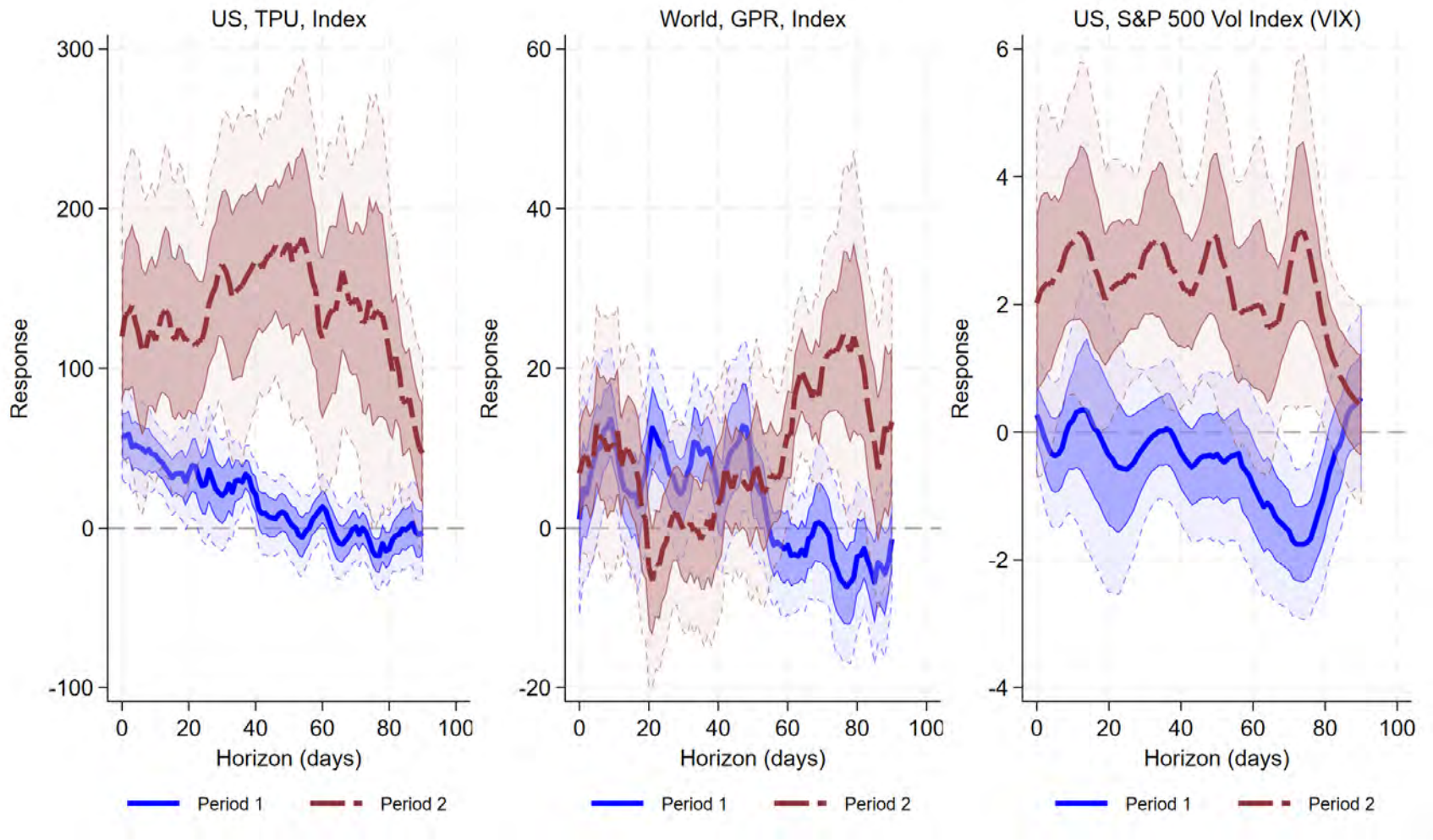
Note: The figure plots local projection estimates of the response of implemented tariffs to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated percentage-point change in implemented tariffs. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1, when tariff announcements did not systematically translate into policy action. Red lines denote responses in Period 2, when announcements were more likely to be followed by tariff increases. Each panel corresponds to a different trade dimension: Chinese tariffs on Rest of the World (ROW) exports, Chinese tariffs on U.S. exports, U.S. tariffs on Chinese exports, and U.S. tariffs on ROW exports.

Figure 5. Impulse Response Estimates of Economic Surprise Indices Following Tariff Announcements.



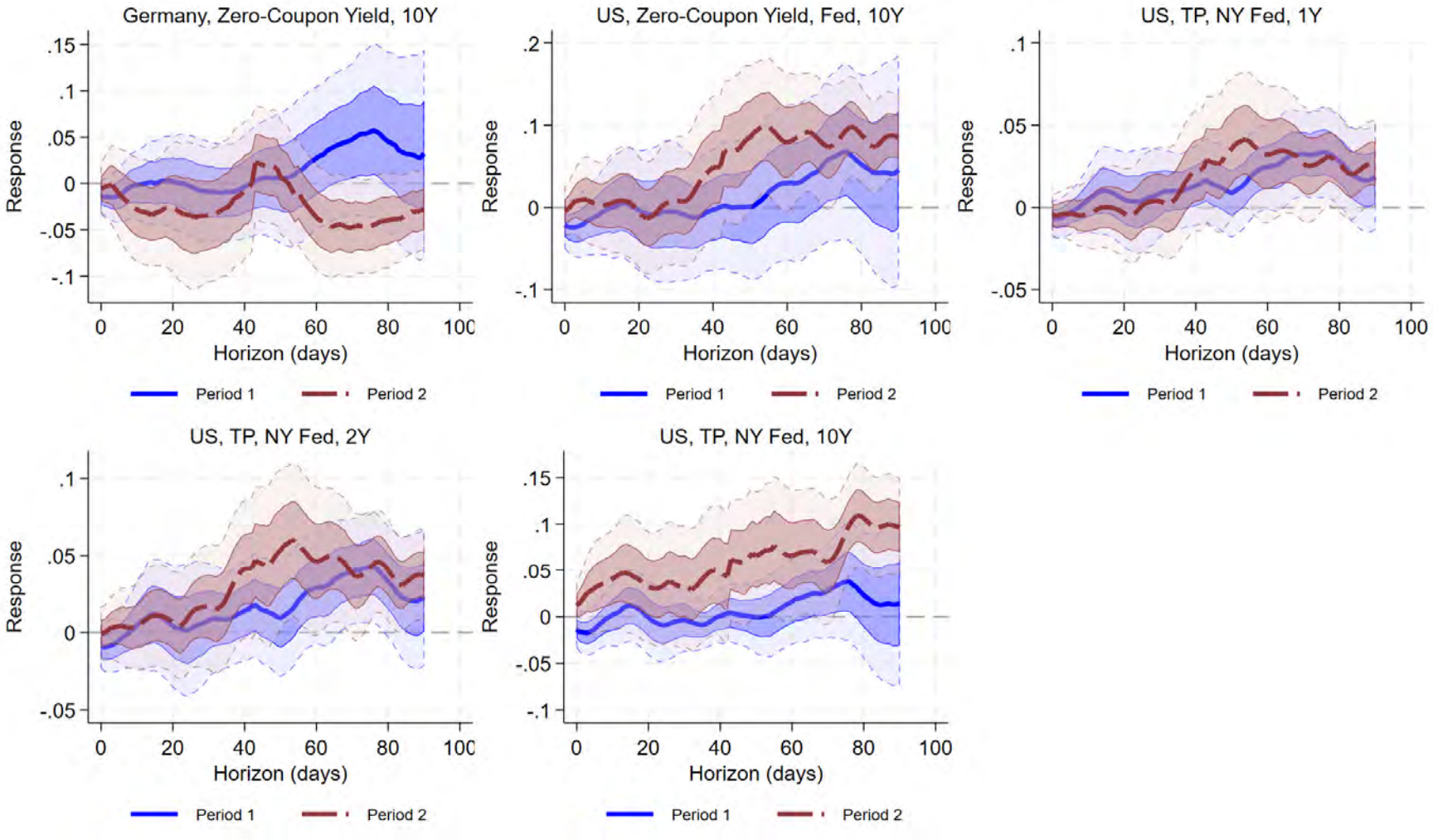
Note: The figure plots local projection estimates of the response of economic surprise indices (ESI) to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated change in index points. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1 (2018–2019), when effects were limited primarily to China. Red lines denote responses in Period 2 (2024–2025), when the China index rose significantly and the U.S. index turned negative, while the Euro Area and World indices remained insignificant. Each panel corresponds to a different regional index: China, Euro Area, World, and the United States.

Figure 6. Impulse Response Estimates of Uncertainty Indices Following Tariff Announcements.



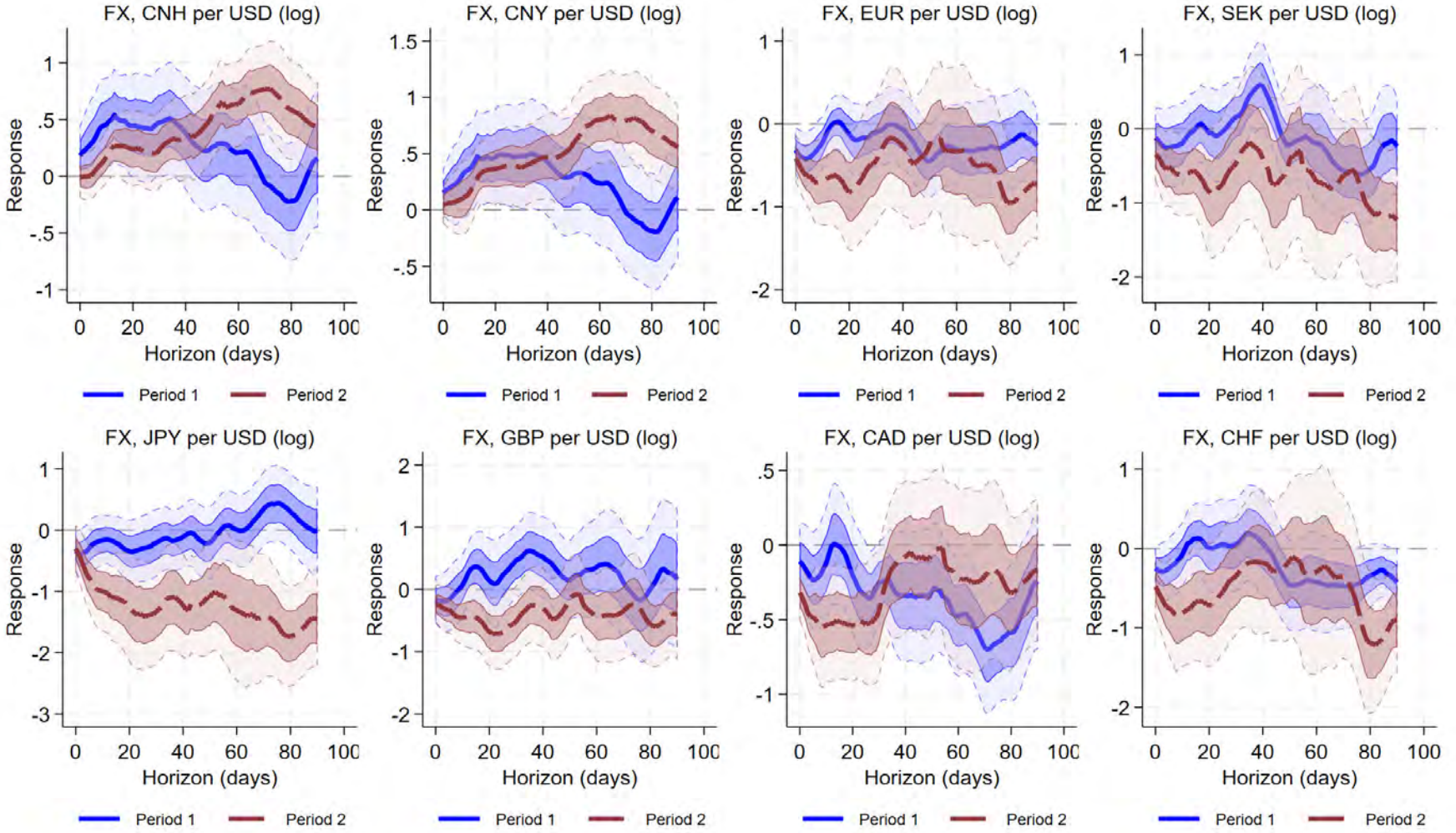
Note: The figure plots local projection estimates of the response of uncertainty and risk measures to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated change in index points. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1, when increases were moderate. Red lines denote responses in Period 2, when effects were larger and more persistent. Panels correspond to trade policy uncertainty (TPU), global geopolitical risk (GPR), and equity market volatility (VIX).

Figure 7. Impulse Response Estimates of Zero-Coupon Yields and Term Premiums Following Tariff Announcements.



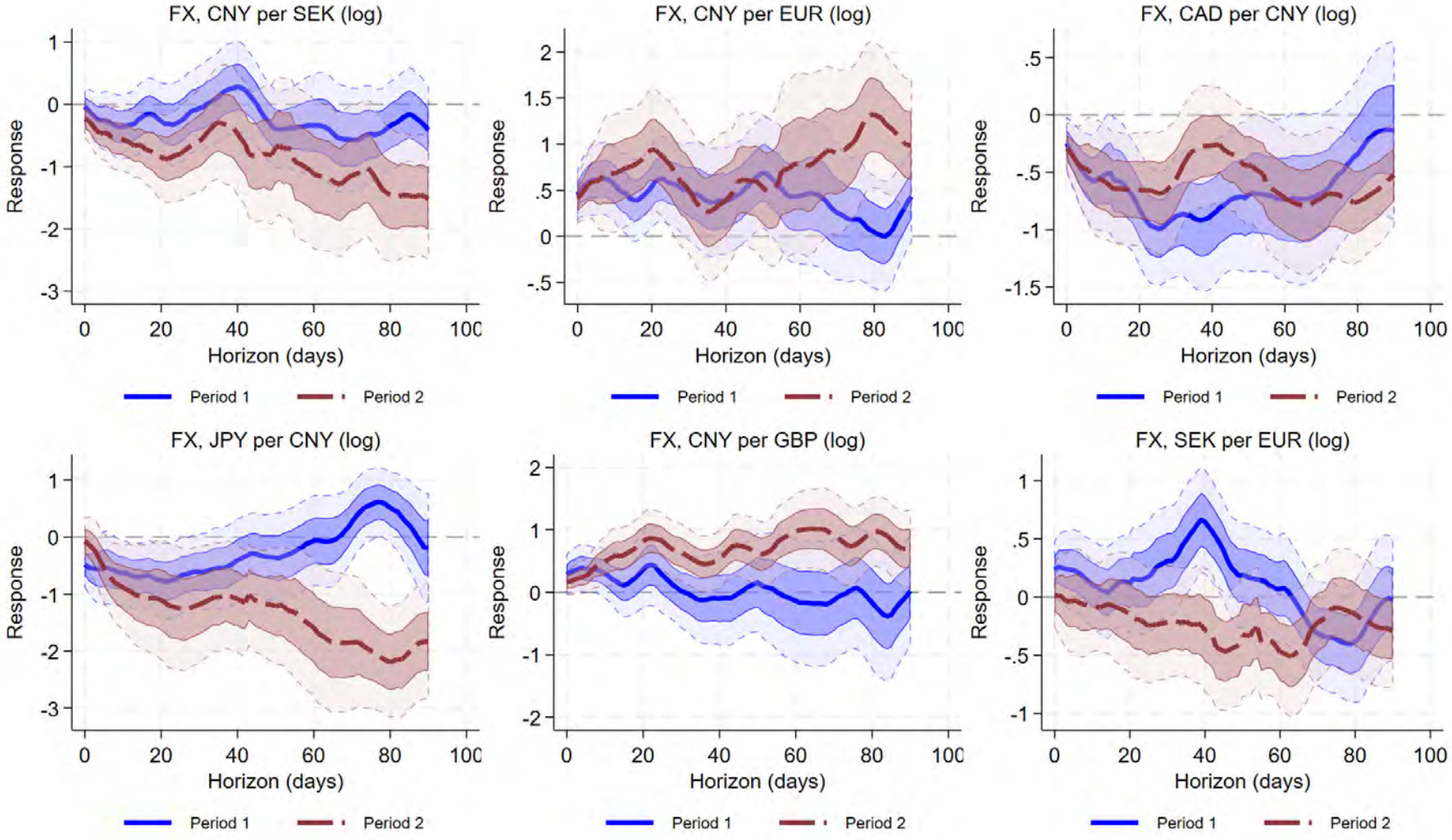
Note: The figure plots local projection estimates of the response of sovereign yields and term premia to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated change in percentage points. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1, when German yields rose modestly and U.S. yields showed small initial increases that faded at longer horizons. Red lines denote responses in Period 2, when yields and short-term premia increased. Panels correspond to the German 10-year Bund yield, the U.S. 10-year zero-coupon yield, and U.S. term premia at different maturities (1-year, 2-year, and 10-year).

Figure 8. Impulse Response Estimates of Bilateral Exchange Rates with the U.S. Dollar Following Tariff Announcements.



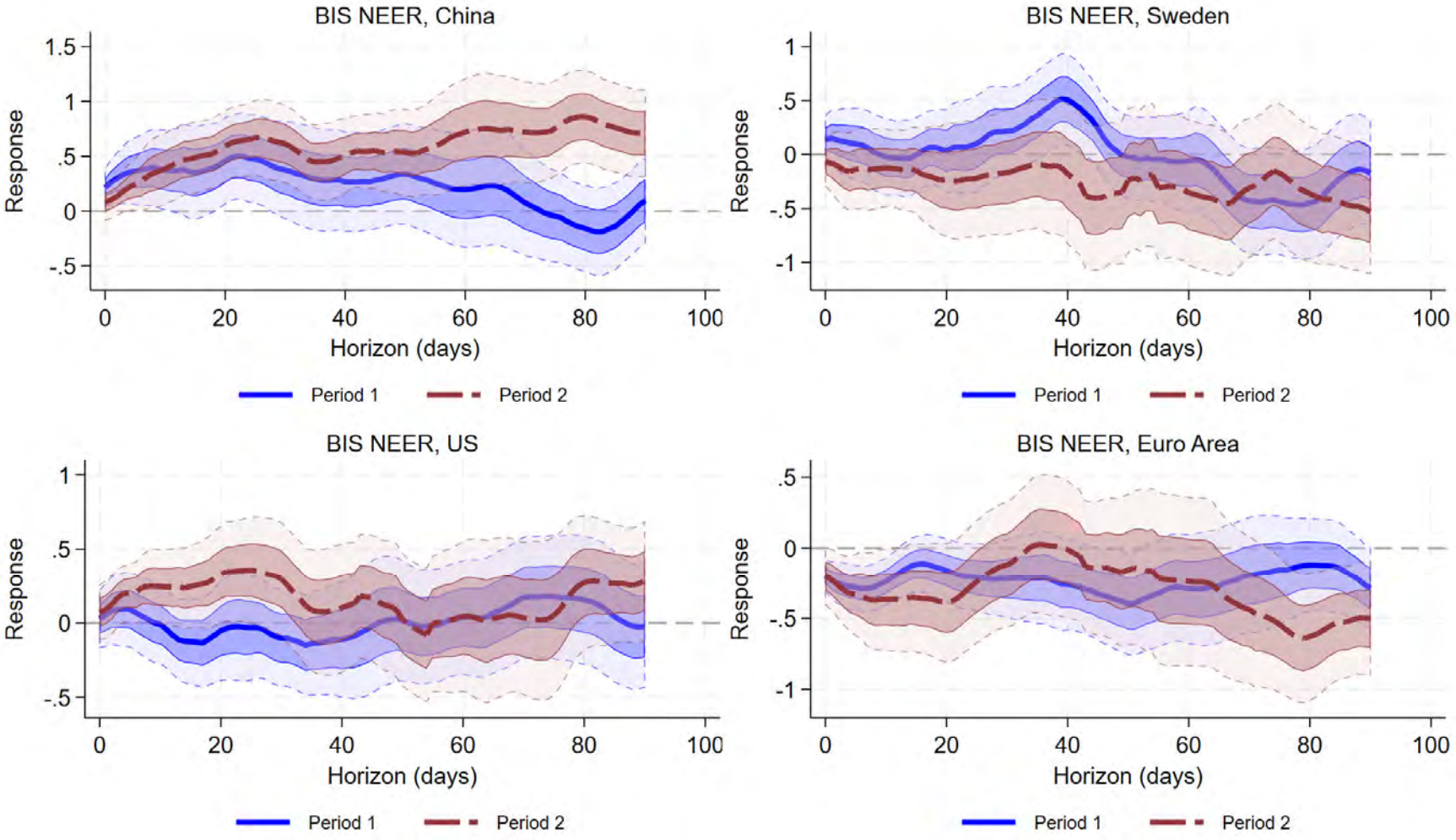
Note: The figure plots local projection estimates of the response of bilateral exchange rates against the U.S. dollar to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated 100xlog change in the exchange rate (domestic currency per U.S. dollar). Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1. Red lines denote responses in Period 2. Each panel corresponds to a different bilateral pair: CNH/USD, CNY/USD, EUR/USD, SEK/USD, JPY/USD, GBP/USD, CAD/USD, and CHF/USD.

Figure 9. Impulse Response Estimates of Bilateral Exchange Rates Following Tariff Announcements.



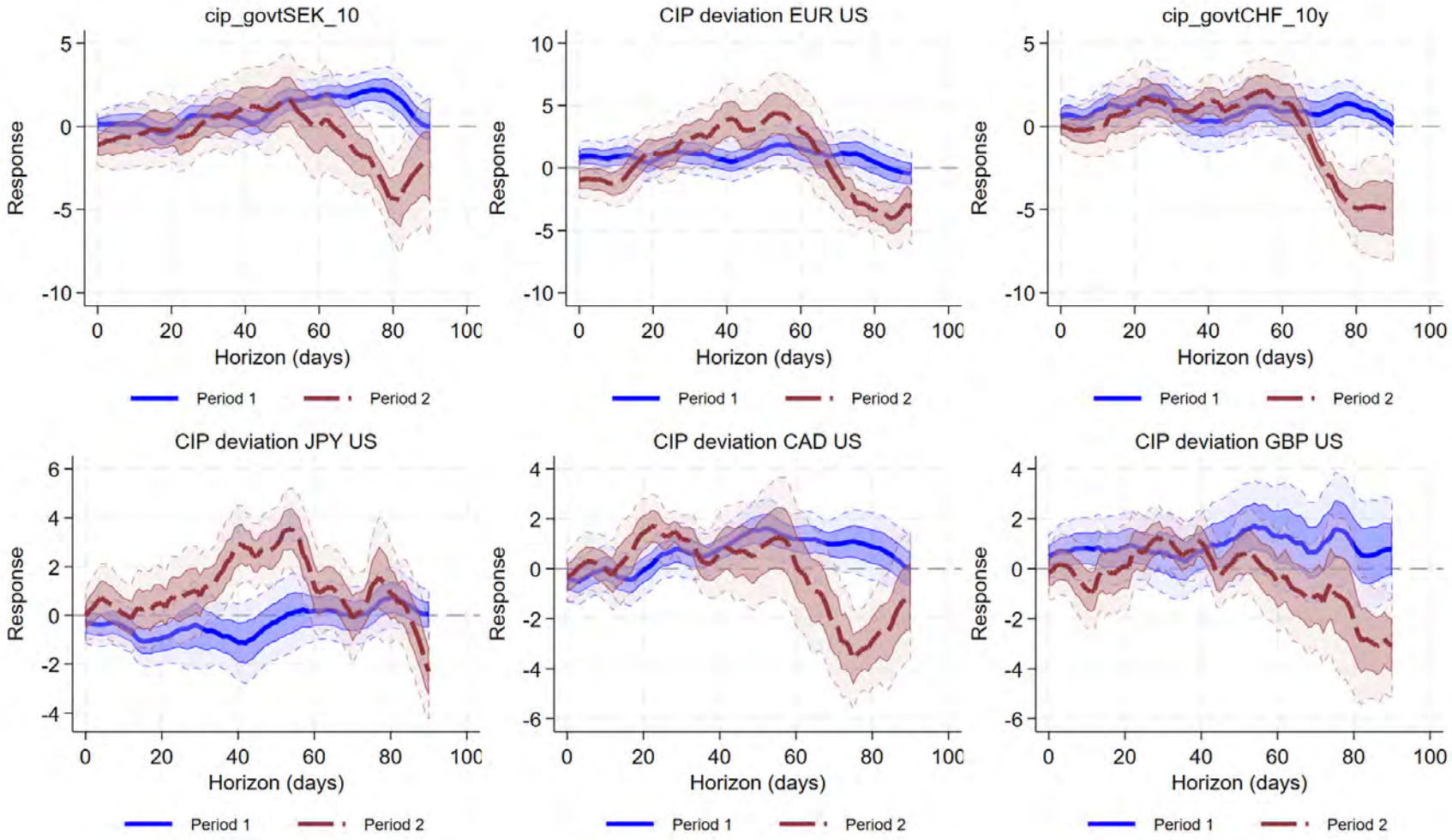
Note: The figure plots local projection estimates of the response of selected bilateral cross rates to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated 100xlog change in the exchange rate. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1. Red lines denote responses in Period 2.

Figure 10. Impulse Response Estimates of Nominal Effective Exchange Rates Following Tariff Announcements.



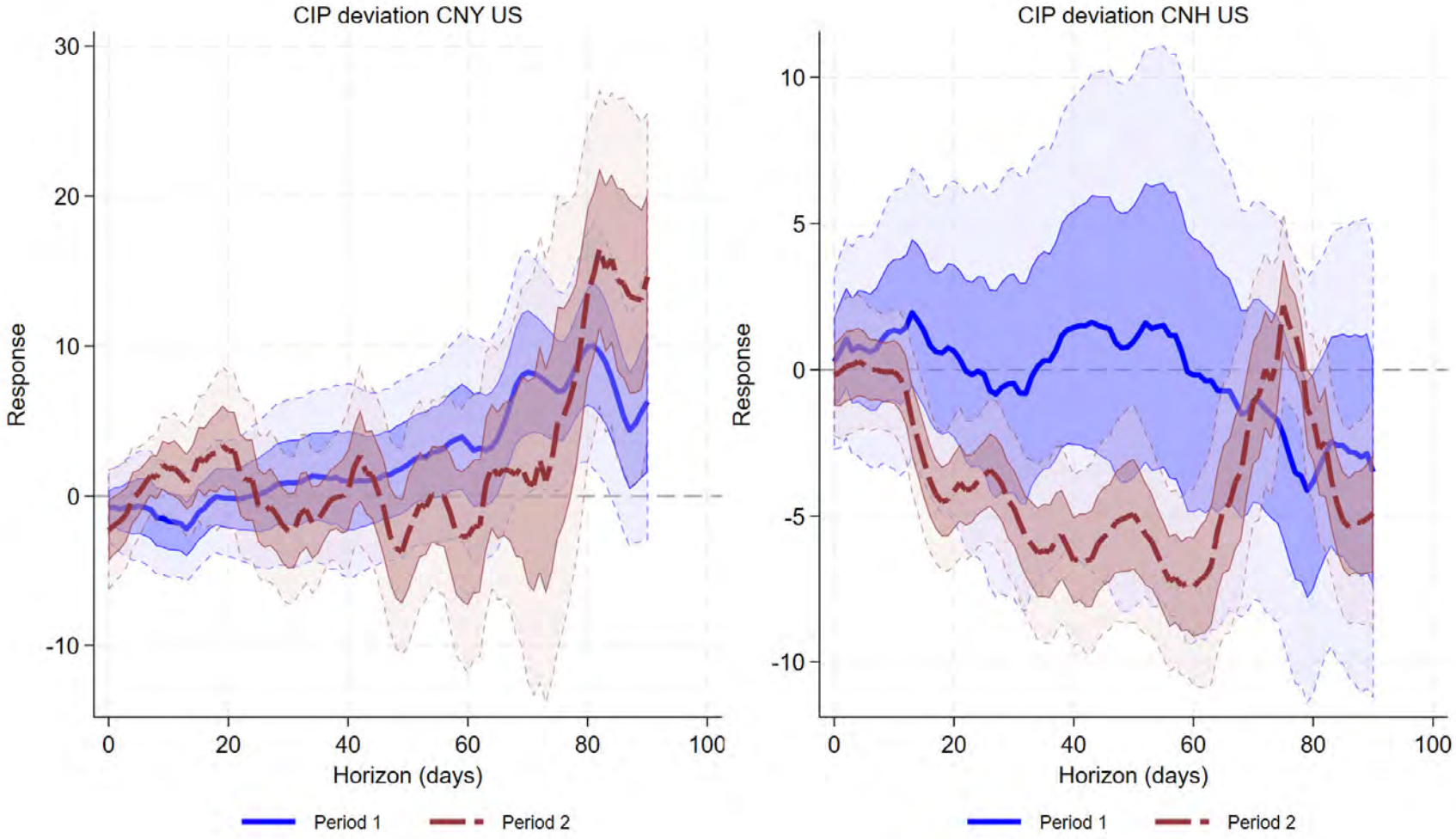
Note: The figure plots local projection estimates of the response of nominal effective exchange rate (NEER) indices to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated 100xlog change in the NEER (constructed such that an increase indicates depreciation). Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1. Red lines denote responses in Period 2. Each panel corresponds to a different BIS NEER index: China, Sweden, United States, and the euro area.

Figure 11. Impulse Response Estimates of CIP deviations for Government Bonds Following Tariff Announcements.



Note: The figure plots local projection estimates of the response CIP deviations for 10 year government bonds to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated basis point change in CIP deviations. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1. Red lines denote responses in Period 2. Panels correspond to CIP-deviations involving Swedish krona, the euro, the Swiss franc, the Japanese yen, the Canadian dollar and the British pound.

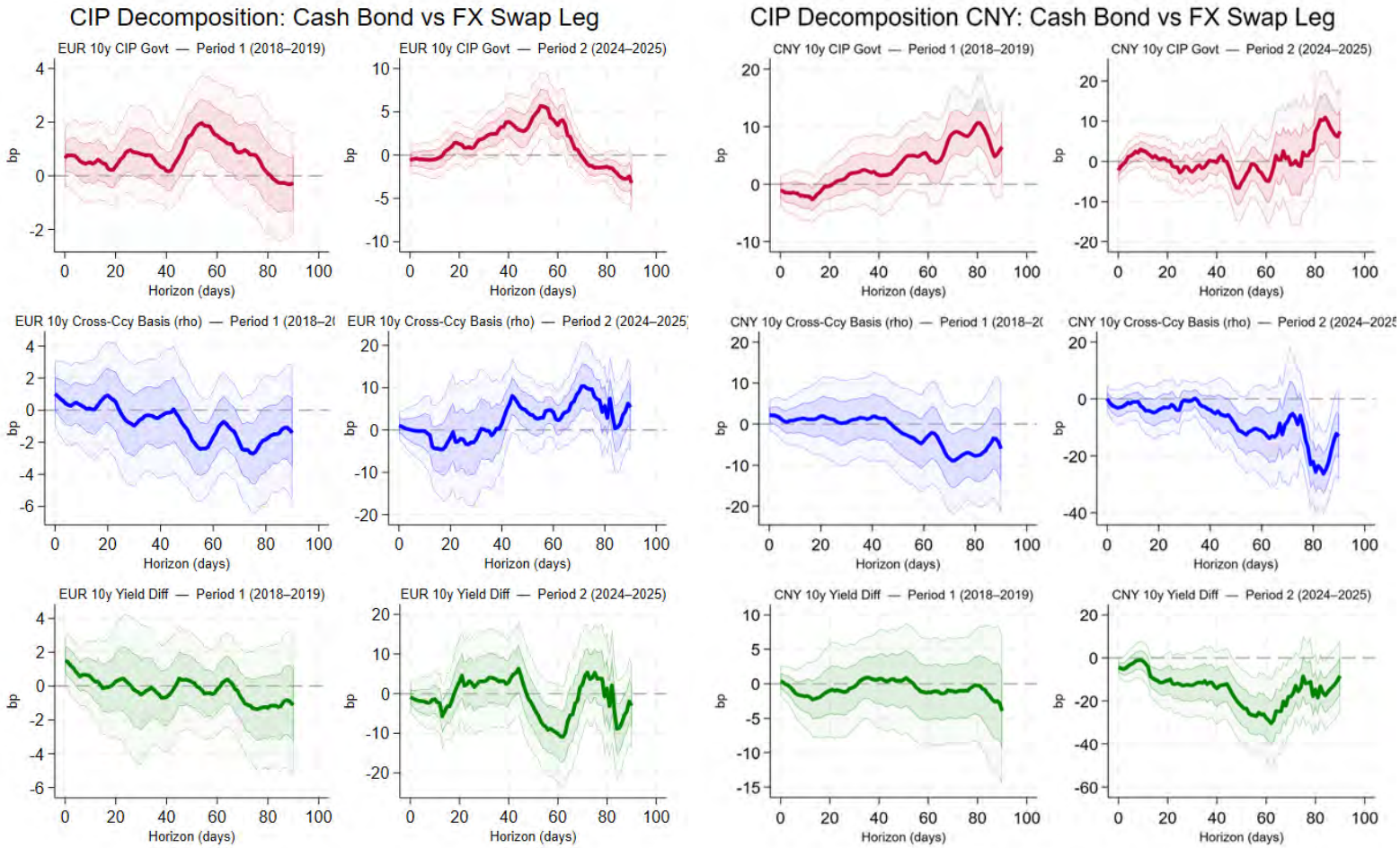
Figure 12. Impulse Response Estimates of CIP deviations for Government Bonds Following Tariff Announcements.



Note: The figure plots local projection estimates of the response CIP deviations for 10 year government bonds to tariff announcements. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated basis point change in CIP deviations. Shaded areas represent 90-percent confidence intervals. Blue lines denote responses in Period 1. Red lines denote responses in Period 2. Panels correspond to CIP-deviations involving the onshore yuan (CNY) and the offshore yuan (CNH).

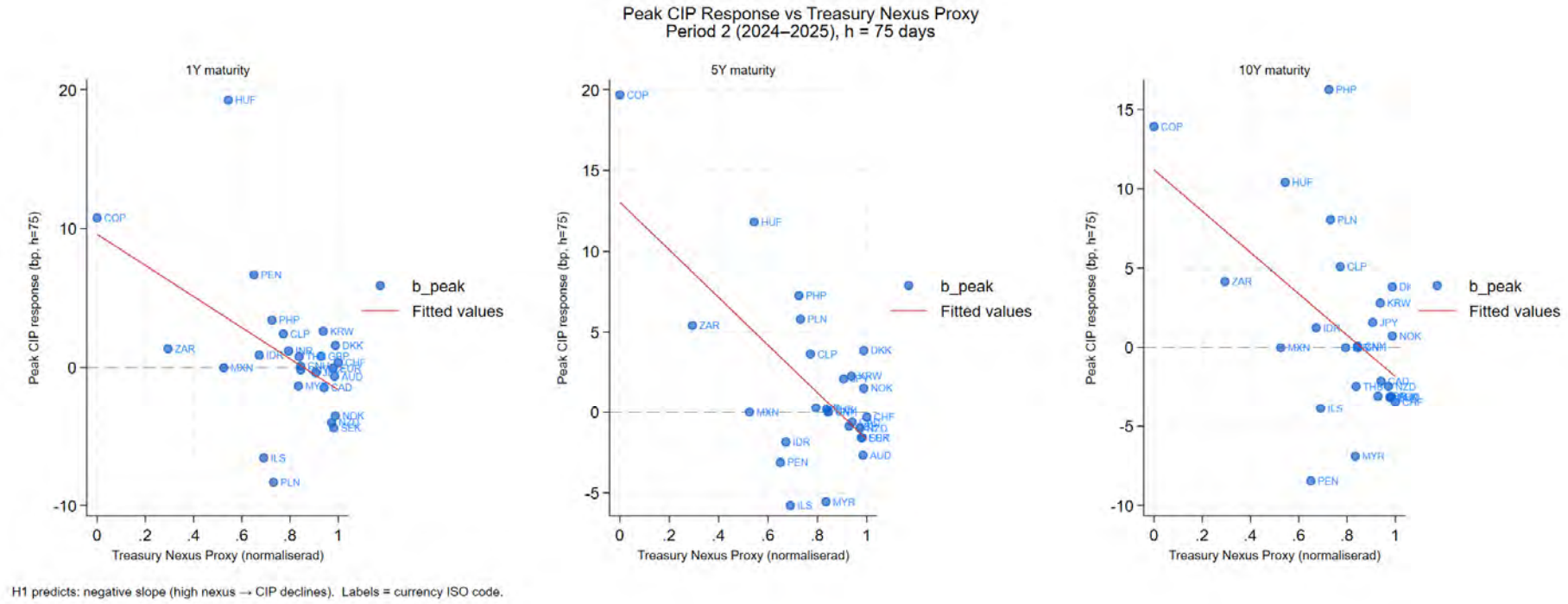
Figure 13. EUR/USD and CNY/USD 10-Year CIP Decomposition: Forward Premium (ρ) and Government Bond Yield Differential.

Panel a: EUR/USD Panel b: CNY/USD



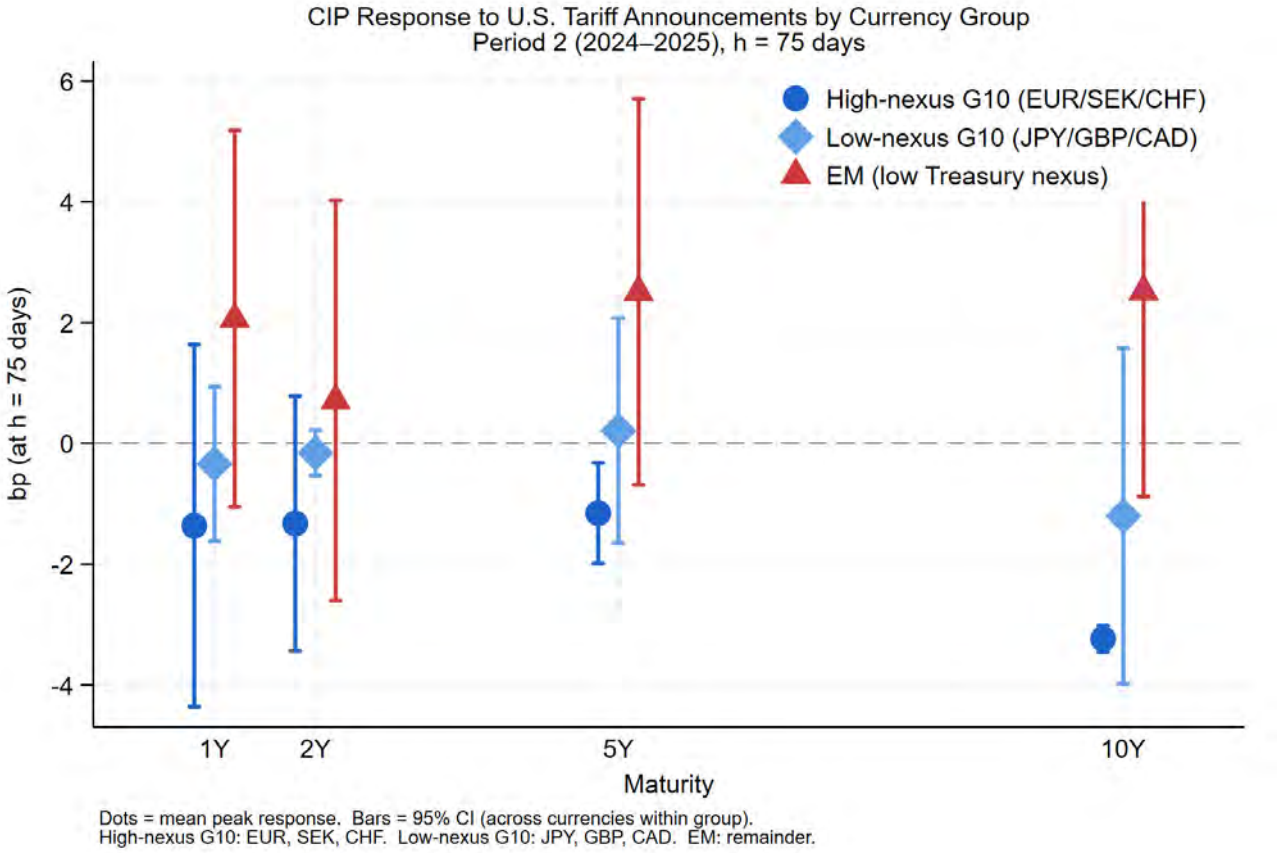
Note: The figure plots the 10-year government bond CIP deviation (red) alongside its two observable components: the forward premium (ρ_t, blue) and the government bond yield differential (green), for Period 1 (2018–2019, left column) and Period 2 (2024–2025, right column). For EUR/USD (panel a), the identity $V_t = \Delta y_t - \rho_t$ holds cleanly. For CNY/USD (panel b), ρ_t is constructed from non-deliverable swap rates and embeds a convertibility wedge alongside standard hedging costs, the plotted components therefore need not sum exactly to the total deviation, and any residual reflects capital-account segmentation rather than a data or construction error. All responses are estimated via local projections using the interaction specification in equation (1). Bands show 68% (dark) and 95% (light) confidence intervals based on Newey–West standard errors. Units are basis points.

Figure 14. Peak CIP Response to U.S. Tariff Announcements and the Treasury-Nexus Proxy, Period 2 (2024–2025).



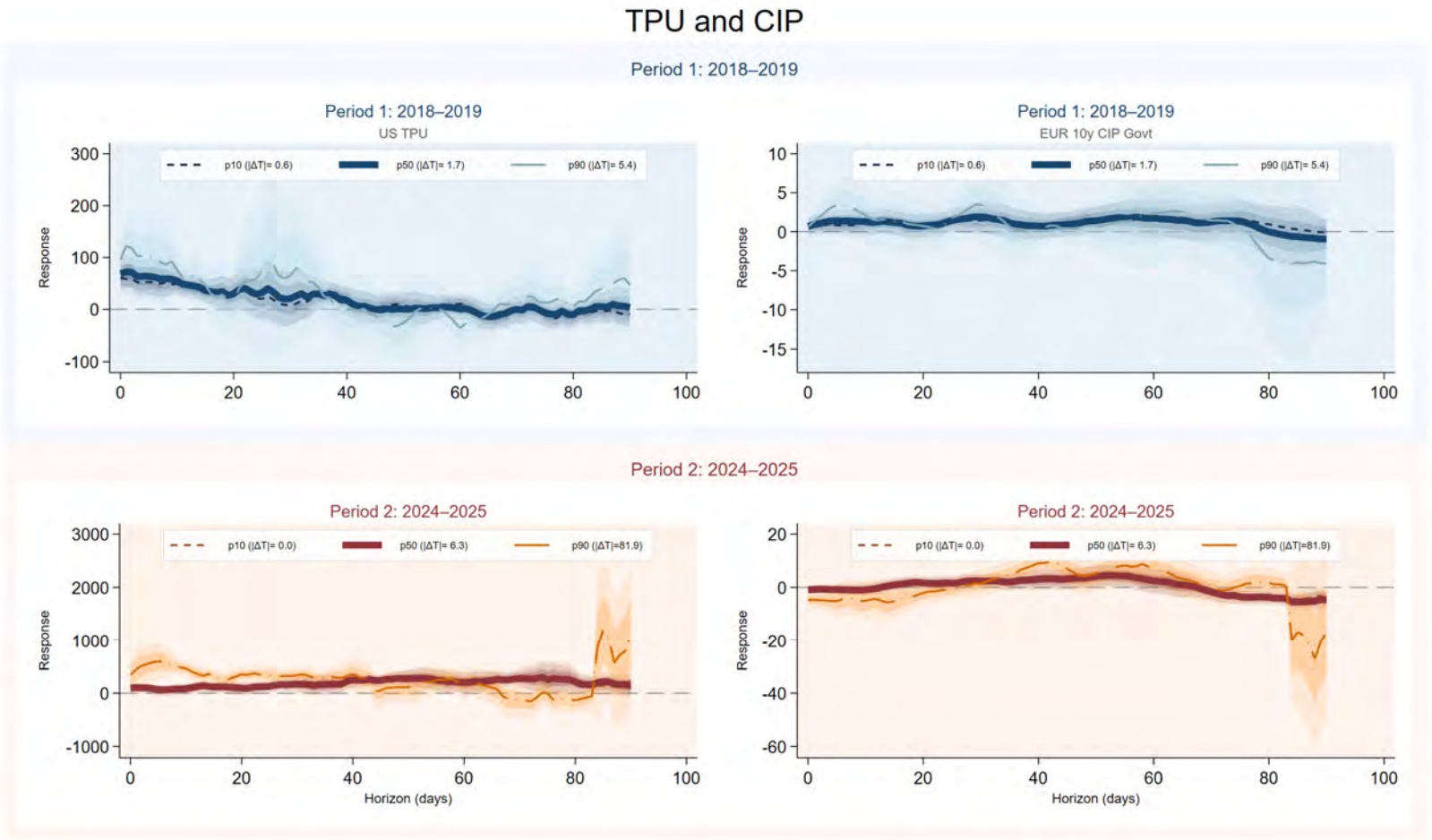
Note: Each point represents the estimated peak local-projection response of the government-bond CIP deviation for currency *i* at horizon h = 75 trading days, plotted against the Treasury-nexus proxy (horizontal axis). The nexus proxy is constructed from sovereign credit default swap spreads (Damodaran 2025), normalized to the unit interval so that higher values indicate lower sovereign credit risk and a government-bond CIP deviation more likely to reflect convenience-yield differentials relative to U.S. Treasuries. The fitted line is an OLS regression of the peak response on the nexus proxy, estimated separately for each maturity. Currency labels follow ISO 4217 codes. The sample covers all G10 and emerging market currencies available in Du, Keerati, and Schreger (2025a) for which at least 30 non-missing daily observations are available in Period 2. H1 predicts a negative slope: high-nexus currencies should exhibit declining CIP deviations as tariff escalation erodes the relative convenience yield on U.S. Treasuries, while low-nexus emerging market currencies should exhibit positive responses as sovereign credit spreads widen. Confidence bands are suppressed for visual clarity; individual-currency confidence intervals are reported in Figure 11.

Figure 15. CIP Response to U.S. Tariff Announcements by Currency Group, Period 2 (2024–2025).



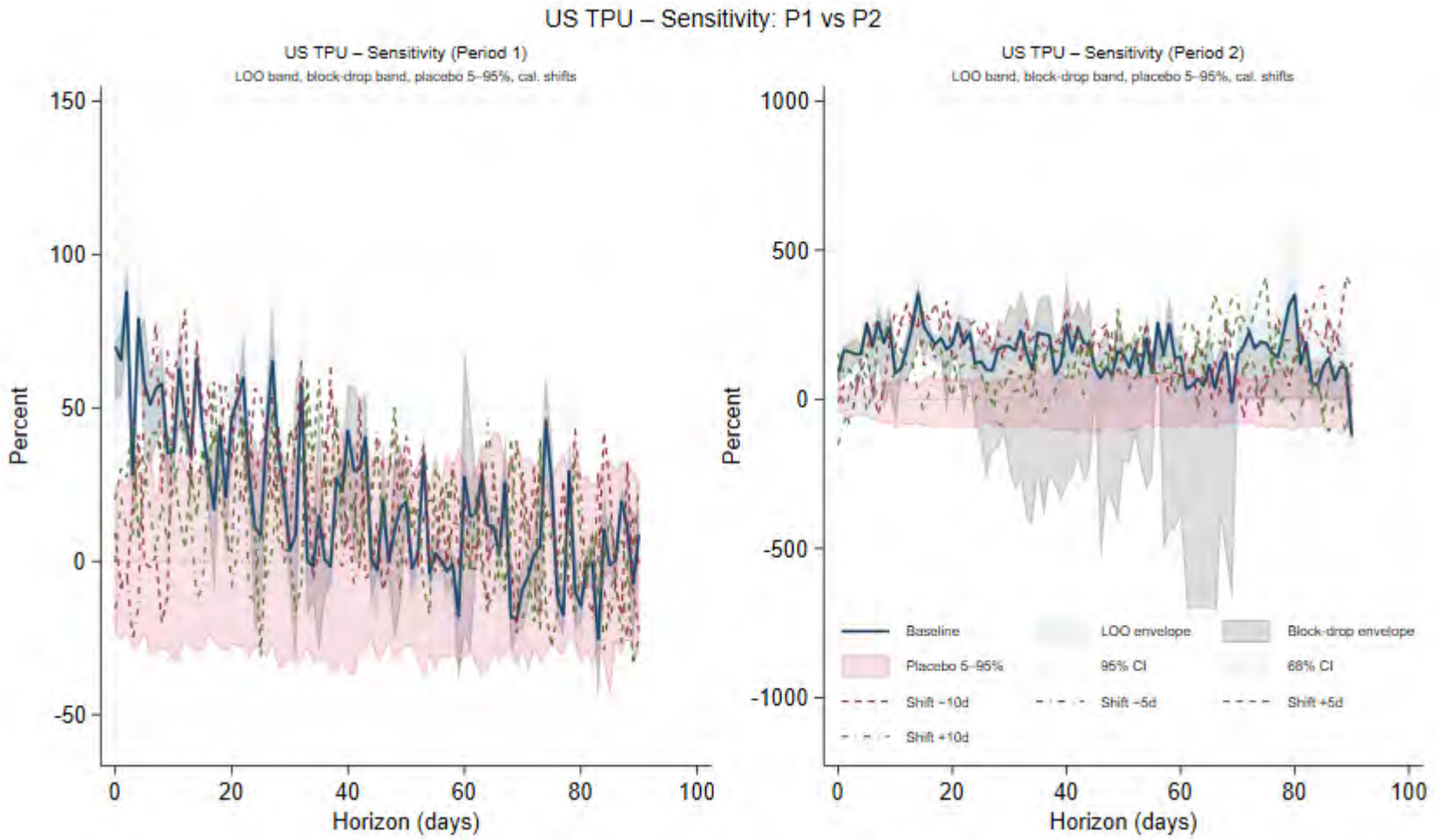
Note: Points represent mean peak local-projection responses at horizon h = 75 trading days for three currency groups: high-nexus G10 (EUR, SEK, CHF; filled circles), low-nexus G10 (JPY, GBP, CAD; filled diamonds), and emerging markets (remainder; filled triangles). Group means are computed across currencies within each group at each maturity. Bars denote 95% confidence intervals constructed as ±1.96 times the cross-currency standard error of the mean within each group. The grouping of G10 currencies follows the currency-specific local projections in Figure 11, which document a systematic difference in H1-signal strength between EUR/SEK/CHF and JPY/GBP/CAD at horizons of 60–90 days. Emerging market currencies exclude BRL and TRY on the grounds that their CIP deviations in Period 2 are dominated by large idiosyncratic domestic shocks — Brazil's fiscal crisis of late 2024 and Turkey's monetary policy volatility — that preclude clean identification of the tariff transmission channel. H1 predicts a monotonic ordering of group means from negative (high-nexus G10) to positive (EM) that strengthens with maturity, consistent with the convenience-yield gradient formalized in Section 5.

Figure 16. Interaction Specification: Impulse Responses of TPU and CIP Deviations at the 10th, 50th, and 90th Percentile of Announced Tariff Magnitude.



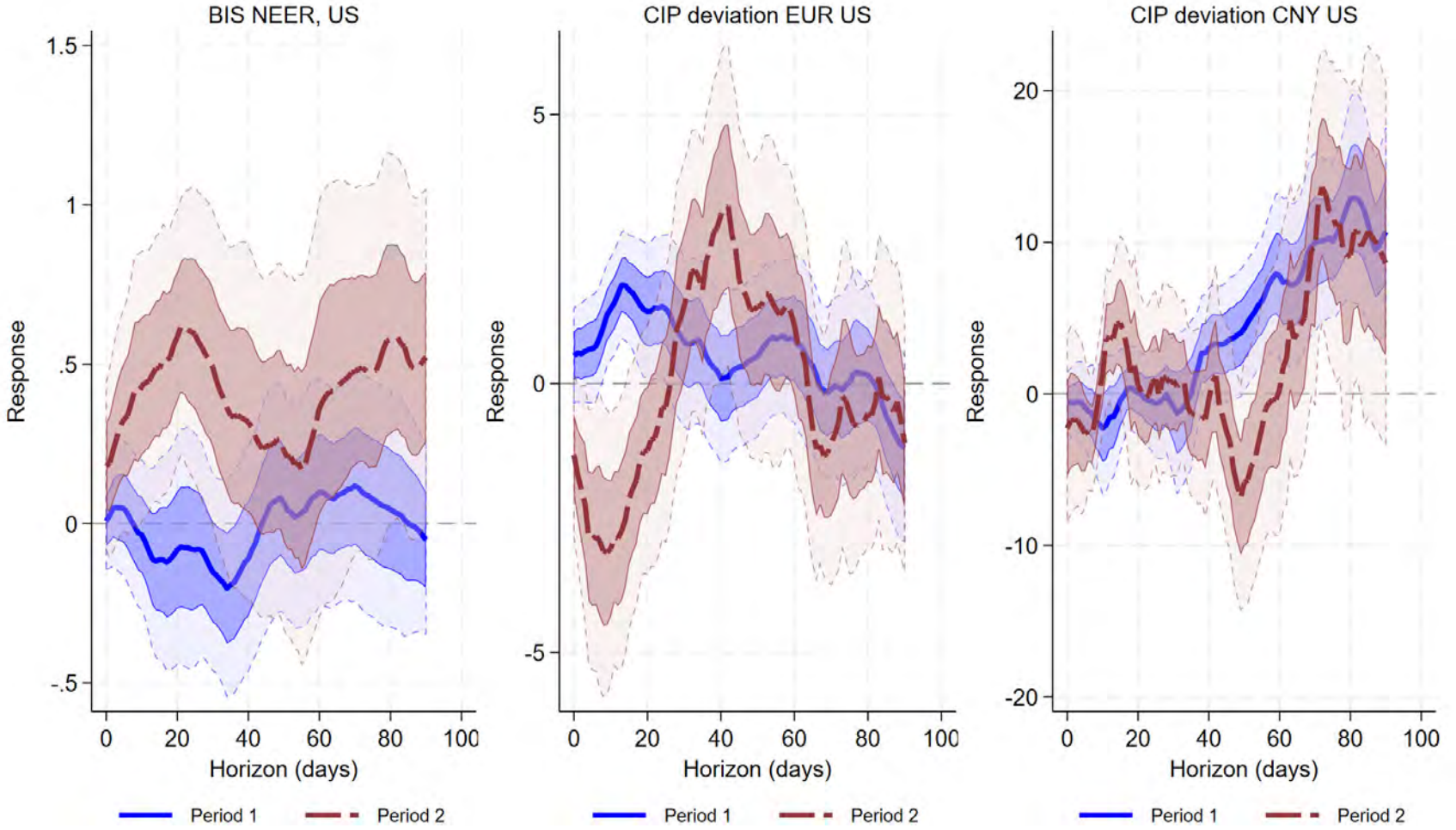
Note: The figure plots total marginal effects from the interaction specification (equation 1'), evaluated at the 10th, 50th, and 90th percentile of |ΔT| on event days. The x-axis measures the horizon in calendar days following the announcement, the y-axis shows the estimated response in index points (TPU) and basis points (CIP). Blue lines and shading denote Period 1 (2018–2019), where the 10th, 50th, and 90th percentiles of |ΔT| are 0.6, 1.7, and 5.4 percentage points. Red lines and shading denote Period 2 (2024–2025), where the corresponding percentiles are 0.1, 6.3, and 81.9 percentage points. Thick solid (Period 1) and thick dashed (Period 2) lines show the median (p50) response, thinner lines show the p10 and p90 responses. Dark and light shading around the median indicate 68- and 95-percent confidence bands, respectively. Standard errors are computed via the delta method applied to the Newey–West variance–covariance matrix.

Figure 17. Sensitivity Analysis of TPU Responses to Tariff Announcements.



Note: The figure reports sensitivity analyses of the local projection estimates for trade policy uncertainty (TPU) in response to tariff announcements. The x-axis shows the horizon in days relative to the announcement date, and the y-axis the estimated change in TPU (index points). Shaded areas (dark grey) depict 68- and 95-percent confidence intervals around the baseline response. Each line and lighter grey shaded area corresponds to a different robustness probe: (i) leave-one-out exclusion of single events, (ii) block-drop exclusion of short clusters of events, (iii) placebo calendars with randomized event timing and preserved sign distribution (light grey), and (iv) uniform calendar shifts to detect anticipation or delayed pass-through (dashed lines).

Figure 18. Impulse Response Estimates of the U.S. Dollar and CIP Deviations Following Tariff Announcements: Alternative Event Series.



Note: The figure plots local projection estimates of the responses of the U.S. trade-weighted exchange rate and CIP deviations for 10-year government bonds to tariff announcements, using the event series of Ostry, Lloyd, and Corsetti (2025) as the treatment variable. The horizon on the x-axis is measured in days following the announcement, while the y-axis shows the estimated response in log index points (left panel) and basis points (center and right panels). Shaded areas represent 95- and 68-percent confidence intervals. Blue lines denote responses in Period 1 (2018–2019), red dashed lines denote responses in Period 2 (2024–2025). The left panel shows the BIS broad nominal effective exchange rate for the U.S. (an increase denotes dollar appreciation). The center and right panels show CIP deviations relative to the U.S. dollar for the euro and the onshore yuan (CNY), respectively.

References

Abadi, Joseph, Jesús Fernández-Villaverde, and Daniel Sanches (2026), "International Currency Dominance," NBER Working Paper 34817.

Amiti, Mary, Matthieu Gomez, Sang Hoon Kong, and David E. Weinstein (2024), “Using Stock Returns to Assess the Aggregate Effect of the U.S.-China Trade War,” Federal Reserve Bank of New York Liberty Street Economics, December 4, 2024.

Andersen, Torben G., Tim Bollerslev, Francis X. Diebold, Clara Vega (2007), “Real-time price discovery in global stock, bond and foreign exchange markets”, *Journal of International Economics*, vol. 73, p. 251–277.

Auclert, Adrien, Matthew Rognlie, Ludwig Straub (2025), “The macroeconomics of tariff shocks”, NBER Working Paper 33726.

Avdjiev, Stefan, Wenxin Du, Cathérine Koch and Hyun Song Shin (2019), "The dollar, bank leverage, and deviations from covered interest parity", *American Economic Review: Insights*, vol. 1, p. 193–208.

Barattieri, Alessandro, Matteo Cacciatore, Fabio Ghironi (2021), “Protectionism and the business cycle”, *Journal of International Economics*, vol. 129, p. 103417.

Barnichon, Regis, Christian Brownlees (2019), "Impulse Response Estimation by Smooth Local Projections", *The Review of Economics and Statistics*, vol. 101(3), p. 522–530.

Baqaee, David and Emmanuel Farhi (2024), "Networks, Barriers, and Trade", *Econometrica*, Econometric Society, vol. 92, p. 505-541, March.

Bergin, Paul R., Giancarlo Corsetti (2023), “The macroeconomic stabilization of tariff shocks: What is the optimal monetary response?”, *Journal of International Economics*, vol. 143, p. 103758.

Blanchard, Olivier, Christopher G. Collins (2019), “Markets don’t believe Trump’s trade war is zero-sum”, Peterson Institute for International Economics, Trade and Investment Policy Watch.

Bolt, Wilko, Kostas Mavromatis, Sweder van Wijnbergen (2019), “The global macroeconomics of a trade war: The eagle model on the US-China trade conflict”, De Nederlandsche Bank Working Paper 623.

Bown, Chad P. (2019), “US-China trade war: The guns of August”, Peterson Institute for International Economics, Trade and Investment Policy Watch.

Bown, Chad P., Melina Kolb (2023), “Trump’s trade war timeline: An up-to-date guide”, Peterson Institute for International Economics, Trade and Investment Policy Watch.

Bown, Chad P. and Melina Kolb (2025a). "Trump's Trade War Timeline: An Up-to-Date Guide." PIIE Trade and Investment Policy Watch, January 20, 2025.

Bown, Chad P. (2025b). "Trump's Trade War Timeline 2.0: An Up-to-Date Guide." PIIE Realtime Economic Issues Watch, 2025.

Caldara, Dario, Matteo Iacoviello, Patrick Molligo, Andrea Prestipino, and Andrea Raffo (2020), "The economic effects of trade policy uncertainty", *Journal of Monetary Economics*, vol. 109, p. 38–59.

Caldara, Dario and Matteo Iacoviello (2022), "Measuring Geopolitical Risk", *American Economic Review*, vol. 112, p. 1194–1225.

Chahrour, Ryan and Rosen Valchev (2022), "Trade Finance and the Durability of the Dollar", *Review of Economic Studies*, vol. 89, p. 1825–1860.

Chahrour, Ryan and Rosen Valchev (2024), "The Dollar in an Era of International Retrenchment", IMF Economic Review, vol. 72, p. 1042–1080.

Cheung, Yin-Wong, Menzie D. Chinn, Eiji Fujii (2011), "China's current account and exchange rate", in *China's Growing Role in World Trade*, Robert Feenstra and Shang-Jin Wei (eds.), p. 231–272, Chicago: University of Chicago Press.

Cheung, Yin-Wong, Guonan Ma, Robert N. McCauley (2011), "Renminbi rising: A new global monetary system emerges", *China & World Economy*, vol. 19(2), p. 1–18.

Cheung, Yin-Wong, Dagfinn Rime (2014), "The offshore renminbi exchange rate: Microstructure and links to the onshore market", *Journal of International Money and Finance*, vol. 49, p. 170–189.

Coppola, Antonio, Arvind Krishnamurthy and Chenzi Xu (2024), "Liquidity, Debt Denomination, and Currency Dominance," *American Economic Review*, vol. 114, p. 1106–1143.

Dao, Mai Chi, Pierre-Olivier Gourinchas and Oleg Itskhoki (2025), "Breaking parity: Equilibrium exchange rates and currency premia", NBER Working Paper 34443.

Diamond, William and Peter Van Tassel (2025), "Risk-Free Rates and Convenience Yields Around the World", Jacobs Levy Equity Management Center for Quantitative Financial Research Paper.

Du, Wenxin and Jesse Schreger (2016), "Local Currency Sovereign Risk", *Journal of Finance*, vol. 71, p. 1027-1070.

Du, Wenxin, Joanne Im, and Jesse Schreger (2018). "The U.S. Treasury Premium", Journal of International Economics, vol. 112, p. 167-181.

Du, Wenxin, Ritt Keerati and Jesse Schreger (2025a), “Decoupling Dollar and Treasury Privilege”, International Finance Discussion Papers 1427, Board of Governors of the Federal Reserve System.

Du, Wenxin, Ritt Keerati, and Jesse Schreger (2025b), “Decoupling Dollar and Treasury Privilege,” "A Dataset for Covered Interest Rate Parity Deviations Between Government Bond Yields," version 4.0, October 2025.

Dornbusch, Rudiger (1987), “External balance correction: Depreciation or protection?”, *Brookings Papers on Economic Activity*, vol. 1, p. 1–39.

Eichengreen, Barry J. (1981), “A dynamic model of tariffs, output and employment under flexible exchange rates”, *Journal of International Economics*, vol. 11, p. 341–359.

Eichengreen, Barry J. (2015), *Renminbi Internationalization: The Political Trilemma*, Asian Development Bank Institute Working Paper No. 457.

Eichengreen, Barry J. (2019), “Trade policy and the macroeconomy”, *IMF Economic Review*, vol. 67, p. 4–23.

Eichengreen, Barry and Marc Flandreau (2009), “The rise and fall of the dollar (or when did the dollar replace sterling as the leading reserve currency?)”, *European Review of Economic History*, vol. 13, p. 377-411.

Erceg, Christopher, Andrea Prestipino, and Andrea Raffo (2023), "Trade Policies and Fiscal Devaluations", *American Economic Journal: Macroeconomics* vol. 15, p. 104–140**.**

European Central Bank (2025), Financial Stability Review, November 2025.

Farhi, Emmanuel and Matteo Maggiori (2018), "A model of the international monetary system", Quarterly Journal of Economics, vol. 133, p. 295–355.

Fajgelbaum, Pablo, Pinelopi Goldberg, Patrick Kennedy, Amit Khandelwal, Daria Taglioni (2024), “The US-China trade war and global reallocations”, *American Economic Review: Insights*, vol. 6, p. 295–312.

Faust, Jon, John H. Rogers, Shing-Yi B. Wang, Jonathan H. Wright (2007), “The high-frequency response of exchange rates and interest rates to macroeconomic announcements”, *Journal of Monetary Economics*, vol. 54, p. 1051–1068.

Feenstra, Robert C., Philip Luck, Maurice Obstfeld, Katheryn N. Russ (2018), “In search of the Armington elasticity”, *Review of Economics and Statistics*, vol. 100, p. 135–150.

Filippou, Ilias, Thomas Maurer, Luca Pezzo and Mark Taylor (2024), "Importance of transaction costs for asset allocation in foreign exchange markets", *Journal of Financial Economics*, vol. 159(C).

Fontagné, Lionel, Philippe Martin, Gianluca Orefice (2018), “The international elasticity puzzle is worse than you think”, *Journal of International Economics*, vol. 115, p. 115–129.

Funke, Michael, Chang Shu, Xiaoqiang Cheng, Selman Eraslan (2015), “Assessing the CNH–CNY pricing differential”, *Journal of International Money and Finance*, vol. 59, p. 245–262.

Furceri, Davide, Swarnali Hannan, Jonathan Ostry, Andrew Rose (2019), “Macroeconomic consequences of tariffs”, *IMF Economic Review*, vol. 67(4), p. 1–34.

Furceri, Davide, Swarnali Hannan, Jonathan Ostry, Andrew Rose (2022), “The macroeconomy after tariffs”, *World Bank Economic Review*, vol. 36, p. 361–381.

Galí, Jordi, Tommaso Monacelli (2005), “Monetary policy and exchange rate volatility in a small open economy”, *Review of Economic Studies*, vol. 72, p. 707–734.

Gopinath, Gita, Jeremy C. Stein (2021), “Banking, trade, and the making of a dominant currency”, *The Quarterly Journal of Economics*, vol. 136, p. 783–830.

Hartley, Jonathan, Alessandro Rebucci (2025), “Tariffs, the dollar, and equities: High-frequency evidence from the Liberation Day announcement”, CEPR Discussion Paper.

He, Dong, Robert N. McCauley (2013), “Offshore markets for the domestic currency: Monetary and financial stability issues”, *Journal of International Money and Finance*, vol. 32(4), p. 760–780.

He, Zhiguo, Arvind Krishnamurthy and Konstantin Milbradt (2019), "A Model of Safe Asset Determination," *American Economic Review*, vol. 109, p. 1230–1262.

IMF (2019), *People’s Republic of China: 2019 Article IV Consultation Staff Report*, IMF Country Report No. 19/266.

Jeanne, Olivier, Jeongwon John Son (2024), “To what extent are tariffs offset by exchange rates?”, *Journal of International Money and Finance*, vol. 142, p. 103015.

Jiang, Zhengyang, Arvind Krishnamurthy and Hanno Lustig (2021), "Foreign Safe Asset Demand and the Dollar Exchange Rate" *Journal of Finance*, vol. 76, p. 1049–1089.

Jiang, Zhengyang (2025), Discussion of “Decoupling Dollar and Treasury Privilege” by Wenxin Du, Ritt Keerati, and Jesse Schreger. IMF Jacques Polak Annual Research Conference, Washington, DC.

Jiao, Yanan, Chang Ma, Zheng Song (2022), “The distributional consequences of U.S. tariffs on Chinese exporters”, *Review of Economics and Statistics*, vol. 104, p. 450–465.

Jordà, Òscar (2005), "Estimation and Inference of Impulse Responses by Local Projections," *American Economic Review*, vol. 95, p. 161–182.

Jorda, Oscar and Alan M. Taylor (2025), "Local Projections", *Journal of Economic Literature*, vol. 63, p. 59–110.

Lerner, Abba P. (1936), "The Symmetry Between Import and Export Taxes", *Economica*, vol. 3, p. 306–313.

Liao, Wenhui, Daniel McDowell (2015), "Redback rising: China's bilateral swap agreements and internationalization of the renminbi", *International Studies Quarterly*, vol. 59(3), p. 401–422.

Matveev, Dmitry, Francisco Ruge-Murcia (2024), "Tariffs and the Exchange Rate: Evidence from Twitter," *IMF Economic Review*, Vol. 72, p. 1185–1211.

McCauley, Robert N., Chang Shu (2019), "Recent renminbi policy and the CNH–CNY spread", *BIS Quarterly Review*, September.

Mundell, Robert A. (1961), "Flexible exchange rates and employment policy", *Canadian Journal of Economics and Political Science*, vol. 27, p. 509–517.

Nakamura, Emi and Jón Steinsson (2018), "High-frequency identification of monetary non-neutrality: The information effect", *Quarterly Journal of Economics*, vol. 133, p. 1283–1330.

Ostry, Daniel, Simon Lloyd and Giancarlo Corsetti (2025), "The Exchange-Rate Response to Tariffs and Retaliations", CEPR Discussion Paper 20452.

Ramey, Valerie A. (2011), "Identifying government spending shocks: It's all in the timing", *Quarterly Journal of Economics*, vol. 126, p. 1–50.

Romer, Christina and David Romer (2010), "The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks", *American Economic Review*, vol. 100, p. 763–801.

Shu, Chang, Dong He, Xiaoqiang Cheng (2015), "One currency, two markets: The renminbi's growing influence in Asia-Pacific", *China Economic Review*, vol. 33, p. 163–178.

van Wijnbergen, Sweder (1987), "Tariffs, employment and the current account: Real wage resistance and the macroeconomics of protection", *Economica*, vol. 54, p. 239–256.