Stablecoins and safe asset prices[a]

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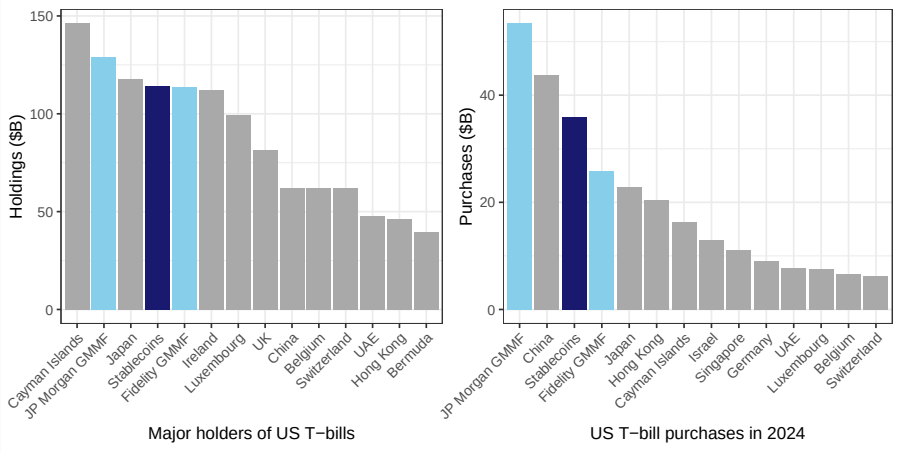
[a]The views expressed here are those of the authors only and not necessarily those of the Andersen Institute for Finance and Economics, or the Bank for International Settlements.

Stablecoins are an important player in Treasury markets

Figure 1: Size and growth of stablecoin US T-bill holdings relative to other large holders of T-bills



This paper: effects on T-bill yields

- Local projections (LP) to study effect of SC flows on (3m) T-bill yields
- Two challenges from simple LP
  - Omitted variable bias
  - Simultaneity bias
  - Naive LP deliver implausibly large estimates: 25 bps reduction over 30 days in response to \$3.5B SC inflow ($\sim$ 2 s.d.); similar to Fed rate cut!
- Control for Treasury yield curve (forward & recent), T-bill supply, crypto prices: 2.5-5 bps
- Instrumental variable (IV) approach using daily version of crypto shocks from (Aldasoro et al., 2025): **2-2.5 bps**; comparable to small-scale QE
- Decompose into issuer-specific contributions: USDT $\sim$ 70%, USDC $\sim$ 19%

Literature

Demand for safe assets and pricing

- Demand for liquidity and safety suppresses Treasury yields (Krishnamurthy and Vissing-Jorgensen, 2012); incentivize issuance of risky short-term debt (Greenwood et al., 2015); MMFs can influence price of near-money assets (Doerr et al., 2023); foreign demand as well (Ahmed and Rebucci, 2024).

Stablecoins

- Stability (D'Avernas et al., 2023; Lyons and Viswanath-Natraj, 2023), adoption (Bertsch, 2023), runs (Ahmed et al., 2025; Gorton et al., 2022) and market structure (Ma et al., 2023); effects on CP market (Barthélémy et al., 2023; Kim, 2025a) and Treasuries (Kim, 2025b)

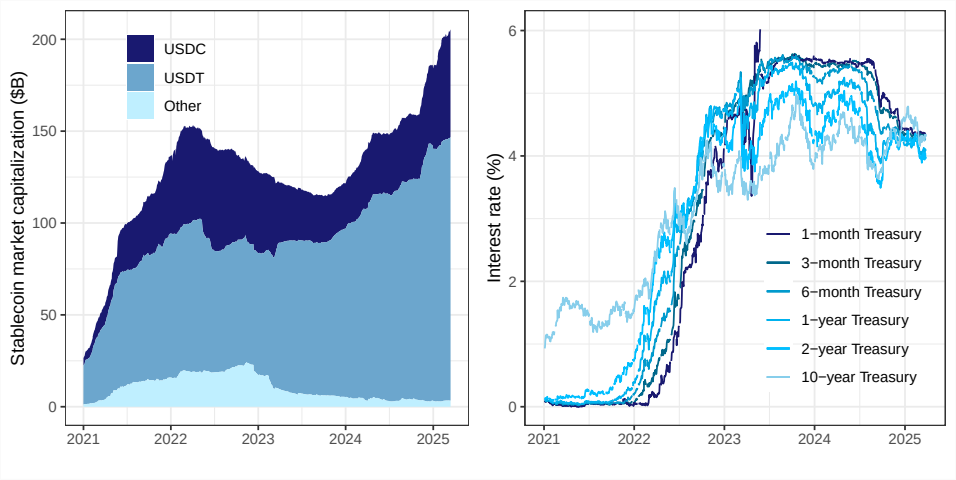
Data and empirical approach

- Daily data from January 2021 to March 2025
  - Six USD SCs (USDT, USDC, TUSD, BUSD, FDUSD, PYUSD) market cap
    - Aggregate & compute 5-day change: $Flow(5d)_t = MC_t - MC_{t-5}$
  - Bitcoin, Ether prices
  - US Treasury yield curve (1m, 3m, 6m, 1y, 2y, 10y)
  - T-bill auction data
- Daily version of crypto shock series proposed in Aldasoro et al. (2025)
  - Unforecastable component of the Bloomberg Galaxy Crypto Index (BGCI)
  - $BCGI = f(BCGI_{-1}, VIX, Surprise, S\&P, 3mYields, oil, gold, NEER, TermSpread)$; simple supervised learning algorithm (elastic net)
  - Cumulative sum, use to instrument for SC flows

Summary statistics

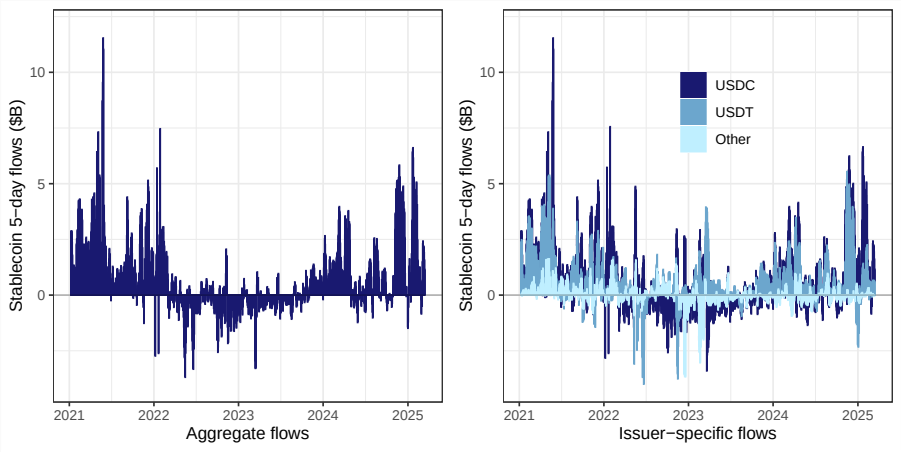
Stablecoin market cap and Treasury yields

Figure 2: Stablecoin market capitalization and US Treasury yields



Stablecoin flows

Figure 3: 5-day aggregate and issuer-specific stablecoin flows



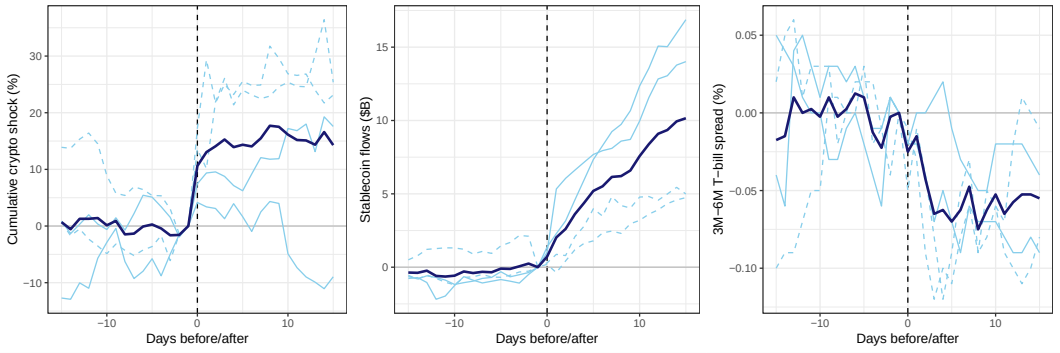
Event study evidence

We study outcomes [stablecoin flows, T-bill yields] 15 days before/after four stablecoin flow-inducing events

- May 9, 2022 Terra-Luna crash (outflow)
- Nov 8, 2022 FTX collapse (outflow)
- Nov 6, 2024 US election (inflow)
- Jan 17, 2025 Trump announces 'TRUMP' memecoin (inflow)

Event study evidence

Figure 4: Average outcomes around events (normalized to inflows)



LP with controls

$$y^{3M}_{t+h} - y^{3M}_{t-1} = \alpha_h + \beta_h Flow(5d)_t + \sum_{k \in K} \gamma_h [y^k_{t+h} - y^k_{t-1}] + \sum_{p \in P} B^p_h X(5d)_{p,t} + e_{t+h}, \quad (1)$$

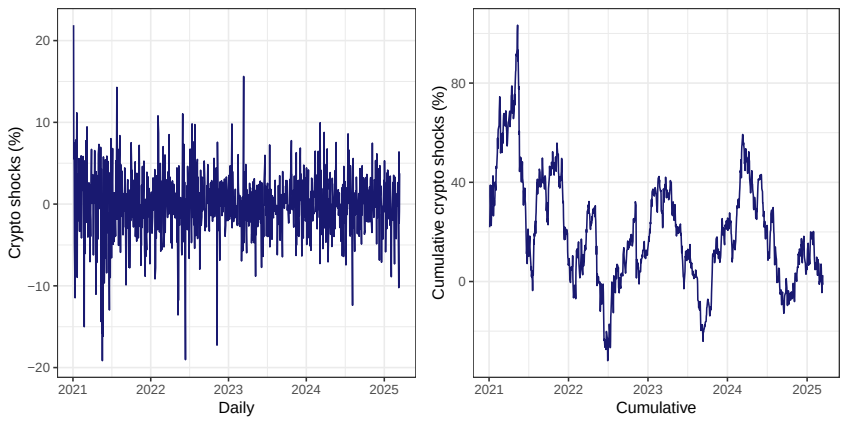
where $\sum_p B^p_h X(5d)_{p,t} =$

$$\sum_{k' \in P} B^{k'}_h [y^{k'}_t - y^{k'}_{t-5}] + B^0_h [\ln BTC_t - \ln BTC_{t-5}] + B^1_h [\ln ETH_t - \ln ETH_{t-5}],$$

with $h = \{0, ..., 30\}$, $k = \{6M, 1Y\}$, and $k' = \{1M, 3M, 6M, 1Y, 2Y, 10Y\}$.

Instrument SC flows with crypto shocks

Figure 5: Daily and cumulative idiosyncratic cryptocurrency price shocks



IV first stage

Table 1: First stage IV regressions of stablecoin flows on crypto shocks

	Dependent variable:			
	Aggregate $Flow(5d)_t$	USDC $Flow(5d)_t$	USDT $Flow(5d)_t$	Other $Flow(5d)_t$
	(1)	(2)	(3)	(4)
Intercept	0.479^{***} (0.063)	0.185^{***} (0.043)	0.322^{***} (0.050)	-0.028 (0.022)
Cumulative crypto shocks	3.261^{***} (0.254)	0.611^{***} (0.176)	2.286^{***} (0.167)	0.365^{***} (0.087)
Observations	1,091	1,091	1,091	1,091
Adjusted R^2	0.207	0.016	0.215	0.025
F Statistic	164.710^{***}	11.962^{***}	187.07^{***}	17.337^{***}

Relevance: ✓

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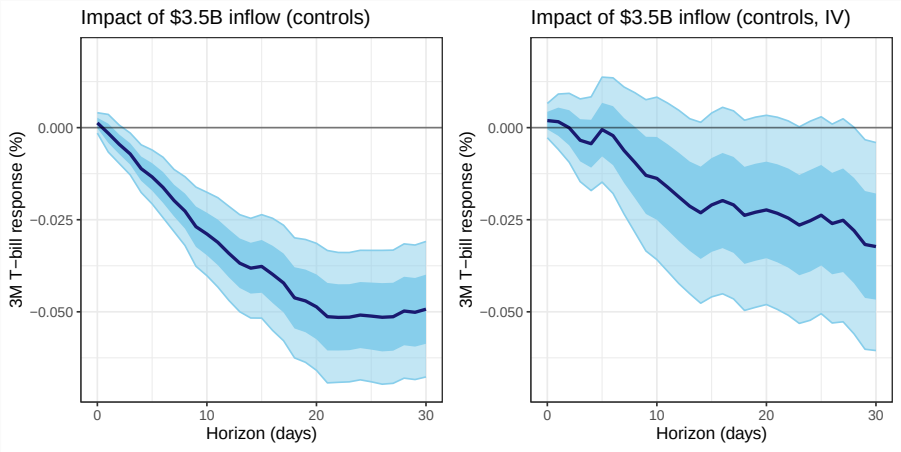
Exogeneity: crypto small relative to Tsy ($3T vs $35T); unforecastable component of crypto prices unlikely to causally affect Treasury prices other than through SC channel

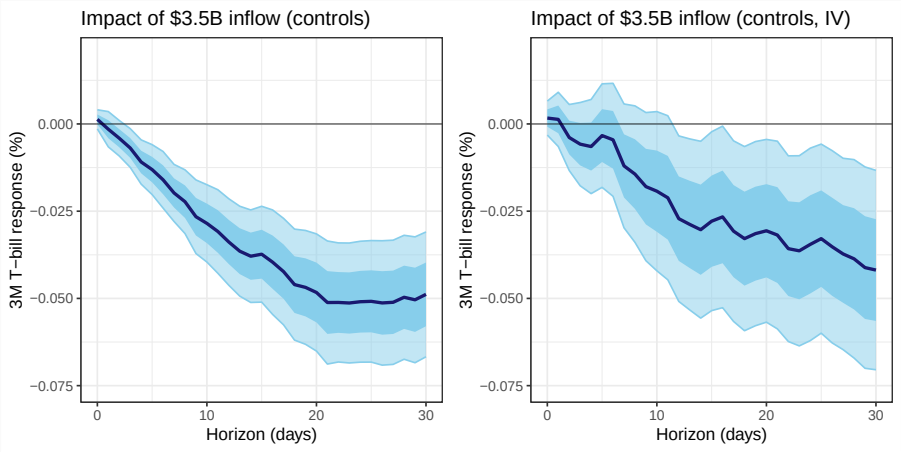
Main result: stablecoin flows have an impact on T-bill yields

Figure 6: IRF of $3.5B stablecoin inflow on 3-month T-bill yields



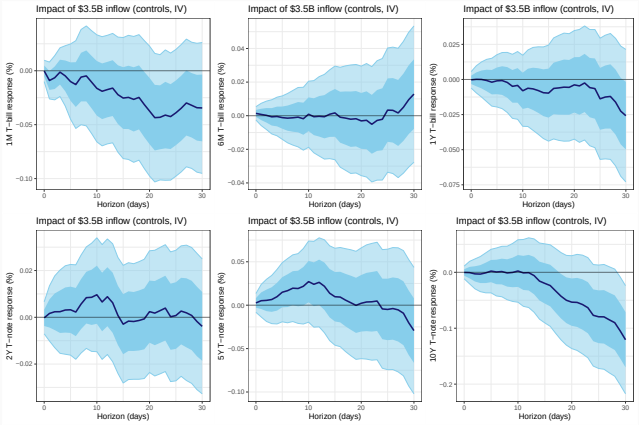
Robust to the controlling for T-bill supply

Figure 7: IRF of $3.5B stablecoin inflow on 3-month T-bill yields, controlling for 3-month T-bill issuance



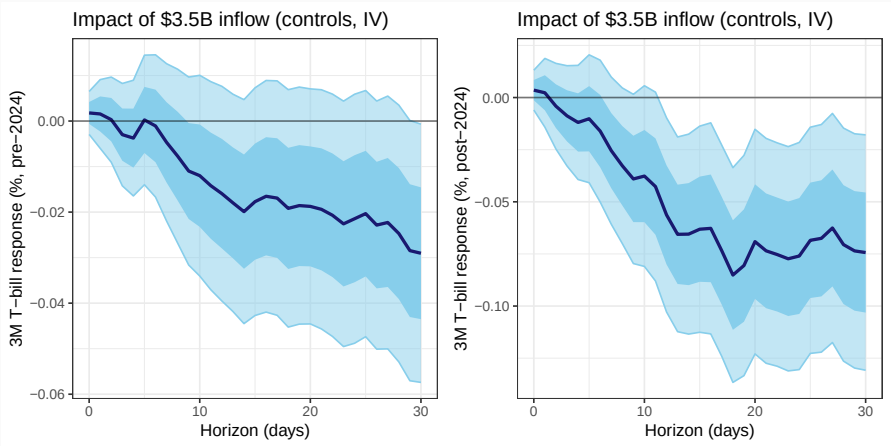
Not present for other tenors

Figure 8: Instrumented IRF of $3.5B stablecoin inflow on 1-month, 6-month, 1-year, 2-year, 5-year, and 10-year Treasury yields



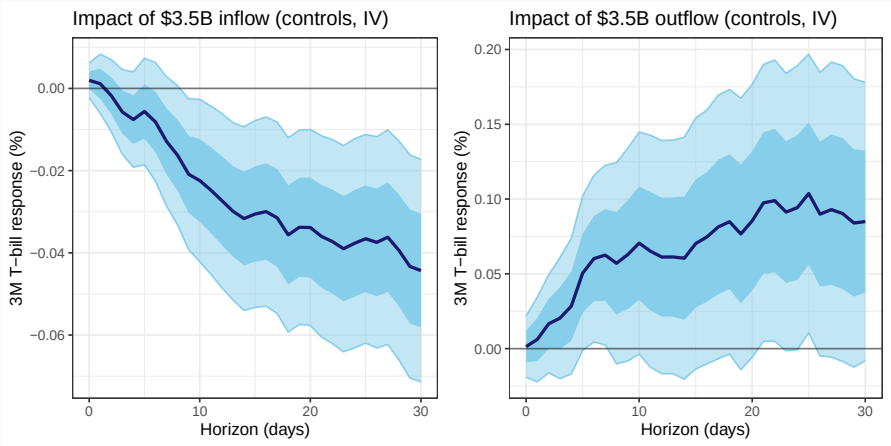
Effects are stronger post-2024

Figure 9: IRF of $3.5B stablecoin inflow on 3-month T-bill yields, before (left) and after (right) January 2024



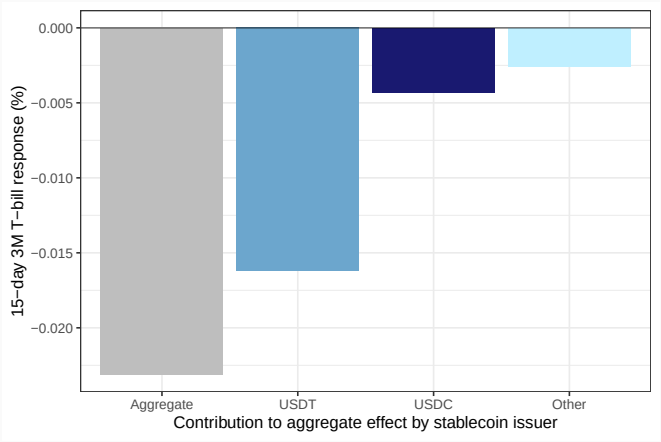
Effects are asymmetric: stronger for outflows

Figure 10: Instrumented IRF of $3.5B stablecoin inflow (left) and outflow (right) on 3-month T-bill yields from asymmetric local projection regressions



Issuer-specific contributions based on IV estimates

Figure 11: 15-day impact of $3.5B stablecoin inflow on 3-month T-bill yields decomposed into issuer-specific contributions



Discussion

- **Magnitude:** TBAC estimates $2T market cap by 2028;
  - Our estimates point to lower yields by 6-8 bps
  - Growing SC market can potentially interfere with transmission of MP to market-based yields
- **Mechanisms:** SC can impact Treasury market pricing via
  - Direct demand (reduces available bill supply)
  - Indirect: relieve dealer balance sheets;
  - Signaling (institutional risk appetite)
- **Policy implications:**
  - Reserve transparency
  - MP: weaker control of short-term rates ('Greenspan conundrum')
  - Financial stability: fire sales (our estimates likely lower bound)
  - Blurring the lines between crypto and traditional finance

Thank you for your attention!

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Summary statistics

Table 2: Summary statistics

Variable	T	Mean	St. Dev.	Min	Max
5-day stablecoin flow ($B)	1,091	0.812	1.747	−4.019	11.539
5-day USDT flow ($B)	1,091	0.555	1.202	−8.684	5.308
5-day USDC flow ($B)	1,091	0.247	1.148	−6.533	7.716
1-month US yield (%)	1,046	3.105	2.343	0.000	6.020
3-month US yield (%)	1,046	3.214	2.302	0.010	5.630
6-month US yield (%)	1,046	3.276	2.218	0.020	5.610
1-year US yield (%)	1,046	3.224	2.061	0.040	5.490
2-year US yield (%)	1,046	3.115	1.800	0.090	5.190
10-year US yield (%)	1,046	3.212	1.176	1.040	4.980
Bitcoin price ($)	1,091	45,230.03	21,628.71	15,787.28	106,146.30
Ether price ($)	1,091	2,429.25	860.46	1,038.19	4,812.08

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