Tariffs, Stablecoins, and the Demand for Dollars[*]

Anantha Divakaruni[†]   Peter Zimmerman[‡]

May 2025

Preliminary. Comments are welcome

Abstract

Several studies have shown that demand for US dollars was lower following the announcement of tariffs by the US government on April 2, 2025. We add color to this narrative by identifying heterogeneity in investors' response to the tariffs. Using data on stablecoin trading as a proxy for dollars, we find that demand for dollars from investors in higher tariff countries rose, relative to those in lower tariff countries. We argue this is evidence of a *dollar hoarding channel*: as foreigners anticipate that tariffs will make it more expensive to acquire US dollars in future, they buy dollars today. This channel is stronger for more liquid stablecoins and for countries with higher capital controls, consistent with the idea that, when actual dollars are hard to acquire, stablecoins are considered as a substitute. Our findings cast light on the international effects of the tariffs, as well as on the degree to which stablecoins are considered a close substitute for dollars.

Keywords: Dollars, Stablecoins, Tariffs, Trade Barriers.
JEL Classification Codes: F31, G15, G23.

[†]Department of Economics, University of Bergen. E-mail: anantha.divakaruni@uib.no.
[‡]Federal Reserve Bank of Cleveland. E-mail: peter.zimmerman@clev.frb.org.

1 Introduction

On April 2, 2025, the White House announced that a range of so-called reciprocal tariffs against almost every country in the world would be imposed on April 9.[1] Studies have found that the tariffs reduced confidence in the dollar and US government debt as safe haven assets.[2] The drop in demand for dollars was unexpected since, in times of uncertainty, dollar-denominated assets usually benefit from a flight to safety (Jiang et al. 2025). Moreover, the unilateral imposition of tariffs by the US would normally be expected to result in a strengthening of the US dollar (see, e.g., The Budget Lab 2025).

Our paper examines how the effect of the tariffs on investors' demand for dollars varied depending on how heavily the investor's country was affected. Economic theory suggests that investors in countries with higher tariff rates should respond to the announcement by immediately raising their demand for dollars. There are several reasons why this might be the case:

1. Suppose foreigners want to hold dollar-denominated financial assets as a safe haven investment (Jiang 2024). They can acquire dollars by exporting to the US; indeed, this foreign demand for dollars helps finance the US trade deficit.[3]

   - If tariffs are paid by US importers, then their imposition reduces US demand for foreign imports. This makes it harder for foreign exporters to acquire dollars in future. Anticipating this, foreign investors try to acquire dollars before the tariffs take effect.

   - If US importers can pass on the tariff costs to foreign exporters, then foreigners anticipate that future acquisitions of US dollars will effectively be subject to a tax. Buying dollars today is a good hedge against that.[4]

---

1. See Executive Order No. 14257 (2025). In the event, imposition of the tariffs was paused on April 9.
2. See, for example, Acharya and Laarits (2025), Hartley and Rebucci (2025), and Jiang et al. (2025).
3. See, for example, Miran (2025) or Obstfeld (2025).
4. Cavallo et al. (2021) find that most of the incidence of the 2018 tariffs fell on US importers with

2. One stated aim of the tariffs is to encourage foreigners to produce in the US rather than in their home countries (e.g., Wosińska 2025). To build a factory in the US, investors need dollars.

We posit that foreigners should seek to acquire dollars immediately after the announcement on April 2, in anticipation of the tariffs being imposed on April 9. We call this effect a *dollar hoarding channel*. Consistent with the existence of a dollar hoarding channel, we find that, following the April 2 announcement, demand for dollars was higher in countries that faced a larger tariff rate.

Our findings cannot be explained by the general flight away from the dollar that the existing literature finds. A general flight away from dollars affects all investors regardless of location, even those based in the US itself. While it may be true that demand for dollars fell *in aggregate*, our analysis suggests that the decline in dollar demand was lower — or even negative — among investors in countries that were hit with higher tariffs. Thus, our findings are consistent with the existing narrative of a general fall in demand for dollars among all investors.

We use stablecoin market data as a proxy for dollars. Stablecoins are a form of cryptocurrency that maintain a one-for-one peg with the US dollar.[5] Ideally, our hoarding channel would be tested by studying trade and quote data in the forex spot markets. However, forex spot markets are generally over-the-counter, meaning that researchers would need to collect data directly from a range of dealers in order to obtain a comprehensive picture of the global market. By contrast, stablecoins are generally traded on exchanges and comprehensive data is available. To the extent that stablecoins are a close substitute for fiat currency, studying the stablecoin markets provides insight into currency markets. We demonstrate this by using limit order book data from a range of major exchanges to measure buying pressure for dollar

---

relatively little pass-through to foreign exporters. For the 2025 tariffs, Cavallo, Llamas, and Vazquez (2025) and Minton and Somale (2025) find evidence of pass-through to US importers or consumers, so once again foreign exporters are not paying the full tariff.

5. Some stablecoins are pegged against other currencies, but we only consider US dollar stablecoins in our analysis.

stablecoins.[6]

Our results are predicated on the idea that stablecoins are considered to be a substitute for actual dollars. Since capital controls make it harder for people to buy foreign currencies but have less effect on stablecoins, we might expect our results to be stronger in countries with higher levels of capital controls. We show that is the case. We also show that our results are stronger with stablecoins that are less volatile and more liquid, which are likely to be considered closer substitutes for dollars. Thus, our findings are consistent with a dollar hoarding channel manifesting itself through the market for stablecoins.

Our paper makes three important contributions. First, we describe an aspect of the tariff episode that has not been documented before now: a dollar hoarding channel, in line with what economic theory would predict. While there may have been a flight away from the dollar in aggregate, we demonstrate heterogeneity between stablecoin traders, driven by variation in tariff rates. This finding provides color to the existing narrative of a general fall in demand for dollars following the tariff announcement.

Second, we demonstrate that stablecoins are viewed as a near substitute for dollars in international currency markets, especially in the presence of capital controls. We contribute to a growing body of work showing that cryptocurrencies — and, specifically, stablecoins — are often used to circumvent capital controls.[7]

Third, we make a methodological contribution to empirical research in currency markets. When data on forex markets can be hard to come by — especially for order flow — data on stablecoin markets can be a good substitute. This is especially true when studying US dollars, which is by far the most popular fiat currency backing stablecoins.

---

6. Data on prices and order flow are more readily available for other forex markets, such as the market for swaps (see, e.g., Syrstad and Viswanath-Natraj 2022). While spot prices can be deduced from forwards using an interest parity argument, it is harder to see how to infer order flow for spot trades, which is essential for our methodology.

7. See, for example, Alnasaa et al. (2022), Berwick and Foldy (2024), Cerutti, Chen, and Hengge (2024), Chen and Sarkar (2022), Foldy (2023), Graf von Luckner, Reinhart, and Rogoff (2023), Graf von Luckner, Koepke, and Sgherri (2024), Hu, Lee, and Putniņš (2023), and Makarov and Schoar (2020).

2   Methodology

At first sight, it may appear difficult to disentangle our proposed hoarding channel from other channels that affect demand for stablecoins. To address this, we make use of heterogeneity in the reciprocal tariff rates. For example, while a flight away from dollars should affect all investors regardless of location, the dollar hoarding channel ought to have a greater impact on people in countries that are expected to be hardest hit by the increase in tariffs. We posit the following regression equation:

$$\text{Buying Pressure}_{ijkt} \quad = \quad \beta \times \Delta\text{Tariff}_i \times 1_{\{t \geq 0\}} \quad + \quad \text{Fixed effects} \quad + \quad \epsilon_{ijkt},$$

where i indexes countries, j stablecoins, k exchanges, and t dates. The event date $t = 0$ is defined as the announcement date April 2, 2025. We choose an event window from $t = -7$ to $t = 7$ (i.e., March 26 to April 9), so that the study ends on the day the tariffs are paused. Essentially, we have an event study with cross-sectional variation (along dimension i) in the treatment dummy. We exploit this variation to compare how demand for dollars varies between countries after the event date.

We run the specification with a variety of fixed effects to control for factors that may vary by country, stablecoin, exchange, or date. Our analysis focuses only on US dollar-pegged stablecoins.

While an announcement was anticipated on April 2, the scale and scope of the tariffs constituted a shock to the market (Moran and Garewal 2025). Although the reciprocal tariffs were eventually paused on April 9, up until that date the White House insisted that the tariffs would take effect (Doyle 2025). Thus we can characterize the April 2 announcement as a shock that the market expected to be permanent until after the end of the event window.

We are interested in estimating the coefficient β. When $\beta > 0$ then we have evidence for the dollar hoarding channel: the interpretation is that, after April 2, traders in higher-tariff

countries raise their demand for dollar-pegged stablecoins by more than those in lower-tariff countries.

For our dependent variable we require a measure of buying pressure for stablecoins. We use the *order imbalance*, which is the total amount of orders at the top of the order book initiated by buyers minus those initiated by sellers, normalized by the total value of those orders.[8] When the order imbalance rises, this means there are relatively more trades initiated by buyers and fewer by sellers, meaning higher buying pressure.

We use daily quote data from Coin Metrics. Our unit of observation is a *market*, defined as a currency-stablecoin-exchange triple. An example of a market is Tether (USDT) traded for euros at Coinbase. For each market, Coin Metrics provides a daily snapshot of the top of the order book. We have the daily lowest ask and highest bid prices, as well as the sizes of the corresponding lowest ask and highest bid orders. During our sample period, the data set consists of 99 markets in which there is at least one active day. These 99 markets comprise 19 currencies, 12 stablecoins, and 14 exchanges.[9] The Coin Metrics data do not tell us in which country a trader is actually located. Instead, we use the fiat currency as a proxy. For example, if we see a transaction of stablecoins for Colombian pesos, we infer that trader is located in Colombia (or at least exposed to the tariff imposed on Colombia).[10]

The independent variable of interest ΔTariff_i is the change in *effective* tariff rate for country i. This is the tariff rate weighted by the mix of products a given country exports to the US, and so is a better measure of the economic impact of the tariffs than the White

---

8. See Chordia, Roll, and Subrahmanyam (2002) for more details.

9. The currencies are listed below in Table 1. The stablecoins are those issued by Tether (USDT), Circle (USDC), TrueUSD (TUSD), PayPal (PYUSD), Ripple (RLUSD), GMO-Z (ZUSD), Gemini (GUSD), First Digital (FDUSD), Ethena (USDe), TRON (USDD), Paxos (USDG), and Sky (USDS). The exchanges are Binance, Binance.us, Bitfinex, Bitstamp, Bullish, Bybit, CEX.io, Coinbase, Crypto.com, Gate.io, Gemini, Kraken, KuCoin, and OKX. All of our exchanges are centralized. While much stablecoin trading is done on decentralized exchanges, those exchanges cannot handle trading directly against fiat currencies so are not relevant to our analysis.

10. Our identification of currency with the location of the trader is likely to be more reasonable for minor currencies, but may be less plausible for major global currencies. For example, it is likely there are many people outside of the US trading stablecoins for US dollars, so associating all those markets with the same tariff rate may be inaccurate. To account for this, we run our regression on the data set without US dollar markets, and obtain the same findings.

House's *announced* tariff rate. The effective tariff rates account for product-level exemptions from tariffs such as pharmaceuticals and semiconductors, and higher tariffs on other products like steel and cars.[11] Fritz (2025) computes each country's effective tariff rate, weighted by the products exported to the US. For example, although the announced reciprocal rate for Switzerland is 31 percent, the effective rate is computed to be only 17.7 percent.

Table 1 shows the fiat currencies used in our study, along with the reciprocal tariff rates announced by Executive Order No. 14257 (2025) and the effective tariff rates computed by Fritz (2025).[12] It also shows the number of different US dollar-pegged stablecoins against which that currency is traded in our sample, the number of different exchanges on which those trades take place, and the total number of markets.[13] The most liquid currency is USD, with about one-third of our markets consisting of orders of dollar-pegged stablecoins in exchange for US dollars. Just over half of our markets are traded against either USD or EUR.[14]

3   Results

Table 2 shows estimates of the coefficient β for models using a variety of different fixed effects. In all five models, we find that a higher tariff on a country is associated with significantly higher buying pressure of dollar-pegged stablecoins with respect to that country's currency. Tariffs are given in percentages, so our results imply that a rise in the effective tariff rate by 1

---

11. See Annex II of Executive Order No. 14257 (2025). Another benefit of using the effective rather than announced tariff rate is that it provides more cross-sectional variation between countries. But a possible drawback is that some product-level tariffs — such as the higher rates on steel and cars — were already known before April 2. In any case, our conclusions do not change if we use the announced tariff rates rather than effective rates.

12. For the Eurozone, we compute the average effective tariff among the countries and territories that use the euro, weighted by their export volumes to the US.

13. For example, the euro is traded against 8 different stablecoins across 8 exchanges in our sample. In total, during our sample period there are 23 stablecoin-exchange pairs that are traded for euros.

14. Purchases of stablecoins against US dollars are assigned a tariff rate of zero. And purchases of stablecoins against Mexican pesos and Canadian dollars are also assigned an effective tariff rate of zero because the April 2 announcement did not contain any increase in tariffs on Mexican or Canadian goods. While tariffs on Mexico and Canada had been announced before the start of our sample period, there is no news about tariffs on these countries during our 15-day window.

Table 1: **Currencies used for our study**

Issuing country	Currency code	Stablecoins (USD-pegged)	Exchanges	Markets	Change in tariff rate (%)	
					Announced	Effective
United States	USD	10	11	30	0	0
Eurozone	EUR	8	8	23	20	13.79
Turkey	TRY	4	4	8	10	11.59
United Kingdom	GBP	3	4	6	10	11.66
Singapore	SGD	3	2	3	10	4.75
Brazil	BRL	2	5	7	10	8.99
Australia	AUD	2	2	4	10	9.09
Poland	PLN	2	2	3	20	20.44
Canada	CAD	2	1	2	0	0
Czech Republic	CZK	2	1	2	20	20.31
Romania	RON	2	1	2	20	20.74
Switzerland	CHF	2	1	2	31	17.74
Argentina	ARS	1	1	1	10	6.51
Colombia	COP	1	1	1	10	5.33
Japan	JPY	1	1	1	24	22.16
Mexico	MXN	1	1	1	0	0
South Africa	ZAR	1	1	1	30	18.07
Ukraine	UAH	1	1	1	10	12.18
Utd Arab Emirates	AED	1	1	1	10	12.72

Notes: Stablecoin data are from Coin Metrics. A market is a currency-stablecoin-exchange triple associated with that currency and traded during the sample period. Table shows change in tariff rate on April 2, 2025. Announced tariffs are from Executive Order No. 14257 (2025). Effective tariffs are from Fritz (2025).

percentage point reduces the buying pressure by around 0.004–0.006 units. The mean buying pressure over our sample period is -0.02 and the standard deviation is 0.33, so the economic impact is meaningful but not large. For example, going from the lowest (0) to highest (22.16) effective tariff in our sample would increase buying pressure by about one-third of a standard deviation.

Table 2: **Impact of reciprocal tariffs on buying pressure for stablecoins**

Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable:	Buying Pressure				
Model:	(1)	(2)	(3)	(4)	(5)
Δ Effective Tariff	0.373**	0.387**	0.508***	0.578***	0.606***
	(0.168)	(0.179)	(0.183)	(0.191)	(0.210)
Day FE	✓	✓	✓	✓	
Currency FE	✓	✓			
Exchange FE			✓		
Currency × Stablecoin FE				✓	
Currency × Stablecoin × Exchange FE					✓	✓
Stablecoin × Day FE					✓
Observations	1,410	1,410	1,410	1,410	1,410
R^2	0.043	0.065	0.119	0.220	0.295

Figure 1 shows day-by-day estimates of β. The estimated coefficients are significantly greater than zero almost every day following the announcement of tariffs. Moreover, the estimated coefficients grow in magnitude over the sample period, peaking on April 7 ($t = 5$). This suggests that demand for dollar-pegged stablecoins from high-tariff countries rises over the event window, even as investors retreat from the US dollar.

Figure 1: **Impact of reciprocal tariffs on stablecoin buying pressure: dynamic estimates**

Table below reports the dynamic time-series estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. Vertical bars are 95% confidence intervals.
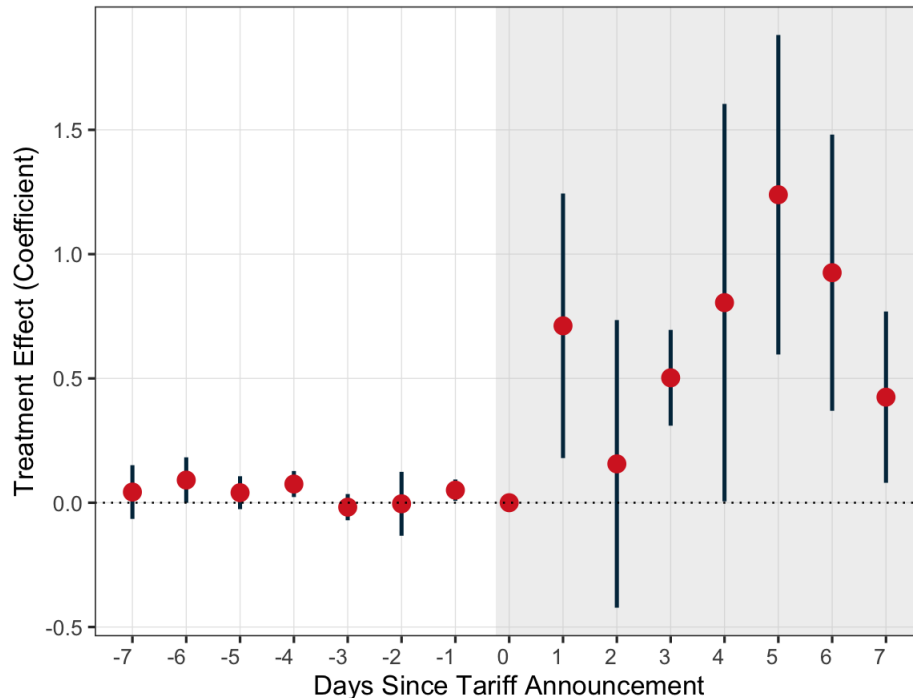
3.1 Stablecoins as a proxy for dollars

Our empirical results demonstrate that demand for dollar-pegged stablecoins increased in countries subject to higher tariffs. This is consistent with a dollar hoarding channel, to the extent that dollar-pegged stablecoins are seen as a close substitute for actual dollars. However, an alternative explanation is that the tariffs induced a motive to hoard stablecoins, rather than actual dollars.[15] To address this concern, we run three tests to demonstrate that our results are stronger when stablecoins are regarded as a closer substitute for dollars.

---

15. For example, stablecoins can be used in decentralized finance (DeFi) markets to acquire crypto assets (Gorton, Ross, and Ross 2025), so our results could indicate that, for some reason, people in higher tariff countries decide to increase their exposure to DeFi.

First, we interact the tariff rate with a measure of capital controls (Table 3). We find that our effect is stronger in countries with tighter capital controls. The idea here is that, when capital controls prevent an investor from easily acquiring dollars, stablecoins can be considered a close substitute. In countries with low levels of capital controls (e.g., Japan or the UK), it is relatively easy for investors to acquire dollars, so they have less need to purchase stablecoins. But, for countries with higher levels of capital controls (e.g., Ukraine or Turkey), it is harder to obtain dollars and so stablecoins are used as a substitute. This is consistent with other evidence that cryptocurrencies — and stablecoins in particular — are used to circumvent capital controls (e.g., Graf von Luckner, Reinhart, and Rogoff 2023).[16]

Table 3: **Impact of reciprocal tariffs on stablecoin demand: role of capital controls**
Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The capital controls data are for 2019 and are denoted by the variable ka in Fernández et al. (2016). This measures capital restrictions on a score from 0 to 1, where zero denotes a country with a fully open capital account.

Dependent Variable:	Buying Pressure		
Model:	(1)	(2)	(3)
Δ Effective Tariff	0.298	0.341	0.303
	(0.453)	(0.377)	(0.505)
Δ Effective Tariff $\times$ Capital controls	0.965***		
	(0.192)		
Δ Effective Tariff $\times$ Capital controls on inflows		1.08**	
		(0.433)	
Δ Effective Tariff $\times$ Capital controls on outflows			0.768***
			(0.113)
Currency $\times$ Stablecoin $\times$ Exchange FE	✓	✓	✓
Stablecoin $\times$ Day FE	✓	✓	✓
Observations	1,410	1,410	1,410
R^2	0.241	0.239	0.296

---

16. The significance is higher when we look at capital controls on outflows in model (3) rather than those on inflows in model (2). This is consistent with our proposed channel: controls on outflows prevent people from directly holding dollars, though there is likely some correlation with controls on inflows.

Second, we interact the tariff rate with measures of liquidity in the stablecoin market (Table 4). The idea here is that, if investors are seeking to use stablecoins as a proxy for dollars, they would tend to buy the largest and most liquid stablecoins. That is indeed what we see: our estimated coefficient is larger for stablecoins that had more transaction volume or lower price volatility in the preceding 24 hours.[17]

Table 4: **Impact of reciprocal tariffs on stablecoin demand: liquidity preferences**
Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. *Stablecoin Txn Volume)$_{-24h}$* refers to the total volume of transactions involving the specified stablecoin across all exchanges in the past 24 hours. *Stablecoin Volatility$_{-1d}$* is the 24 hour rolling realized volatility, measured as the standard deviation of the natural log of returns calculated every 10 minutes over the past 24 hours.

Dependent Variable:	Buying Pressure	
Model:	(1)	(2)
Δ Effective Tariff	-2.66*	1.27***
	(1.50)	(0.406)
Δ Effective Tariff $\times$ Log(Stablecoin Txn Volume)$_{-24h}$	0.146**	
	(0.061)	
Δ Effective Tariff $\times$ Stablecoin Volatility$_{-24h}$		-20.1***
		(4.87)
Country $\times$ Stablecoin $\times$ Exchange FE	✓	✓
Stablecoin $\times$ Day FE	✓	✓
Observations	1,326	1,326
R^2	0.267	0.269

Third, we interact the tariff with a dummy for exchanges located offshore (that is, in international tax havens like the Seychelles or Cayman Islands). Such exchanges are less regulated, making it easier for investors to convert their stablecoin holdings into actual dollars at a future date. Table 5 shows that the dollar hoarding channel is stronger among these exchanges, consistent with the idea that investors aim to hold stablecoins that are

---

17. Stablecoins aim to maintain parity with a dollar peg. Therefore, price volatility may be associated with a concern that a stablecoin may lose its peg in the near future.

more easily convertible into actual dollars.[18]

Table 5: **Impact of reciprocal tariffs on buying pressure for stablecoins: heterogeneity by exchange location**
Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable:	Buying Pressure	
Model:	(1)	(2)
Δ Effective Tariff	0.448**	0.494**
	(0.208)	(0.221)
Δ Effective Tariff $\times$ Offshore exchange	0.951**	1.19**
	(0.418)	(0.484)
Day FE	✓	
Currency x Stablecoin x Exchange FE	✓	✓
Stablecoin x Day FE		✓
Observations	1,410	1,410
R^2	0.223	0.300

3.2 Robustness tests

We carry out three robustness tests. The first test is to check that our results hold even without quotes for stablecoins against fiat US dollars. There are two reasons to check this. First, when a trader purchases a stablecoin using US dollars, they are flat on their exposure to dollars. Thus, it's not clear that purchasing a stablecoin using US dollars has anything to do with a dollar hoarding channel. Second, one potential criticism of our approach is that we have identified the location of a trader with the currency they use. This may not be a reasonable assumption for a global currency like the US dollar. In other words, we should be concerned that some of the trading of stablecoins against US dollars is actually done by traders outside of the US.

When we drop the US dollar quotes, the results still hold (see Table A1 in the Appendix).

---

18. These regressions include stablecoin fixed effects, allowing us to rule out that the findings are driven by the most liquid stablecoins being primarily traded in offshore exchanges.

The estimated coefficients are actually larger than before. It is possible that the lower p-values are due to the smaller sample size.

The second test is to check that our results are specific to dollar stablecoins, and not other denominations of stablecoin (e.g., euro-pegged coins). We would not expect investors in countries hit hardest by US tariffs to respond by buying non-dollar stablecoins. Table A2 in the Appendix confirms that is the case: while the estimated coefficients are positive in sign, they are not statistically significant for any of the models tested. This finding is consistent with a dollar hoarding channel: people acquire holding dollar-pegged stablecoins because they seek a close substitute for dollars.

The third test runs our baseline specification on forex market data.[19] We do not have data on order flows in spot forex markets, so do not have a proxy for dollar demand. Instead, we estimate the effect of tariffs on dollar liquidity by defining the dependent variable as the normalized bid-ask spread of the relevant currency against the US dollar (i.e., bid minus ask, divided by the midpoint of the bid and ask). The idea is that, if order flow is initially balanced and dollar demand increases, then the market should become less liquid and bid-ask spreads would widen. Table A3 in the Appendix shows that this is indeed the case: an increase in tariffs is associated with higher bid-ask spreads in the relevant currency against the US dollar.

We also run tests to check whether there are changes in stablecoin supply that could explain our results. We reject any relationship between tariff rates and stablecoin supply, for both dollar and non-dollar stablecoins. Our results are available upon request.

---

19. Our data are from Polygon.io. We have daily bid and ask quotes for 118 currencies against the US dollar. We exclude the Russian ruble since, while Russia was not included in the tariffs announced on April 2, it was subject to a pre-existing comprehensive sanctions regime. The range of countries included means the results presented here involve a much wider range of currencies than earlier. The results do not change if we restrict our sample only to those currencies listed in Table 1.

4 Conclusion

We show that demand for dollar-pegged stablecoins increased in countries hit hardest by the tariff announcements on April 2. We attribute higher demand among investors in high-tariff countries to precautionary hoarding of dollars. The effect is stronger for countries with higher capital controls and more liquid stablecoins, consistent with a theory of dollar hoarding and stablecoins being used as a substitute for dollars.

Our analysis sheds light on this turbulent episode in global markets. While existing literature documents a general flight away from US assets following the tariff announcements, we show that investors in higher tariff countries demanded higher dollar exposure, relative to their peers in lower tariff countries, in line with the predictions of economic theory. By documenting this heterogeneity in responses, our study contributes to understanding of how tariffs affect the global financial system.

5 References

Acharya, Viral V., and Toomas Laarits. 2025. "Tariff war shock and the convenience yield of US treasuries: A hedging perspective." Unpublished paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5229097.

Alnasaa, Marwa, Nikolay Gueorguiev, Jiro Honda, Eslem Imamoglu, Paolo Mauro, Keyra Primus, and Dmitriy Rozhkov. 2022. "Crypto-assets, corruption, and capital controls: Cross-country correlations." *Economics Letters* 215 (110492). https://doi.org/10.1016/j.econlet.2022.110492.

Berwick, Angus, and Ben Foldy. 2024. "Inside the Russian shadow trade for weapons parts, fueled by crypto." Wall Street Journal, April 1. https://www.wsj.com/finance/currencies/crypto-fuelsrussian-shadow-trade-for-weapons-parts-1bfdc1a1.

Cavallo, Alberto, Gita Gopinath, Brent Neiman, and Jenny Tang. 2021. "Tariff pass-through at the border and at the store: Evidence from US trade policy." *American Economic Review: Insights* 3 (1): 19–34. https://doi.org/10.1257/aeri.20190536.

Cavallo, Alberto, Paola Llamas, and Franco Vazquez. 2025. "Tracking the short-run price impact of US tariffs." Harvard Kennedy School paper, Apr 20. https://www.hks.harvard.edu/centers/mrcbg/programs/growthpolicy/tracking-short-run-price-impact-us-tariffs.

Cerutti, Eugenio M, Jiaqian Chen, and Martina Hengge. 2024. "A primer on Bitcoin cross-border flows: Measurement and drivers." IMF Working Paper No. 2024/085. https://doi.org/10.5089/9798400274879.001.

Chen, Jiakai, and Asani Sarkar. 2022. "Slowed-down capital: Using Bitcoin to avoid capital controls." Unpublished paper. https://www2.hawaii.edu/~jiakai/files/loopbtc_20220816.pdf.

Chordia, Tarun, Richard Roll, and Avanidhar Subrahmanyam. 2002. "Order imbalance, liquidity, and market returns." *Journal of Financial Economics* 65 (1): 111–130. https://doi.org/10.1016/S0304-405X(02)00136-8.

Doyle, Katherine. 2025. "Trump says he is 'not looking' to pause tariffs before this week's rollout, despite market uncertainty." NBC News, Apr 7. https://www.nbcnews.com/politics/donald-trump/trump-says-not-looking-pause-tariffs-weeks-rollout-market-uncertainty-rcna200014.

Executive Order No. 14257. 2025. "Regulating imports with a reciprocal tariff to rectify trade practices that contribute to large and persistent annual United States goods trade deficits." Issued Apr 2, published in Federal Register Apr 7 as 90 F.R. 15041. https://www.federalregister.gov/documents/2025/04/07/2025-06063/regulating-imports-with-a-reciprocal-tariff-to-rectify-trade-practices-that-contribute-to-large-and.

Fernández, Andrés, Michael W Klein, Alessandro Rebucci, Martin Schindler, and Martín Uribe. 2016. "Capital control measures: A new dataset." *IMF Economic Review* 64 (3): 548–574. https://doi.org/10.1057/imfer.2016.11.

Foldy, Ben. 2023. "From Hamas to North Korean nukes, cryptocurrency Tether keeps showing up." Wall Street Journal, Oct 27. https://www.wsj.com/finance/currencies/most-popular-cryptocurrency-keeps-showing-up-in-illicit-finance-71d32e5e.

Fritz, Johannes. 2025. "US reciprocal tariff chart book." Global Trade Alert, University of St. Gallen. https://globaltradealert.org/reports/US-Reciprocal-Tariff-Chart-Book.

Gorton, Gary B, Chase P Ross, and Sharon Y Ross. 2025. "Making money." Substantively revised draft. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4021072.

Graf von Luckner, Clemens, Carmen M. Reinhart, and Kenneth Rogoff. 2023. "Decrypting new age international capital flows." *Journal of Monetary Economics* 138:104–122. https://doi.org/10.1016/j.jmoneco.2023.05.015.

Graf von Luckner, Clemens M., Robin Koepke, and Silvia Sgherri. 2024. "Crypto as a marketplace for capital flight." IMF Working Paper No. 24/133. https://www.imf.org/en/Publications/WP/Issues/2024/06/28/Crypto-as-a-Marketplace-for-Capital-Flight-550966.

Hartley, Jonathan, and Alessandro Rebucci. 2025. "Tariffs, the dollar, and equities: High-frequency evidence from the Liberation Day announcement." VoxEU column. https://cepr.org/voxeu/columns/tariffs-dollar-and-equities-high-frequency-evidence-liberation-day-announcement.

Hu, Maggie R., Adrian D. Lee, and Tālis J. Putniņš. 2023. "Evading capital controls via cryptocurrencies: Evidence from the blockchain." Unpublished paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3956933.

Jiang, Zhengyang. 2024. "Exorbitant privilege: A safe-asset view." National Bureau of Economic Research Working Paper 32454. https://doi.org/10.3386/w32454.

Jiang, Zhengyang, Arvind Krishnamurthy, Hanno Lustig, Robert Richmond, and Chenzi Xu. 2025. "Dollar upheaval: This time is different." Unpublished paper. https://ssrn.com/abstract=5220444.

Makarov, Igor, and Antoinette Schoar. 2020. "Trading and arbitrage in cryptocurrency markets." *Journal of Financial Economics* 135 (2): 293–319. https://doi.org/10.1016/j.jfineco.2019.07.001.

Minton, Robbie, and Mariano Somale. 2025. "Detecting tariff effects on consumer prices in real time." FEDS Notes, May 9. https://doi.org/10.17016/2380-7172.3786.

Miran, Steve. 2025. "CEA Chairman Steve Miran Hudson Institute event remarks." White House briefings and statements, Apr 7. https://www.whitehouse.gov/briefings-statements/2025/04/cea-chairman-steve-miran-hudson-institute-event-remarks/.

Moran, Michael, and Gurpreet Garewal. 2025. "Taking stock of the tariff shock." Goldman Sachs Asset Management Market Brief. https://am.gs.com/en-us/institutions/insights/article/2025/market-brief-taking-stock-of-the-tariff-shock.

Obstfeld, Maurice. 2025. "The U.S. trade deficit: Myths and realities." Brookings Papers on Economic Activity conference draft, spring. https://www.brookings.edu/articles/the-us-trade-deficit-myths-and-realities/.

Syrstad, Olav, and Ganesh Viswanath-Natraj. 2022. "Price-setting in the foreign exchange swap market: Evidence from order flow." *Journal of Financial Economics* 146 (1): 119–142. https://doi.org/10.1016/j.jfineco.2022.07.004.

The Budget Lab. 2025. "Tariffs, the dollar, and the Fed." Yale University, Jan 31. https://budgetl ab.yale.edu/research/tariffs-dollar-and-fed.

Wosińska, Marta E. 2025. "Will pharmaceutical tariffs achieve their goals?" Brookings, Mar 27. https://www.brookings.edu/articles/pharmaceutical-tariffs-how-they-play-out/.

A Additional tables

Table A1: **Impact of reciprocal tariffs on buying pressure for stablecoins: USD quotes removed**

Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable:	Buying Pressure				
Model:	(1)	(2)	(3)	(4)	(5)
Δ Effective Tariff	0.640*	0.635*	0.763**	0.827**	0.848**
	(0.372)	(0.377)	(0.383)	(0.392)	(0.411)
Day FE	✓	✓	✓	✓	
Currency FE	✓	✓			
Exchange FE		✓			
Currency $\times$ Stablecoin FE			✓		
Currency $\times$ Stablecoin $\times$ Exchange FE				✓	✓
Stablecoin $\times$ Day FE					✓
Observations	989	989	989	989	989
R^2	0.058	0.074	0.129	0.215	0.282

Table A2: **Impact of reciprocal tariffs on buying pressure for non USD-pegged stablecoins**

Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily order imbalances in non US dollar-pegged stablecoin markets. Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are double-clustered by currency–day and exchange–day, and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable:	Buying Pressure				
Model:	(1)	(2)	(3)	(4)	(5)
Δ Effective Tariff	0.206	0.167	0.171	0.171	0.316
	(0.302)	(0.324)	(0.323)	(0.326)	(0.476)
Day FE	✓	✓	✓	✓	
Currency FE	✓	✓			
Exchange FE		✓			
Currency × Stablecoin FE			✓		
Currency × Stablecoin × Exchange FE				✓	✓
Stablecoin × Day FE					✓
Observations	557	557	557	557	557
R^2	0.041	0.109	0.171	0.283	0.537

Table A3: **Impact of reciprocal tariffs on bid-ask spreads in US-denominated forex markets**

Table below reports the event-study estimates of how the April 2, 2025 White House announcement of new effective tariff rates ($t = 0$) affected daily bid-ask spreads in US-denominated forex markets. We normalized each country's bid-ask by the midpoint (i.e., the average of bid and ask). Our sample spans seven trading days prior to the announcement (March 26 – April 1, 2025) and seven trading days after (April 3 – April 9, 2025). Standard errors are clustered by day and currency and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable:	Bid-Ask Spread		
Model:	(1)	(2)	(3)
Δ Effective Tariff	0.00203	0.00111	0.00137***
	(0.00263)	(0.00165)	(0.00000)
Day FE	✓		✓
Currency FE		✓	✓
Observations	256	256	256
R^2	0.025	0.886	0.911