NEUBERGER BERMAN

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Confusing Correlations: What's *Really* Behind Them?

In recent weeks we've witnessed extreme (and at times, puzzling) correlations among asset classes. In this paper, we break down the potentially misunderstood drivers of these strange dynamics and their implications for investors.

What Happened

The specter of surging U.S. tariffs and an escalating trade war sent capital markets reeling in early April. In typical crisis periods, equities tend to fall while Treasury bonds and the U.S. dollar tend to appreciate, cushioning traditional 60/40 portfolios; this time, however, stocks, Treasuries and the dollar all dropped, while non-U.S. equities and currencies outperformed.

Are these movements heralding a structural shift that requires meaningful asset allocation adjustments, or should long-term investors stay the course within their portfolios? We believe having a data-driven explanation that is consistent with the April shock and the U.S. equity rebound that followed is essential to answering that question.

Why Everyone Thinks It Happened

We have identified three widely accepted narratives about recent market trends that do not hold up under data-driven examination.

- Foreign governments, including China and Japan, sold U.S. assets as a form of retaliation. The primary data source on foreign government holdings of Treasuries by country is published in the Treasury International Capital (TIC) Data, but it is released with a long lag.¹ However, the U.S. Federal Reserve publishes weekly data on foreign official holdings of Treasuries held in its custody.² This data—which tend to track the TIC data on combined holdings of major holders like China, Japan and China's offshore accounts in places like Belgium and Luxembourg—does not suggest a material change in foreign government ownership trends of U.S. Treasuries; moreover, we note that foreign governments took down nearly 88% of the issuance at the 10-year Treasury auction in mid-April, the highest share on record.
- Foreign private investors sold U.S. assets in protest of Trump's policies, or because they foresaw an erosion in the U.S. rule of law and free-market protections that enabled dollar assets to outperform in the past. While flow data strongly indicate foreign private selling of both U.S. equities and fixed income, we note that those trends had already been underway prior to April 2.
- Overleveraged hedge funds unwound their "basis trades." A Treasury basis trade is a popular strategy that seeks to generate arbitrage profits from being long cash Treasuries and short Treasury futures. Some market watchers surmised that the sudden increase in market volatility forced financial institutions to adjust their Value-at-Risk (VaR) models, leading to rapid portfolio de-risking to stay within risk limits, including the forced unwind of basis trades. Others argued that stress in the repo market prevented hedge funds from accessing short-term funding to finance their basis trades.

The last two scenarios would require hedge funds to neutralize their positioning by selling cash Treasuries and buying Treasury futures, which presumably would cause a spike in cash treasury yields. However, we see no evidence in the CFTC data of leveraged investors switching their positioning in treasury futures, nor did repo rates spike. Market price data do suggest, however, that hedge funds were getting stopped out of highly crowded *asset swap spread* trades,³ which likely put some upward pressure on yields, in our view.

What Really Happened

The most important driver of the correlation breakdown was indeed foreign private investors selling dollar assets. However, a closer look at ETF flows into and out of U.S. Treasury and equity funds indicates that foreign private outflows from U.S. assets started well before Liberation Day.

Minding the Fundamentals

The specific timing of when foreign capital flipped from flowing into the U.S. to flowing out of it suggests that the reversal had less to do precisely with the onset of the trade war, and more to do with cracks emerging in the foundations of what has been called "U.S. exceptionalism."

First, the unveiling of China's powerful DeepSeek AI model in late January challenged the notion that the U.S. is the only market that gives investors exposure to secular growth technology companies. Second, Germany's watershed constitutional reform in early March, approving new government spending worth 20% of GDP for defense and infrastructure, challenged the view that only the U.S. was capable of enacting massive government stimulus to generate superior real GDP growth.

These two drivers of U.S. economic leadership—unrivaled technology companies plus deficit-fueled GDP growth—contributed to a risky build-up in unhedged foreign positioning in U.S. assets in the post-COVID period, which exacerbated recent dynamics.

These assertions are evident in Figure 1. Weekly foreign inflows into both U.S. equities and Treasuries come to an abrupt halt right around the DeepSeek rollout, and meaningful U.S. outflows commenced after the German fiscal announcement. In fact, the largest foreign outflow from U.S. equity ETFs this year occurred right after Germany's fiscal shift: a \$3.5 billion outflow at that time versus \$2.7 billion in the second week of April.

¹ U.S. Department of the Treasury, <u>Treasury International Capital (TIC) System—Home Page</u>.

² Federal Reserve Bank St. Louis, <u>Table 1A. Memorandum Items</u>, May 5, 2025.

³ Asset swap spread trades involve bets on bank regulation and changes in long-term bond supply.

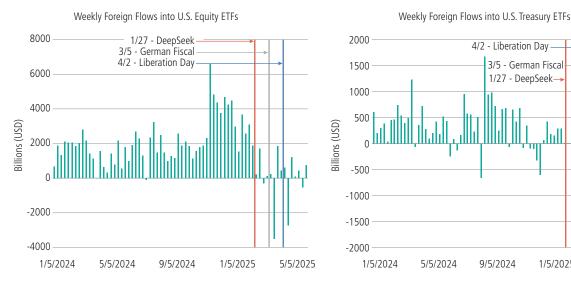
In our view, if the perceived expected return differential between U.S. and global equities is narrowing or reversing, foreigners have less incentive both to hold U.S. equities and to keep large shares of their cash in other dollar-denominated assets such as Treasuries. Similar dynamics are evident in the dollar's performance: The dollar peaked around the start of this year, and roughly half of this year's depreciation occurred before April 2, accelerated by these two events.

1/27 - DeepSeek

1/5/2025

5/5/2025

FIGURE 1: OUTFLOWS FROM U.S. EQUITY AND TREASURY FUNDS HAD BEGUN WELL BEFORE LIBERATION DAY ON APRIL 2



Source: Bloomberg and Neuberger Berman.

Given the data, we believe recent asset correlations are being driven by private investor flows that are based on perceived fundamental drivers of relative value between U.S equities and the rest of the world—not by a broad display of political retribution.

Global Overexposure to U.S. Assets

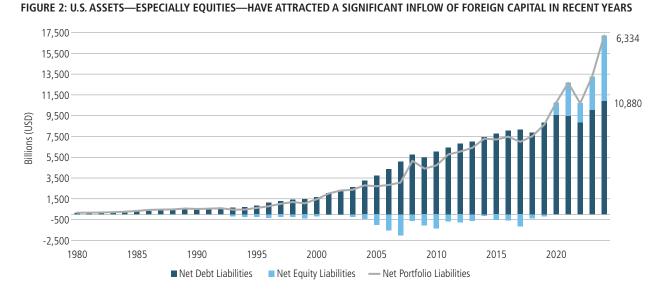
In recent years, U.S. stocks have dominated global market-cap-weighted indices. As of April 30, U.S. equities accounted for 71% of the MSCI World Equity Index, and nine of the index's top 10 holdings (22% of the total index) were large-cap U.S. tech companies. ⁴ This concentration automatically pushes benchmarked or passive foreign investors to be heavily exposed to the U.S.

The immense exposure of foreigners to U.S. equities is also evident in the U.S. net international investment position (NIIP) data on the U.S. capital account, which measures the difference between U.S.-owned foreign assets and foreign-owned U.S. assets. The U.S. capital account is the mirror image of the current account, which is mostly made up of the trade deficit. If the U.S. consumes more than it produces, the country needs net foreign investment inflows to finance this consumption.

For decades, foreigners have owned more U.S. assets than U.S. investors have owned foreign ones, creating a "net liability" that finances the U.S. trade deficit. However, prior to COVID, foreigners financed the U.S. trade deficit by being net purchasers of U.S. debt instruments. Since 2020, the increase in U.S. trade deficit has been funded nearly entirely by net foreign purchases of equity instruments, with net foreign ownership of U.S. equities switching from slightly negative in 2019 to \$6.3 trillion currently (see figure 2).5 In 2024, net foreign inflows into U.S. equities hit a record, equivalent to 10% of U.S. GDP, versus an inflow into U.S. debt securities of only 1% of U.S. GDP.

⁴ MSCI, MSCI World Index.

⁵ Similar dynamics are evident with U.S. net foreign direct investment liabilities, which have also surged since the pandemic, driven almost entirely by equity investments instead of debt.



Source: Bureau of Economic Analysis, <u>BEA Interactive Data Application</u> and Neuberger Berman.

It follows, therefore, that a reduction in the trade deficit (from a rebalancing of trade relations) would result in structural net capital outflows from dollar assets—with U.S. equities more at risk now than in the past.

However, the rekindled trade war initially produced an even *larger* annual trade deficit, hitting a record \$1.57 trillion in March due to import front loading. A wider trade deficit implies *greater* foreign capital inflows and would not seem to explain why stocks, Treasuries and the dollar all fell at the same time—a pattern that, in our view, was driven more by fundamental reassessments, compounded by relatively extreme positioning in U.S. assets. If sustained tariff policy serves to close the U.S. trade gap, we expect to see greater structural foreign selling of dollar assets and/or U.S. purchases of foreign assets.

Potential Investment Implications

Given this framework, the bounce-back since April 2 has made sense to us thus far: Big U.S. tech companies reported a spate of positive earnings while the administration announced plans to loosen AI chip export controls; the U.S. budget reconciliation bill points towards renewed fiscal stimulus in 2026 with ongoing fiscal deficits above 6% of GDP, while DOGE fears fade; and a sharp reduction in tariff levels on China imply that a sudden narrowing of the trade deficit seems less like the Trump administration's true objective. Furthermore, the renewed sell-off in Treasuries also stands to reason as U.S. growth prospects have suddenly brightened.

We will be testing this framework in the months ahead by asking three key questions: First, how durable is so-called "U.S. exceptionalism" (i.e. will the U.S. continue to deliver the largest fiscal impulse among its peers, and will U.S. big tech maintain market dominance)? Second, when it comes to trade, is the administration's end game truly to lower U.S. trade deficits vis-à-vis the rest of the world (or is it something else)? And finally, how exposed is foreign private positioning in USD assets to the next shock after extensive de-risking thus far in 2025?

If the two drivers of U.S. exceptionalism reassert themselves, while trade policy veers away from narrowing the U.S. trade deficit, we believe the relative expected return profile between global stocks and domestic ones likely will continue to favor U.S. equities and, in turn, support foreign demand to retain savings in dollars and deploy these savings in U.S. Treasuries.

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