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**Working Paper**

## The under-theorisation of dollar dominance

CITYPERC Working Paper, No. 2026-01

**Provided in Cooperation with:**

City Political Economy Research Centre (CITYPERC), City, University of London

*Suggested Citation:* Lysandrou, Photis (2026) : The under-theorisation of dollar dominance, CITYPERC Working Paper, No. 2026-01, City, University of London, City Political Economy Research Centre (CITYPERC), London

This Version is available at:

<https://hdl.handle.net/10419/339510>

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# **The Under-theorisation of Dollar Dominance**

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CITYPERC Working Paper No. 2026-01

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# The Under-theorisation of Dollar Dominance<sup>1</sup>

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## Abstract

The recent period has seen an upsurge in predictions that the dollar's international dominance will at some point be challenged by a rival currency, notably the euro. This paper counters these predictions. It argues that the overestimation of the euro's ability to challenge dollar dominance is due to the under-theorisation of the foundations of that dominance, the root problem being macroeconomic theories' tradition of taking the household investor to be the representative investor when it should in reality be an institutional asset manager. If financial securities are viewed through the lens of the institutional investor it becomes clear that there can be no exodus from the dollar because it becomes clear that foreign investors remain attracted to the US capital market for reasons as much to do with its mass and consequent gravitational force as to do with a shortage of securities that can be supplied by other capital markets.

**Key words: dollar dominance; under-theorisation; household savers versus institutional investors; dollar mass and its gravitational force**

**JEL Classification: F31; G15**

## 1. Introduction

The recent period has seen an upsurge in predictions that the dollar's international dominance will at some point be challenged by a rival currency, with the euro tipped as the leading contender. This paper counters these predictions. It argues that the overestimation of the euro's ability to challenge dollar dominance comes down to the under-theorisation of the current foundations of that dominance, the root problem being macroeconomic theories' continued tendency to take household savers rather than institutional asset managers to be the representative investors. It is well known that the dollar's current dominance rests heavily on the substantial size of the US capital market and on the substantial involvement of foreign investors in that market. But if financial securities are viewed through the lens of the household saver, it then follows that there is nothing preventing a foreign exodus from the US market such as will reduce it to a size comparable with the eurozone market thereby enabling the euro to rival the dollar. On the contrary, if financial securities are viewed through the lens of the institutional investor it then becomes clear that there can be no exodus from the US on the scale necessary for undermining the dollar's dominance because it then becomes clear that foreign investors remain strongly attracted to the US capital market for reasons

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<sup>1</sup> I wish to thank Bruno Bonnizzi, Giorgos Gouzoulis, Aggela Papadopoulou and Joel Rabinovich for helpful comments on previous drafts of this paper.

as much to do with its mass and consequent gravitational force as to do with a shortage of securities that can be supplied by other capital markets including that of the eurozone. To put this argument is by no means to condone dollar dominance because there are important reasons why it should be challenged, but if this is to happen it is essential that there is a full understanding of what sustains its dominance in the contemporary era. The central purpose of this paper is to help contribute to this understanding.

The structure of the paper is as follows. Section two briefly surveys the ongoing predictions of a coming end to dollar dominance. Section three explains why the dollar's dominance largely rests on the fact that no other regional capital market can compete with the large size of the US capital market. Section four explains why another crucial factor behind dollar dominance is the US capital market's mass and gravitational force. Section five explains why the euro will not challenge the dollar's dominance in the foreseeable future because it will be long before the eurozone's capital market can achieve the same size and mass as has the US capital market. Section six concludes.

## **2. The ongoing predictions of a coming end to dollar dominance.**

One of the great unresolved questions of today is why the US dollar remains the dominant international currency. Between 1986 when the BIS conducted its first triennial survey of OTC foreign exchange turnover and 2025 when it conducted its 14th survey, daily forex turnover had risen from \$0.4 trillion to \$9.6 trillion with the dollar throughout all this time maintaining its top share of around 88% (out of 200%) (BIS, 2001;2025). Going by past history this is an anomaly because the lesson it teaches is that a currency's position in the international currency hierarchy rests on the issuing country's position as an industrial and trading power: when this weakens so also does the international position of its currency. This was the experience of the British pound sterling and, by the first decade of this century when the US' trade and fiscal deficits were rapidly rising while its share of world production was shrinking, it seemed to many commentators that this would now be the experience of the US dollar as foreign investors pulled out of the US in response to its deteriorating macroeconomic fundamentals. In an article published in 2004 by Martin Wolf, one of the world's leading financial journalists, he stated: "Let us be blunt about it. The US is now on the comfortable path to ruin. It is being driven along a road of ever rising deficits and debt,

both external and fiscal, that risk destroying the country's credit and the global role of its currency" (Wolf, 2004). In a paper published in 2008 by two prominent international economists, Menzie Chinn and Jeffrey Frankel, the authors predicted that the dollar would cede its dominance to the euro by 2015 because the US' "chronic deficits" meant that it "could not count on being bailed out indefinitely by its foreign creditors". (Chinn and Frankel, 2008, p.51). Other authors that advanced similar positions around this time included Kirshner (2009), Helleiner and Kirshner (2009); Helleiner (2008; 2009) and Cohen (2009). To quote Cohen: "I do not consider the persistent build-up of America's foreign debt as sustainable for long. Unless reversed by significant policy reform in Washington, the US economy's dependence on foreign capital must be expected in time to erode the advantages historically enjoyed by the greenback, creating an opportunity for challengers ". (Cohen, 2009, p143). The fact is that the US' dependence on foreign capital has not eroded the greenback's advantages because foreign investors have not abandoned the US. In 2004 when Martin Wolf penned his article warning of the US' path to ruin, foreign investors held a total of \$6.2 trillion US securities, of which \$1.8 trillion were US treasuries, but in every single year since then the figure has continued to climb so that by 2024 it had reached \$31.2 trillion of which \$8.5 trillion were treasuries. (SIFMA, 2018;2024)

Why have foreign investors not abandoned the US capital market thereby weakening the dollar? In answer to this particular question, a second lesson of history has typically been invoked, one that concerns inertia. As argued by Charles Kindleberger in his classic text of 1973 (Kindleberger, 2013), the British pound did not cede its dominant position to the dollar when Britain lost its industrial pre-eminence before the start of the first world war but when the US assumed Western leadership at the end of the second world war. The lesson this appears to carry today is that foreign investors will only abandon the dollar if they are convinced that the political initiatives of rival governments can result in a credible alternative international currency. In this context, the events surrounding Russia' invasion of the Ukraine in early 2022 seemed to be pivotal. From its formation in 2009, the BRICS association of countries have always declared their intention to help de-dollarize the international financial system by switching to the use of alternative currencies, most notably the renminbi, in their international economic transactions (Papa and Lin, 2022). This switching process, having already begun before the US-led imposition of sanctions on

Russia, accelerated rapidly following that imposition and it was this acceleration that then led to a stream of predictions that the renminbi would soon rival the dollar in a new multipolar currency system. Zoltan Poszar, for example, argued that we shall soon such a currency system that matches a multipolar international economic system because "if the G20 fractures into the camps of the G7 plus Australia, Brics+ and the non-aligned, it's impossible that these rifts will not affect the international monetary system" as the "dollar-based monetary order is already being challenged in multiple ways" (Poszar, 2023). For similar predictions regarding the renminbi's advance in rivalling the dollar see also Papa and Lin, (2022); Galbraith, (2022); Roubini, (2023); and Munchau, (2023)). These predictions have been proved wrong. When the BIS published the results of its 13th triennial survey of foreign exchange turnover in November, 2022, these showed that while the dollar's share of the new daily turnover figure of \$7.5 trillion remained as before at 88%, the renminbi's share was only 7%. Again, when the BIS published the results of its 14th triennial survey in September, 2025, these showed that while the dollar's share of the new \$9.6 trillion daily turnover figure had risen to 89.2%, the renminbi's share had risen to a mere 8.5%.

What of the euro's chances of challenging dollar dominance? Ever since its creation in 1999, the euro has had the potential to rival the dollar as an international currency but has never managed to realise that potential. If one of the primary reasons for this failure is that the eurozone's governments never had sufficient motivation to pursue the policies necessary for making the euro a credible rival to the dollar, then, according to some current opinion, that reason is about to change because of the fact that the US under Donald Trump's second presidency is prepared to use its economic and financial power as much against its allies in the West as against its adversaries in the East. As Kenneth Rogoff put it: " Donald Trump is an accelerant, he's a catalyst. And the time when the euro and the renminbi come up much closer to the dollar ..., is going "to happen a lot sooner now, believe it or not" (Rogoff, 2025a). See also Rogoff, (2025 b); Fishman, et.al (2025); Holden, (2025); Snower, (2025): Rey, (2025). Helene Rey's position in this context was particularly interesting because in agreeing that the eurozone's leaders may now boost the euro's chances of rivalling the dollar due to the catalytic effect of Trump's policies, she expressly drew on Kindleberger's analysis of the inter-war period. As she put it: "we seem to be approaching a new 'Kindleberger gap'" because " by pursuing policies that undermine US institutions,

fundamental research, multilateralism, and the economy's long-run growth prospects, the US under Trump is rapidly eroding trust in the dollar" and so "creates an opportunity for the eurozone, which issues the world's second-most-important international currency, to capture some of the exorbitant privilege long enjoyed by the US" (2025). The predictions that the gap separating the euro's international standing from that of the dollar might now narrow as a consequence of Trump have also been proved wrong. The BIS' 14th triennial survey of forex turnover was launched on April 1st, one day before Trump's unveiling of his "Liberation Day" tariffs, and when the results of the survey were published in late September, 2025, these showed that while the dollar's share of the \$9.6 trillion daily forex turnover had risen to 89.2% as against its 2022 share of 88.5%, the euro's share had fallen to 28.6% as against its 2022 figure of 31.4%.

The predictions of a coming challenge to dollar dominance have been met with scepticism by others who take a different perspective on foreign investor involvement in the US capital market (see e.g. Prasad (2014); Karltenbrunner and Lysandrou (2017); Gopinath et.al (2020); Bertaut et.al. (2025); Gopinath, (2025)). Contrary to those who believe that foreign investors may abandon the US due to its weakened position in world production and trade, the opposite position taken by the sceptics is that there will be no such abandonment because no other capital market can match the size, depth and liquidity of US capital market and therefore offer foreign investors the same array of investment opportunities as can the latter. This line of argument is in our view entirely correct but, taken on its own, it does not settle the question of whether the dollar's dominance will or will not persist. Rather, all that it does is to put on hold the answer to the question: dollar dominance is safe for now but whether this will remain the case in the foreseeable future is left open to doubt. The crux of the matter is that while no other individual capital market can match the size of the US capital market, the fact that these other markets' collective share of the world's supply of securities outweighs that of the US leaves open the notional possibility that foreign investors will abandon the US and thus weaken the dollar should their patience and forbearing be pushed to breaking point. The central issue in this context is that of "trust": the US capital market may hold many attractions for foreign investors, but these could still not be enough to offset the collapse of trust in the US should this be precipitated by the erratic policies pursued by its government. One early example of the pessimism expressed

on this score was that provided by Eswar Prasad. In his publications on dollar dominance, he stressed the importance of the size of the US capital markets and of the strength of the US' financial and political institutions in supporting that dominance (see e.g Prasad, 2014) and yet, in an article published in the Financial Times in 2018 in the midst of Trump's first presidency titled 'America beware: dollar supremacy is not forever', Prasad warned that Trump's heavy and indiscriminate use of the dollar as an economic and political weapon might eventually hurt the dollar by "eroding foreign investors' trust and confidence in the US and its institutions" (Prasad, 2018). Similar warnings that Trump would undermine the dollar by undermining trust in the US' institutions became frequent right from the start of his second term as US president. One example, already noted, is Helene Rey who argued that "the US under Trump is rapidly eroding trust in the dollar"(Rey, 2025). Another example is Barry Eichengreen who in, an article questioning whether the dollar can remain "king of the currencies", doubted whether its chances were good in view of the loss of foreign trust in the US due to Trump's assault on the values, arrangements and institutions that underpinned that trust (Eichengreen, 2025). To take as a final example an article by Pforr, Pape and Petry titled "Dollar Diminished: The Unmaking of US Financial Hegemony Under Trump", the authors were emphatic that the loss of trust in the US would spell the end of dollar dominance. As they put it: "Under Trump, the undermining of the global economic order, growing fiscal deficits, and continued attacks on the institutional foundations of the administrative state are fundamentally undermining trust in the United States that is fundamental for the dollar's global role" (Pforr et.al. 2025)

In what follows, we put the very different view that while Trump's assault on the institutions that underpinned the dollar's dominance in the past are indeed now under threat of survival, this threat will in no way impact the dollar's continuing dominance in the future. On the contrary, this dominance will not only persist but also continue to grow in the decades to come, and it will do so for two reasons. The first is the already acknowledged reason that no other capital market can supply the world's investors with the same abundance of financial securities as can the US capital market. While this is the negative or default reason why foreign investors are willing to hold increasing amounts of US securities, the second and more positively charged reason concerns the US capital market's mass and consequent gravitational pull on foreign investors. In our view, it is the combination of the

US capital market's large size and density of mass that explains why the dollar's dominance will persist for decades to come because it will be extremely difficult for any other capital market to achieve the same combination of these attributes and thus be able to pull foreign investors out of the dollar's gravitational field. If it is then asked why current discussions on dollar dominance fail to make this distinction between the size and mass of the US capital market, thus underestimating its gravitational force, the answer suggested here is that this failure comes down to a category error in current macroeconomic theories, namely, the continued tendency to take the household saver to be the representative investor. While differences between household and institutional investors are recognised, the general assumption is that these differences are secondary to what all investors have in common for which reason there is no harm in continuing to treat the household as representative. This assumption has become firmly entrenched in the minds of many scholars and while this entrenchment may indeed do no harm as regards certain subjects of enquiry, the situation is different as regards the particular subject of dollar dominance because it clouds understanding of what continues to sustain this dominance. In elaborating on this argument, we begin by discussing the aforementioned category error and explain why it leads to an underestimation of the importance of US capital market size in determining dollar dominance.

### **3. The size of the US capital market as a determinant of dollar dominance**

Household savers have historically been the dominant group of investors in financial securities. Over recent decades, however, it is institutional asset managers such as pension and mutual funds and insurance companies that have become the dominant group. Yet, despite this fact, many macroeconomic theories still tend to take household savers to be the representative investors. To quote Brunnermeier and Sannikov: "many macroeconomic models are based on identical households that invest directly without financial intermediaries" (Brunnermeier and Sannikov, 2014, p.379). Brunnermeier and Sannikov are here describing mainstream macroeconomic models whose basic unit of analysis is the individual agent, but the description also applies to heterodox macroeconomic models that take aggregate sectors as their basic units of analysis. The most advanced of these models at the current time is the Post-Keynesian stock-flow model that has five sectors, and what we find here is that institutional asset managers such as pension funds are included in the

household sector (Godley and Lavoie, 2007). Differences between household and institutional investors are of course recognised such as, for example, that the latter have more professional expertise and are thus better able to maximise returns subject to a given level of risk (Philip Davis and Steil, 2001). These differences, however, are viewed as secondary to what all types of investors have in common, which is that they stand on the demand side of the capital markets in contrast to corporations and governments that stand on the supply side. The reality is that there are fundamental differences that now separate out institutional investors from households, but which of these differences are singled out for special attention depends on the particular subject of enquiry.

To return to Brunnermeier and Sannikov who have been amongst those who have recently developed macroeconomic models in which the fundamental differences between financial intermediaries and households are made explicit (see e.g. Brunnermeier et.al. (2012); Brunnermeier and Sannikov, (2014)) we find that the key difference drawn here is that between professional experts that have low net worth and borrow funds to invest in assets and households who have less skill or willingness to invest in assets and lend funds to the experts. The rationale behind this angle of approach is that it helps to uncover two important properties of business cycles, persistence and amplification: persistence because "a decline in experts' net worth due to a sudden shock in a given period results in depressed economic activity and low net worth of experts in the subsequent period" and amplification because when "a shock is aggregate and affects many highly leveraged experts at once, it results in decreased demand for assets and a drop in asset prices, further lowering the net worth of experts, further feeding back into prices, and so on" (Brunnermeier and Sannikov, 2014, p.379). As regards the subject of dollar dominance, the relevant fundamental difference to be drawn between households and institutional investors is not that between lenders and borrowers of funds so much as that between holding financial securities as a matter of *choice* and holding financial securities as a matter of *necessity*. Households may well invest their savings in securities should the returns on them look more favourable than are those on alternative asset classes such as real estate but should the returns on these alternative assets turn out to be more favourable there is absolutely nothing in their function as households that prevents them from switching all of their savings to these assets. No such option is open to institutional investors such as pension funds. They can

hold cash for liquidity purposes, and they can hold real estate assets for higher return purposes, but the exigencies of their role as financial intermediaries require them at all times to hold the bulk of their asset portfolios in the form of financial securities, assets that can combine value storage capacity with liquidity. It is symptomatic of this fact that over the past twenty five years, pension funds in the OECD countries have on average invested around 70% of their funds in equities and bonds (OECD, 2025)

To view the difference between holding securities as a matter of choice as opposed to a matter of necessity is to view the global safe asset shortage problem in a new light. The position taken in the current literature on this problem is a highly generalised one: there is a shortage of all types of assets that can potentially serve as stores of value because all types of agents that demand assets for use as stores of value are aggregated together (Caballero, 2010; Caballero et.al, 2017). For example, a 2017 paper on the “safe assets shortage conundrum” opens with the following passage: “Economic actors need stores of value. Households save for retirement, for a rainy day, or to transmit wealth to their offspring. Corporations need to hold cash. Financial institutions need collateral. Central banks and sovereign wealth funds need to hold foreign assets” (Caballero et.al, 2017, p.1). Now if we separate out agents such as institutional asset managers who must hold the bulk of their assets in the form of equity and debt securities from other agents such as households that can hold assets in any of the alternative forms, it then becomes clear that the global safe asset shortage is particularly acute as regards financial securities because while the supply of other assets such as real estate or cash is more evenly distributed across the globe the supply of securities is heavily concentrated on just one country, the US. It is a measure of this concentration that of the \$272 trillion global securities stocks outstanding in 2024, a sum over two and a half times the \$110 trillion figure for world GDP in that year, the US accounted for an average of 44% of these stocks (39.% of the \$142 trillion bond stock and 47.4% of the \$130 trillion equity stock, (SIFMA, 2025). The upshot is that if no fundamental distinction is made between household and institutional investors and if, therefore, foreign investors holding US securities are viewed through the lens of the former group, it follows that these investors can collectively exit the US relatively easily because the supplies of alternative types of assets are more evenly distributed across the globe. On the contrary, it becomes clear that such a collective exit, while not impossible, is extremely difficult when

foreign investors are viewed through the lens of institutional investors who must hold the bulk of their portfolios in financial securities because no other country can supply these securities on the same scale as can the US.

If we divide the dollar's 89% share of the current daily forex turnover volume of \$9.6 trillion by two to allow for the fact that all pairwise currency transactions are counted twice, we find that the resulting percentage figure is higher than the US' 24% share of world production and even more substantially higher than its 10% share of world trade but more or less on a par with the US' share of world securities supplies. The connection between the US' top position in the capital market sphere and the dollar's top position in the currency sphere is basically maintained through two types of channels, one direct and the other indirect. The first of the direct channels is the substantial presence of foreign portfolio investors in the US capital market: being forced into this market because of the shortage of alternative supplies of financial securities, they then need dollars to access it. The second direct channel is the equally substantial presence of the foreign dealing banks in the US capital market. All of the world's major dealing banks, which today account for over one half of daily forex turnover, hold substantial amounts of foreign currency assets for various reasons that include those to do with self-interest business expansion as also those to do with serving the foreign currency needs of their institutional clients. This said, what is noteworthy is that the US banks hold far less foreign currency assets as compared, say, with the dollar assets held by their peers in the eurozone or in the UK, an asymmetry that reflects the size asymmetry separating the dollar capital market from that of the euro and sterling markets (Baba et.al, 2009; Tokunaga,2018). FX swaps (that combine spot and outright forward transactions and comprise over one half of daily forex turnover when broken down by instrument) play an important role in this context in that there are basically three ways in which non-US banks can fund their dollar assets, the first two through borrowing from deposits or from the money markets and the third through FX swaps. As few non-US banks have substantial operations inside the US, thus limiting their ability to borrow from dollar deposits, the remaining main ways of funding their dollar assets are through accessing the US money markets (e.g. through the issuance of commercial paper) or through FX swaps, but as the risk on dollar debt issuance tends to

be higher than that on FX swaps the latter have continued to gain in popularity as dollar funding instruments.

At the heart of the indirect channels that connect US capital market dominance with dollar dominance is the liquidity factor: attracted to the US capital market because of the advantages offered by its size, depth and liquidity, foreign portfolio investors and foreign banks then add to its depth and liquidity and, in so doing, to the depth and liquidity of the dollar market itself. It is this fact that the dollar market is the most liquid of all currency markets that then explains the preferred use of dollars in a number of international roles. Thus, the dollar is the world's most frequently used currency in international trade, typically accounting for around 50% of international payments on SWIFT (Bertaut et al, 2025). Because of its dominant role as a medium of exchange, the dollar is also the dominant currency in international banking, accounting for around 55% of international and foreign currency claims and 60% of liabilities (Bertaut,et.al, 2025). The superior liquidity of the dollar market also explains the dollar's role as a vehicle currency: when portfolio funds are moved across countries with small securities markets, these movements typically take place via the dollar as the intermediary currency rather than via a direct pairwise exchange of the local currencies in question. Finally, the depth and liquidity of the dollar market explains the dollar's premier role in speculative currency trading: if we take the case of the hedge funds that now account for much of the short-term speculative activity in the forex market (their use of computerized high frequency trading being particularly important in this context) we find that when trading the same pair of currencies many times over to extract profit from any small exchange rate movements, it is invariably the dollar that stands on one side of these pairwise currency transactions.

The conclusion that falls out of the above observations is that for any country to have its currency match the dollar in the international currency system, a necessary condition is that the size of its domestic capital market must match that of the US capital market. No matter how strong is the country's industrial profile and its corresponding position in international trade, these factors can only play a secondary role in supporting its currency's international standing because trade together with all other real economy-related international activities now account for an extremely small proportion of all foreign exchange transactions. In

2025, for example, non-financial institutions accounted for only 5% of the daily forex turnover figure of \$9.6 trillion, a sum down from the 7% share registered in 2019, and even more markedly down from the 13% share registered in 2010 (BIS, 2025). The remaining 95% of foreign exchange transactions are finance related transactions conducted by banks (46% by dealing banks and 24% by local banks) and non-bank financial institutions (17% by institutional investors and 8% by hedge funds) and if the dollar dominates these transactions, it is because the US dominates the world's financial securities stocks at a time when these stocks are increasingly dominating the world's material production base. To repeat, if the dollar's international dominance is to be challenged by another currency, a necessary condition is that its issuing country builds up its capital market to a size roughly equivalent to that of the US capital market. However, while necessary, this condition taken on its own is not sufficient to pull foreign investors away from the US on the scale required to reduce the dollar's dominance to a level that can be matched. For this objective to be reached, the rival capital market must not only have the same large size as has the US capital market but also the same density of mass. To make clear the distinction between the size and mass of a capital market, we begin by taking a close look at the equities and bonds that are its constituent stuff.

#### **4.The US capital market's mass as a determinant of dollar dominance**

As financial securities have no intrinsic value, it follows that it is only through their prices that they can acquire a quantitative value storage capacity. As these prices are nothing other than the discounted values of future cash returns, it further follows that securities can only remain solid enough to preserve a determinate quantity of value over time on condition that cash returns are made at a certain rate and with a certain regularity. The price solidity of bonds is given some guarantee by the fact that these pay interest by law. The same is not true of equities that pay dividends on discretion, which means that to give corporate managers too much discretion over cash returns is to risk endangering the price solidity and hence value storage capacity of their equities. It is to guard against this danger that the asset management industry has in recent decades pressed for complementary corporate governance regulation so as to compel corporate managers to prioritise regular cash returns to shareholders. As Simon Deakin has observed, this new norm or practice of shareholder primacy is "not the result of

the core content of company law" but "the cumulative impact ..of relevant changes mostly to be found in 'soft law' codes and standards, made by financial actors themselves, principally institutional shareholders, to which governments have ceded rule-making authority." (Deakin, 2017, p.26). The ascendancy of shareholder primacy as a corporate governance norm has generated intense critical debate in the financial literature because this has essentially been conducted on the premise that the central aim of this norm is to maximise corporations' production efficiency. Thus, where on the one side proponents of agency theory argue that this efficiency is maximised when corporate managers are constrained by shareholder primacy because only then will they be in a position to distribute any residual cash to shareholders after having paid all other stakeholders (see e.g. Ross (1973); Jensen and Meckling, (1976); Jensen, (1986) and Baker et.al (1988)), on the other side, critics of shareholder primacy argue that this doctrine undermines production efficiency by forcing managers to adopt a short term profit-oriented focus on industrial investments when many of these types of investments require a longer term vision for their effective implementation (see e.g. Lazonick and O'Sullivan (2000); Aglietta and Reberieux (2005); Driver and Thomson (2017) and Deakin (2017)). The contrary position put here is that the end-aim of shareholder primacy is not production efficiency maximisation so much as *equity price solidification*, by which is meant not the fixing of equity prices so as to prevent their fluctuation according to supply and demand conditions but the placing of bottom limits to this fluctuation to prevent equity prices from collapsing to zero (Lysandrou and Stoyanova, (2007); Lysandrou, (2008)). Pension funds and other asset managers of course want corporations to be productively efficient in order to be able to return cash, but ability is not the same as *readiness* and it is to ensure this readiness that institutional investors demand corporate commitment to shareholder primacy.

The fact that macroeconomic theories have continued to take the household saver to be the representative investor while institutional asset managers have been pushing forward their shareholder primacy agenda helps to explain the prevailing view that the rationale behind this agenda is only about production efficiency and corporations' ability to return cash to investors rather than also about making equity prices more tangible. At the heart of the matter here is the distinction between the yield aspect of financial securities and their value storage aspect. For households who save only for personal reasons it is the yield aspect of equity securities that is of paramount importance: if cash returns on equities are not made, they are always free to switch their savings away from equities and towards other asset classes. For

pension funds and other asset managers who invest on behalf of clients, it is both the yield and value storage aspects of equities that are equally important: they need cash returns to be regularly made but a major point of this regularity is also to ensure the solidification of the prices and hence value storage capacities of the equities in which clients' moneys are held. When these observations are expanded to encompass the question of the dollar's continuing international dominance, one can further understand the continuing doubt surrounding the answer to this question. It is well known that the dollar's dominance primarily rests on the fact that, in addition to the size, depth and openness of the US capital market, what also makes this market particularly attractive to foreign investors who are doubly outsiders in that they are external stakeholders in US corporations as well as being of foreign nationality is the high degree of protection given by the US' legal and governance infrastructure. But if this infrastructure is viewed from a perspective that makes no fundamental distinction between household and institutional investors and is therefore not seen as having any special connection to the solidification of the prices and value storage capacities of US securities, it is then easy to conclude that the US capital market, large, deep and open as it is, may still be a hollow entity, devoid of any content.

To illustrate the point, we take some examples starting with the already cited 2008 paper by Chin and Frankel. In that paper the authors stated that for a currency to have international status "the capital and money markets in the home country must be not only open and free of controls, but also deep and well developed" (ibid.p.57) and yet, despite the fact that the US meets all these criteria that underpin its currency's top international status, they could still go on to argue that the dollar could lose this status and be overtaken by the euro by 2015 because the US' "chronic deficits' meant that it could not "count on being bailed out indefinitely" (ibid p.67). To take another example, we go back to Eswar Prasad who in his publications on dollar dominance has continually stressed the importance of the size of the US capital markets and of the strength of the US' financial and political institutions in supporting that dominance (see e.g Prasad, 2014). Yet, as already observed, in an opinion article published in the Financial Times in 2018 in the midst of Donald Trump's first presidency Prasad warned that Trump's heavy and indiscriminate use of the dollar as an economic and political weapon might eventually hurt the dollar by "eroding foreign investors' trust and confidence in the US and its institutions" (Prasad, 2018). The idea that is implicit in these arguments, that to protect the dollar the US has to count on being 'bailed out' by its foreign investors or that it cannot afford to 'erode' foreign investors' trust and

confidence in its institutions, is that the US' capital market has nothing of substance that keeps foreign investors locked in its embrace thus placing the dollar's dominance at the mercy and goodwill of these investors. This idea was made explicit in an article by James Galbraith published in May 2022 and titled "A new multipolar currency system is here", when he argued that "Up to now the dollar-based order has been supported mainly by instability elsewhere and the lack of a credible alternative or compelling reason to create one, or where such reasons are felt, the ability to do so. ... The system has been held up, in short, by confidence in itself, and not, so far as one can see, by much of anything else" (Galbraith, 2022)

The only possible way that one can claim that there is not "much of anything" holding up the dollar system is if one fails to draw a fundamental distinction between the size of the US capital market and its mass, a failure that comes from ignoring or downplaying the significance of the new cash return rules and obligations that are now tightly binding on security issuers and that are aimed at solidifying the prices of US securities. In the absence of these rules and obligations, US securities, as with all financial securities, are in danger of remaining just promissory notes, but with their imposition these securities are transformed into genuine stores of value. From being particles without matter, securities become particles filled with matter and what this means is that when all of the securities of a country's capital market are aggregated together, this aggregation gives that capital market mass. In sum, the distinction between the size and mass of a capital market can be put as follows:

Capital Market Size= $N_b P_b + N_e P_e$

Capital Market Mass= $\lambda_b(N_b P_b) + \lambda_e(N_e P_e)$

where  $N_b P_b$  and  $N_e P_e$  are the nominal market values of bonds and equities and  $\lambda_b$  and  $\lambda_e$  are institutional weights that capture investor protection: respectively, creditor-protection/legal strength for bond claims and shareholder-primacy/governance effectiveness for equity claims. Assuming that the effectiveness of the institutional weights ranges from 0 to 1,  $\lambda \in [0,1]$ , a capital market may have size but no mass if the effectiveness of the weights approaches 0 while it can combine size and mass if the effectiveness of the weights approaches 1 and ensure that nominal value is fully mobilised. As there is strong evidence that the institutional weights capturing investor protection are close to 1 in the

case of the US (see e.g. the annual global competitiveness reports published by the World Economic Forum), it can be said that its capital market is not only large in size but also has density of mass. Other capital markets such as those the UK, Australia and Switzerland have mass but are small in size. China's capital market is rapidly growing in size but lacks mass because of continuing weaknesses in its legal and governance infrastructure that are particularly severe in the area of outside investor protection (Wincuin, (2019), for example, documents the extent of low investor confidence in Chinese institutions; see also WEF (2025)). The eurozone capital market combines size and mass to some degree but its most serious deficiency is its fragmentation. The US capital market not only combines large size with density of mass but it is also homogenous in the sense that all US securities have the same currency denomination, that the risks on all US securities are measured against the same risk-free benchmarks (US treasuries) and that all transactions in US securities are covered by the same financial standards and regulatory rules and are subject to the same contract, insolvency and tax laws. The eurozone capital market by contrast is a heterogenous mix of national capital markets that may share a common currency but nevertheless continue to operate according to their own financial rules and regulations and according to their own contract, insolvency and tax laws.

If substantial numbers of foreign institutional investors continue to be pulled into the US capital market and then stay firmly locked in its embrace it is because this market's unique combination of size, mass and homogeneity enables it to meet the various needs of these investors that are specific to their role as large financial intermediaries. In the first place, they are offered an abundance of dollar securities in which large pools of their clients' funds can be safely stored. In the second place, they are offered scope for portfolio diversification. Foreign investors need to spread portfolio funds across a wide spectrum of securities carrying different risk-return attributes so as to better cope with the pressures of any economic disturbances while at the same time continuing to meet the financial needs of their clients, and this need is amply met by the huge scale and diverse composition of the dollar mass of securities. Finally, they are provided with facilities that are conducive to large scale trading. When diversifying across different US securities, foreign investors also need assurances that they are able to freely and cost efficiently move pools of funds across these securities in line with any changes in the economic climate and the US capital market

provides these assurances because in addition to its size, depth and liquidity it is also free of any currency, legal and regulatory barriers.

For evidence that what pulls foreign investors to the US capital market is as much its ability to give scope for diversifying their funds across different US securities as is its ability to give safe accommodation to these funds one need only look at the close correspondence between the breakdown of total US securities stocks according to risk category and the breakdown of foreign investments in the US capital market. If, for example, we deconstruct the total \$126 trillion stock of US securities outstanding in 2024 according to risk category, we find that at its core was the \$30 trillion stock of risk-free US treasuries and the \$2.8 trillion stock of low-risk agency bonds, with its outer layers comprising, firstly, of an \$18 trillion stock of corporate bonds and an \$11 trillion stock of securitised bonds that carried credit risk premiums over the risk free rate and, secondly, of an \$67 trillion stock of equities that carried extra equity risk premiums (SIFMA, 2025). If we now turn to the composition of the total \$31 trillion worth of US securities held by foreign investors in that same year, we find that about \$13 trillion was invested in equities, \$9 trillion in corporate bonds and \$8.5 trillion in US treasuries, where this sum was in turn evenly divided between foreign portfolio investors and foreign central banks (SIFMA, 2025).

This latter division of foreign holdings of US treasuries indicates that these securities are doubly important in underpinning the dollar's international dominance in that they not only serve as the safe asset core of foreign privately owned dollar portfolios but also as the premier reserve asset in foreign central bank's currency reserves. Proceeding from the observation that the share of dollar assets in these reserves had been 'trending down' over the past two decades so that they now account for around 58% of these reserves as opposed to the 70% figure of the early 2000s, it has been argued that this decline will likely continue as central banks' diversify away from dollars towards the currencies of smaller economies that offer higher yields (Arslanalp et.al. 2022; Eichengreen, 2022). We disagree with this argument. To say that there has been a 'trend' decline over the past two and a half decades is misleading in that while the dollar's share fell from 70% to around 60% on the appearance of the euro, this share has since remained fairly stable. There may have been a small decline to around 58% for the reasons given, but we are not likely to see any further decline, and

certainly not to levels below 50% as has been suggested in some quarters (see e.g. Marsh and Sharan, 2024). The explanation lies in the lethal combination of capital market volume and capital mobility.

The rate of capital mobility may have started to accelerate in the early 1970s following the breakdown of the Bretton Woods system, but this was still a period of low world capital market volume as compared with world GDP. Only from the early 1990s onwards did the rate of world capital market growth begin to rapidly outstrip that of world GDP so that today the world's financial securities stocks are nearly three times the size of annual world GDP and the daily turnover volume in the foreign exchange market is over thirty times the size of daily world GDP. Portfolio investors have welcomed the growth of securities stocks as it provides them with ample value containers, but the flip side of this growth is that international portfolio flows carrying large amounts of value can bring huge pressure to bear on currency exchange rates (Lysandrou and Stassinopoulos, 2018; Lysandrou, 2025). This is the reason why foreign exchange reserve volumes have over the past three decades grown in tandem with the growth of the world's capital markets so that they now total nearly \$13 trillion as opposed to the \$1.4 trillion figure for 1995, and this is the reason why US treasuries have accounted for the majority share of these reserves over this period (IMF, 2025). To counter the potentially destructive effects of portfolio flows, central banks need to hold the bulk of their reserves in assets that combine three attributes regarding their value storage capacity: safety (their stored value must hold firm up to the point of sale); liquidity (they can be sold quickly without any adverse impact on their price and hence stored value quantity); and, what is above all crucial, *volume* (they must be capable of holding such substantial quantities of value as can match those carried in international portfolio flows). The securities of other governments may meet two of these criteria, safety and liquidity, while offering better yields than do US treasuries, but what gives the latter absolute advantage over all other competitors as reserve assets is that these alone can fulfil the volume criterion along with those of safety and liquidity. Given the likelihood of a continuing scale growth of capital market volume and capital mobility, this criterion is bound to outweigh any considerations of extra yield in central banks' reserve management policies, which in turn is why US treasury bonds will continue to maintain their near 60% share of foreign exchange reserves.

To argue that the dollar's international dominance now ultimately rests on the US capital markets' unique combination of size, mass and homogeneity is to present a very different perspective on the time scale over which that dominance will persist. As previously observed, the majority opinion is that the dollar's dominance will decline in the foreseeable future, with the differences here being between those who see this decline happening in the short to intermediate term as a consequence of Donald Trump's policies and those who see this decline happening over a longer term but still a term with a foreseeable end limit. Our contrary opinion is that dollar dominance will persist indefinitely. It will not last forever because nothing lasts for ever, but it will certainly last for decades to come because it will be decades for another currency to have behind it the same backing mass of securities as has the dollar. To illustrate the point, we need only look at the formidable problems currently facing the euro, the currency most widely tipped to rival the dollar.

#### **4. Why the euro will not rival any time in the foreseeable future**

The euro mass of securities is homogenous insofar as these securities share the same currency denomination, but this is where the similarity with the dollar mass ends. Far from being an integrated entity, the eurozone capital market is a loose amalgam of national capital markets that not only vary in size and quality of governance infrastructure but also operate to different financial regulatory rules and standards and are governed by different insolvency, contract and tax laws. A further constraint that is holding back eurozone capital market integration is the absence of joint eurozone government backed bonds that can provide a common risk-free benchmark for calculating the risks on all other euro denominated securities. Although efforts have been made to resolve these problems, these have so far had limited success. To take as an example the capital market union (CMU) project launched by the European Commission in 2015, we find that while some advances have been achieved under its action plans, such as the new listing act aimed at making it easier for smaller companies to go public and new prospectus regulation aimed at providing investors with better information about opportunities and risks, the project has failed to achieve its major objective not least because of continued resistance to the creation of a single European financial supervisory body and because of continued opposition to the harmonisation of national insolvency and contract laws. When turning to the question of joint eurozone government backed bonds we find the same story. The European Commission has on several occasions made the case that the introduction of such bonds would not only boost the size, depth and liquidity of the eurozone capital market through the large issuance volumes involved but also help transform it into a

more integrated entity by enabling security risk calculations to be de-coupled from national government bond interest rates (2011;2015). However, the proposal for joint eurozone government backed bonds has consistently met with opposition from Germany and other northern eurozone member states on two grounds, one to do with the perceived unfairness of debt mutualization (why should their taxpayers be made to help bail out countries that had lived beyond their means?) and the other to do with moral hazard (profligate governments that are continually bailed out would have no incentive to rein in their profligacy).

The failure to transform the eurozone's capital market into a genuinely integrated entity helps to explain the widening size gap separating it from the US capital market. It is a measure of the extent of this widening that where in 2013, for example, the EU's share of the outstanding \$154 trillion global financial security stocks was 21.6% (\$33.3 trillion) as opposed to the US' 36.9% share (\$56.8 trillion), by 2024 the EU's share of the outstanding \$272 trillion global security stocks had fallen to 13.9% (\$37.6 trillion) as compared with the US' share of 43.4% (\$118 trillion) (SIFMA (2014; 2025)). This widening size gap separating the US and European capital markets is due to the interplay of domestic and international factors. Take first the US case. Its comparatively large capital market is in the first place a result of the fact that US corporations principally rely on equity and bond issuance to meet their external funding needs with bank loans playing a relatively small role in this regard (SIFMA, 2025). A second contributory factor to US capital market size is the extent to which the US government takes a relaxed stand on its debt to US GDP ratio and is thus willing to furnish its capital market with abundant supplies of treasury bonds. As we have said, foreign institutional investors are attracted to the US capital market because where its large size offers scope for extensive portfolio diversification, its homogeneity allows for large pools of investor funds to be transferred across different US securities relatively freely and cost efficiently. However, these advantages offered to foreign investors must be paid for in the sense that they will tend to earn lower risk premiums on their US securities than they can elsewhere. They will, for example, expect to earn comparatively low liquidity risk premiums (due to the depth of the dollar markets), low credit risk premiums (due to the general strength of the US' legal and governance infrastructure), and a low sovereign risk premium (due to the US government's power of taxation). It is because foreign investors are willing to trade relatively low returns on their US financial assets off against their many advantages

that the flipside of this trade-off is that it places the US' corporations and federal government in a position of being able to issue increasing amounts of securities before coming up against repayment constraints.

Everything is different in the case of the eurozone capital market. Where US corporations principally rely on equity and bond issuance to meet their external funding needs, with bank loans playing a relatively small role, the exact reverse is the case for European corporations; and where the US government is content to issue abundant supplies of treasury bonds, because it takes a relaxed stand on its debt to US GDP ratio, the German and other European governments' more restrictive stand on their debt to GDP ratios has held back the supply rate of government bonds in the euro area (Grahl and Lysandrou, 2018). When bringing foreign factors into the picture, we find that a further reason why the euro mass of securities is getting comparatively smaller as against the dollar mass is that the fragmentation of the eurozone's capital market acts as an additional constraint on the eurozone's corporations' and governments' abilities to issue securities at the same rate as can their US peers because this fragmentation deters foreign institutional investors from making portfolio investments in the eurozone on anything like the same scale that they do in the US. It is illustrative of this deterrent effect that Norway's \$1.9trillion oil fund, which is the biggest single owner of European assets owning on average 2.5 per cent of every listed company on the continent, reduced the share of European equities in its total assets from 26 per cent to 15 per cent over the past decade citing as the main reason "key barriers that include national security laws, corporate laws, and insolvency regimes that vary significantly across member states" (Norway's oil fund calls for urgent reform of Europe's capital markets, Financial Times, June 9th, 2025). Needless to say, most of the funds withdrawn from Europe by the Norwegian oil fund were redirected to the US capital market.

The widening size gap separating the US and European capital markets has been mirrored by a widening of the distance separating the dollar and the euro's respective positions in the international currency hierarchy. Thus, where the euro's share of forex turnover in 2010 was 39%, by 2019 it had fallen to 32 % and by 2025 it had fallen again to 28.6% while the dollar's share remained at around an average of 88% throughout all this time. Alarmed by this development, the EU's leaders have taken some initiatives aimed at bolstering the euro's

international position. The most notable of these is an endorsement of the EU Commission's plan to expand the issuance of European 'supra-national bonds', that is, bonds that are backed by EU member state contributions to the EU budget. First introduced in October 2020 to finance job creation (the SURE programme) and shortly afterwards expanded to finance a post-covid pandemic recovery programme (the NextGeneration EU programme), the intention now is to substantially expand the supply of supra-national bonds to finance an array of new programmes including those in the areas of defence, energy transition, digital infrastructure and new technologies. The problem is that while these bonds go some way to qualify as a European safe asset, they cannot go all the way because they are not directly backed by European governments and their powers of taxation (European currency and monetary union has not been accompanied by fiscal union) and because, in being programme specific, their renewal upon maturity depends upon the launch of new programmes. Nevertheless, even if foreign institutional investors are attracted by the safety and volume of these new supra-national bonds, this would still be nowhere near sufficient to raise the euro's international standing close to that of the dollar. For this to happen, what is absolutely vital is that all of the barriers preventing European capital market union be removed and that European corporations move far closer to a capital market funded model of corporate financing. All of this will take a considerable amount of time and in the interim the likelihood is that the size gap separating the US and European capital markets and hence the distance separating the dollar's and the euro's international positions will widen further because global institutional investor demand for financial securities will continue to grow and it will inevitably be the US capital market that will accommodate the bulk of this growth.

## **6. Conclusion**

Predictions of a coming end to dollar dominance have been made countless times and have invariably been proved to be wrong. Yet, despite this fact, what is certain is that such predictions will continue to be made not least because what enables them and gives them space and oxygen are flaws in the current theoretical framework within which dollar dominance is analysed and discussed. This paper has pinpointed two of these flaws. One is the idea that history carries important lessons regarding the hierarchical structure of the international currency system. The reality is that it does not. There was a period when a currency's position in that system was determined by the issuing country's position in the physical realm of production and international trade. That period lasted all through all the 19th century and right up to the closing decades of the 20th century, but its time is over. The

new reality is that a currency's position in the international currency hierarchy is now determined by the issuing country's position in the financial realm of securities stocks and international portfolio flows and this means that if the dollar's present position at the top of this hierarchy is to be seriously challenged, the challenge has to be mounted within this financial realm. The other flaw is the failure to fully recognize the many ramifications arising out of the fact that the needs of the institutional asset managers that are today the dominant group of investors are fundamentally different from the needs of household savers that were previously the dominant investor group. It is this failure that lies at the root of the failure to see that what keeps the dollar firmly locked in its top position in the international currency system is the fact that the dollar's huge and homogenous backing mass of financial securities keeps many of the world's institutional investors firmly trapped in the dollar's gravitational field. Only at the point when another currency has behind it the same backing mass of securities can that currency pose a serious challenge to dollar dominance. That point, as we say, will not be reached anytime soon.

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