

Lysandrou, Photis

Working Paper

The under-theorisation of dollar dominance

CITYPERC Working Paper, No. 2025-03

Provided in Cooperation with:

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

Suggested Citation: Lysandrou, Photis (2025) : The under-theorisation of dollar dominance, CITYPERC Working Paper, No. 2025-03, City, University of London, City Political Economy Research Centre (CITYPERC), London

This Version is available at:

<https://hdl.handle.net/10419/339443>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



**CITY
PERC**

City Political
Economy
Research Centre

Working Paper Series

The Under-theorisation of Dollar Dominance

Photis Lysandrou

CITYPERC Working Paper No. 2025-03

City, University of London
Northampton Square
London EC1V 0HB
United Kingdom

The Under-theorisation of Dollar Dominance

Photis Lysandrou¹

Abstract

The recent period has seen an upsurge in predictions that the dollar's international dominance will soon be challenged by a rival currency, with the euro currently 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 foundations of that dominance, the root problem in this context being macroeconomic theories' tradition of taking the household investor to be the representative investor when it should in reality be an institutional investor. 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 investor, it then follows that there is nothing preventing a foreign exodus from the US such as will reduce its capital market 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 capital market on the scale necessary for undermining the dollar's dominance because it then becomes clear that foreign investors remain strongly attracted to this market for reasons as much to do with its mass and consequent gravitational pull as to do with a shortage of securities that can be supplied by other capital markets including that of the eurozone.

Key words: dollar dominance; under-theorisation; household savers versus institutional investors

JEL Classification: F31; G15

The recent period has seen an upsurge in predictions that the dollar's international dominance will soon be challenged by a rival currency. In the months following Russia's invasion of the Ukraine when Russia and its allies in the BRICS group of countries declared their intention to reduce their international use of the dollar in response to the US-led imposition of sanctions on Russia, it was China's renminbi that was predicted to be the main challenger (see e.g. Papa and Lin, (2022); Eichengreen (2022); (Galbraith, 2022);Pozsar, (2023); Roubini, (2023)). In the opening months of Donald Trump's second presidency when it became clear that the US was prepared to use its economic and financial power as much against its allies in the West as against its adversaries in the East, it was the euro that was predicted to have the best chance of challenging the dollar's dominance (see e.g. Fishman, et.al (2025); Rogoff, (2025); Rey, (2025)). Two lessons of history have been invoked to support of these predictions. The first is that a currency's top position in the international currency hierarchy rests on the strength of

¹ My thanks to Giorgos Gouzoulis and Bruno Bonizzi for helpful comments on an earlier draft of this paper.

the issuing country's macroeconomic fundamentals: when the latter weaken, so also does the top position of the currency weaken as a consequence. The dollar's current dominance rests heavily on the substantial size of the US' bond and equity markets and on foreign investors' substantial involvement in those markets, but the fact that the US continues to issue increasing amounts of financial securities at a time when its share of world production is shrinking and its trade deficit is rising means that there may come a time when foreign investors abandon these securities on a scale sufficient to weaken the dollar. Of the alternative currencies that are seen to most likely benefit from the flight from the dollar, it is the euro that leads the list with the renminbi some way behind. Ever since its creation in 1999, the euro has been the second most used currency in an international role but has never managed to close the gap with the dollar's leading role. This is where we come to the second lesson of history that is invoked to predict the coming challenge to dollar dominance, one that concerns inertia. As argued by Charles Kindleberger in his classic text of 1973 (Kindleberger, 2013), the British pound did not cede its hegemonic 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. If world war was the catalyst behind the dollar's eventual dethronement of the pound at the top of the international currency system, so the increasing use of the dollar as an economic and political weapon may prove to be the catalyst that sees the eurozone's leaders take the steps necessary to making the euro a credible rival to the dollar.

These predictions of a looming challenge to dollar dominance have been met with a great deal of scepticism (see e.g Bertaut et.al. (2025); Gopinath et.al (2020); Gopinath, (2025)), the basis of which are the financial data pertaining to the dollar's continuing dominant role in both the private and official spheres of international finance. The empirical evidence that points against any real possibility of an imminent challenge to dollar dominance is indeed very strong, but the question that then arises is why this possibility continues to be harboured by so much critical opinion. The answer advanced here is that there is an under-theorisation of the financial foundations of dollar dominance, the root problem in this context being the long-established tradition of taking the household investor to be the representative investor in macroeconomic theories. While differences between household and institutional investors are recognised, the general assumption has been 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 investor as representative. This assumption appears to have become firmly

entrenched in the minds of many scholars and while this entrenchment may do no harm as regards certain subjects of enquiry, the situation is very different as regards the particular subject of dollar dominance because what matters here is that there is recognition of the fundamental differences that separate household and institutional investors. As observed, the dollar's 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 investor, it then follows that there is nothing preventing a foreign investor exodus from that market such as can reduce it to a size comparable with the eurozone market capital, thereby enabling the euro to rival the dollar. On the contrary, view financial securities through the lens of the institutional investor and what then becomes clear is that there will be no exodus from the US capital market on the scale necessary for undermining the dollar's dominance because what then becomes clear is that foreign investors remain strongly attracted to this market for reasons as much to with its mass and consequent gravitational pull as to do with a shortage of securities that can be supplied by other capital markets including that of the eurozone.

The structure of this paper is as follows. Section two explains the error arising out of the macroeconomic theories' tradition of taking the household saver to be the representative investor and discusses this error's implications for the bond market dimension of dollar dominance. Section three goes on to discuss this error's implications for the equity market dimension of dollar dominance and, in so doing, explains how the end-result of this error is an under-estimation of the mass and gravitational force of the US capital market. Section four explains why the euro will not challenge the dollar's dominance in the foreseeable future due to the formidable constraints that hold back the necessary increase in the scale and cohesion of the eurozone capital market that is required for the euro's challenge to be effective. Section five concludes.

2.

Household savers have historically been the dominant type 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 type. 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. Thus, if we take the most advanced of these models, the Post-Keynesian stock-flow model (Godley and Lavoie, 2007), we find that of its five sectors the only one that includes investors is the household sector. 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). When turning to the subject of dollar dominance, however, 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 (OECD, 2024)

The reason for highlighting the above difference between households and institutional investors in terms of choice versus necessity in holding securities comes down to the marked differences in the global distribution of assets that can serve as investables. If we divide these investables into two main groups, one comprising of financial securities (bonds and equities) and the other comprising of all other types (real estate, other material assets, cash, etc) we find that where the supply of the first group of investables is heavily concentrated in one country, the US, (in 2024 it accounted for 40.1% of the \$142 trillion global bond volume and 47% of the \$130 trillion global equity volume (SIFMA, 2025)) the supply of the second group of investables is widely dispersed across the globe. Now if the foreign investors that are heavily involved in the US capital market are viewed through the lens of household investors who are always free to pull all of their funds out of securities and place them in alternative asset classes, it must follow that the threat of investor exit from the US can always be held up as there is no world-wide shortage of these alternative types of assets. This threat in turn means that the onus is always on the US to behave in a way that does not repel foreign investors thus putting the dollar's dominance in jeopardy. It is this logic that explains why the early 2000s, when the rate of US treasury bond issuance began to accelerate at an exponential rate, also saw an increase in predictions that the dollar's dominance would end on account of the US government's fiscal irresponsibility. Thus, 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" (FT, August, 17th, 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 that it "could not count on being bailed out indefinitely by its foreign creditors". (Chinn and Frankel, 2008, p.51). In a paper published a year later in 2009 by Benjamin Cohen, the doyen of international currency theorists, he argued that: "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). In the more recent period, predictions of a foreign investor flight from the dollar have directed more attention to the US government's weaponisation of the dollar as the principal cause of that flight. As previously observed, these types of predictions became particularly prominent in the months following Russia's invasion of the Ukraine and again during the opening months of Donald Trump's second presidency when the weaponisation of the dollar was conjoined with the weaponisation of US tariffs.

The fact of the matter is that, far from there ever being any significant foreign investor flight from the dollar securities markets over the past two decades, foreign participation in these markets has on the contrary continued to rise at an exponential rate. 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 (SIFMA, 2018). By 2014, foreign US securities holdings had grown to \$15.9 trillion of which \$6.2 trillion were treasuries and by 2024 total foreign holdings had nearly doubled to \$31 trillion of which \$8.5 trillion were treasuries (SIFMA, 2022;2025). The immediate explanation for this development is that foreign institutional investors are compelled to hold US securities whatever their misgivings about the US and its policies because of the absence of alternatives. While there is a global abundance of non-dollar assets such as real estate, there is no such abundance as concerns the global supplies of non-dollar financial securities, the one specific type of investable asset that institutional investors depend upon the most. The eurozone's capital markets are second in size to those of the US but not only do these occupy a distant second place, what is even more problematic is that this distance has been expanding rather than shrinking over the past decade. Thus, where in 2014 the US' share of the global bond volume of \$83.4 trillion was 40.5 % and the EU's share was 24%, in 2024 the US' share of the new global bond volume of \$142.1 trillion remained stable at 40.1% while the EU's share had shrunk to 18% (SIFMA, 2022;2025). The situation regarding equities is even more problematic for where in 2014 the US' share of the global equity volume of \$69.6 trillion was 37.8% as against the EU's share of 11.3 %, in 2024 the US' share of the new global equity volume of \$130 trillion had risen to 47.1% while the EU's share had shrunk to 8.7% (SIFMA, 2022;2025). The major explanations for this widening size gap separating the US' and the EU's capital markets are, firstly, that European corporations continue to rely heavily on bank-

based forms of external funding in contrast to US corporations that rely more heavily on capital market-based forms and, secondly, that the European governments' stance on public debt has tended to be more restrictive as compared to that of the US government. For the present, we concentrate attention on this latter issue as this is where the aforementioned category error in macroeconomic theory has had a discernible impact.

In the years following the financial crisis of 2007-8, the eurozone's governments faced the same highly favourable bond financing terms as did the US government and yet, after having bailed out their banks, they chose to execute a sharp policy U-turn and embark on debt-reducing austerity programmes in contrast to the US government that made no such U-turn. What is curious is that although it was two US-based economists, Carmen Reinhart and Kenneth Rogoff, that lent academic weight to the case for a post-financial crisis turn to austerity, it was above all the governments of Europe that used this case while that of the US completely ignored it. The pivotal idea in the Reinhart-Rogoff argument is that when a government's debt to GDP ratio exceeds 90% the negative consequences for that government's domestic economy can be extremely serious (Reinhart and Rogoff, 2010). Underlying this idea of a government debt threshold is the idea of investor debt intolerance: if investors feel that a government has issued too many bonds, they may demand such high interests as compensation against risk as would force the government in question to raise taxes or make substantive expenditure cuts, actions that would in turn squeeze domestic economic growth. Now while the link running from debt intolerance to a negative impact on growth had long been established in standard macroeconomic theory (see e.g. Ball and Mankiw, (1995)), what was never specified was the exact government debt to GDP ratio at which debt intolerance would kick in and cause substantial damage. Was the tipping point ratio 50%? 100%? 150%? Standard theory never provided an answer, but an answer must be provided, an exact ratio must be specified, if a government that embarks on a deeply unpopular austerity programme aimed at reducing its debt is to be able to counter the public backlash by pointing to the disastrous consequences of not pursuing such a programme. Reinhart and Rogoff conveniently produced just such a figure: 90%. To quote from their 2010 paper: "Why are there thresholds in debt, and why 90 per cent? This is an important question that merits further research, but we would speculate that the phenomenon is closely linked to [the] logic ... of 'debt intolerance'... as debt levels rise towards historical limits, risk premia begin to rise sharply, facing highly indebted governments with difficult tradeoffs. Even countries that are committed to fully repaying their debts are forced to dramatically

tighten fiscal policy in order to appear credible to investors and thereby reduce risk premia"(Reinhart and Rogoff, 2010, p23.).

In the opening sentence of these paragraph two questions are posed but only the first is answered through an appeal to economic theory while the second question is left open and only to be subsequently answered through an appeal to the lessons of two hundred years of history. While Reinhart and Rogoff's extraction of a 90% tipping point ratio from historical experience was subsequently shown to have rested on highly questionable research methods (see Herndon et al (2014)) of more concern in the present context was their premise that this ratio applied equally to all governments that issued debt in their own currencies (the 90% ratio is for governments that borrow in their own currency; for emerging economy governments that borrow in foreign currencies the ratio is lower at 60%). This premise implies that investors are always free to redirect all of their portfolio funds away from government bonds and towards alternative assets, which is to say that all governments are equally vulnerable to investor debt intolerance. If all of this was correct, we should then have seen the yields on all government bonds rise in tandem with the common rise in the government debt to GDP ratios in the years following the financial crisis of 2007-8. This did not happen. The yields on US treasuries continued to fall even while the US government debt to GDP ratio broke through the 90% threshold figure (Lysandrou, 2013). As concerns the eurozone, the yields on the bonds of certain weaker eurozone governments rose substantially in this period (the case of Greece and Spain being notable examples) while the yields on the bonds of the stronger eurozone governments continued to fall despite the fact that the 90% threshold figure had been broken through in all cases (Lysandrou, 2013). The explanation for this latter development was that while some of the portfolio funds withdrawn from the bonds of the weaker eurozone governments were redirected towards alternative asset classes, the bulk was instead redirected towards the bonds of the stronger eurozone governments thus enabling the latter to substantively raise their debt to GDP ratios without incurring negative repercussions. The lesson here that was reinforced by the different post-crisis experiences of the eurozone governments is that there cannot be a uniform tipping point government debt to GDP ratio, whether this be 90% or any other single figure, when the main body of investors are institutional investors. For the idea of a uniform ratio to hold, the underlying assumption must be that it is household investors that are predominant because, not compelled to invest in government securities, they can hold up the threat of exit to all governments simultaneously. On the contrary, when this assumption is dropped on recognition that institutional investors are predominant it then becomes clear that government debt to GDP

ratios have to differ across countries because, if institutionally held portfolios must always contain substantial amounts of government bonds for safety, liquidity or regulatory reasons, these ratios cannot remain independent of each other but must instead be interdependent inasmuch as one government's low debt to GDP ratio helps to sustain another government's high debt to GDP ratio.

As in the case of bonds, so also in that of equities the lack of alternative supplies of non-dollar equities poses a problem for the world's institutional investors. This said, when equities are brought into the picture it then becomes possible to see that a further major reason why foreign investors remain strongly attracted to the US' securities markets and hence to its currency is the pull of these markets' gravitational force. To understand this force, one has to understand the distinction between the size of the US' securities markets and their mass, and to understand mass one has to understand the rationale behind the new corporate governance norm of shareholder primacy.

3.

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 degree of regularity. The price solidity of bonds is given a certain guarantee by the fact that these pay interest by law but 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 US asset management industry over the 1980s and 1990s lobbied for the introduction of new corporate governance rules and codes of conduct whose combined effect was to compel corporate managers to prioritise regular cash returns to shareholders. This new corporate governance principle of shareholder primacy, which was to gradually spread to Europe and other regions, has been the subject of intense critical debate in the financial literature because this has been conducted on the premise that the central aim of the principle is to maximise corporations' production efficiency: thus, where on the one side proponents of agency theory argue that this efficiency is maximised because only then are corporate

managers 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 the shareholder primacy principle argue that it on the contrary 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 to the above 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 corporate managers are now constrained by the shareholder primacy principle.

While institutional asset managers were pushing forward their shareholder primacy-centred governance agenda from the 1980s onwards, most macroeconomic theories, as we say, continued to take the household saver to be the representative investor, a fact that then helps to explain the prevailing view that the rationale behind shareholder primacy is only about production efficiency rather than also about making equity prices more tangible: as households are always free to switch their savings away from equities and towards other asset classes they can hardly have the motivation, even if they have the lobbying power, to push for shareholder primacy as a means of solidifying the value storage capacities of equities. When this observation is expanded to encompass the question of the dollar's continuing dominance, one can further understand the scepticism 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 outsiders in the double sense 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 not seen as having any special connection to the solidification of the prices and hence value storage capacities of US securities, it is then easy to conclude that the US capital market, large, deep and open as it is, has no intrinsic content. To illustrate the point, let us 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, consider 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, in an opinion article published in the Financial Times in 2018 in the midst of Donald 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). The idea that is implicit in these arguments, that to protect the dollar the United States 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 United States has really nothing of value to offer these investors in return for their trust and goodwill, that, to put it another way, there is nothing of substance underpinning the US dollar's dominance. 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 simply as follows:

Capital Market Size= $N_bP_b+N_eP_e$

Capital Market Mass= $\lambda_b(N_bP_b)+\lambda_e(N_eP_e)$

where N_bP_b and N_eP_e are the nominal market values of bonds and equities and λ_b and λ_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, $\lambda \in [0,1]$ then it can be said that the difference between the size and mass of a capital market softens to the point of becoming irrelevant as the institutional weights approach 0 and become completely immobilised/irrelevant, and the difference hardens as the institutional weights approach 1 and become fully effective and ensure that nominal value is fully mobilised. Strong evidence that the institutional weights capturing investor protection are close to 1 in the case of the US is provided in the annual global competitiveness reports published by the World Economic Forum (see e.g WEF (2025))

In the final analysis, the aspect of the US capital market that is of overriding concern to foreign investors, and which then gives context and meaning to this market's other aspects of size, depth, openness and investor protection, is its *quantum aspect of mass*: its ability to hold vast amounts of funds in a secure and portable form. When foreign investors from different parts of the world buy US securities, they are effectively transferring pools of funds from their different localities into US value containers, and when they then sell one set of US securities in order to buy another set of US securities, they are effectively transferring pools of funds across different types of US value containers. This latter observation links in with a further reason why the huge mass of US securities exerts a powerful gravitational pull on foreign investors, which is that its homogeneity (courtesy of the fact that all US securities have the same currency denomination and are uniformly covered by the same legal and governance infrastructure) and its structured risk composition (courtesy of the pivotal role of US treasuries as the risk-free benchmarks against which the risks on all other US securities are calculated) give ample scope for diversifying portfolio funds along an extensive risk-return spectrum. Nothing better illustrates this point than 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 markets. 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 were the risk-free \$30 trillion worth of US treasuries and the low risk \$2.8 trillion worth of agency bonds, with its outer layers comprising, firstly, of \$18 trillion worth of corporate bonds and \$11 trillion worth of securitised bonds that carried varying credit risk premiums over the risk free rate and, secondly, of \$67 trillion worth of equities that carried varying equity risk premiums (SIFMA, 2025). If we 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 latter 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 their quantum aspect, their ability to contain large amounts of value in a risk free and liquid form, is doubly important in underpinning the dollar's international dominance in that it both enables their private use as the safe haven core of foreign owned dollar portfolios and their official use as the premier reserve asset in foreign central bank's currency reserves. US treasuries currently comprise about 58% of the \$12.6 trillion world total amount of foreign exchange reserves, with eurozone government securities comprising a further 19% and an assortment of other government securities comprising the remaining 23% (IMF, 2025). Proceeding from the observation that the share of dollar assets in foreign exchange 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. In the first place, 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 by the IMF, but we are not likely to see any further decline, and certainly not to levels below 50%, because of 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. The situation today is very different when the world's financial securities stocks are nearly three times the size of annual world GDP and when 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, 2025). This is precisely 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 \$0.4 trillion figure for 1995, and this is precisely the reason why US treasuries have accounted for the majority share of these reserves over this period. 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 summarise, the quantum aspect of the US capital markets as defined above is the ultimate source of a gravitational force that pulls foreign institutional investors to these markets in sufficiently large numbers as to maintain the dollar's dominance in the international currency system. Omit this quantum aspect from view and, whatever other distinguishing aspects of the US' capital market are highlighted, the door is left open to the idea that the dollar is vulnerable to challenges from rival currencies. On the contrary, this door is closed once the US capital market's quantum aspect of mass is brought into clear view because what then becomes clear is that the gravitational force exerted by this mass and that keeps the dollar firmly locked in its top position in the international currency rankings is also the same force

that keeps other currencies firmly locked in their subordinate positions lower down those rankings. This conclusion holds true as much for the euro as for other currencies.

4.

Ever since its creation, 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. What helps to sustain this opinion is the experience of the inter-war period as recounted by Charles Kindleberger (1973), which is that while the British pound's international dominance had long been open to challenge from the dollar, the challenge only became effective when the US government decided to take the steps necessary to bringing it about. The lesson apparently taught by this historical episode is that there is always scope for government policy initiatives to directly affect national currencies' rankings in the international currency hierarchy. Thus, building on this lesson, it would appear that the euro might at last begin to seriously challenge the dollar's dominance because it would appear that the highly disruptive policies pursued under Donald Trump's second presidency are giving the eurozone's governments enough cause to boost the euro's chances of succeeding in that challenge. A good example of this line of thinking is that given by Helene Rey who stated in a recent article: "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" .. a development that in turn.. "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" (Rey, 2025).

The cardinal question here is whether there is today as much scope for government policies to influence national currencies' positioning in the international currency hierarchy as there was in the past. When the US government finally decided that the time was right for the dollar to assume international currency leadership, it organised a conference in 1944 that duly implemented this decision. But can we really draw parallels between what happened then and what is happening today? The eurozone's leading governments, angered and frustrated by the Trump administration's hostile policies, are making very clear their intent to promote the euro as a rival international currency to the dollar, but are these declarations of intent going to

have any rapid impact? The answer is no because any scope for government policy intervention in the international currency system has been drastically narrowed down as a consequence of the fact that national currencies' rankings in this system are now determined by the issuing countries' positions in the global financial space of securities stocks and portfolio flows rather than by their positions in the global physical space of production and trade. The euro illustrates the point, because since its creation the size gap separating its secondary position in the foreign exchange market from the dollar's primary position has been more or less proportional to the size gap separating the eurozone's capital market from that of the US. As previously observed, this latter gap has widened over the past decade and half and, as it has done so, the gap separating the euro's secondary position in the foreign exchange market from the dollar's primary position has widened accordingly. Thus, where in 2010 the euro's share of daily foreign exchange turnover was 18% (39% out of 200%), by 2022 it had dropped to 15% (31%) and by 2025 it had dropped again to 14% (28.6%), while the dollar continued to maintain its 44% (88%) share through all this time (BIS, 2022; 2025). Europe's governing elites may decide to raise the euro's international currency ranking by encouraging Europe's trading partners in Asia and other parts of the world to make greater use of the euro in place of the dollar in their trading relations with Europe. The problem is that while such decisions can be taken fairly quickly, they will have no discernible impact on the euro's currency ranking because trade related transactions together with all other real economy related transactions account for a tiny fraction (on current estimates, about 6%) of the daily foreign exchange turnover volume now estimated at \$9.5 trillion. The only possible way that the euro's current 14% share of this turnover volume can be lifted close to the dollar's 44% share is if the eurozone's capital market offer the world's large portfolio investors the same array of benefits as does the US capital market. This principally means: (i) that the eurozone capital market has the same mass as the US market in order to be able to house pools of portfolio funds on the same scale; (ii) that this mass is as homogenous along the legal, governance and financial regulatory dimensions as along the currency dimension to enable pools of portfolio funds to be moved across different euro securities without friction; and (iii) that this mass has at its core a European safe asset that, by serving as the common risk free benchmark across the entire eurozone, can allow for the pricing of the risks on all other securities to be decoupled from national government bond rates. All of this amounts to a tall order that is not going to be met anytime soon given the formidable constraints that stand in the way.

Foremost amongst these constraints is the European corporations' heavy reliance on banks for their external funding needs in contrast to the US corporations that rely more heavily on the capital markets. The contrast is particularly pronounced in the case of debt funding needs, for where about 85% of US corporate debt consists of bonds and only 15% of bank loans the exact reverse is true of the European corporate debt structure (SIFMA, 2024). As the close European bank-corporate relationship has a long-established tradition, it is never going to be easy to induce European corporations to shift towards capital market-based forms of funding but if this is to happen, there must exist in Europe a substantial body of investors that can act as a large and permanent source of demand for corporate securities. Institutional investors such as pension funds and other asset managers best meet this condition, but the problem here is that these investors are deterred from any heavy involvement in the European capital markets because these continue to operate separately with their own insolvency and contract laws, their own tax regimes and their own financial supervisory rules and standards, with the result that the fragmentation of these markets and their consequent lack of depth provide little scope for European-wide portfolio diversification. Indeed, rather than foreign institutional investors being attracted to Europe's capital markets, what is currently happening is that many European institutional investors are pulling some of their investments out of these markets and redirecting them to the dollar markets that provide far superior portfolio diversification facilities. In 2015 the European Commission launched its capital market union (CMU) project with the aim of integrating the EU's national capital markets into a single, deep and well-diversified capital market (European Commission, 2015). 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 but, this said, genuine European capital market union is far from being achieved not least because of continued opposition to the harmonisation of national insolvency and contract laws and because of continued resistance to the creation of a single European financial supervisory body.

A further formidable constraint holding back the development of the European capital market is the absence of a financial security that can perform the same two major functions in the eurozone as do US treasuries in the US, which are to provide investors with a common standard for pricing the risks on all other financial securities while also offering investors a risk-free reserve asset. A possible solution to this problem is through the creation of a common eurozone sovereign bond, that is, a bond jointly guaranteed by all the eurozone

member governments. While the idea of such a bond had been floated before the financial crisis of 2007–8, it was only when the effects of the crisis began to take their toll on the eurozone economies and on the finances of their governments that it received serious attention. In November 2011, the European Commission presented a Green Paper in which it argued the case for the introduction of joint government guaranteed eurobonds, or ‘stability bonds’ as these were labelled, on the grounds that this initiative "could potentially quickly alleviate the current sovereign debt crisis, as the high-yield Member States could benefit from the stronger creditworthiness of the low-yield Member States’ (European Commission, 2011, p.2). Interestingly, when broadening out the case for stability bonds, the European Commission argued that, while on the internal European front "institutional investors (for example, life insurance companies and pension funds), which tend to hold a relatively high share of domestic sovereign bonds, would benefit from a more homogenous and robust asset in the form of a Stability Bond", on the international front "Stability Bonds would facilitate portfolio investment in the euro and foster a more balanced global financial system. The larger issuance volumes and more liquid secondary markets implied by Stability Bond issuance would strengthen the position of the euro as an international reserve currency" (European Commission, 2011, p.3). None of this had cut any ice with the German government. On the contrary, a number of the ‘low yield Member States’ led by Germany strongly objected to the ‘stability bond’ proposal 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). When nearly a decade later, following the global outbreak of the COVID-19 pandemic in early 2020, a number of eurozone governments led by France argued for the issuance of joint government backed eurobonds, this time labelled ‘corona’ bonds, to help finance the costs of dealing with the economic and social consequences of the COVID-19 pandemic, the German government, backed by several other northern eurozone governments, again resisted this proposal for the same reasons that they had resisted the earlier ‘stability’ bond proposal. The one difference was that, on this occasion, a compromise solution was reached whereby joint eurozone government backed bonds could be issued (the Next Generation EU (NGEU) bonds) but only as a temporary measure (they are to be repaid gradually from 2028) because the funds raised are meant to be used solely to finance COVID-19 pandemic recovery programmes.

Even if the eurozone's member countries can quickly agree to the raft of measures needed to expand and integrate the eurozone's capital market along the lines outlined above, it will still take considerable time for these measures to take effect. During this time, the size gap separating the US and eurozone capital markets will not remain constant but will likely widen further for two major reasons. The first is that global institutional investor demand for investable securities will continue to grow in line with ongoing changes in the global economic landscape and it will inevitably be the US' capital market that will have to accommodate the bulk of this demand growth. The second reason is that the continued influx of portfolio funds into the US will enable its government and its corporations to issue increasing amounts of securities while, by contrast, the deterrence effect of the eurozone's fragmentation on institutional investors means that its governments and corporations will remain constrained from issuing securities at anything like the same rate. Given today's close correlation between national or regional capital market size and international currency ranking, the upshot is that the euro looks set to lose even more ground against the dollar for the foreseeable future before there is any reversal. This is a pessimistic prediction but to make it is by no means to deny or downplay the crucial importance of the need for the euro to achieve international parity with the dollar. Rather, it is to reject the impression currently being spread in academic circles as much as in the popular press that the process of achieving this parity has already been set in train by the catalytic effect of Donald Trump's policies and will soon see its completion. The harsh reality that bears repeating is that no matter how objectionable Trump's policies may be, portfolio investors will not abandon the dollar in favour of the euro unless and until the eurozone's capital market offers them the same array of benefits as does the US capital market. There will come a point when this condition will be met, but in the interim the idea that ours is an era marked by a new Kindleberger gap should be summarily dismissed because in raising expectations of an imminent euro challenge to dollar dominance that are wholly unrealistic, the idea only serves to do more harm than good.

5.

There has long been a steady stream of predictions that the dollar's days of international dominance will soon come to an end. Although these predictions have always been met with scepticism, the counterarguments that dollar dominance will persist for the foreseeable future have never managed to cut off the oxygen supply keeping alive illusions to the contrary. The chief purpose of this paper has been to cut off this oxygen supply.

References

- Aglietta, M and Reberioux, A (2005), *Corporate Governance Adrift*, Edward Elgar
- Arslanalp, S; Eichengreen, B, and Simpson-Bell, C (2022), The Stealth Erosion of Dollar Dominance: Active Diversifiers and the Rise of Nontraditional Reserve Currencies, *IMF Working Paper*
- Baker, G; Jensen, M and Murphy, K (1988), Compensation and Incentives: practice vs. theory, *Journal of Finance*, Vol.43, 593-616
- Ball, L. & Mankiw, N. G. (1995). What do budget deficits do? *Harvard Institute of Economic Research Working Papers 1740*.
- Bank for International Settlements (2022). *Triennial Survey of the Foreign Exchange and OTC Derivatives Markets in 2022*, November.
- Bank for International Settlements (2025). *Triennial Survey of the Foreign Exchange and OTC Derivatives Markets in 2022*, Preliminary Results, September.
- Bertaut, C, Beschwitz, B and Curcuru, S, (2025), *The International Role of the Dollar*, Board of Governors of the Federal Reserve System
- Brunnermeier, M.K, Eisenbach, T.M and Sanniko, Y, (2012), *Macroeconomics with Financial Frictions: A Survey*, National Bureau of Economic Research, Working Paper 18102,
- Brunnermeier, M.K and Sanniko, Y (2014), A Macroeconomic Model with a Financial Sector, *American Economic Review*, 104(2), 379-421.
- Chinn, Menzie, and Jeffrey Frankel. 2008. "Why the Euro Will Rival the Dollar." *International Finance* no. 11 (1):49-73.
- Cohen, B.J. 2009. "Towards a Leaderless Currency System." In *The Future of the Dollar*, edited by Eric Helleiner and Jonathan Kirshner. London Cornell University Press
- Deakin, S (2017), Reversing Financialisation: Shareholder Value and the Legal Reform of Corporate Governance in *Corporate Governance in Contention* (Driver, C and Thompson, G (eds.)), Oxford University Press
- Driver, C and Thompson, G (2017), Corporate Governance and Why It Matters, in *Corporate Governance in Contention* (Driver, C and Thompson, G (eds.)), Oxford University Press
- Eichengreen, B (2022), "Ukraine war accelerates the stealth erosion of dollar dominance", *Financial Times*, 28 March.
- European Commission (2011) GREEN PAPER on the feasibility of introducing stability bonds, COM (2011) 818 final, Brussels, 23rd November

European Commission (2015) GREEN PAPER: Building a Capital Markets Union, COM (2015) 63 final, Brussels, 18th February

Fishman, E, Jain, G and Nephew, R (2025), How Trump Could Dethrone the Dollar, *Foreign Affairs*, April

Galbraith, J, (2022), “A multipolar financial world is here”, *Institute for New Economic Thinking (INET)*, May 5th

Godley, W and Lavoie, M (2007), *Monetary Economics*,

Gopinath, G; Boz, E; Casas, C; Diez, F.J; Gourinchas, P-O and Plagborg-Moller, M (2020), Dominant Currency Paradigm, *American Economic Review*, Vol.110, no.3

Gopinath, G (2025), *Dollar Dominance Unlikely to Change in the Near Future*, The Economic Times, September 13th

Herndon, T, Ash, M, and Pollin, R, (2014), Does High Public Debt Consistently Stifle Economic growth? A critique of Reinhart and Rogoff, *Cambridge Journal of Economics*, Vol.38, No.2

IMF (2025), Currency Composition of Foreign Exchange Reserves, July

Jensen, M (1986), Agency cost of free cash flow, corporate finance, and takeovers, *American Economic Review*, Vol.76, 323-9

Jensen, M and Meckling, W (1976), Theory of the firm: managerial behavior, agency costs, and ownership structure, *Journal of Financial Economics*, Vol.3, 305-60

Kindleberger, C.P (2013), *The World in Depression, 1929-1939*, University of California Press

Lazonick, W and O'Sullivan, M (2000), Maximising shareholder value: a new ideology for corporate governance, *Economy and Society*, Vol.29, no1

Lysandrou, P and Stoyanova, D (2007) The Anachronism of the Voice-Exit paradigm: institutional investors and corporate governance in the UK. *Corporate Governance: International Review*, Vol. 15(6),1070-1078.

Lysandrou, P (2008), The transformation of corporate Europe, in *Global Finance and Social Europe* (Grahl, J (ed)), Edward Elgar

Lysandrou, P (2013), Debt Intolerance and the 90% Debt Threshold: Two Impossibility Theorems, *Economy and Society*, Vol.42, No 4

Lysandrou, P (2025), *Dollar Dominance: Why it Rules the Global Economy and How to Challenge It*, Bristol University Press

OECD (2024), *Pension Markets in Focus*

- Papa, M and Liu, ZZ (2022), *Can BRICS De-dollarize the Global Financial System?*, Cambridge University Press
- Phillip Davis, E and Steil, B (2000), *Institutional Investors*, MIT Press
- Pozsar, Z (2023), Great power conflict puts the dollar's exorbitant privilege under threat, *Financial Times*, January 20th
- Prasad, E (2014), *The Dollar Trap*, Princeton University Press
- Prasad, E (2018), America beware: dollar supremacy is not forever, *Financial Times*, May, 20th
- Reinhart, C. & Rogoff, K. (2010). Growth in a time of debt. *NBER Working Paper* 15639.
- Rey, H (2025), Prepare for the Global Euro, *Project Syndicate*, May 5th
- Rogoff, K (2025), *Our Dollar, Your Problem*, Yale University Press
- Ross, S (1973), The economic problem of agency: the principal problem. *American Economic Review*, Vol.63, 134-9
- Roubini, N, (2023), A bipolar currency regime will replace the dollar's exorbitant privilege, *Financial Times*, February 5th
- Securities Industry and Financial Markets Association, SIFMA, (2018), *Capital Markets Fact Book*
- Securities Industry and Financial Markets Association, SIFMA, (2022), *Capital Markets Fact Book*
- Securities Industry and Financial Markets Association, SIFMA, (2025), *Capital Markets Fact Book*
- Wolf, M (2004), America on the Comfortable Path to Ruin, *Financial Times*, 17th August
- World Economic Forum (2025), *The Global Competitiveness Report, 2025*