

COMMENTARY

Why the Euro will Not Rival the Dollar*

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I. Introduction

Financial panics are indeed dramatic and, for many private individuals and economic policymakers, traumatic. They are rarely of lasting significance to the fate of nations or their currencies, however, as the prompt recovery of Brazil, Korea, Mexico and Russia from their travails a decade ago demonstrates – unless some fundamental political upheaval takes place as well (as happened in the case of Indonesia).¹ Even the United States unilaterally

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¹In fact, the most recent empirical literature suggests that the fastest growing countries are not just those most subject to financial crises, but that those economies still come out ahead of their more stable counterparts, net of the cost of crises. See Tornell and Westermann (2005).

shutting the gold window in 1971 did not lead to a sustained shift out of dollars or free fall in the currency. Though difficult to maintain, this long-term perspective is useful while the United States at present experiences a panic in its many interlocking asset-backed securities markets, following years of large current account deficits and a concurrent sell-off of the dollar against the euro. But it would be a mistake to read too much into recent developments. In fact, they obscure the reality that the euro is at a temporary peak of influence, and the dollar will continue to benefit from the geopolitical sources of its global role which the euro cannot yet or soon, if ever, match.

If the dollar is displaced from its global role either now or in the coming couple of decades, it will likely and unfortunately be in favour of global monetary fragmentation induced by failures of US political leadership, rather than by ascension of the euro to a leading role based on purely economic developments. This significant dependence of the dollar's future role on political as well as economic factors, however, suggests that the dollar's global role is vulnerable to foreign policy failures – that in fact some of the decline in the dollar's global role of late is already due to the foreign policy failures of the Bush administration, not just to current account imbalances and financial turmoil. Therefore, were the dollar to be displaced from a dominant role there is a real risk of fragmentation of the global monetary system reinforcing political fragmentation. Were there just to be bipolarity with the euro, that would be a much happier prospect and at least a smoother transition with fewer implications. Alas, that is not to be.

II. The Dollar's Status is Not Just About the Money

With news reports at the moment that everyone from fashion models and rap stars to New York City souvenir store owners are seeking payment in euros instead of dollars, and with McDonald's running a television advertisement for its Dollar Menu on US broadcasters beginning with a bunch of typical American office workers muttering 'Dollar's looking weak ...', it seems only logical to think recent turmoil may be the big event that pushes the dollar off its pedestal as the dominant international currency. Given the apparent readiness of the euro to provide an alternative for all these concerned individuals to accept in lieu of dollars, or even into which to switch their investments, the euro's ascent to at least comparable status with the dollar has a surface and popular plausibility.

Indeed, some observers predicted before the euro's launch that the euro would some day rival the dollar as a reserve currency, if not also as a private store of value and means of account, producing a bipolar monetary

system.² In this view, the fundamental drivers of reserve currency shares were the relative economic size, financial depth and commitment to low inflation of the dollar and euro economic blocs, all of which could be expected to converge over time, if not favour the euro.³ Later, Chinn and Frankel (2007) offered a since widely cited econometric projection of the shift in relative shares of the dollar and euro in central bank holdings, which bravely forecast dates for the crossing point (initially 2022, now updated to 2015), plus-or-minus depending upon the expansion of the eurozone's membership.⁴ The entry or not of the United Kingdom into the eurozone, with its accompanying financial depth and liquidity via London's capabilities as well as its GDP size, would either accelerate or postpone the point of equalization – but it would be only a matter of time either way on this view.

Offsetting this projected trend of increasing euro usage is the obvious inertia in dollar usage shown in the data, which is usually ascribed to incumbency advantages due to the network benefits from the already wide use of the dollar. Thus, these network effects could be expected to persist without being fully offsetting, barring incident, and in fact to diminish over time as the relative sizes of the dollar and euro currency networks converged. As Truman (2007) points out, however, these lagged effects explain 80–90% of the variation in reserve shares in the Chinn and Frankel (2007) estimations, and are thus what we really want to explain. It is also noteworthy that network effects have not as yet been measured directly since, at an aggregate level, they are an increasing function of the extent of euro or dollar usage which such studies attempt to explain, and thus can only show up as lagged values of the extent of that usage. Dooley et al. (1989) and Eichengreen and Mathieson (2000), with access to confidential IMF data on specific country reserve portfolios, found that the geographic composition of trade, the denomination of foreign debt and most importantly the choice of currency peg (if any) could explain the persistence of reserve

²See Alogoskoufis and Portes (1992), Bergsten (1997a, b) and Portes and Rey (1998). Note that most of these economic analyses focus specifically on the reserve currency role, given availability (for the most part) of data on official currency holdings and the assumption that many other aspects of the dollar or euro's usage would follow shifts in this usage. That is not to say that they dismiss other aspects such as pegging by third countries or private-sector invoicing, but do not focus on them.

³Given the extraordinary historic convergence of monetary policies and resulting inflation rates globally, not just between the United States and the eurozone, I will largely set aside this as a potential source of shift between euro and dollar.

⁴Frankel has demonstrated consistent regard for the importance of the economic size and financial depth criteria as determinative, having previously argued against risks to the dollar's relative standing prior to the existence of a truly sizeable and liquid currency zone to compete. See Frankel (1995).

shares – perhaps unsurprisingly, all being persistent variables themselves. The revealed importance of the lags could also reflect either other sources of inertia or omitted variables which play as large or a larger role in the choice of pegs and the other liquidity variables emphasized to date, as I will argue below.

Some analysts have argued that the euro's attaining co-dominance simply awaited a significant series of policy mistakes or balance of payments crises on the part of the United States for the regime switch to occur, by overcoming this inertia (notably Bergsten 2005). Such a process is assumed, in those analysts' interpretation, to have been operative when sterling lost its role to the dollar in the 1930s, once the United Kingdom's balance of payments and monetary discipline flagged, and the dollar being spared such a fate in turn during the 1970s, only because neither the Deutschmark nor the yen was a viable alternative at the time. The existence of the alternative reserve currency was supposedly the key factor, conditional on the basic economic size and financial liquidity factors being in place, and thus recent events are ripe for an accelerated switch to the euro, if not a formal regime change.

It is overdue and correct for American and other observers to shed any remnants of the excessive doubts about the euro's viability that prevailed in too many quarters from the mid-1990s onward, and to recognize that the euro has been an ample success within the limits of the monetary realm (Posen 2005). Recent developments in foreign exchange markets, with the euro reaching new historical highs against the dollar, may finally make that recognition near-universal. Yet, to go further and to argue that this is the turning point for the euro to equal the dollar in, or to displace the dollar from, its global role, however, would be misguided.

There will be no abrupt displacement of the dollar from a dominant role in official reserve portfolios because official reserves are accumulated either to insure against speculative attacks or to pursue mercantilist goals. Both of those motivations result in portfolio rebalancing, meaning a tendency to increase official dollar holdings when the exchange rate declines. Longer-term choices of international currency commitments – such as which currency to peg to or to manage one's currency against – are not solely driven by financial factors either, but also by foreign policy motivations and security ties. It is not an accident, for example, that the CFA franc zone, where France still intervenes militarily, is the only group of countries outside of eurozone membership candidacy to peg to the euro, while those EU members with the strongest desire for independent security policies (Poland, Sweden and the United Kingdom) are the ones which have refused to enter the ERM II in preparation for eurozone membership. The source of all of these mistakes is too narrow and deterministic a focus on simple observable

economic determinants of reserve currency holdings, and of global currency usage more broadly.⁵

The mainstream economics literature on currency status admits as much by its repeated frustration in accounting for the empirical behaviour of dollar holders either in the public sector, which is seen in the persistence of dollars in international reserves even though they do not hold value over the long term, as well as the persistence of dollar pegs seemingly at odds with optimal currency criteria. It is just as troubling regarding the private sector, given the apparent willingness of foreign investors to give the United States an 'exorbitant privilege' via accepting low-yielding US Treasuries and other dollar-denominated investments. This is why Hausmann and Sturzenegger (2006) were fully justified in resorting to the physics analogy of unobservable 'dark matter' to explain the gap in relative returns for dollar holders, which ultimately is the source of the United States' ability to run large current account deficits and (by identity) of foreigners' accumulation of dollar assets – although closer examination indicated that their specific contention about intangibles leading to high profits from US FDI abroad argument did not hold up.⁶

The missing mass problem for pure economic explanations of currency behaviour is why Chinn and Frankel (2007) have to include such a large role for imputed 'network' effects via lags, even though there is little work done by that labelling. The missing mass in economic explanations is also why the latest research by Andrew Rose (2007) on exits from currency unions reveals that 'what shapes currency unions around the world is not what the received theory predicts . . . the most striking facts are that aggregate macroeconomic features of the economy do a poor job in predicting current union exits . . .'.⁷ And this gap is why while Gourinchas and Rey (2007) and Curcuru et al. (2008) debate the numbers on whether a differential financial return actually exists for US holders of foreign assets versus foreign holders of US assets, which could rationalize the capital flows temporarily, but cannot explain

⁵While a large literature in political science has emerged in the last 20 years on the political economy of monetary policy, the focus has tended to be on either monetary statecraft, the tactical use of exchange rate policy in specific instances (e.g. Henning 1994; Kirshner 1993). Those few that deal with currency choice (e.g. Cohen 1998) end up emphasizing the same trio of economic determinants of reserve status as typical in economics. A partial exception are the essays collected in Andrews (2006) and Kirshner (2003) and the contributions therein. More provocative are the broader historical syntheses of Maier (2006) and Strange (1996) on sources of American power which take currency usage as part of the package.

⁶See Gros (2006), Higgins et al. (2005) and Setser (2005) for extensive critiques of their view.

⁷Quoted from Rose's own summary in 'Why Have Currency Unions Dissolved? A Test of Optimum Currency Area Theory', VOX, 6 February 2008, <http://www.voxeu.org/index.php?q=node/902>, accessed 15 March 2008.

them. At some point, the very fact that long-term holdings of US dollar assets by foreigners have been a losing proposition in relative as well as absolute terms, has to be taken at face value: these assets were and are held for non-financial reasons, at least in part.

The United States' political leadership in security, commercial and even cultural affairs globally has a critical impact on the usage of the dollar in the monetary realm.⁸ Other governments' reserve currency holdings and exchange rate management are importantly influenced by security ties, and thus decisions to link to the dollar (and to accumulate dollar reserves for intervention) from Taiwan to Saudi Arabia to Panama depend as much on foreign policy as economics. Private decisions to invest in the United States, both at the corporate level and by individuals, are supported by the desire to gain insider access to key decision-making processes and to membership in transnational elites; in fact, it is this desire for membership and access that is a major source of the financially unrewarding investments made by foreigners in the United States – and thus of the United States' exorbitant privilege to pay for its current account deficits in its own currency. The European Union, let alone the eurozone itself, is unable or unwilling to offer these systemic or security benefits beyond a very limited area, and thus is fundamentally limited in its ability to attract currency adherents, despite the success of the euro on its own terms as a currency and store of value.

III. The Inertia behind Public Sector Decisions in Reserves

The most attention-getting aspect of the supposed displacement of the dollar by the euro is the rising share of euros in official reserves held by governments and central banks. It is the most easily quantifiable and trackable aspect of the shift, as analysed by Chinn and Frankel (2007). Often, a statement by a sovereign wealth fund or central bank, particularly if from East Asia, that it is thinking of buying fewer dollar-denominated assets gets wide reportage and some market attention. In broad terms the widely held assumption is that euros and dollars play a zero-sum game in official portfolio holdings – when dollar holdings decline, euro holdings rise, and yen, sterling and other currencies are largely irrelevant.⁹ Yet, the broad data

⁸In an important recent book, Findlay and O'Rourke (2007) make a parallel case (in much greater depth) that war and security relations played a bigger role than technology (i.e. pure economic incentives) in determining the expansion and pattern of global trade over the last several centuries.

⁹In contrast to Portes et al. (2006), Truman and Dowson (2008) find that the euro has not 'benefited' from reserve diversification; the pound sterling and other currencies have gained disproportionately relative to the low level of their initial shares as developing countries have built up their reserve totals (see Figures 1 and 2).

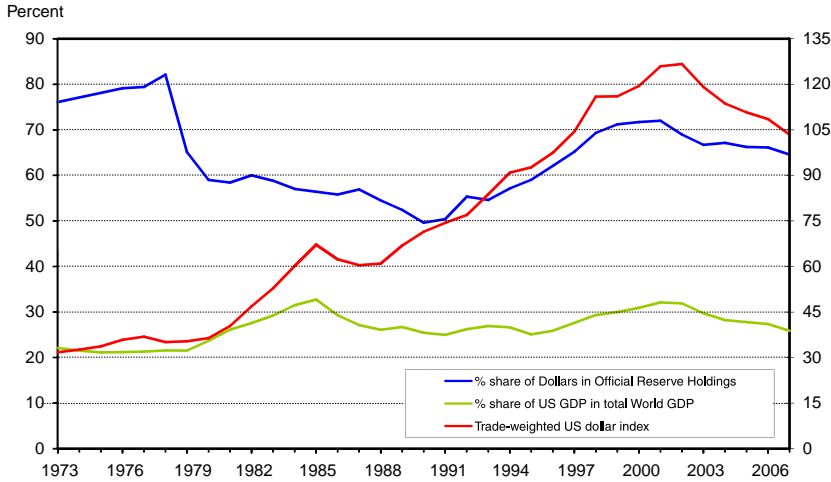


Figure 1: The long view on dollar decline

Sources: Data from 1973 to 1994 are taken from Table I.2 in the respective year's IMF Annual Report. Data since 1995 are taken from the IMF COFER database. Trade-weighted USD index are from Federal Reserve Statistical Release. GDP data from 1970–79 are taken from Angus Maddison's World Population, GDP and Per Capita GDP, 1-2003 AD (<http://www.ggd.net/maddison/>). Data since 1980 are taken from IMF WEO, October 2007.

pattern remains that currency shares in central bank portfolios are very persistent over time.¹⁰ See Figure 1 for a long-term view on the exchange rate of the dollar, its reserve share and the US share in global GDP, the latter two of which vary little over the entire post-Bretton Woods period. There is a literature that tries to model the portfolio behaviour of central banks and other official reserve holders, which should clarify how these decisions are made and the reasons for such stability. In fact, it only contributes to the glaring need for non-financial variables to explain official reserve behaviour, because the financial models demonstrate how far the current holdings are from optimal allocations from a risk management perspective.

In a sophisticated recent example, Portes et al. (2006), 'develop a dynamic mean-variance optimization framework with portfolio rebalancing costs to estimate optimal portfolio weights among the main international currencies . . . adding in constraints that reflect a central bank's desire to hold a sizable portion of its portfolio in the currencies of its peg, its foreign debt, and its

¹⁰As Eichengreen (2005) points out, the network externality argument in favour of a single currency does not really make sense for official reserve holders (and some private agents) for whom the whole point of reserves is to diversify. This provides additional reason for concern about how to interpret the observed importance of lagged reserve shares in forecasting future reserve shares.

international trade'. Absent a strong assumption that the dollar is the 'reference (risk-free) currency', which already assumes the persistence result, they cannot generate in their 'optimizer' holdings of the dollar anywhere close to those levels observed¹¹ – and in so doing illustrate the 'huge foregone diversification losses' from a solely financial perspective that the dollar's dominance embodies. Similarly, the euro would have an optimum weight (share) lower than that already observed in reserve holdings according to their optimizer.

Even with the inclusion of trade/debt/peg additional variables beyond those in Chinn and Frankel (2007), following Eichengreen and Mathieson (2000), Portes et al. (2006) generate predictions that India and China should be increasing their shares of yen reserves (not happening and not going to), and that Brazil and Russia should be significantly increasing their shares of euro reserves (yes to the latter, no to the former) – all of which results seem to emphasize that the choices about pegs, if not economic patterns more broadly, in practice are dominated by security concerns and diplomatic relationships. It is no coincidence that Russia is the only one of these four major emerging markets to actively move into the euro, even when all four face substantial financial expense and risk from not reallocating their portfolios, given their dollar exposure on accumulated reserves.

Given this gap between what a financially optimizing portfolio allocation strategy would encourage for reserve allocation and what is observed in reality, it should be no surprise that there is no simple relationship between even sustained movements in exchange rates and reserve shares. As well-explained by Lim (2006), most central banks appear to have fixed target allocations for their portfolios, and pursue a rebalancing strategy to maintain those allocations, buying more of the lesser-valued assets as their exchange rate value declines, and vice versa (see also Truman and Wong 2006). Lim (2006) points out that this rebalancing behaviour can be distinguished from the behaviour of central banks that are seeking to maximize the short-run financial value of their portfolios in terms of how much and in which direction reserves respond to exchange rate movements. Rebalancing central banks will buy more of what declines in value (reserves in a depreciating currency) to return their portfolio allocations to their original proportions, so long as that underlying desired proportion is unchanged. Central banks that seek to maximize short-term returns, or to minimize short-term losses, will tend to change their ideal allocation of their

¹¹An earlier version of their paper (2005) without this assumption finds that 'While on average, among [Brazil, China, India, and Russia], the optimization gives the dollar a weight of 20%–25%, the actual share is forty percentage points higher at 65%', even when taking trade, debt and pegging ties into account.

portfolio when they perceive a trend going against one piece of their portfolio. In short, they will sell off the reserves held in depreciating currencies. So it is worthwhile to document that managers of official reserves have continued to largely maintain persistent currency allocations, and that those allocations are far too dollar-heavy to be financially optimal, even with recent developments in the US economy and the euro-dollar exchange rate.

As of the latest available data on official reserves (the IMF's COFER data which runs to 2007Q3), it is clear that diversification away from the US dollar has remained gradual over the past few years, consistent with the past behaviour. Among those countries that report the currency composition of their reserves to the IMF, the dollar's share of total reserves has fallen from 72% in 2002Q1, when the trade-weighted dollar was at a peak, to 64% in 2007Q3. This 8% drop in share is to be compared with a depreciation of the dollar against the SDR by 20% and bilaterally against the euro by 39% over the same period. Even the sustained dollar depreciation trend does not appear to have had a commensurate effect on dollar reserves.

Truman and Dowson (2008) further make the case that diversification out of dollars has been predominantly what they term 'passive', meaning the result of the declining relative value of already held dollar reserves versus other currencies, rather than due to 'active' diversification away from new dollar purchases or by sales of dollar reserves with intent.¹² They re-calculate the changes over time in the COFER data in national currency (or quantity) terms in order to distinguish these effects, and find that only \$30 billion a year in total of the reserves covered in the data set could be termed actively diversified out of dollar holdings. That is less than 10% of the nearly \$400 billion per year in dollar reserves that foreign central banks added during the 1999Q1-2007Q3 period.

Following their approach, I compute the changes in shares of the euro in official reserves in the available data, distinguishing between value shares, which vary with the exchange rate movements, and national currency denominated quantity shares. See Figures 2 and 3 for the results for developing and domestic economies, respectively. As shown in both figures as a benchmark, the euro has risen against the SDR (and thus a basket of world currencies) steadily since mid-2000, and is up a cumulative 30%. The euro's appreciation against the SDR being greater than the dollar's 20% decline against the SDR, it indicates a broader appreciation of the euro globally.

¹²I am grateful to Ted Truman for discussion of these issues, and to him and Doug Dowson for sharing their analysis of COFER data (see Truman and Dowson 2008), which this section complements on the euro side. The use and interpretation of that data here, however, is solely my own responsibility.

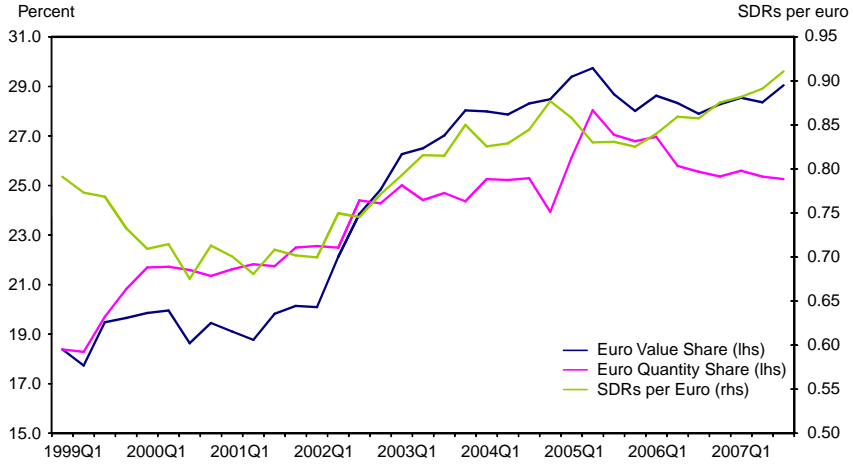


Figure 2: The euro in developing countries reserves, 1999–present

Source: IMF rates database; IMF COFER database.

Note: End-of-quarter values were used for SDRs per euro.

Since a near-step increase in euro shares of developing country reserves in mid-2002, however, the euro share of reserves has fluctuated in a small range, depicted in Figure 2. The share of reserves has remained between 24% and 28% of total, returning from the peak in 2005Q2 to just over 25% in 2007Q3. Both of these movements in reserve shares at the margin – increasingly into the euro following the dollar peak and out of the euro following the euro run-up – are consistent with a rebalancing approach by central banks, as discussed in Lim (2006) and Truman and Wong (2006). This is of course also the flip side of Truman and Dowson’s (2008) finding that most of the shift in the dollar quantity share of developing country reserves since 2004Q2 has been balanced by an increase in sterling and other currencies, and not in the euro. Computed on a value basis, the euro’s share of reserves is of course higher, but has stayed between 27% and 30% since 2003Q3, and has also come down in recent quarters.

For the industrial countries, the picture shown in Figure 3 is perhaps even more surprising. Despite the steady appreciation of the euro, the euro quantity share of their reserves declines markedly from a high of 22% in 2002Q4 to 17% in 2004Q1. This would seem to be the effect of the massive currency intervention by Japan in the dollar–yen market in 2003 and the first quarter of 2004, when the Japanese government bought up huge amounts of dollars, but not euros (and other Asian central banks pursued similar strategies on much smaller scales), and thus is a one-time shock. But looking at the three-plus years since the Japanese intervention available in

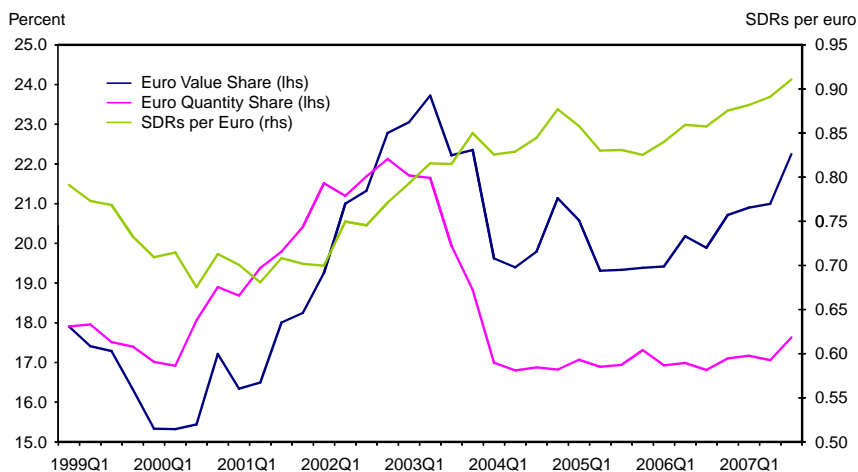


Figure 3: The euro in industrial countries reserves, 1999–present

Source: IMF rates database; IMF COFER database.

Note: End-of-quarter values were used for SDRs per euro.

the data, the euro share of industrial country reserves has barely moved in quantity terms, staying between 17.0% and 17.6% of the total. While the industrial country totals are dominated by Japan, the United States, the United Kingdom, and the eurozone members themselves, this still implies that none of the major economies actively shifted their reserves into euros over the period at all. The value share of euro reserves has fluctuated much more markedly up and down over the period, between a high of nearly 24% and a low just over 19%, despite the relatively steady appreciation of the euro against the dollar and the SDR. The last four or five quarters do show an upward trend, which of course reflects recent euro–dollar exchange rate developments, and could of course accelerate – but to present still leaves the euro share, even in value terms, in industrial country reserves below 23%.

It is worth emphasizing (as Setser 2007; Truman and Dowson 2008, among others, point out) that the main driver in the accumulation of official reserves in this decade is not the relative allocation of euros versus dollars. Instead, the big story is the massive accumulation of dollar reserves by Asian developing countries, and the broader rise of developing country reserves as a share of the global total as their national incomes have risen on the back of export-led growth. This massive accumulation of reserves in East and South Asia is in part brought about by foreign exchange intervention to undervalue their currencies, and in part to ensure that incumbent governments will have sufficient reserves to deter speculative attacks on their currencies of the sort

that occurred in 1997–98.¹³ On the latest COFER data, developing country reserves are now 75% of the total in official hands, even counting Japan. It seems that for the developing countries, perhaps in part for reasons of the denomination shares of their trade and external debt (see Portes et al. 2006), their ideal allocation is heavier on euros relative to dollars than in the industrial countries.

That heavier allocation into euros for the developing countries, however, on Portes et al.'s (2006) optimal portfolio is still well below 30%, and that is consistent with the range of values seen for the euro share in Figure 1 here. Thus, a relative gain in the share of official reserves held and managed by developing countries versus those in industrial countries should lead to an increase in the overall share of reserves held in euros, but only to the point of the higher euro share that fits their needs. In other words, some of the apparent recent reallocation of dollar to euro reserves reflects the different underlying portfolio preferences of the developing countries, but not an obvious revision upward of the desired steady-state share of euros in either developing or industrial country portfolios. It remains possible that this time is different, that the next COFER data update showing 2007Q4 or 2008Q1 developments will display such a shift, but through the financial turbulence and euro appreciation of 2007Q3 that has not been happening. And if the reserve shares held in the official sector in Asia and beyond do not respond to these exchange rate developments, but continue to show persistence in dollar allocations, then the missing mass issue is only brought into sharper relief.

IV. Geostrategic Reasons for Pegging Decisions

A key determinant of a country's public sector demand for a foreign currency is the existence or not of an exchange rate peg to that foreign currency. The existence or not of an explicit official currency peg, however, understates the influence of these relationships on the dollar's global role along three dimensions. First, the vast majority of emerging markets and smaller economies run monetary policies that involve highly managed floats, if not *de facto* pegs, primarily against the dollar (Calvo and Reinhart 2002; IMF 2007), so the list of official peggers understates the customer base for dollars from this source. Second, to the degree that currency ties endogenously encourage trade links, capital flows and economic integration between

¹³Some analysts have pointed out that the amount of reserves accumulated by these countries far exceeds the quantity required for self-insurance against currency crises, which arguably gives credence to the mercantilist motivation for export-led growth, and certainly demonstrates that slow-moving 'network effects' or changes in the size of currency areas cannot account for these decisions (in estimations, the missing mass problem remains).

economies (in the spirit of Frankel and Rose 1996), private sector demand for the anchor currency or currency of intervention will also rise. Third, for countries that take on exchange rate pegs in part as a means of monetary stabilization or credible commitment to price stability, there will be an extreme reluctance to alter a peg arrangement for fear of inducing instability, even if that means turbulence in the course of anchor currency movements (Eichengreen and Masson 1998).¹⁴ In short, the decision to orient a country's currency and exchange rate policy to the dollar as an anchor accounts for a large and persistent share of the dollar's global role.

But what determines a country's choice of peg? The workhorse baseline for evaluating currency affiliations remains the Optimal Currency Area (OCA) criteria of Mundell–McKinnon, which emphasize the direction of trade and the relative synchronization of shocks. Given the rise of the eurozone and East Asia as sources of international trade and of global growth, and the still important role of geographical proximity in determining trade patterns, there would seem to be a strong argument for a large number of currencies to peg (or managed float) against the euro, or even the yen or yuan, rather than against the dollar (as discussed in de Brouwer and Kawai 2004; McKinnon 2004). These optimal criteria are offset in part by the aforementioned reluctance to change pre-existing pegs, and in part by increasing cyclical synchronization and deepening trade ties over time. Even so, the seemingly unavoidable occurrence of financial crises and divergences that break such pegs, or forces changes of their valuations, would be expected to overcome these inertial forces. The argument that the existence of the euro as an alternative to the dollar thus arises in a different form. If undervaluing the exchange rate for export success is important, then that is another argument for the target currency to shift to a basket or change anchor as export markets shift.

Thus, the question of the dollar's continued global role on this score becomes one of what is keeping export-oriented emerging markets from switching their pegs to the euro, or at least a euro–dollar basket, when they have greater proximity to, and trade volumes with, the eurozone than with the United States. Will recent cyclical divergences cause the switch, given that the Federal Reserve has been rapidly cutting interest rates while many of

¹⁴Eichengreen (1999, p. 106) puts it well: 'If the country, having brought down inflation, can then smoothly exit the currency peg before being forced to do so in a crisis, the peg will have been worth the candle. The problem is the same as with using heroin or morphine to treat a patient in pain; once the suffering subsides, the patient is still hooked . . . Smooth exits from currency pegs, whatever the original rationale for the peg, are very much the exception to the rule.' Others go further and suggest that for the majority of smaller economies dollarization or euroization, that is permanent hard pegs, are the means to ongoing monetary stability. See Steil and Hinds (2009).

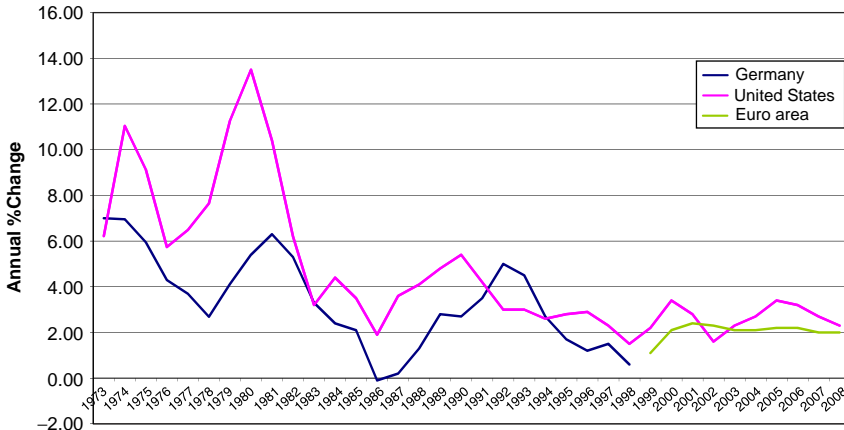


Figure 4: Euro-dollar inflation differential, 1973-present

Source: 1973–79: inflation data are from IFS December 2007.

1980–2008: inflation data are from WEO October 2007.

Notes: 1980–2008 Inflation data are from WEO October 2007.

Euro area includes Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Slovenia and Spain.

the pegging countries face inflationary pressures?¹⁵ The actual inflation differential of the eurozone and the United States should not be exaggerated – as shown in Figure 4, the maximum difference between United States and eurozone headline inflation rates was 1.3% at an annualized rate, and the latest data have come in well below that amount. Nonetheless, were a number of countries' exchange rate pegs, official and *de facto*, to get moved away from the dollar towards the euro, many of the inertial forces mentioned above would tend to lock-in the change. That in turn would reduce the dollar's role in the private sector as well.

Unmentioned, however, in this discussion is the critical role that foreign policy and national security ties play in countries' decisions about exchange rate relationships – and there the conditions continue to favour the dollar's global use as an anchor currency. The ability of such relationships to overcome even strong economic pressures to change a peg can be seen in the response of Germany and Japan when their fixed exchange rates against the dollar during the 1960s led to significant imported inflation and macro-economic overheating. As recounted in detail in Gavin (2003), West Germany was repeatedly confronted with an explicit linkage of the security

¹⁵For example, the decision of Kuwait to leave its dollar peg in May 2007 was explained in these terms; see also the discussion in Setser (2007).

commitment to maintain US troops in the country deterring the Warsaw Pact with Germany's commitment to maintain its part in the gold pool. This culminated in the so-called Blessing Letter of 1967 which locked in the *quid pro quo* – and which, even though politically repudiated by the subsequent West German government, was maintained in spirit, and no meaningful official sales of German dollar holdings took place until 1979. That, in turn, was when the ERM began, and involved (as seen in Figure 1 and well-documented elsewhere) a one-time level shift in the dollar reserves share for other European currencies to enable intra-ERM interventions, not any ongoing shift out of dollars. Moreover, it was hardly a coincidence that concrete steps toward EMU, with German encouragement, began in earnest only in 1992, 13 years after the ERM began, once the Cold War had clearly ended, Germany had successfully unified, and thus American troop withdrawals were imminent and the sense of security dependence diminished.¹⁶

Japan, which has never significantly reduced its sense of external threat from China and other regional powers, and thus its perceived need for US troop presence in the home islands, has also never diversified its official reserves to any meaningful degree. This reflects a dollar focus of yen policy that continues 40 years after Japan began importing higher inflation from the United States, and having faced repeated bouts of asynchronous monetary policy from the Federal Reserve since then (see Volcker and Gyohten 1992). The security relationship between the United States and Japan has contributed to this conservatism of Japan's exchange rate policy, though obviously export motivations also played a role in an ongoing effort to varying degrees to keep the yen undervalued against the dollar. These concerns overcame the 'Nixon Shock' when Japan was perhaps the hardest-hit country in macroeconomic terms by the 1971 Nixon–Connally decision to close the gold window, and Japan did nothing to diversify out of dollars or to target other currencies with its exchange rate. The recurring vague proposals by some ambitious Japanese officials that the yen be internationalized, or become a rival currency to the dollar, always ran aground on the security-driven desire not to offend the United States, right up through the Asian Monetary Fund fiasco of the mid-1990s.

Meanwhile, it was not a coincidence that Gaullist France, being far more interested in asserting its foreign policy independence of the United States and NATO than Germany or Japan, was the loudest and most demanding

¹⁶The popular notion that EMU was a payoff of reduced German autonomy on monetary issues for French and other nations' acceptance of reunification is largely unsupported by the historical evidence. This political consideration, that Germany no longer needed to keep Europe from creating a potential rival to the dollar, was far more evident. But that is a topic for another (historical) paper.

member in challenging the gold pool and the fixed dollar price of gold during the 1960s – despite actually facing both a far smaller amount of imported inflation from the United States than West Germany or Japan, and a far greater inflation risk when the dollar-based system broke down than the Deutschmark and yen did. Even if they did not intend more than a devaluation of the dollar against gold, the French government was more willing to put the Bretton Woods system at risk through its pressure on the United States than either Japan or Germany were.

The security motivations of France's currency arrangements also were primary in its management of relations with the central African CFA franc zone, as detailed in Helleiner (2003) and Stasavage (2003a, b): 'Countries such as Guinea and Mali, which sought to break away from the CFA zone [in the early 1960s], found their broader security, trade, aid, and other economic links to France severed by the French government in ways that were very costly.'¹⁷ In the case of Mali, the country exited the CFA zone in 1962 when it sought closer ties with the Soviet Union and separation from France, and returned to the zone as part of the package of returning to the Western fold and ties with France, with full reintegration only following a coup d'état that credibly changed the leaning of the Malean regime. Similar political breaks regarding the orientation of foreign policy precipitated exits from the currency bloc by Madagascar and Mauritania in the 1970s. Thus, the security-driven arrangement of French CFA ties led in turn to the significant share of peggers to the euro coming from that zone in Africa – driven by post-colonial foreign policy ties rather than any economic determinants. In fact, the only non-EU membership candidate countries to have a euro peg are the CFA franc zone, the French Overseas Territories, Cape Verde and Comorro (European Central Bank [ECB] 2007, p. 41).

Another substantial share of euroized or euro-pegging countries are those successor states to the former Republic of Yugoslavia, which is of course the scene of postwar Europe's largest and most geographically contiguous military intervention (and which ex post have all been classified as potential candidates for EU membership for the sake of *political* stability). So Kosovo and Montenegro have unilaterally euroized, Bosnia-Herzegovina has a euro-based currency board, and Croatia, FYR Macedonia and Serbia all have managed floats with reference to the euro. Other candidate and would-be

¹⁷Helleiner (2003, p. 75). Stasavage (2003a, p. 81) similarly 'suggest[s] that calculations of Francophone African leaders [regarding CFA zone membership] have had as much to do with preserving the stability of their regimes . . . Fear of losing privileged aid and security arrangements has raised the cost of exit for a number of governments that otherwise would have sought to establish their own currencies' in subsequent decades.

candidate countries for EU membership, notably Turkey, have chosen not to peg to the euro, even as economic ties have proceeded to deepen.

Looking at the list of European economies' exchange rate arrangements (ECB 2007; IMF 2007), one sees a surprisingly large number for whom the economic case for euro pegging would seem to be clear – as well as having the legal obligation from EU membership to enter into ERM II en route to the eurozone – but who choose to do otherwise. These include: Poland, which followed Sweden and the United Kingdom in refusing to formally tie-in to the euro; Hungary which had maintained a wide-band float tied to the euro outside of ERM II, and in late February 2008 exited that arrangement; and the Czech Republic and Romania which float with a euro reference, but nowhere close to a peg, as defined by the ECB's own description. The question becomes why has the eurozone, which has delivered price stability, increasing financial depth and trade linkages with these economies, not been attractive for membership to these economies which are already EU members? It would appear that these countries' voluntary absence from the eurozone or ERM II is consistent with their strong desire for national autonomy and for foreign relations somewhat independent of the EU – all of which was amply demonstrated by these countries' reluctance to ratify the Treaty of Nice and related constitutional measures for the EU – rather than for lack of economic linkages. As has been stressed by European officials for the last nine years, the eurozone is not just an economic club, and so it should be no surprise that those EU members feeling the most politically rather than economically distant are the ones to remain outside of it.

Such decisions are hardly rare. Looking a little further east, it is worth considering the break-up of the rouble zone following the collapse of the Soviet Union in December 1991. Initially, there were 15 post-Soviet states sharing a common currency, and the leading experts at the time, including the IMF, on economic grounds advised members against leaving the rouble zone (Aslund 1995). Given the trade ties between these economies, the spectre of hyperinflation or least rapid devaluation, and the putative network externalities of continued rouble usage – as well as the absence at that time of a local euro with hope of membership to latch on to – the advice was sensible. Yet, the rouble zone fell apart less than two years later. Abdelal (2001, 2003) provocatively points out that there was a clear cross-sectional difference in the monetary goals and strategies of the post-Soviet states, and thus of readiness to exit the currency union, which ran opposite to what economic criteria would predict. The Baltic States had some of the highest intraregional shares of their total commerce within the rouble zone, and would suffer the largest negative terms-of-trade shock by exiting the zone (Michalopoulos and Tarr 1992), and yet were the first and most eager to exit. In contrast, the 'Stans', which had similar or lower trade shares within the

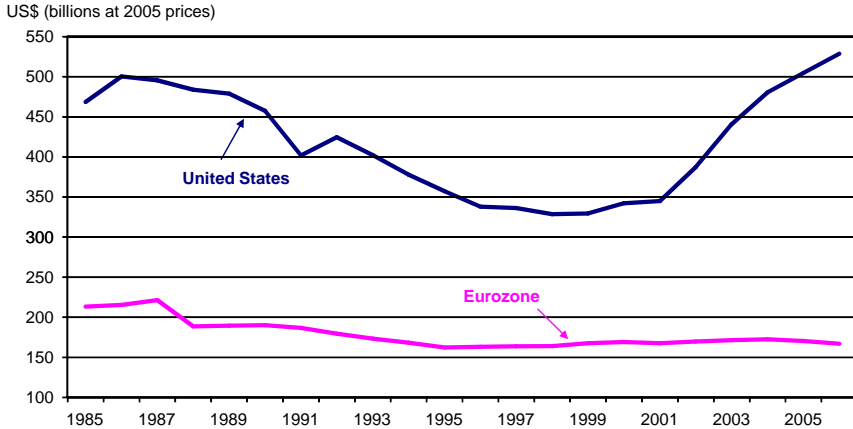


Figure 5: Military expenditures, 1985–2006

Source: Stockholm International Peace Research Institute (SIPRI). 1985–87 data are from US Arms Control and Disarmament Agency's World Military Expenditures and Arms Transfers (WMEAT) 1996 document (Table 1). 2005 constant prices calculated using BLS's CPI for All Urban Consumers (Base period: 1982–84 = 100).

Notes: Eurozone includes Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

Countries that joined the eurozone after 2006 (i.e. Cyprus, Malta and Slovenia) are not included.

zone than the Baltics did, but (as resource exporters) had the most to gain in terms of trade from exiting were the most reluctant to exit, and in fact tried to keep the zone going, because politically they were the most inclined to maintaining close relations with Russia and within the CIS.

So what does this all mean for the role of the dollar *vis-à-vis* the euro? It means that given the limited desire and ability of the eurozone members to project security relationships beyond their immediate neighbourhood, there is little incentive for other countries around the world to shift their pegging, formal but also informal, from the dollar to the euro. This can be captured in Figure 5, which shows the relative military expenditures of the United States and the eurozone economies – even at the post-Cold War lows of the mid-1990s, US military spending was double that of the eurozone, and of course it has surged with ill use since that time. But the point is that while some economic arguments would suggest that this defence spending differential would likely hasten the euro's displacement of the dollar, through eroding savings and the current account balance, the political view would suggest that at least some of that differential supports the dollar's global role.

Turn to Table 1, which lists the largest US troop deployments on average in the pre-Iraq War period, 1996–2000, and the exchange rate arrangements of the host countries. Of course, most of the places in Europe with large US

Table 1: US Troop Deployment and Dollar Pegging

Country	Average deployment, 1996–2000	Exchange rate peg, 2007
Germany	62,667	Eurozone
Japan	41,016	Dollar <i>de facto</i>
Korea, Republic of	36,314	Dollar <i>de facto</i>
Italy	11,663	Eurozone
United Kingdom	11,143	Float
Bosnia and Herzegovina	8,319	Euro currency board
Saudi Arabia	4,157	Dollar <i>de jure</i>
Kuwait	3,941	Float
Panama	3,314	Dollarized
Spain	2,735	Eurozone
Turkey	2,524	Float
Hungary	2,517	Float
Serbia and Montenegro	2,379	Euro <i>de facto</i>
Egypt	1,869	Dollar <i>de jure</i>
Iceland	1,764	Float
Belgium	1,635	Eurozone
Cuba/Guantanamo	1,296	NA
Croatia	1,055	Euro <i>de facto</i>
Portugal	1,041	Eurozone
Bahrein/Bahrain	944	Dollar <i>de jure</i>
Diego Garcia	719	NA
The Netherlands	693	Eurozone
Macedonia	582	Euro <i>de jure</i>
Greece	555	Eurozone
Honduras	550	Dollar <i>de jure</i>
Australia	296	Float
United Arab Emirates	288	Dollar <i>de jure</i>
Thailand	228	Dollar <i>de facto</i>
Singapore	211	Basket
Haiti	190	Dollar <i>de facto</i>
Canada	170	Float
Greenland	131	NA
Ecuador	128	Dollarized
Peru	111	Dollar <i>de facto</i>
Oman	101	Dollar <i>de jure</i>
Norway	97	Float

Data sources: DOD (2007), IMF (2007), Kane (2004).

troop deployments are now in the eurozone, but they all saw significant declines in US troops stationed there versus during the pre-euro days. The table also makes clear that there are regions in Latin America and East Asia where the US security presence leads to dollar pegging – in contrast to the euro, dollar peggers are not limited to contiguous areas. While Kuwait indeed abandoned its dollar peg in March 2007, despite the huge troop

buildup there, it is difficult to see Saudi Arabia and the other Gulf states following suit – in the extreme, one can imagine them revaluing against the dollar and/or moving to a highly managed float against the dollar, but the dollar would remain the reference currency for them. The dollar continues to play a major role in the exchange rate policies of Egypt and Turkey, even though the trade and finance links of those economies have shifted strongly toward the eurozone, and relatively away from the United States, in recent years. This anti-economic juxtaposition is, however, consistent with the view that Turkey and Egypt's security priorities – represented by the large US troop deployments in those countries, aid and arms sales from the United States, and explicit security guarantees – dominate those governments' financial concerns. In this context of ongoing military deployment, is it credible to think that Japan or South Korea (or Taiwan) would move to a yuan peg voluntarily, were such an option to be meaningful? Is there anyone outside of the potential members of the EU and some Mediterranean neighbours who would consider initiating a euro peg?¹⁸ No and no.

V. Limitations on the Euro beyond the Monetary

This essay has focused on one line of argument why the euro is unlikely to displace the dollar from its global role: non-financial factors must be invoked to explain the inertia in reserve currency allocations and exchange rate pegs, and a principal one of those relating to national security ties favours the dollar. This argument does not depend upon any claims of structural weakness in the eurozone *per se*, either in absolute terms or relative to the dollar. This argument, however, does depend upon limitations to Europe's ability to project security relationships beyond its borders, which seems hardly controversial for the foreseeable future. It also assumes that improvements in the financial or economic advantages of euro usage do not become overwhelming. Because such economic advantages are based on mostly slow-moving factors themselves, and even in Chinn and Frankel (2007) show up as responsible for a very small share of the variance in reserve shares over time, that also seems to be a safe assumption.

It is worth at least pointing out, however, that while matters have gone very well for the eurozone as a monetary union of late, the eurozone as a real economy has not been so compelling in performance.¹⁹ The best available

¹⁸Tunisia and Morocco do have basket pegs that include both euro and dollar *de facto*, where on an economic basis it would seem straightforward for them to peg solely to the euro if not euroize.

¹⁹Among those monetary accomplishments beyond maintenance of price stability are good management to date of the financial turmoil, the exertion of greater unity and voice by the

sectoral analysis of productivity developments in the eurozone economies suggests that the recent boom in Europe was not driven by an increase in productivity growth.²⁰ In fact, the boom could be cloaking a continued downward trend in productivity growth, because it came through increased input of low-skilled labour. In any event, absent improved productivity growth, the boom is not based on a sustainable source of growth. Baily (2008) comes to a similar assessment based on independent corporate studies and on the breakdown of Okun's law relationships when the recent employment increase accompanied rather slow growth. Why does this matter for the global role of the euro? Because it indicates that the relative parity in economic size of the eurozone and the US economies at the moment is unlikely to last. The demographics continue to favour the United States, both on birth rates and (one hopes) on immigration, and, even allowing for a decline in the US productivity growth trend, the gap between eurozone and US productivity growth rates will remain sizeable for the coming years as well. Thus, as in Posen (2004), the US economy will gain in size relative to the eurozone, even as it shrinks relative to China and world GDP as a whole – and we know that relative size of economies is an important determinant of currency status.

The financial markets in the eurozone have also made significant strides in recent years, particularly in development of corporate bonds, but also in the liquidity of other markets through the reduction of transaction costs, improved information flows and deeper cross-border integration. All else being equal, this could be thought to be bullish for the euro's ability to equal or displace the dollar (especially if US financial markets remain in reputational decline for some time), given the supposed role of financial depth as an explanation for reserve shares, etc. Yet the importance of these strides for the euro *vis-à-vis* the dollar, whatever their other economic benefits, has come under doubt for two reasons. First, as documented in Forbes (2005), Higgins and Klitgaard (2008) and Lane and Wälti (2007), much of the deepening of eurozone financial markets in recent years is indistinguishable from financial globalization and the decline of investors' home bias more broadly. As a result, the *relative* gains of internal eurozone financial integration versus integration with other parts of the world including the United States are not so high, and the gains themselves may be reaching a limit. Second, the gap in financial depth and liquidity between the United States and

ECB Governing Council *vis-à-vis* the member central banks, the (slight) consolidation of chairs and shares in the international financial institutions, and the successful support of continued financial deepening in eurozone bond markets. See Posen (2005) and Pisani-Ferry et al. (2008) for summary positive assessments of the euro in its own terms.

²⁰See the official discussions of the EU-KLEMS database research in ECB (2008a, b) and EC DG ECFIN (2007).

the eurozone (as well as other markets) has probably been exaggerated for some time. As argued recently in Curcuru et al. (2008) and in Gruber and Kamin (2008), the returns on widely traded US financial assets have not been noticeably better than abroad – which brings us back to the need for non-financial explanations of the revealed willingness to hold dollar assets, what I have called ‘missing mass’ approaches, such as the one offered in this paper.

For those in the foreign policy field who have recently been writing about the limitations to US global leadership which arise out of the dollar’s supposedly declining role – *inter alia* Leverett (2008), Mallaby (2007), Steil (2007) – this paper’s argument that the euro is unlikely to displace the dollar in its global role should be of little comfort. On the theoretical side, I argue that the causality runs as much from security leadership to economic leadership as in the other direction, meaning that some apparently disparate aspects of US global hegemony will tend to rise or fall together. It is not just that if the United States loses reserve currency dominance military activities will become more expensive to finance. If anything, major American military misadventures will also erode the willingness of other countries to rely on the dollar, and thus create a negative feedback loop between economic and security capacities.

On the predictive side, I do offer a new reason to think that the euro cannot displace the dollar in coming decades. Yet, I also argue that the dollar can lose its global role through its own actions alone, even absent a viable rival. In contrast to those who emphasize the need for there to be a ready alternative currency for the dollar to lose its leadership, I would suggest that fragmentation of the global monetary system is more likely to emerge from dollar failure rather than a smooth shift to a viable dollar rival. In such a situation, there would be an erosion of easy currency convertibility between currency zones, a shift of reserves towards gold and other ‘hard’ commodities, and lesser cross-border flows of capital. This would return the United States to a more 19th-century world inducing greater macroeconomic instability. This is of course along the lines of Kindleberger’s interpretation of the 1930s when there was no monetary leadership to be had, and the trading system collapsed as a result. While things need not get that bad, we at least should not assume that saying ‘not yet’ for the euro – or the yuan – means ‘no worries’ for the dollar.

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