Exorbitant Privilege? On the Rise (and Rise) of the Global Dollar System Perry Mehrling^{*}

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ABSTRACT

The global dollar system, though repeatedly reported to be on its last legs—most recently in the Global Financial Crisis of 2008, but most famously in the Nixon devaluation of 1971—has repeatedly instead consolidated and gone on to further geographical expansion (McCauley 2021). The key currency approach to international monetary economics, first put forward by John H. Williams in the aftermath of the 1931 devaluation of sterling, suggests that such resilience arises from the actions of market practitioners who appreciate the convenience of a global means of payment. So the question arises, why has the key currency approach remained a minority view, if not among practicing bankers then certainly among practicing academics? This paper proposes two main reasons—the discredit of monetary optimism during the depression, and the subsequent fateful adoption of Walrasian equilibrium as the frame for academic discussion after WWII.

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The current tendency to make money "the center around which economic science clusters," then, is a tendency to be fostered. For that course promises (1) to clarify economic theory by giving it a better framework, (2) to render economic theory more useful by directing attention to those actual processes with which all serious proposals for governmental regulation and social reorganization must deal, (3) to make economics more realistic and therefore more interesting intellectually as well as practically, and, finally, (4) to make economic theory more profound by orienting the economist for a fruitful study of his aspect of human behavior.

Mitchell (1916, 161)

In his June 1945 Congressional testimony in opposition to the new Bretton Woods institutions, John H. Williams outlined his own "key currency" view of the postwar international monetary system, which he explicitly tagged as quite definitely a "minority" view (1947, p. 266). Money is inherently hierarchical, not multilateral, and the central monetary problem for postwar reconstruction was to stabilize the dollar-sterling exchange rate as the core of a new global dollar system, which other currencies could join as they were able.

It's the same view he had pushed a decade earlier, at the 1933 World Economic Conference on the heels of the September 1931 sterling devaluation that marked the end of the sterling system (Williams 1947, Ch. 15). At that time, however, newly elected President Roosevelt had other ideas and so nothing came of it until the 1936 Tripartite Agreement, which included also the French franc. And soon enough that too came to grief in 1939 with the outbreak of World War II which forced a return to currency controls in Great Britain.

It's also the same view that Despres, Kindleberger and Salant (DKS) would push two decades later in their famous "The Dollar and World Liquidity: a minority view" (1966). The postwar dollar system was coming under attack, by Robert Triffin urging an international currency on the one hand, and by Harry Johnson urging flexible exchange rates on the other (Mehrling 2022, Ch. 6 and 7), and DKS were stepping in to defend it. This time it was President Nixon who had other ideas (specifically his own reelection), unilaterally closing the gold window in August 1971, an act that Kindleberger always called the Crime of 1971. He feared worldwide deflation as had happened after 1931 but, contrary to his fear, this time global money and capital markets did not collapse, instead migrating offshore and giving rise to the Eurodollar system. And this time international monetary disorder took the form of worldwide inflation rather than deflation, a disorder that was eventually brought to heel by the 1979 Volcker shock and then consolidated by the 1985 Plaza Accord.

Fast forward to today, the actually existing international monetary system is very much a global dollar system more or less in line with the Williams/Kindleberger vision (McCauley 2021). This is so despite continuing opposition by policy makers (and economists) both inside and outside the US, and also notwithstanding periodic crises, most dramatically the Global Financial Crisis of 2008-9 and most recently the Covid crisis of March 2020. As in the past, today the standard

economic view still treats individual countries as separate islands, each with its own currency. The Mundell-Fleming model formalizes that standard view, and provides the analytical frame for policy debate, even as the world outside the window increasingly diverges. And so the question arises, Why does the apparently prescient and correct "key currency" view remain an embattled minority view, visible almost nowhere except in the research output of the Bank for International Settlements (CGFS 2020)?

Deepening the puzzle, the key currency view is in fact not a minority view at all in practical banking circles. The reason is that practical bankers cannot avoid the world outside their window, lest it bite them, and so they tend to trust wisdom borne from experience more than formal models, perhaps we might say inductive rather than deductive knowledge. But such inductive knowledge relies on the available empirical data, and thus also on the conceptual frame used to organize (and even collect) that data, which is quite typically the standard model. As a consequence, the practical banker has rules of thumb and disparate pieces of wisdom, but typically no organized alternative theory, and certainly nothing with which to challenge entrenched academic orthodoxy.¹ Confronted with the key currency approach, the practical banker dependably nods assent, recognizing a fellow traveler, but for day-to-day purposes typically relies instead on the less organized wisdom of experience.

This state of affairs, I suggest, is a problem, and especially so today as we enter a period of monetary tightening after a decade of extreme looseness, which was the policy response to the GFC and then Covid. Governor Powell is explicitly analogizing the present moment to that which confronted Governor Volcker in 1979. Things are going to break (are in fact already breaking) and central banks are going to have to respond, but the mental frame that most people will be (are in fact) using is not well suited for understanding how the world now works, and the minority who do understand are in danger of being overwhelmed by sheer weight of numbers, not to mention entrenched authority. This is the context in which I raise the question as to why exactly the key currency view is a minority view. The investigation is necessary spade work for any future project of remedy.

What is the key currency approach?

Because it is a minority view, readers may be unfamiliar with it, and so it behooves me at the start to provide a sketch. In my understanding, the key currency approach is essentially the international extension of an older tradition of monetary analysis that I call the money view.²

¹ Practical *central* bankers are somewhat of an exception, and I have learned much from their efforts to rise above the immediate policy challenge, as for example Clarke (1973), Coombs (1976), Goodhart (1975), Giannini (2011) and Allen (2013).

 $^{^2}$ The next paragraphs are me, but very much informed by my reading of Kindleberger (Mehrling 2022, 231-34). My *New Lombard Street* (2011) used the money view as analytical frame to make sense of the biography of the domestic dollar (the Fed); and my *Money and Empire* (2022) uses the international version as analytical frame to make sense of the biography of the global dollar.

In my understanding, the money view has two foundational elements: banking as a payments system, and banking as a market-making system. The constraint to settle payments daily, the so-called "survival constraint", provides essential discipline to encourage agents throughout the economy to line up cash inflows and outflows in time, and to make provision to fill gaps by borrowing or lending in short term money markets. In this frame, the money rate of interest appears as the price of relaxing the survival constraint by borrowing. Alternatively, one can meet a deficit by selling some financial asset, into more or less liquid markets. In the money view, the price in those asset markets is understood as arising from the economics of the dealer function, an "inside" bid-ask spread quoted by profit-seeking market-makers who offer to counterparties the facility to move from money (means of payment) to financial assets, and vice versa, for a price. That price is the price of liquidity, typically showing up as a spread away from the "fundamental" value of the asset in question, maybe quite small in normal times and liquid markets, but potentially quite large in crisis times and illiquid markets. Lender of last resort enters as backstop for the borrowing method of meeting a deficit, and dealer of last resort as backstop for the asset sale method.

Extension to the international monetary system is straightforward. The balance of payments is the international analogue of the survival constraint, requiring settlement in international money. Short-term borrowing in global money markets is one way to meet a deficit, and asset sale is another. Global banks, and foreign exchange dealers are the central actors for this purpose; covered interest parity arbitrage is the central pricing relationship. Just so, in today's world FX swaps—yen/dollar and euro/dollar mainly, backstopped by central bank liquidity swap arrangements at a spread away from CIP--are crucial mechanisms knitting the global monetary system together (Aldasoro and Ehlers 2018).

When we view the world as a web of interlocking promises to pay, policed by the daily settlement constraint and priced in continuous dealer markets, it follows that the optimal currency area is the entire world, and it becomes natural to view institutional evolution as driven fundamentally by this fact. Business practice all over the world is trying to create a unified global monetary system. And that's where the global dollar system comes from, as we see from the fact that the international dollar is largely a private dollar, the liability of global banks.

This natural economic tendency toward global reach has to reckon, however, with the national organization of most other economic activity, and with the national political interest in managing that activity. Sometimes nations come together to ratify the emergent system, as at Bretton Woods in 1944 (James 2012), but sometimes they work at cross purposes, as Roosevelt in 1933 and Nixon in 1971. The underlying tendency of the system is toward geographical expansion and integration, but the mechanism is a "see-saw" one, as each expansion requires renegotiation of the boundary between public and private money, and between political and economic dimensions. Quite typically that see-saw also involves financial crisis, which in its international dimension requires institutional innovation of an international lender of last resort.

It is a see-saw, but in a long enough time horizon the tendency toward geographical expansion and integration is clear. Just so, the immediate postwar was about expansion to Europe, then Asia, and now the Global South. Ever since the Global Financial Crisis, dollar credit expansion has been predominantly in the South, and it is that most recent expansion that is now being tested. All of this being said, the question emerges once again, "Why exactly does the key currency view, apparently prescient and correct, remain a minority view?"

Two Fetishes and a Bogeyman

Two features of economics, since Adam Smith days, seem fundamental to the question. First, what I have elsewhere called the "fetish of the real" (Mehrling 2017). As scientists, we economists are trained to look through the veil of money in an attempt to understand the processes of production and distribution, not to mention value. Just so, we habitually construct measures of "real" GDP, "real" wages, and "real" rates of interest, quite deliberately averting our eyes from the facts outside the window, i.e. the actual data of our world, which are monetary transactions and monetary prices. As a consequence, the money view, with its image of the centrality of *settlement* in the payments system and the centrality of *market-making* for the determination of prices, is not visible by construction, much less its international extension, the Williams/Kindleberger key currency approach.

Second, a feature that emerges as a theme in my recent book *Money and Empire*, is what I will call the "fetish of sovereignty". Says Kindleberger: "In economics, the worldwide is efficient. In social questions, small is beautiful." And for that reason, "sovereignty is the last asset to be pawned." Not to put too fine a point on it, our social life is organized within nation states (and even smaller geographical units) each of which proudly and loudly asserts its Westphalian identity. This has consequences for economics because, ever since Adam Smith, economics has found its social purpose in giving advice to the local prince, and for that purpose has found it convenient to adopt the prince's viewpoint. No sovereign wants to be reminded of the limits of their sovereignty, and advisors who want to gain the sovereign's ear are well-advised to accept such as the boundaries of polite discourse.

Both of these features I take to be long-standing and deep-rooted, and there is a third as well, maybe not so long-standing and deep-rooted but nonetheless quite dispositive, which I will call the "bogeyman of banking". From the standpoint of the money view, the infrastructure of a market economy is monetary and financial, and one consequence of that fact is that both business and government rely on bankers to implement their daily projects. In this respect, the agency of bankers is a daily threat to their own agency. Through the alchemy of banking (meaning the creation of credit as a swap of IOUs), bankers relax the requirement to accumulate funds in advance of spending them, for projects and people that they favor. Here we find the reason for the modern economist to emphasize the ex post funding of credit rather than the ex ante creation of it, which is to say portfolio equilibrium and *intermediation* between (household) saving and (business) investment, rather than *credit creation* by expansion of bank balance sheets (Mehrling 2020). Like their patrons, both private and public, economists are apparently also threatened by the agency of bankers, and we calm our fear with a mental model in which bankers have no agency.

All three of these features I take to be the common property not only of most economists today, but also of the general public, spanning the political divide. Proceeding through the three features in reverse order, gold bugs on the right and Knappians (MMTers) on the left agree that banks are the bogeyman, even as they disagree on what should replace them, commodity money or state money, respectively. Anti-state proponents of laissez faire and pro-state proponents of economic planning disagree about economic policy, but accept without really thinking about it the essential sovereignty of the state. The reality of the lives of the rich and the poor diverge drastically, but both agree that money does not buy happiness; it is consumption that we want, and money is just a means to that end. One bogeyman and two fetishes unite us all, and one consequence is the minority status of the key currency approach.

Postwar Economics

As citizens, we economists have taken over this common intellectual property from civil society, but then as scientists we have gone further to construct elaborate formalisms on top. The idea has been to create a neutral ground within which the political divides of civil society (as enumerated above) can be made subject to scientific adjudication. Fine and good perhaps, so far as it goes, but the important point is that it, as we can now see in retrospect, it hasn't gone very far at all when it comes to money.³ The problem is that the Arrow-Debreu formulation of general equilibrium has no place in it for money, as Hahn long ago pointed out (1965, 1985).

The most serious challenge that the existence of money poses to the theorist is this: the best developed model of the economy cannot find room for it. The best developed model is, of course, the Arrow-Debreu version of a Walrasian general equilibrium. A world in which all conceivable contingent future contracts are possible neither needs nor wants intrinsically worthless money (1985, p. 1).

Twenty years earlier, Hahn's target was not so much Arrow-Debreu as it was Patinkin's *Money, Interest and Prices* (1956), or more generally what I have called "monetary Walrasianism", which includes Tobin, Modigliani and also Friedman (Mehrling 1997). At that time, Arrow-Debreu had not yet percolated throughout the economics profession, and instead the standard frame for thinking about the economy as a whole simply appended a money demand and supply equation to the list of demand and supply equations for the N goods being produced and consumed. This was intended, clearly, as a pragmatic move. Hahn suggested that this frame had no foundations, but it seemed possible that the people who care about such things might in time find an alternative formulation of general equilibrium that would do the trick, and so the profession continued on with Patinkin et al.⁴ The workhorse IS/LM model was that kind of thing, and so was Tobin's canonical "General Equilibrium Approach to Monetary Theory" (1969), which embedded $M^d=M^s$ in a general equilibrium theory of financial asset prices

³ Perhaps this is the reason for the robust tradition of monetary cranks, typically writing from outside the academy? What they read of economics seems not to address their concerns/experience and so they are driven to try to figure it out on their own.

⁴ Gale (1982, 1983), a student of Hahn, provides a comprehensive record of such attempts.

determined by asset demand and asset supply. International economics simply added the balance of payments so IS/LM/BP, so-called Mundell-Fleming (Dornbusch 1980).⁵

But no adequate foundations ever appeared, and the lack of foundations gradually undermined the model from the inside, even as institutional developments in money and finance undermined it from the outside. The rise of modern finance, both as a set of ideas and as a set of institutions, seemed increasingly to epitomize the frictionless market model of general equilibrium idealization. From this point of view, the lack of money that so bothered Hahn came to be seen by most economists as a feature not a bug.⁶ Today the standard DSGE (Dynamic Stochastic General Equilibrium) model discards the money supply/demand frame entirely, in favor of a nominal interest rate rule chosen by the central bank (Woodford 2003). Extension to international economics is straightforward. Different central banks choose different nominal interest rate rules, and the difference shows up in exchange rates (Uribe and Schmitt-Grohe 2017; Schmitt-Grohe, Uribe and Woodford 2022).

All of this elaborate construction, it is worth repeating, builds on the two fetishes and the one bogeyman. The result is an internally coherent picture of the world that, importantly, has calculable implications that can be proffered as advice to the prince, or his central bank nominee. It is of course advice about a world without money, in which the price of liquidity is zero by assumption. But that's supposed to be a frictionless idealization that can be taken to the data with the help of various added frictions (Smets and Wouters 2007). Given this orthodoxy, it is no wonder that the key currency approach is a minority view today. What the money view sees as foundational, everyone else sees as merely frictional.

Prewar Economics

It didn't have to be that way. There was monetary economics before IS/LM, and international monetary economics as well. That's the world that John H. Williams came from, and Kindleberger also. In the prewar American tradition, for lack of any central bank, there was a lively tradition of understanding money as a matter of bank settlement (Cannon 1910), with bankers' balances bridging the gap between periods of deficit and periods of surplus, and a lively tradition as well of financial crisis experience and proposals for reform (Sprague 1910, Laughlin 1900). In the classroom, Dunbar's text (first edition 1891) set the frame, and much of that tradition continued on after the establishment of the Fed in 1913 because much of the system remained the same (Watkins 1927, Dunbar 1929). Various regional banking centers had already evolved as a way of netting intra-regional payments, with the net then clearing in New York and JP Morgan acting de facto as central bank. The new Fed simply shifted all of that onto public balance sheets.

War finance however transformed the system, as the new Fed came to be built on Treasury securities rather than commercial bills as intended. After WWI, Allyn Young and his students in

⁵ In the wake of Mundell's 1999 Nobel, historians filled in context: Arnon and Young (2002), Boughton (2003), Young and Darity (2004).

⁶ Fischer Black (1970) is an early and prescient salvo. More generally see Mehrling (2005).

effect set themselves the task of updating Dunbar for new conditions (Young 1928, Currie 1934, Angell 1922). They took Hawtrey's text *Currency and Credit* (1928), written to explain the British monetary system, as an explicit model of what needed to be done for the American system. But the Americans had in mind something more far-reaching as well, stemming from roots in the American institutionalist tradition, as sketched in Mitchell's "The Role of Money in Economic Theory" (1916), quoted in the epigram to the present essay. The new Fed offered a possible lever for intervening in America's long history of financial crises, but to manage the system it was necessary first to understand it, and that meant placing money in a central position in economic analysis.⁷

The important point is that, in the 1920s in the United States, the point of view of the central bank was for a brief time the point of view also of at least two leading academic institutions (Young at Harvard, and Mitchell at Columbia). Instead of seeing like an economist, a select group of economists was explicitly trying to see like a central bank, and they were making progress. Across the pond, something similar was happening, most importantly Hawtrey's *The Art of Central Banking* (1932), which found an eager readership back in America.⁸ Says Hawtrey, with reference to "the disastrous events of the last three years":

The need arises for an *international lender of last resort*. Perhaps some day the Bank for International Settlements will be in a position to meet this need. But, as things are, the function can only be undertaken by a foreign central bank or by a group of foreign central banks in co-operation (p. 228, emphasis in original).

Given the dire state of the Bank of England at the time, Hawtrey is calling for help from abroad. The "foreign central bank" he has in mind is pretty clearly the Fed.

What is needed, he says, is monetary expansion at a world level, and if that can be arranged, he is confident that the depression can be stemmed.

But if the banks persist in buying more and more securities they will pass beyond the point at which the credit created can be offset by the repayment of advances, and they can thus *ensure* an expansion taking place. When they buy, they create money, and place it in the hands of the sellers. There must ultimately be a limit to the amount of money that the sellers will hold idle, and it follows that by this process the vicious circle of deflation can always be broken, however great the stagnation of business and the reluctance of borrowers may be (p. 173-4, emphasis in original).

Here, then, is the context for the World Economic Congress held in London in 1933; central bankers were trying to arrange the necessary cooperation for worldwide reflation.⁹ It didn't

⁷ The echo here of Bagehot is deliberate.

⁸ My copy of the book, bought for \$3 when I was graduate student, was discarded from the Kirkland House Library at Harvard. Physical evidence makes abundantly clear that Chapter 4, which gives its title to the entire volume, was much thumbed by students.

⁹ Hawtrey was not an outlier in this respect. Keynes was also a monetary optimist at this time, see Rivot (2022).

happen because of politics. And even if it had happened, it is not clear that it would have worked, i.e. "pushing on a string." But leave that aside for the moment.

The important point for present purposes is that world depression, and the evident failure of monetary authorities to stem it, brought into discredit the attempt by economists to think like central bankers, and we have been living with the consequences ever since. Subsequently, depression and then WWII meant that all over the world private money markets and capital markets fell into disuse, along with the previously lively intellectual ferment that had been trying to understand how these markets worked. All over the world, central banks came under the thumb of Treasuries intent on war finance. It is in this context that academic economics began to follow instead the monetary Walrasianism first proposed by Marschak (1938).

Conclusion

And so it came to be that after the war, when Sproul at the Fed tried to restart the prewar conversation between academic economists and central bank practitioners (1980, 160), the result was not economists trying to see like central bankers, but rather economists trying to instruct central bankers how to see like economists (Mehrling 2011, 56-65). Abstracting from exactly the mechanics of the settlement and market-making system that the previous generation had considered the heart of the matter, the new generation simply pasted a story of money demand/supply onto an essentially real model of economic production and exchange, rather than placing money at the very "center around which economic science clusters", as Mitchell had proposed. And that is where things stand, right up to the present moment.

You might think that the global financial crisis of 2008-9 would have served as a wakeup call, but instead it seems to have led to a circling of the wagons. *Liquidity and Crises* (Allen 2011), issued immediately after the crisis, is a collection of papers building mostly on Diamond and Dybvig (1983), and now we have the Nobel in which Bernanke (1983) joins, and there is a huge literature that builds on that as well. But that is exactly the point. The academic literature has built in a certain direction, even as the world has moved in another direction. For understanding the dynamics of the modern world, the older literature, which grew from the globalization experience of the sterling system, remains an underutilized resource.

To be sure, echoes of the older literature did survive the monetary Walrasian blitzkrieg. I have mentioned Kindleberger, a product of prewar Columbia, and of course there is also Minsky, a product of prewar Harvard. Perhaps most important however is Morris Copeland (student of Mitchell) whose *Study of Moneyflows in the United States* (1952) explicitly urged an alternative to the NIPA frame that informed IS/LM Keynesianism, and an alternative as well to the quantity theory of money frame that informed the official monetarist opposition. Copeland's efforts live on as the Flow of Funds accounts, but not at all as the "center around which economic science clusters" that he intended, rather as a sort of esoteric rump on a NIPA frame. What Copeland offered was an accounting system, not a theory, but it is the natural accounting system for the money view, and also for its international counterpart, the key currency approach. Today the

BIS accounting system, constructed from the balance sheets of global banks, offers a modern version of Copeland, albeit just as much a minority view as Copeland in his day.

The key point is that the present intellectual equilibrium, in which the key currency approach is a definite minority view, is in the process of being disrupted by events in the world, big time. The price of liquidity has been zero for a long time, and now it is becoming positive. How should we think about that? The money view sees the overnight rate of interest as the price of putting off the day of reckoning for one day, an incentive to each economic agent to pay attention to any mismatch between the time pattern of cash inflows and cash outflows. Mismatch can be met by drawing down money balances, borrowing, or selling an asset, and crucially the latter two methods both require a willing counterparty, which at the very least requires an attractive price. After a decade of costless rollover of payments as they come due, the day of reckoning is arriving, assets are being repriced, and we are finding out which underlying activities society recognizes with a positive net cash flow, and which not.

Times of crisis are times of change; institutional change as we stress-test the system and find out where it breaks. And perhaps also intellectual change, as events in the world stress-test the intellectual equilibrium inherited from the past. The intellectual ferment of the 1920s came as economists were trying to understand the mechanics of the pre-WWI global sterling system, in an ultimately doomed effort to reconstruct some version for the postwar world. The intellectual ferment of our own time is about understanding the mechanics of the present global dollar system, in an effort to reconstruct some version for the post-GFC world.

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