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The Consolidation of Dollar Hegemony after the Collapse of Bretton Woods: Bringing power back in

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Abstract

Contrary to conventional views which suggest that the collapse of Bretton Woods represented the beginning of the end of the global hegemonic position of the dollar, the collapse of the system liberated American policy from convertibility to gold, and imposed a global fiat system still dominated by the floating dollar. The end of Bretton Woods and the set of regulations that imposed capital controls were part of the agenda of many powerful groups within the US, and led to the creation of a more dollarized world. The challenge to the dollar might arise, eventually, from the decline in the United States' power to determine the pricing of key commodities in global markets; but it is premature to think about the demise of the dollar. The limitations of the dominant views about Bretton Woods are ultimately tied to mainstream economics.

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Introduction

The Bretton Woods regime emerged slowly, from the collapse of the Gold Standard associated with British hegemonic decline and the disorder of the inter-war period, which included the Great Depression. It was the final step, during the Second World War, when it was clear that the United States and the allies would emerge victorious and that the reorganization of the international monetary system was central *to* the reconstruction of the global economic order. The failures of the Versailles Treaty and of the reestablishment of the Gold Standard were clearly on everybody's mind at the New Hampshire Hotel during the meeting (Boughton, 2014). To some extent, the reality of a dollar-based system was already evident. As much as the pound had been the *de facto* key currency before the First World War, the dollar had become for all practical purposes the key currency, if not with the Tripartite Agreement of 1936—that stabilized the exchange rates of the United States, the United Kingdom and France—certainly with the war.

It is often suggested and indeed correct to say that Harry Dexter White's plan, rather than the British proposal designed by John Maynard Keynes, was the ultimate blueprint for the international monetary architecture that emerged.² The predominance of the American plan allowed early critics of the proposals to argue that the emerging international monetary system would be impractical and would favor key currency countries, particularly the United States, and burden deficit countries more heavily.³ By the 1950s, it was quite clear that the Bretton Woods system did not operate as envisaged. Some analysts that have been among early critics of the plan, suggested that the system was unsustainable and that it would eventually collapse (Triffin, 1960).

The conventional view of the collapse of the Bretton Woods system emphasizes the role of the United States, and its lack of commitment to price stability, on the one hand, and the unwillingness of other key players, in particular Germany, to accept higher levels of inflation (Bordo, 1993; James, 1996). However, at a deeper level, the accepted consensus suggests that the system was doomed to failure from start, and that it would have collapsed eventually even if the United States did not pursue inflationary policies related to the Vietnam war and the expansion of the welfare safety net during the Kennedy and Johnson administrations. In this view, there is a more profound cause behind the collapse of Bretton Woods. This deeper contradiction implied that “[t]he crisis of the Bretton Woods system can be seen as a particular and very dramatic instance of the clash of national economic regulation with the logic of internationalism” (James, 1996: 207).

The analytical basis of the conventional view of the collapse of Bretton Woods rests on problematic foundations. The argument presupposes that the main challenge for the management of the system was taming the inherently inflationist tendencies of the established macroeconomic policy framework, based on the Keynesian consensus about the desirability of full employment policies. The latter was enshrined, in the United States, with the Employment Act of 1946. The victory over the Great Inflation of the 1970s would only take place after the collapse of Bretton Woods, which, in the conventional view, would require a long battle to restrain the central bank. In this view, the collapse of Bretton Woods is part of the more general collapse of the Golden Age of capitalism, or the so-called *Trente Glorieuses*, and it is ultimately the result of the excesses of embedded liberalism, to use John Ruggie’s expression, and part of the crisis of Keynesian economics.

The evidence, discussed in detail by Helleiner (1994), indicates that it was the limitations on capital mobility, and the push from within the United States to liberalize capital flows, which were central to the abandonment of the Bretton Woods system. While there existed a consensus on the necessity of capital controls—given the instability of the 1930s and the role that the instability of capital flows had in furthering the Great Depression—the dominant theoretical view still suggested that capital mobility was desirable. This view is expressed in Ragnar Nurkse’s study for the League of Nations, *International Currency Experience* (1944). By the 1950s, these views were even stronger. While many economists not adhering to the Keynesian consensus—most famously Friedman (1953)⁴—defended the notion that flexible rates and capital mobility

would promote the more efficient allocation of resources among the dominant Keynesian view also, the predominant theoretical reason for capital controls was the existence of imperfections (Metzler, 1960).

In other words, the policy consensus for full employment, which to some extent was only possible within the context of the Cold War (Glyn et al., 1990), went hand in hand with a dismissal of the theoretical foundations of the intended policy framework, which made it easier to discard the whole system as fundamentally flawed. The Keynesian revolution remained one in policy, not in theory, and that has important implications to understand the demise of the post-war international monetary arrangement. The collapse of Bretton Woods was not a sign of the failure of the Keynesian consensus, but a precondition for bringing it down. The policy consensus around full employment policies and the expansion of welfare was more easily undermined in a world with open capital markets. The collapse of Bretton Woods did not reflect the overzealousness of the Federal Reserve in promoting full employment at the expense of price stability. The end of Bretton Woods, symbolized by the closing of the gold window by Nixon fifty years ago, reflects the changes in the policy priorities in the United States, the imposition of the neoliberal agenda and the retreat of the welfare state. It was a policy decision, not the revelation of some hidden and profound incompatibility between national policy priorities of the United States and the international role of the dollar.

Significantly, the end of Bretton Woods did not imply the end of dollar hegemony, meaning the continuous dominance of its role as the reserve and vehicle currency in the global economy, as had been predicted by many critics of Bretton Woods. Conventional views emphasize that the end of Bretton Woods was the beginning of the end of dollar hegemony.⁵ In fact, by delinking the dollar from gold, the new flexible dollar standard (Serrano, 2003) promoted a more dollarized world (Vernengo, 2006c), and lifted the restrictions imposed on American macroeconomic policy. In this respect, it reaffirms some of the central points raised by the so-called Hegemonic Stability Theories (HST) of the international monetary system, in particular a reinterpretation of the key analytical points raised in Kindleberger (1973), by neo-Chartalist authors, often associated with Modern Money Theory (MMT), and that have also been discussed in the International Political Economy (IPE) literature (Fields and Vernengo, 2013).⁶ The rise of the neoliberal era has often been associated in the literature with the decline of the United States as a global power, what Strange (1987) aptly called the persistent myth of lost hegemony, and the beginning of the end of dollar supremacy. Arguably, the opposite is true and what the first true global fiat international monetary system had done is to increase the power of the United States and enhance the role of the dollar. The end of Bretton Woods

was a policy decision that augmented the economic power of the United States. In order to fully understand the issues associated with power in economics, there is a need to rethink the ideas of the old and forgotten tradition of classical political economy (Kurz, 2018), something that is not fully appreciated by HST, MMT and IPE authors.

The rest of the paper presents the arguments for an alternative interpretation of the demise of Bretton Woods—one in which the internal decisions within the United States play a central role—and for the argument that the hegemonic position of the dollar has been boosted. It is argued that the failure to understand the causes of the collapse of Bretton Woods and its consequences for the international position of the dollar stem, to some degree, from the particular problems with the conventional or dominant view of political economy based on mainstream or Marginalist economics. A brief conclusion follows, suggesting the possibilities opened up by the more recent rise of China, and the more multi-polar world power structure that it insinuates.

Bretton Woods and the end of the Keynesian consensus

The precise end of Bretton Woods is somewhat open to debate. As much as many would argue that the system was not fully operational until the convertibility of the key Western European currencies in the late 1950s, one could argue that from the depreciation of the pound in 1967, or the collapse of the ‘gold pool’ arrangements in 1968, or, perhaps, more specifically with the elimination of the gold backing for Federal Reserve notes in March of that year, the system was already terminally ill and doomed to expire. These readjustments, as well as the creation of Special Drawing Rights (SDRs) in 1969, certainly prefigured the closing of the gold window by president Richard Nixon on August 15, 1971, which is more often than not seen as the terminal end of the system. That date is challenged as the mark of the end of Bretton Woods only by the collapse of the Smithsonian Agreement in February of 1973, when the key currencies were allowed to float. The emphasis in all of these different dates implies a diagnostic of the crisis that puts the role of gold and the system of fixed, but adjustable, exchange rates as the central feature of the Bretton Woods system.

However, if one goes back to the early debates on the reorganization of the international monetary system, and the plans by Keynes and White, it is clear that the need to control the movements of capital

was the overarching concern of the architects of the system. This was also evident in Nurkse (1944), which “contained all the fundamental tenets of the [Bretton Woods] Agreement,” according to Enders (2005: 14).⁷ It is worth remembering that Keynes had been against the return to the gold standard at the pre-war parity in the 1920s, and pleased about the prospects of its abandonment in September of 1931, even if it is doubtful that this defense of a devaluation should be seen as central to his revolution in theory, as implied in Carter (2020). In fact, in his Plan and in the Bretton Woods meetings, Keynes was for a fixed exchange rate system, and this change from a defense of flexible rates in the 1920s and 1930s to his defense of the agreement in 1944, should not be seen as contradictory (Vernengo and Rochon, 2000). Keynes ultimately defended the agreement because it did make capital controls the norm of the functioning of the international monetary system and that, not the fixed but adjustable exchange rates, remains the *differentia specifica* of Bretton Woods with all other international monetary arrangements.⁸

However, while the profession and the policy world had certainly absorbed the main points of the Keynesian consensus by the 1940s, the policy view regarding capital controls was essentially that it was a necessary evil. Enders (2005: 17) tells us that the “Nurksian penchant for exchange controls [was] set against a clear warning: ‘exchange control [was] plainly a harmful and obnoxious means’ of dealing with chronic or persistently recurring deficits (or surpluses) on the current account of the balance of payments.” In conventional Marginalist analysis, the fundamental role of capital mobility is to allow for intertemporal smoothing of savings and investment decisions, and allowing for international lending to reduce the frictions in the operation of the system.

Metzler (1960) represents the logic of the conventional argument. Following the conventional Loanable Funds Theory of the rate of interest, he assumed that central or advanced economies would have more capital abundance and a lower natural rate of interest than peripheral economies. The excess of savings in the core would flow to the periphery, increasing the funds available and reducing and eventually eliminating the interest rate differential. In this sense, the allocation of savings would be more efficient, and a uniform natural rate of interest—corresponding to a long-standing tradition in economic theory, which, in spite of significant differences, can be ascribed to both classical authors like David Ricardo and Marginalist authors like Knut Wicksell—would lead the system to an equilibrium determined by real forces.⁹ The monetary variables, in particular, the policy rate determined by the central bank, would adjust to the real variable.

In this sense, the logic of internationalism required mobility of capital to promote the efficient allocation of resources, while the functioning of the domestic economy and the dangers of deflationary forces required low interest rates to promote full employment at home. The dominant view basically subscribed to the notion that unemployment at home resulted from wage rigidities and other market imperfections too, and that Keynesian policies were, essentially, a short-term remedy. But the Keynesian consensus, at a political level, within the context of the Cold War, required the expansion of the Welfare State. It was clear that the structural problem of global embedded liberalism was the need for capital controls for domestic reasons, and this clashed both with the need for capital mobility and the role of the dollar as the key currency. Capital mobility might lead to interest rates that were higher than what would have been required for the sustainability of domestic public debt and the expansion of welfare programs at home.

To some extent, these problems are easily resolved in the Marginalist literature. The equilibrium of investment with saving at the natural rate of interest, should correspond to the full employment of labor at home, and what Friedman (1968) referred to as the natural rate of unemployment. In this sense, with flexible exchange rates and capital mobility, markets should clear and provide full employment at home, and flows of capital from the advanced economies to the less developed ones, where capital is scarce, allocate resources efficiently. This of course relies on the notion that capital flows are stabilizing rather than sources of instability. In this view, a fixed exchange rate system created a problem, since it precluded the smooth resolution of balance of payments disequilibria. It added a problem, like the wage rigidities that caused unemployment, according to the neoclassical synthesis version of Keynesian economics.

Since Keynes' Plan, which allowed an international currency, Bancor, to be created and for surplus countries to provide the financial resources for the adjustment of deficit countries, had been rejected, the Bretton Woods system required dollars to be made available to deficit countries, at least in the short run. In a growing global economy, it would be expected that the United States would have to run persistent deficits, and provide an ever-increasing amount of dollars. This dollar glut, would grow out of sync, inevitably with the United States gold reserves, and would lead to the collapse of the system. This was the basis of the famous Triffin dilemma. The persistent trade or current account deficits could be seen as the result of the excessive spending at home, and the result of the excess of Keynesianism in association with the need to provide an international currency. The gold-dollar parity would be unsustainable, eventually, and the international context of the 1960s, in this interpretation, just provided the environment for the system to

unravel. The crisis has been succinctly described in the following terms: “[e]xpansionary US monetary policy beginning in 1965 was transmitted through a rising balance of payments deficit that led to dollar flows to the surplus countries of continental Europe and Japan. The central banks in these countries attempted to sterilize the dollar inflows but most led to increases in their money supplies and rising prices” (Bordo and Orphanides, 2013: 12). In this context, the functioning of the system required international cooperation, for example, to preclude countries from demanding gold, but also the moderation of domestic central bank behavior. Central banks committed to price stability, particularly in the United States, would have been needed to preclude the unraveling of the system.¹⁰

This view is based on a Metallist conception of money, in which money is essentially a means of exchange that reduces transaction costs, and a Monetarist view of inflation, which implies that the overissuing of money is at the core of inflationary pressures. It ultimately relies on a Marginalist conception of value and distribution. In some respects, one can think of Keynes’ view of the Gold Standard as ‘barbarous relic’, as part of his struggle to break up with these conventional views.¹¹ It is clear that Keynes conceived money, not merely as a means of exchange, but as a unit of account, which required the exercise of power, the power to enforce contracts in particular. Keynes also had no doubts that money was, at least in the modern period, State money. He also came to believe, in the course of his long battle to get rid of Marginalist ideas, that the natural rate of interest that equilibrated investment to full employment savings, as presented in the Loanable Funds Theory, should be abandoned.¹²

A low interest rate environment was necessary for creating the conditions for the accumulation of public debt necessary for the new phase of capitalism, in which the expansion of private credit, and the risks of the impact of deflationary pressures on debt could expel disaster. Capital controls were seen as a central and permanently required feature of the international monetary system, since “[i]n the absence of capital controls, capital flight would be triggered whenever the domestic or international financial investors became dissatisfied with, or even just nervous about, the general tenor of government economic policy. This would give the rentier class effective veto power over government policy. Capital controls remove this major source of policy influence exercised by the rentier class” (Crotty, 2019: 10).

Capital controls were not a necessary evil, but a positive good. Keynes’ Plan then was envisaged not simply or fundamentally as a monetary regime to allow the adjustment of balance of payments disequilibria

while preserving exchange rate stability, but as the centerpiece of the accumulation regime based on the euthanasia of the rentier.¹³ The Bretton Woods system worked in that way simply because the United States was forced to make concessions at home, mostly to the white working class, and opened its markets to their allies in the Cold War. That effort included some concessions to minorities at home, with a gradual expansion of civil rights, and the promotion of economic development of those that had lost the Second World War, in particular Germany and Japan, in what has been termed development by invitation.¹⁴ The role of the Marshall Plan in allowing Bretton Woods to function as a regime of accumulation that favored catching up by the losers in the war and some peripheral countries cannot be exaggerated.

In the context of the Cold War, the United States elites were willing to accept significant reforms at home and to selectively promote development abroad. It should be noted that a good part of the periphery grew fast, but many encountered balance-of-payments constraint problems that Prebisch and the authors at the Economic Commission for Latin America (ECLA) and the United Nations Conference on Trade and Development (UNCTAD) suggested would preclude full catching up (Dosman, 2008). But the post-war prosperity changed the circumstances and the willingness of the American establishment to maintain its commitment to a liberal order at home and abroad.

The United States could have maintained the gold parity. In fact, a hike in the domestic interest rate could be used to attract flows of capital and preclude the demand for gold, as much as the Volcker experiment in the late 1970s showed that higher interest rates would lead to higher demand for dollars. Further, that could have been done while providing subsidized credit at home, at lower rates, and promoting full employment. To some extent, Ronald Reagan fostered the recovery of the role of the dollar, while at the same time promoting expansion at home, but his expansion was not geared towards the expansion of the welfare state, but in the opposite direction. But his policies made clear that fiscal deficits were not incompatible with a strong dollar. The issue was not the inability of the United States to preclude a run on the dollar, or the incompatibility of the need to maintain the gold-dollar exchange parity with the needs of the expansion of welfare safety net and the commitment to full employment at home. Full employment policies could have been promoted at the same time that relatively high interest rates were maintained for the purpose of attracting capital flows, and this was compatible with the provision of dollars according to the needs of the international markets.

The real change was political, not economic. It was the decision within the United States to move away from the so-called embedded liberal international order to a neoliberal order, from a restrictive financial order with capital controls to one that promoted capital account liberalization, which was only possible as the New Deal coalition broke down at home, and it was that which created the conditions for the demise of Bretton Woods. As noted by Helleiner (1994:13), “the unravelling of the Bretton Woods financial order relates to the strong interest of the United States and Britain after the late 1950s in promoting a more open international financial order” or, perhaps, more accurately, the interest of certain groups within these and other central countries.¹⁵ Resistance to the New Deal Keynesian consensus within the United States was not new.¹⁶ The question is then why it was possible to promote financial liberalization at this particular juncture. The answer is provided by Michal Kalecki, the author who had predicted that the ebbs and flows of conservatives and progressives would mark the cyclical fluctuations of the economy in the post-war period, and that also foresaw the changes that would lead to the rise of neoliberalism in the 1970s.

Kalecki and Kowalik (1971: 472) argued that the expansion of the welfare state and the full employment in the center turned the working class, as they suggested, “radically reformist in its attitude towards capitalism,” rather than revolutionary. This opened the space for more militant pro-capitalist views even within the lower classes, and for a reversal of the consensus that was the political foundation of Bretton Woods. These working-class attitudes are epitomized in the United States by the Hard Hats Riot, in which white construction workers attacked Vietnam war protestors, mostly students, by Richard Nixon’s Southern Strategy and his silent majority, by the rise of George Wallace and by Reagan Democrats. Resentment against those that protested about the persistent inequalities in the United States fueled the flames of division. The roots of Donald Trump’s right-wing authoritarian populism hark back to these developments.

More importantly, it was this political support from the working class that allowed the ideas of Milton Friedman, Friedrich Hayek and other neoliberal authors, to gain sufficient support to eventually become dominant. It is worth remembering that many of the neoliberal policies started before the rise of right-wing conservatives like Ronald Reagan and Margaret Thatcher, and that in the United States it was Jimmy Carter that appointed Paul Volcker to the Federal Reserve, and Senator Ted Kennedy’s hearings on the aviation industry that preceded the deregulation of the sector.

The end of Bretton Woods was not like the collapse of the Gold Standard, that marked the end of British hegemony, and came with fears of the collapse of capitalism. On the contrary, it opened a triumphant period and the rise of American global economic power, symbolized by the fall of the Berlin Wall, the collapse of the Soviet Union, which are seen as marks of victory in the Cold War. That persistence of American power, however, is often described as being purely financial dominance, increasingly based on a declining industrial base, and for that reason unsustainable over the long run. In that sense, the conventional view on the end of Bretton Woods still sticks to the notion that the dollar is on its way to lose its hegemonic position, not immediately, but over the reasonably close horizon. While in the early years of the twenty-first century, the euro was often seen as a possible contender, at least since the 2010 crisis that has received less attention (Cohen, 2011). The rise of the renminbi has taken over as the main contender for the position of hegemonic currency in the conventional view (Prasad, 2016). More agnostic views suggest a multipolar international monetary system (Eichengreen et al., 2017).

A global fiat standard

The main implication of the closing of the gold window was the end of the fixed dollar-gold exchange ratio, and with the end of the metallic standard came the expiration of the international monetary system that in one way or another always co-existed with world markets, and the imposition of the first truly global fiat monetary standard. A few currencies had always dominated the trade and financial networks associated with long distance trade, at least in the West. In Western Europe, these were the Venetian ducat, the so-called dollar of the Middle Ages, the Dutch guilder and the British pound. During the period of the European colonial conquest, the role of the Spanish silver peso was central in the global trade routes with Asia (Marichal, 2017). The Spanish dollar, or the piece of eight, was legal tender in the United States from 1792 until right before the Civil War (Ibid.: 69), and silver itself remained part of the legal standard until the Coinage Act of 1873. Metallic systems dominated the whole history of international monetary systems until fifty years ago, with silver, more than gold, being the key one. It is true that, as suggested by De Cecco (1974), one could consider the classical Gold Standard a *de facto* pound system. However, the pound was still constrained to some degree by its ties to gold, as much as the dollar was during the Bretton Woods era.

But the reason why agents globally were willing to accept pounds (and later dollars), to use them for international trade transactions, to enforce contracts denominated in them, hold them as reserves, or more importantly, as noted by Keynes in his *Treatise on Money*, to use it as the unit of account in which their calculations about the future were ultimately based, was not their connection to gold. It was the raw military power, and the fact the United Kingdom was able to impose it as the global unit of account. This means, of course, not just localized military power, but an ability to enforce rules on a global scale, something that was only possible until well into the nineteenth-century, after the Industrial Revolution, and the so-called Great Divergence. The so-called unequal treaties with Asian nations after the Opium Wars were the ultimate example of that power. In a sense, the Industrial Revolution created the technical conditions for military power to be exercised globally, and for a fiat standard to be imposed.

In that sense, it is important then to understand the rise of the West, and why a peripheral island at the extreme edge of Western Europe, and then its colonial offshoot, were able to create, first *de facto* and then *de jure*, fiat international monetary standards. Most technological innovations associated with military power, and higher productivity that allowed the rise of the West, as it is well-known since Joseph Needham's pioneering work, originated in Asia, particularly in China.¹⁷ The exceptions often cited are glass lenses, and the mechanical clock. But the key to the issue discussed here lies in another Western European, in fact Italian, innovation. Public debt was one of the few Western European financial innovations, created by the Northern Italian city-states at the end of the medieval period, in the thirteenth-century (Fратиanni and Spinelli 2006; Cipolla, 2010).

Public debt was central because it provided, not immediately, but eventually, a secure, risk-free asset that anchored the functioning of the financial sector, creating the financial conditions for the developmental state.¹⁸ The concept of the developmental state is often used, but seldom analyzed more carefully. The narrative is often associated with the Asian experience in the post-war period, from Japan to China, including, in particular, South Korea. Conceptually, the work of Chalmers Johnson and his followers (e.g. Alice Amsden, Ha-Joon Chang, Peter Evans, and Robert Wade) was central for its development, building on a tradition that harks back to Friedrich List. But the logic of the developmental state is actually related to the American experience, and to the legacy of Alexander Hamilton, who was the inspiration for List, as

noted by Cohen and DeLong (2016). However, the argument should be extended to the British case in the eighteenth-century, which was the ultimate inspiration for Hamilton's *Report on Manufactures*.¹⁹

The post-Glorious Revolution British state, what Brewer (1988) called the Fiscal-Military State, was the original developmental state. Arguably, the central characteristic of the developmental state is its ability to borrow more or less without the possibility of *default*. In other words, the state must be able to borrow in its own currency, and the central bank should be able to fund the accumulation of public debt. It is true that the British currency was legally tied to gold from the early 1700s, but convertibility was suspended in periods of crisis, like the Napoleonic Wars (Eichengreen, 1996). At the core of the developmental state is the ability to spend without external restrictions. A developmental state must have the hegemonic currency. In this sense, Charles Tilly's famous dictum could be amended to say that war made the developmental state, and the developmental state made war. The role of a permanent navy and naval warfare in the British case was central for the formation of the Fiscal-Military developmental state. Rodger (2011) refers, in this context, to a Fiscal-Naval State.²⁰

War mattered, but control of the sea mattered even more, in particular because it provided control of the main trade routes. It also required large bureaucracies, investments in shipbuilding, which were often associated with government spending, procurement policies that required certain standards of quality, and long-term planning. The same could be said about guns. It was the increase in military spending, the size of the Royal Navy, the required complexity of the bureaucracy associated with it, including the procurement policies of the Office of Ordnance, which led to, as noted by Satia (2018: 1), a "military-industrial society," the precursor of the Military-Industrial Complex of the twentieth-century in the United States. Procurement policies were central for technological development, and remain a central instrument of industrial policy. The machinery of state increased, and public debt mounted, reaching the staggering level of 260 percent of Gross Domestic Product (GDP), managed by the Bank of England that fundamentally acted as the fiscal agent of the state. In the United States, the origin of the so-called American System is often related to the two government arsenals, and their procurement policies.

It was the ability to spend, without the risk of default, that allowed the state to expand demand, promote growth and technological development, and it was the financial power associated with lifting the borrowing constraint that was instrumental in producing the technological rise of the west, not the other way around.²¹

The notion of a developmental state and of a hegemonic currency are, in this view, intertwined, and they both rely on the use of the state to promote military power at the service of capital accumulation.

It is true that metallic standards were extremely resilient; after all, it was only with the end of Bretton Woods that money finally broke off its golden fetters. This could be interpreted as suggesting that a Metallic interpretation of the origins of money could be more adequate.²² Silver had been for most of recorded history the key metallic currency, as noted before. The demonetization of silver effectively took place with the rise of the pound as hegemonic currency, and the establishment of the gold standard at the end of the nineteenth century. The rise of the dollar saw, in a similar way, the demonetization of gold. In other words, the demonetization of metals—silver first and gold later—is directly associated with the rise of the pound, and subsequently, the dollar in the modern era, after the Industrial Revolution and its expansion to some Western offshoots. England had demonetized silver in the eighteenth-century, in part as a result of accident and circumstances, and in the late nineteenth-century it was able to impose and coordinate a global transition to gold, its own domestic monetary standard.²³ As Keynes (1930: 274) famously argued, the Bank of England was so predominant that it “could almost have claimed to be the conductor of the international orchestra.”

It is worth noting that territorial or national currencies were also a relatively modern affair and that it took place only in the second half of the nineteenth-century, in the United Kingdom starting with Sir Robert Peel’s Bank Act of 1844 that granted the monopoly of note issuing to the Bank of England, and in the United States with the Civil War and the issuing of greenbacks (Helleiner, 2003; Rochon and Vernengo, 2003). Helleiner (2003) emphasizes the technical issues associated with counterfeiting, and the advantages that industrial techniques created for reducing forgery, and making it possible to enforce a national currency. Further, modern money, meaning the monetary system associated with the rise of mercantile capitalism, was to some extent first an international affair (Rochon and Vernengo, 2003).

The reason why metals remained central to the monetary system is related to its relevance for the exercise of power. Power is a question of degree. In the same way that a firm might create barriers to entry for new competitors and gain a competitive advantage, a country can enforce contracts in its own script. The initial city states had power, and they could enforce contracts in their own denominations, fundamentally because they controlled long distance trade. It should not be a surprise that the hegemonic currencies follow the arc

that goes from northern Italian city-states to the Low Countries and to the territorial Atlantic countries. In the beginning, city-states dominated financial markets and could borrow at lower rates. Stasavage (2015: 528) suggests that it was the more compact political geography, and the political representation of the merchant elites that provided what might be referred to as bourgeois values, as Deirdre McCloskey would call them, and made the difference. For Stasavage, kings were more prone to default than city-states governed by assemblies of mercantile oligarchies.

It is an important argument, but the causality is in reverse. It was the hegemonic power of the mercantile elite, which allowed the control of international trade routes, furnished the means to borrow and to be able to repay, and created the political conditions for representation. Public banks were then created to help finance the state, and to manage public debt. The creation of the banks, precursors of the modern central banks, followed the same sequence of key currencies, with the Bank of Venice, both the Bank of Rialto and the Banco del Giro, the Bank of Amsterdam, and the Bank of England being the main ones. The reasons for the eventual advantage of the Atlantic territorial states, in particular England, were ultimately geopolitical. The fall of Constantinople, and the opening of the route around Africa by the Portuguese, that depended on England to maintain its autonomy from Spain, played a central role. In this case, the source of power was the control of international trade routes, and the conventional source of authority associated with debit and credit contracts, namely, the ability to tax the lower classes, was less relevant. Metals became central, in this context, since they were associated with international transactions. Control of trade routes allowed access to metals and to the sources of finance. Also, custom taxes often provided the lion's share of revenue.

The debts accumulated did not have to be paid, at least not immediately, just rolled over. Creating institutions to manage the debt, i.e. central banks, that acted as the fiscal agents of the state, become an essential instrument of the developmental state. The English adopted the Dutch model, that, in turn, had built on the northern Italian precedents. But the growth that was associated with the control of the international trade routes went hand in hand with the expansion of domestic markets, and it was at this stage that large national territorial states had a greater advantage over city-states, which also explains the eventual abandoning of the metallic monetary standard. National polities can be taxed in domestic currency. There is no reason why the state would be forced to repay in silver or gold, since that is not the basis for their ability to borrow.

It is their power to tax their own population that becomes increasingly important, as the expansion of the economy and of the patterns of consumption extend to an increasingly larger share of the population.

The persistence of the Gold Standard is surprising, and it is clear, as Keynes' impatience suggested, that it had survived well beyond its usefulness. The gold standard was less an instrument of credibility, as suggested in the conventional literature (e.g. Bordo and Kydland, 1999), than a leftover from an era in which the sources of funds and hegemony were tied to the international economy. The gold standard was in a sense a spandrel, to use the term that Steven Jay Gould adapted from architecture—Aa byproduct of the evolution of Western economic hegemony. It was by the end an institution that bestowed legitimacy to power and precluded the direct use of force, in an analogous way to other institutions like the church or the media.²⁴ But gold itself was essentially irrelevant from a functional point of view. England had, for the most part, no problem remaining in the gold standard, and could borrow at relatively low rates of interest without serious risk of default. The only situations in which convertibility had to be discarded was in the presence of an existential external threat to the state, during the Napoleonic Wars and during the First World War. Before the First World War it could attract capital flows and avoid crisis, and even act as a global lender of last resort, and a source of demand for distressed goods, as Kindleberger (1973) argued. It was only when that power to control the flows of capital vanished that the British hegemonic position collapsed. The central issue, besides the fact that the United Kingdom had borrowed in dollars during the war and had to repay in foreign currency, was that it needed the material support of the United States to win the war. Military power provided the basis for the rise of the dollar.

An important consideration is whether Kindleberger (1973: 289) was correct in affirming that the functions of the hegemon “must be carried out by a single country that assumes responsibility for the system.” Eichengreen et al. (2017) suggests that this is not the case, and that the HST literature on the subject, including the version here discussed, is ultimately incorrect. A multipolar view of the international monetary system is required to understand the functioning of the international monetary system, in their approach. This argument builds on Eichengreen and Flandreau's (2009) work on the rise of the dollar as the hegemonic currency, and the evidence which indicates that the dollar became dominant very fast in the 1920s, to be surpassed again by the pound in the 1930s. They conclude that “the evidence is that sterling and the dollar shared reserve-currency status in the interwar period” (Ibid.: 403). The implication is that the world might enter a new era of shared reserve status, with the end of Bretton Woods, the creation of the euro, and the

rise of China—in particular, with the deindustrialization in the United States, and the increasing real productivity advantages demonstrated by the persistent surpluses in China and their accumulation of dollar reserves.

It is to be expected that predictions about the future of the dollar should be informed by the historical record. What Eichengreen and his co-authors seem to argue, on that basis, is that an evolution towards a more multipolar international monetary system where the euro and the renminbi have more significant roles, seems at hand. The argument emphasizes a Metallist view of money, in which the position of the currency results from the advantages associated with reduced transactions costs linked to higher network externalities, and confidence, which depends on real economic factors. Declining industrial power, with persistent trade and current account deficits, would be forced to have a depreciating currency that would increasingly lose its international standing. The international standing of the currency derives from the real economy.

Predictions of the demise of the dollar, it is worth noticing, are older than the end of Bretton Woods, and go back at least to Triffin's classic book. In fact, very few authors argued forcefully against the idea of the demise of the dollar. Tavares (1985) was one of the few to suggest that Bretton Woods had increased the ability of the United States to manage the global economy, criticizing the diplomacy of the dollar that plunged Latin America and a good chunk of the global periphery into stagnation.²⁵ Fields and Vernengo (2013) following in the same tradition suggest that in a neo-Chartalist perspective, causality should be reversed. It is the power to determine what is the international currency that matters and the monetary power that follows which gives advantages in the real economy.²⁶ A state that can borrow in its own currency and can use its central bank as a fiscal agent, helping it finance and manage the accumulation of public debt, can promote the expansion of demand and economic growth, which has a positive effect on technological progress and productivity.

There is little doubt that the United States had that power during Bretton Woods. But after the 1970s, in part associated to the process of deindustrialization, it has become common to assume not only that the country has lost hegemonic power, but also, perhaps hyperbolically, that it might be moving in the direction of becoming a failed state. If the twentieth-century was American, the twenty-first will be, in this apocalyptic scenario, Chinese.²⁷ This seems an exaggeration.

It is evident that going back to the Bretton Woods era, the American developmental state was hidden, to use Fred Block's pertinent expression (Block, 2008). It was concealed in order to promote the notion that free markets and democracy guided the functioning of the United States institutions, and not state planning, which could be confused with a planned economy in the Soviet style. This was necessary during the Cold War for external reasons, and it became more relevant with the rise of the conservative movement, for domestic purposes. But it would be a mistake to assume that the developmental state is gone. It is not just that the capacity of the state, now unconstrained by the gold relic, is still there, but the fact, noted by Block (2008), that the state has increased its support of the private sector capacity to commercialize new technologies. Further, one cannot see the rise of China independently of the geopolitical decision of the United States to open up its markets more or less at the same time that Bretton Woods was declining, again in line with the idea of development by invitation.

Arguably, the capabilities of the hidden developmental state in the United States, which continues to work through the military-industrial complex, remain intact. Although, five million manufacturing jobs have been lost in the 2000s, manufacturing output grew continuously, if somewhat more sluggishly in the decade between the Great Recession and the pandemic. The rise of China, partly associated to a development by invitation strategy by the United States, poses challenges that have now become evident to American elites. However, in military terms or regarding the position of the dollar, the American hegemonic position is unmatched. There are American military bases around China's neighboring countries, but not vice versa, and China must hold significant reserves in dollars, while the reverse is unthinkable and unnecessary. The existence of a geopolitical challenge does not imply that we are moving to a multipolar international monetary system.

On the theoretical limits of modern political economy

Hegemonic Stability Theories, International Political Economy, and heterodox economics were all developed in the 1970s, after the collapse of Bretton Woods. In part, these theoretical developments reflected the incapacity to deal with the events of that decade analytically, and central among these was the position of the dollar in the global economy. This inability to deal with the complexities of the global economy at a theoretical level remains unresolved. While it is to be expected within the mainstream of the economic profession, it is more problematic for IPE as a field. Blyth and Matthijs (2017) argue, in the same vein, that

IPE has been incapable of understanding the recent developments in the global economy, from the Global Financial Crisis in 2008 to Brexit and beyond, because the theoretical framework is inappropriate. In other words, this was not a case of an unexpected black swan, but a lame duck theory, in their own words. In particular, they suggest that the relation between the global economic turmoil and the rise of right-wing and nationalist movements, sometimes referred to as populist, has been a persistent blind spot for IPE. For them, “IPE theory has been blind to that linkage, because while theories of IPE definitely have a micro-level ‘economic approach to politics’, there is no macroeconomics of the IPE driving events” (Ibid.: 205).²⁸

Following Cohen (2008), they see the divide in IPE, to some extent, as a transatlantic divide, even though it is clearly a theoretical division more than a geographical or cultural one, and criticize in particular the American school that “gradually evolved into ‘Open Economy Politics’ (OEP)” (Blyth and Matthijs, 2017: 206). It is worth noticing that Keohane (2009: 37) had noted incisively that OEP starts from individual selfish behavior, and that “interests are deduced from economic theory, OEP can build on the edifice of contemporary economics.” By contemporary economics, one must understand modern Marginalist economics. In this view, the main issue essentially is one that is related to the prominence of rational individual behavior over the constraints imposed by macrostructure. In neo-Polanyian fashion, the micro behavior has to be embedded in social norms, and in their view in macroeconomic regimes that limit the behavior of individual agents.²⁹ While it is clear that Blythe and Matthijs (2017) are correct in emphasizing the problems with theory, it seems that the more profound problem with IPE is not simply a lack of understanding of the relevance of the macroeconomy, or the institutional framework in which economic systems are embedded. The problem lies with the dominant economic theory itself used by IPE authors. IPE needs a good dose of heterodox economics, that fraternal intellectual endeavor that was also born with the demise of the old Bretton Woods order.

Modern economics eschews the issue of power (Kurz, 2018; Vernengo, 2004). But as noted by Kurz (2018: 1) “[i]n non-mainstream economics, in the classical, the Marxian, the Kaleckian and the Post-Keynesian currents of thought, power is an important, and frequently, a central analytical category.” This is particularly true within the heterodox currents that emphasize the old and forgotten theories of classical authors. In that approach there might be a commonality with IPE. Cohen (2008: 18) emphasizes correctly that “IPE may be said to have a long and distinguished lineage, going back to the liberal Enlightenment that spread across Europe in the seventeenth and eighteenth centuries... In a work published in 1671, the

English administrative reformer Sir William Petty first spoke of ‘Political economies’.” The crucial difference between the old classical political economy and the modern Marginalist economics that emerged slowly from the decline of Ricardian economics, is the former’s theory of value and distribution.

Classical political economy authors were concerned with the material reproduction of society, and relative prices represented, in their analytical scheme, the conditions for the viability of society and for accumulation or for economic development, which was their main theoretical concern. In order to determine relative prices, the technical conditions of production and distribution had to be determined, and, in the classical analysis, the real wages were assumed to be determined by historical and institutional factors.³⁰ In other words, conflict between capitalists and workers, and the relative bargaining power of the working class was central to determine income distribution. For classical authors, the rate of profit was ultimately a residual, and did not represent the remuneration of services provided by capital. In addition, the rate of profit was the gravitational center for the monetary interest rate, as noted before. But that is certainly not necessary within the classical political economy framework.

As noted by Sraffa (1960), it is possible to assume that the interest rate, as determined by the central bank, governs the behavior of the rate of profit. In this sense, and in accordance with Keynes’ notion of a conventional rate of interest, distribution would be a macroeconomic phenomenon determined by monetary forces (Pivetti, 1991; Galbraith, 2019). It is only within the context of classical political economy that the notion of a natural rate of interest can be shown to be inconsistent and that the monetary rate can become central, and it is in this framework that the macroeconomic regimes, alluded by Blyth and Matthijs (2017), become relevant.³¹ Some of these ideas on the relevance of macroeconomic regimes, or more specifically of international monetary regimes, for economic development were also discussed by Structuralist authors in Latin America.³² In this sense, the end of Bretton Woods can be seen as part of a change in the regime of accumulation, in which the interests of working class Americans lost, and certain parts of the periphery were integrated into the value added supply chains expanding manufacturing production, particularly in Asia, while other parts of the periphery went through a process of premature deindustrialization.

More importantly, classical political economy, and its revival within heterodox economics, provides a coherent and logical framework for the rebuilding of a truly relevant IPE, capable of explaining not only the central issues associated with the interaction of political and economic variables, but it transcends the

simplistic dichotomy at the core of the conventional approach. The old classical political economy approach requires a discussion of the power relations that are intrinsic to the organization of production and distribution, and it is essential to understand the geopolitical relations that are behind the rise and fall of hegemonic currencies. Further, whereas in the Marginalist approach, a natural rate of interest that corresponds to the equilibrium of investment at the full employment savings level (or in Friedman's terminology at the natural rate of unemployment) would be achieved in the absence of imperfections, in the classical analysis distributive variables are determined as residuals, and a policy variable, like the central bank interest rate, might determine the rate of profit and the equilibrium could be established at several levels, not requiring the full utilization of resources.

The classical theory of distribution, together with Keynesian effective demand imply that there is no natural output rate as a real limit to the economy, and that the limit is often political. It goes without saying that the economy could hit the capacity limit if demand expands too fast, and the capacity limit, which depends on demand itself, does not expand at the same pace. But the norm in capitalist societies implies that income distribution conflicts put an end to demand expansion way before the economy reaches the capacity limit. In the case of the Bretton Woods international regime, it was not exactly the typical Polanyian double-movement in which those social groups that lost with the demise of *laissez-faire* capitalism led a reaction against it (Blyth, 2002), a revolt of the elites to use Christopher Lasch's expression. It was the fact that the very success of the Golden Age created the conditions for a more conservative working class, willing to defend the system against its critics. Rightwing nationalist populism did not simply emerge as a reaction to the failures of neoliberalism over the last decades, but, on the contrary, it was instrumental to the rise of neoliberalism and the end of Bretton Woods.³³ The success of the Keynesian consensus during Bretton Woods, and the increasing concessions to minorities, allowed the divisions within the working class to be exploited, and the increasing support, within the working class circles, for policies that undermined their own economic interests (Frank, 2004). The end of Bretton Woods created the conditions for what James Galbraith has called *The Predator State*, which implies the use of the state apparatus to promote the private gains of corporations and the wealthy (Galbraith, 2008).

Concluding remarks

The end of Bretton Woods was a political decision, fundamentally associated with lifting any financial restrictions on the mobility of capital, something that was seen favorably by American elites. It was not the result of structural problems related to the overissuing of dollars which depended, on a more superficial level, on an excessively inflationary Federal Reserve, or, in a deeper sense, on the contradictions between the domestic and international functions of the United States. It was also not the end of the supremacy of the dollar as the hegemonic currency, but the culmination of the rise of the dollar to that position, as much as the demonetization of silver in the late nineteenth-century represented the rise of a true pound standard, which was the underlying system behind the classical gold standard. Also, these interpretations of the collapse of Bretton Woods and its consequences result from the limitations of the conventional approach to economics. A revival of the method of classical political economy, which is the foundation of heterodox economics and of critical work in IPE, is needed to understand the role of power and the reasons for the end of Bretton Woods.

This does not mean that the dollar position is unassailable; but at the present moment there is little evidence of significant changes in the foreseeable future. The military power that has allowed the United States to impose its currency, and to use it to spend and promote its own industrial and military capabilities through its hidden developmental state, remains intact, even if the opening to China is now seen as something that should be reversed and the Chinese challenge should be confronted more directly, an issue that has a rare bipartisan support in the American congress.

Notes

- ¹ The author would like to thank José Antonio Pereira de Souza and two anonymous referees for their comments, without implicating them.
- ² For example, Steil (2013: 5) tells us that: “White’s role as the chief architect of Bretton Woods, where he outmaneuvered his far more brilliant but willfully ingenuous British counterpart, marks him as an unrelenting nationalist, seeking to extract every advantage out of the tectonic shift in American and British geopolitical

circumstances put in motion by the Second World War.” The notion that White was able to outmaneuver a *naïve* Keynes contrasts with the more materialistic notion that what drove the process, and the ultimate predominance of the American proposal, was the earth-shattering change in geopolitical power.

- ³ There were also significant criticisms of the British Plan. Endres (2005) provides detailed analysis. For a discussion of the critiques of the Bretton Woods plans from a peripheral country, in the work of Raúl Prebisch, see Pérez Caldentey and Vernengo (2021). Prebisch’s concerns were with the possibilities for development in the periphery. Helleiner (2014) argues that during the debates at Bretton Woods, the influence of economists from developing countries, particularly from Latin America like Victor Urquidí, implied that there were concerns with development in the original agreement. In this sense, it was the operation of the system that deviated from plan, and caused problems.
- ⁴ These anti-Keynesian policies were relatively dominant with the International Monetary Fund (IMF), as can be attested by the early influence of the Polak model within the institution, that would eventually become central to the conditionality attached to the loans provided to developing countries (Polak, 1998).
- ⁵ For a recent expression of that view see James (2021: 19), who argues, in his defense of *laissez-faire* policies, that “a different currency could become a new international standard. The dollar is not an adequate insurance policy or a viable basis for Washington to reject the need for change.”
- ⁶ It should not be surprising that the so-called Hegemonic Stability Theory of the international monetary system, IPE as a relatively independent field, and heterodox economics as distinctive from orthodox or mainstream Marginalist (often referred to as neoclassical) economics, all appeared in the 1970s during the crisis and collapse of the Bretton Woods system. See Eichengreen (1989) for a discussion of Hegemonic Stability Theories, Cohen (2008) for a history of IPE, and Lee (2011) and the first chapter of Lavoie (2014) for a history of heterodox economics. The notion of heterodox economics adopted here implies that both the classical political economy notion of conflictive distribution and the Keynesian notion of the principle of effective demand are the minimum elements of an alternative to the mainstream. It is a broad tent perspective, as defined by Lavoie, and includee many groups not directly related to heterodox economics in his definition, such as Latin American structuralists, certain Marxist groups, including some French regulationists, and World System authors.
- ⁷ The inter-war understanding for the need to control movements of capital was particularly strong in the periphery. Prebisch had introduced capital controls as the effective manager of the Central Bank of Argentina, and this was praised by Robert Triffin, when he was in charge of the Latin American section of the Federal Reserve Board, and took Prebisch to the Fed’s monetary missions to Santo Domingo and Paraguay in the 1940s. See Pérez Caldentey and Vernengo (2018) for Prebisch and Triffin’s discussion on capital controls.
- ⁸ Carter (2020: 361) argues that “Keynes convinced himself that the final arrangement was acceptable because the United States would pay more than any other country.” That the United States would foot the bill was a given. The real reason Keynes accepted the arrangement, besides the fact that he did not have an option really, was that it provided for capital controls and allowed for what he referred to as the ‘euthanasia of the rentier’—central for his views about the possibilities of avoiding another Depression. On Keynes and capital controls, see Crotty (1983; 2019).
- ⁹ There are many problems from a logical point of view with the notion of a natural rate of interest and the notion of a well-behaved investment schedule, which are well-established in the literature. For a recent description of the main critiques and their relevance, see Dvoskin and Petri (2017).
- ¹⁰ This follows the view that price moderation requires a credible commitment by the central bank. The gold standard is sometimes described as such a commitment (Bordo and Kydland, 1997), and in its absence the Fed had to learn about the inflationary impact of its own policies by exploiting the Phillips Curve. The experience of the Great Moderation showed that a credible fiat regime could also achieve price stability, once the monetary authorities had incorporated the lesson that there was no Phillips relation to be exploited in the long run (Sargent, 1999). There are alternative, heterodox, explanations for the acceleration of inflation in the 1970s and the stabilization of the 1980s that would contradict this analysis (Vernengo, 2006a).

- ¹¹ For classical authors, the value of gold was determined by the technical conditions of production, often associated to labor needs, and for a given subsistence wage, and not by its relative scarcity. Further, the amount of credit in the economy depended upon the needs of trade, based on the so-called Real Bills Doctrine. Hence, the amount of gold had no direct connection with the price level. For Ricardo, under inconvertible paper currency, and accepting Say's Law, inflation could result from the overissuing of money by the Bank of England. The notion that value, including of gold, was associated with supply and demand, and that the amount of gold, or paper currency in an inconvertible system, would be central for prices only becomes dominant with the rise of Marginalism. For a discussion on the classical views, see Green (1992).
- ¹² Keynes famously argued in the *General Theory* that "I am now no longer of the opinion that the concept of a 'natural' rate of interest, which previously seemed to me a most promising idea, has anything very useful or significant to contribute to our analysis" (Keynes, 1936: 243). Arguably, Keynes was unable to completely free himself of the notion of a natural rate, but his emphasis on a conventional interest rate could be developed into a coherent alternative in which the monetary rate, as influenced by the central bank, is the anchor of the long-term equilibrium position. In this sense, Keynes was building on a tradition that suggested that monetary factors drive the real ones.
- ¹³ Keynes' views on the euthanasia of the rentier and the socialization of investment could be seen as part of his case for Socialism, as suggested by Crotty (2019), rather than his, perhaps more liberal, preoccupation with saving capitalism from itself. Interestingly enough, Kalecki, the other key author of the Keynesian Revolution, saw the dangers of a less radical and more reformist agenda for the future of capitalism.
- ¹⁴ The concept was first utilized by Arthur Lewis, and then by Immanuel Wallerstein. The concept here is used in a sense closer to Medeiros and Serrano (1999), suggesting that the hegemon helps in lifting the external constraint, and access to funds in the hegemonic currency, to certain geopolitical allies.
- ¹⁵ While that is essentially correct, the follow up notion that the United States was forced to change its position because of its weakened external situation undermines the argument. Citing the work of Robert Gilpin on benevolent and predatory hegemonies, Helleiner says that the "United States abandoned its early postwar support for the restrictive Bretton Woods order in large part because of its changing global position. In the early postwar years, the economic strength of the United States and its strategic interests in the cold war encouraged it to assume a 'benevolent' hegemonic position in the Western alliance. Many analysts have suggested that beginning in the 1960s, the United States gradually adopted a more self-centered or 'predatory' foreign economic policy because of growing current account and budget deficits. In particular, the United States began to seek foreign help in financing and adjusting to these deficits, in order to maintain its policy autonomy" (Ibid.). This would suggest that the basis for the change was economic, and not political as argued here.
- ¹⁶ The rise of Neoliberal ideas and its close relation to corporate and business interests within the United States is well documented in Phillips-Fein (2010). The Neoliberal project, in particular from the 1930s onwards wanted the market re-embedded to preclude the redistributive policies of the New Deal, as noted by Slobodian (2018: 19). Further, it is clear that even back then in the 1940s the free mobility of capital was central for the neoliberal project. Slobodian (Ibid.: 136) says that "[a]gains Roosevelt's Four Freedoms—of speech, of worship, from fear, from want—neoliberals posed the four freedoms of capital, goods, services, and labor."
- ¹⁷ Among these innovations, gunpowder and guns have a central role for military power, and these were invented in China. Chase (2003) argues that early firearms were not very effective when used against cavalry because of their overall lack of mobility, poor rates of fire, and limited accuracy. As a result, their effectiveness was restricted to infantry and siege warfare, and they were not used in regions threatened by nomads, like China, in which cavalry warfare was dominant. Andrade (2016) shows, however, that China was able to catch up, and that its lagging behind is relatively recent.
- ¹⁸ The pioneer work on the origins of what he termed the Tax State is by Joseph Schumpeter. Stasavage (2015: 524-25) argues that the preconditions for the creation of public debt were the existence of a source of revenue, an event

requiring an expenditure shock, often warfare, and the need to pay soldiers in monetary terms, rather than using the conscription of civilian populations.

- ¹⁹ Hamilton is often, and incorrectly, seen as a neo-mercantilist. Cohen and DeLong (2016: 45) argue that the Hamiltonian project was anti-Ricardian and Smithian. And while it is true that it was against the *laissez-faire* approach of some classical political economy authors, it is unclear he departed in other respects. It was a policy difference, but not a conceptual one.
- ²⁰ The argument follows the work by Glete (2000), which extends to the work by John Roberts and Geoffrey Parker on the Military Revolution, which preceded the Industrial Revolution.
- ²¹ This notion is firmly based on a neo-Chartalist understanding of money and a functional finance role of public debt, which builds on the work of Abba Lerner. This analysis has similarities with the work by Wray (1998). For some differences on the origins of modern money, see Rochon and Vernengo (2003), and for some differences on the role of exchange rates and the external constraint in limiting the scope of fiscal expansion in the periphery, see Vernengo and Pérez Caldentey (2020).
- ²² For a discussion of Metallist and Chartalist views of money see Ingham (2004). For a critique of Metallist views of the rise of the west see Vernengo and Fields (2016).
- ²³ For a discussion on the role of Sir Isaac Newton, as Master of the Mint, see Eichengreen (1996). It must be added that the material conditions for a gold standard were possible since Portugal found great quantities of gold in Brazil, and had signed a free trade agreement, the Treaty of Methuen, with England in 1703. Brazilian gold flows went to London, via Lisbon.
- ²⁴ This idea in IPE derives from the work of Robert Cox, which builds on the concept of hegemony from Antonio Gramsci. As he says, “[h]egemony, for Gramsci, was a condition in which the governed accepted or acquiesced in authority without the need for the application of force” (Cox, 2004: 311).
- ²⁵ Strange (1987) also, attacks the myth of the loss of American hegemonic power. As discussed in Fields and Vernengo (2013: 743), the work by Susan Strange can be seen also as suggesting that the United States’ hegemony increased after Bretton Woods.
- ²⁶ Gavis (2019: 14) contextualizes inaccurately the argument in Fields and Vernengo (2013), suggesting that the neo-Chartalist view of hegemonic currencies is “a reductionist way to simply mean ‘stabilizer.’” It is evident that the misquote comes from a discussion of the work by what are referred to as conventional IPE writers (e.g. Philip Cerny, Robert Keohane, Stephen Krasner, and John Ruggie, among others), arguing that the role of the hegemon is to provide space for cooperation. That view is clearly contrasted with a neo-Chartalist view in which the central role of the hegemon is to determine the international unit of account, and is associated in IPE to the work by Strange. Imposing order, rather than managing cooperation, is the main role of the hegemon.
- ²⁷ For a more balanced view of the possibilities and the likely persistence of American hegemony in the twenty-first century, see Nye (2015).
- ²⁸ They do note that “Marxist IPE theorists, out of the mainstream, especially in the United States, are not so blind to global macro-events and have a definite theory of the global macroeconomy” (Ibid.: 224). Marxists in this respect can be grouped with other heterodox economic groups within economics, in the same way as the French Regulation School that they discuss together with the literature on the varieties of capitalism, as being relevant for their notion of macroeconomic regimes. Marxists are particularly relevant, since they do, like Marx, use the categories of the old classical political economy authors from William Petty to David Ricardo.
- ²⁹ Very often neoliberalism is seen as project to disembed markets from regulatory institutions. If one takes Hayek as central to the neoliberal project, it is worth noticing that “both Hayek and Polanyi were ‘concerned with socio-institutional responses to the free market’ [and] Hayek developed his own idea of ‘free markets as socially embedded’” (Slobodian, 2018: 6). In other words, the neoliberal approach, which is close to what Blyth and Matthijs (2017) associate with OEP, is also very much concerned with the legal and institutional framework that

constrains behavior in free markets. For a discussion of the similarities between Hayek and Polanyi, in this respect, see Mirowski (2018).

- ³⁰ The details about the determination of prices in classical political economy, as reappraised by Piero Sraffa, are not relevant here, and are clearly delineated in Kurz and Salvadori (1995). It suffices to say that it contrasts with Marginalist economics, in which relative prices represent relative scarcity, including in the case of the so-called factors of production. In that case, distribution is, as much as relative prices, determined by supply and demand. In this analysis, power relations play no direct role in distribution.
- ³¹ Some IPE authors, like Baccaro and Pontusson (2016) have incorporated neo-Kaleckian growth models, and the distinction between profit and wage-led regimes into their analysis. For a more thorough discussion of demand-led growth models within heterodox economics, see Freitas and Serrano (2015).
- ³² Medeiros and Serrano (1999) develop the same topic on the basis of heterodox approaches that build on classical political economy and a tradition that has its foundations in Latin American Structuralism, in particular the work of Conceição Tavares. On the work of Tavares and her followers, see Vernengo (2006b).
- ³³ No doubt that the crises of the last decades, including the Great Recession and the Pandemic, have exacerbated the discontent with neoliberalism and the prominence of populist leaders. But there is a clear direct connection, in the United States, between Goldwater, Wallace, Reagan and Trump. On a different view of the rise of populism, see Judis (2016).

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