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Stabilizing a Keynes-Minsky model of financial fragility

Abstract

The profound insights provided by Minsky's theory of financial instability are insufficient. On the one hand, as Marxist and other critics have pointed out, they tend to dissociate finance from the instability-creating dynamics of the wider economy. On the other hand, they tend to depict the state as an exogenous, stabilizing, influence. This creates an inherent tension in Minsky's analysis, which also insists, 'stability is destabilizing'. A Marxist understanding resolves this tension. The state is an essential and active component of capitalism and its contradictions. State interventions may attenuate some of capitalism's destabilizing processes but these displace rather than eliminate the underlying contradictions and themselves contribute to longer-term instability and crises.

Introduction

This article contributes to a critical Marxist engagement with the Keynesian tradition. In particular, it builds on existing critiques of Hyman Minsky's Financial Instability Hypothesis to emphasize the essential role of the state in reproducing the social relations of finance and thence in reproducing financial instability.

The next section makes the case for a critical but constructive dialogue with Keynes and the Keynesian tradition. Keynesians say important things, which may need reworking and setting on Marxist foundations but which can then enrich Marxism. In particular, Keynes's emphasis on finance identifies important themes, which are relatively underdeveloped in Marx's own work and raise questions with which Marxists have been relatively uninterested. For Marxists, Keynes exaggerates the independent role of finance, which cannot be cleaved from the broader social relations of capitalism and he misconceives the state in an essentially Hegelian sense as able to stand above and resolve capitalism's contradictions (Mann 2017). But there is an active state agency, crucial to a distinct financial "moment", which cannot simply be read-off from developments in the "real" economy.

As the second section continues, the power of Keynesian insights and their limitations is epitomized by Minsky's hypothesis of financial instability or fragility. This became particularly fashionable in the aftermath of the 2007-08 sub-prime crisis. Where, for the mainstream, the crisis both came as a surprise and remained fundamentally inexplicable, the non-mainstream, as Sheila Dow, puts it, had "a theory - Minsky's financial instability hypothesis - which explained it" (2020, 47). Dow's endorsement here is without qualification. Several post-Keynesian co-thinkers, including Randall Wray (2008) and Jan Kregel (2008) similarly see Minsky providing something close to a sufficient explanation. Minsky was also rediscovered by more mainstream figures, ranging from properly conservative commentators in the *Economist* and the *Wall Street Journal* to New Keynesians like Martin Wolf, Paul Krugman and Janet Yellen (see Palley 2009, Yellen 2009, Jessop 2012). Meanwhile, at least one prominent Marxist interpreted the sub-prime meltdown as a Minsky crisis not a Marx crisis (Moseley 2008). But as existing critiques suggest, the powerful logic Minsky identifies is better understood when integrated into a broader analysis of the uneven and changing dynamics of capital accumulation (Jessop 2012, Ivanova 2013, Dunn 2014, Kincaid 2016). There is then no need to posit Minsky's and Marxist visions as radical alternatives.

The third section builds on this to argue that a critical Marxist incorporation of the role of the state in constituting financial crises can deepen the critique of Keynes and the Keynesian tradition, securing the hypothesis of financial instability not only from "below", but also from "above". Keynes and Minsky see the state as a stabilizing agent, susceptible to mistakes and to circumvention by innovative finance, but not itself constitutive of volatility. Once the state is understood in terms of anti-determinist Marxism, as having agency, as Susanne de Brunhoff puts it, "which is both immanent in, but not reducible to, the fundamental relationship of capital exploitation" (1978: 5), it becomes an integral part of the social relations of capitalism and as such vital to reproducing money and finance. States accordingly also become implicated in financial dislocations. Brief historical examples illustrate how states were actively involved in producing various forms of financial crisis and challenge a reading of the 20th century as switching to and away from effective Keynesian regulation. While it is impossible to disprove the historical counterfactual of finance permanently reined-in, it is more plausible to see states as part of, not as exogenous to, an unruly global capitalist system. Such a critical Marxist view of the state can help resolve a fundamental tension between two crucial Minskyian propositions. On the one hand, "stability is destabilizing" (1995, 94). On the other hand, state intervention is capable of stabilizing finance (1995, 88). The logic of the first proposition suggests that the second is always likely to prove temporary and fragile.

1. For a constructive critique of Keynes

Why bother with Keynes? He was a self-proclaimed elitist and moderately conservative economist who insisted that "the class war will find me on the side of the educated bourgeoisie" (CWIX: 297). He was ignorant and dismissive of Marx and Marxism. Some Marxists have been equally dismissive of Keynes. At best he provides a more subtle apologetics for capitalism (Mattick 1971, Pilling 1986). Meanwhile, others suggest a straightforward amalgam (Foster and McChesney 2012). There are some fundamental epistemological differences between Marx and Keynes which cannot simply be wished away and any Marxist appropriation needs to be developed with caution. But there are important precedents in learning from bourgeois economists, most obviously in Marx's own work but also, for example, in Lenin's appropriation of insights from John Hobson and attitude towards Keynes's early work, insisting on the prompt publication of a Russian translation of the *Economic Consequence of the Peace* (Lenin 1975, Turner 1969). As Duncan Foley says of Marx, he "wants to find the kernel of truth in the knowledge constructed by others. His criticism is in this sense positive" (1986, 2-3). It is an unattractive conceit that Marxists have nothing to learn.

Rather than attempting to resolve the broader philosophical issues, here I simply want to note how Keynes's and the Keynesian tradition's preoccupation with money and finance contrasts with a relative Marxist neglect. The relative Marxist neglect is attested in the incompleteness of Marx's *Capital* in relation to questions of money (De Brunhoff 1976). Similarly, amongst Marx's followers, John Weeks argued, that "[o]bsession with Marx's theory of value and exploitation has resulted in little attention being directed to his analysis of capitalism as a money economy" (1988, 202). Of course, there has since been an enormous amount of work, particularly on recent processes of financialization. Some of this will be drawn upon in the critique of Minsky in the following sections. But, as Fred Moseley's (2005) collection attests, there remains a contradictory diversity of Marxist approaches to money. There is work to be done.

There is, of course, also a great variety of Keynesian thought, some of it converging with the mainstream Keynes was criticizing. Here I want to sketch two simple points from Keynes's *General Theory*, while the next section returns to a more specific argument about financial volatility made in chapter 12 of that book and which has been drawn upon particularly by Minsky and the more radical "post-Keynesians".

First, for Keynes (1973), the "non-neutrality" of money is crucial. He accuses almost everybody else, from David Ricardo and Marx to his own contemporaries of believing in neutrality, of believing that money does not matter, that the economy can be understood without money, as if it worked by barter. As a consequence, for the mainstream, everything becomes an equivalent exchange and economic equilibrium becomes the point of departure. Modern economics textbooks usually reproduce this way of thinking, depicting the fundamental problems of allocating scarce resources without reference to money which is then bolted on in a chapter or two towards the back. Instead, for Keynes, "liquidity preference", the demand for money as money, not simply as a means of immediate spending in the real economy, impacts profoundly on interest rates and thence on investment and employment. Therefore, as Minsky puts it, "we cannot understand how our economy works by first solving allocation problems and then adding financing relations; in a capitalist economy resource allocation and price determination are integrated with the financing of outputs, positions in capital assets, and the validating liabilities" (1986, 159-60). Money is not neutral.

Keynes's accusations against Marx are false. The capitalist economy is essentially monetary. Of course, money matters and classical ideas of hoarding anticipate Keynes. Marx has a particular contempt for Jean-Baptiste Say and his "famous law" (2010, 160) that supply creates its own demand, the essence of the assertion of monetary neutrality. But it is probably fair to acknowledge a tendency amongst Marxists to assume we can first solve the relation of production problems and then add financing relations, without reflecting-back too much on their mutual constitution. Of course, for Marxists, there is quite properly an analytical ordering, which puts value creation and surplus extraction in production before finance (Marx 1973: 108). But there is at least a specific monetary moment that cannot simply be derived from what we know, or think we know, about the productive economy.

At the same time, while Minsky's formulation suggests integration, most of Keynes's *General Theory* presumes determination of the real, of interest and employment, by the monetary. At least at times, the Keynes-Minsky vision approaches what might be called "real economy neutrality". Causation runs one-way from finance to investment and employment. Interest rates can be pushed up by the process of financial speculation but Keynes comes close to an outright denial, that they are influenced by "real economy" factors in any predictable way (Keynes CWXIII, 515, 1973, 247, Sheehan 2009, Shaikh 2016, Dunn 2021). Minsky too sometimes writes as if the productive economy would be stable were it not for finance, endorsing Michael Kalecki's vision in which the accounting identities appear to preclude "real economy" causes of dislocation (Minsky 1995, see Jessop 2012). There are already qualifications of this vision in Keynes and, as will be discussed in the next section, in the interpretations of later Keynesians including Minsky. But just as money is not neutral, we cannot understand the economy by first solving the financial problems and then adding real economy relations and it remains worth reflecting on their mutual constitution.

The second crucial element of Keynes's critique of the mainstream is that state intervention can have a positive effect on the economy, increasing investment and employment. Keynes's influence on modern economics is such that the orthodoxy he was criticizing now sounds bizarre. Government intervention was not only reckoned morally deplorable, it could not work. The market, by definition was efficient, and any interference in that market would be counter-productive. Keynes acknowledged that few people believed this literally, but their theory (as above, assuming market equilibrium) operated as it were so. By contrast, Keynes (1973) argued that through their supply of money, the authorities could influence the rate of interest and thence investment and employment. Where that proved insufficient, the state could intervene directly to create jobs though public works where private business was unwilling.

The crucial, positive, point here is the recognition that states are themselves vital economic actors. Their interventions make a difference. In Keynes and the Keynesian tradition more broadly, there is at least a tendency to flip instead of than fundamentally challenging the mainstream market-good / state-bad, binary. Mann's claim that "Keynes is our Hegel" (2016, 128), neatly summarizes this view of the state as standing above, and reconciling, the tensions within civil society (Mann 2017). Meanwhile, the state remains "exogenous", outside the economic system being considered. Some Keynesians challenge this. For Dow (1996), nothing but acts of God should be seen as exogenous to a properly critical political economy. So, although the final section attempts to articulate states' roles in reproducing financial volatility in specifically Marxist ways, it may again be worth critically engaging with the Keynesian tradition.

2. Minsky and his critics

For readers unfamiliar with Minsky's hypothesis of financial instability or fragility, this section begins with a brief summary. Minsky saw himself standing on the giant shoulders of Keynes (as well as those of Irving Fisher and Henry Simons) (Minsky 1982, 1986). Keynes and Minsky begin with a critique of the mainstream, which assumes economic equilibrium in the absence of exogenous shocks. Instead, they posit instability as "endogenous", a function of the normal working of the financial system. The section continues by identifying how critics have suggested the power of Minsky's insights can be deepened when put in the context of the wider contradictory dynamics of capitalism.

The liberal mainstream sees free markets, left to themselves, as essentially efficient and comprehensible as if they worked by barter, without money (Minsky 1986). Consequently, "[f]inancial instability is a non-event, something that just cannot happen in so far as the standard body of today's economic theory is concerned … Standard economic theory does not examine the possibility that there are endogenous disequilibrating forces within a capitalist economy" (Minsky 1982, 13, 16). Over the years, many more or less orthodox economists have nuanced this position; imperfect information is endemic, prices may misallocate resources, and adjustments may be jerky (Stiglitz 2011). But understanding more radical financial volatility remains beyond the remit. Robert Lucas is explicit.

> [O]ne thing we are not going to have, now or ever, is a set of models that forecast sudden falls in the value of financial assets, like the declines that followed the failure of Lehman Brothers in September 2008. This is nothing new. It has been known for more that 40 yeas and is one of the main implications of Eugene Fama's "efficient markets hypothesis". (Lucas 2009).

Market adjustments are small and incremental. More substantial volatility must originate elsewhere. In keeping with the broader liberal tradition, major disturbances are exceptions and accidents to be "explained away", most typically blamed on exogenous shocks. Psychology, human fallibility, and "irrational exuberance" are invoked (Fergusson 2008, Kindleberger and Aliber 2008, Dymski 2013, Shiller 2015), if seldom with reference to the psychological literature. Probably most importantly for the liberal tradition, politics, war, revolution and the generally malign hand of government are responsible.

By contrast, Piero Ferri and Minsky are explicit; theirs is "an approach which literally reverses Lucas's conception" (1992, 89). This straightforward reversal will be criticized in what follows but Keynes's views, particularly those on uncertainty and his comments on speculation in chapter 12 of the *General Theory*, provide the basis for powerful claims to identify internal or endogenous drivers of financial instability. Drawing on his earlier work on probability (Keynes 1921), Keynes recognizes that people often make decisions where there is no secure basis for knowledge. Financial assets come to be valued according to how other people expect them to be valued. Here Keynes's invocations of "animal spirits" and psychology may appear to converge with the mainstream (McCulley 2009, Palley 2009, Bernard *et al*. 2014). But, rather than seeing psychology as radically indeterminate or "irrational" from a putatively "objective" stance, it makes more sense (and puts clear blue water between Keynes and the mainstream he is criticizing) to see the psychology of financial transactions as individually rational, even if it has collectively adverse consequences. Keynes was fond of identifying "fallacies of composition" (O'Donnell 1989).

Keynes gives some famous depictions of financial behaviour. Those owning stocks, increasingly know little about the firms' actual business operations and are less concerned with buying "for keeps", with making "long-term forecasts of the probable yield of an investment over its whole life, than with foreseeing changes in the conventional basis of valuation a short time ahead of the general public" (1973, 154). People cannot know what other people are thinking or how they will act (Varoufakis *et al*. 2011) and "we devote our intelligences to anticipating what average opinion expects the average opinion to be" (Keynes 1973, 156). Values of financial assets become self-referential. Because they are not "produced" (in a Marxist sense they are "fictitious capital" and do not themselves have value), there is also often no commensurate supply cost. Instead of dampening demand, rising prices encourage more people to jump on the bandwagon.

Minsky's (1986) model elaborates a specific logic of financial crises developing through a five-stage trajectory, beginning with conditions of (moderate) boom and financial expansion. Investors borrow but can repay the loans with the proceeds of the investment. Minsky calls his first stage "hedge" finance. It is hedged in the sense of being safe, less than the profit being made. Anticipating the discussion below, it is worth already noting that in such formulations Minsky therefore depicts a source of re-payment and of confidence in corporate profitability. Company stocks, paying dividends out of profit and, with luck, also rising in price, probably provide the most straightforward example. This model based on businesspeople and bankers, contrasts with conventional visions based on "consumers' decisions" (Ferri and Minsky 1992, 79). Elsewhere, the object of investment can be almost anything and the liability structures can apply to "firms, households, and financial institutions" (Minsky 1995, 85). In the aftermath of the sub-prime crash, housing, where investors charge rent while property values appreciate, was widely accepted as fitting the model. In any case, hedge finance appears to be stable and sustainable. But "stability is destabilizing" (Minsky 1982, 26), a phrase Minsky (1995, 94) attributes to Abba Lerner. Success breeds complacency, and the longer the success, the greater the complacency. As asset prices rise, it seems worthwhile to borrow and buy.

Minsky's second stage is "euphoria", turning hedge finance into speculative. Minsky (1986) describes how finance is transformed.

> If a particular mix of hedge and speculative financing of positions and of internal and external financing of investment rules for a while, then there are, internal to the economy, incentives to change the mix. Any transitory tranquility is transformed into an expansion in which the speculative financing of positions and the external financing of investment increase. (Minsky 1986, 244)

Debt is rolled-over rather than repaid out of income. Investments still earn enough to meet the interest payments but investors rely on the rising asset prices to pay back the principle.

The third stage, the critical stage, turns what was speculative finance into Ponzi. Charles Ponzi was a notorious US fraudster, so it is worth stressing that Minsky is identifying a process and not necessarily any individual malpractice. Ponzi paid investors high returns but could only do so by using the money coming from new investors brought into the scheme (attracted by high returns). It is an inherently finite process. For Minsky, the nature of financial markets means that what begin as sound investments can be transformed into situations where payment can only be made by drawing on new funds. Ponzi finance is a form of speculative but now the assets themselves no longer make enough money to cover the interest payments and investors need to borrow more to cover the previous loans. This might still be rational. So long as asset prices are rising, it remains possible to anticipate a profit.

A rise in interest rates may be enough to push hedge finance into speculative and speculative into Ponzi. This rise in interest rates may be achieved by policy decisions but increased demand itself eventually generates upward pressure and produces rate rises. “The upper turning point is completely endogenous once it is accepted that interest rates rise in an investment boom” (Minsky 1982, 33).

At this point we enter Minsky’s fourth stage of revulsion and propagation. It becomes a good time to sell. A few people, often market insiders, detect even a slowing of growth, rather than an absolute decline, and cash-in. The few initial sales increase the supply of assets and put a little downward pressure on prices, inclining a few more people to sell. Soon, a cautious sneak to the exit becomes a rush. Anyone who has borrowed to buy assets, now worth less than they paid for them, faces ruin. The market collapses. And the lenders are not repaid. And they too collapse. Sensing which, of course, depositors rush to retrieve their savings, accelerating the debacle. Just as inflation feeds on inflation, now deflation feeds upon debt-deflation (Minsky 1992, McCulley 2009). But the downward spiral has its limits. Those who sold early made a profit, with which they seek new avenues of investment. Eventually it becomes possible to find bargains amongst the depreciated assets. A process of renewal and recovery begins. "As the memory of the 'crisis' fades, risk aversion dissipates and financing terms ease" (Minsky 1995, 93). This is Minsky's fifth and final stage, and while history never simply repeats itself, this then shades into his first.

There is an inherent cyclical logic and "as long as the economy is capitalist, it will be financially unstable" (1982, 36). There is no need to invoke exogenous shocks in general, or state malevolence or incompetence, to explain financial crises. The logic is endogenous. For Keynes, Minsky and their followers, money is not neutral so what occurs in the financial sphere then has potentially profound effects on the wider economy. Much of this resonates with the long history of financial crisis, from Tulipmania and the South Sea Bubble through Wall Street in 1929, to the 1997 Asian crisis and the 2007-08 sub-prime crash (Kindleberger and Aliber 2008).

Minsky's schema has been widely accepted across the economic and political spectrum. It has provoked a huge literature, some of this also identifying problems and seeking to extend Minsky's ideas by embedding them within a broader critique of capitalism. After briefly sketching these below, the next section extends the constructive critique by considering how states are implicated in the reproduction of financial crises and not, as Minsky and many supporters suppose, simply their solution.

As one mainstream critic argues, the destabilizing potential of stability as a "mechanism is, of course, extremely general; it may account for wars and certainly plays a role in epidemiology" (Flemming 1982, 40). The accusation of abstract generality may better fit the way Minsky has been appropriated than some of Minsky's own writing, notably his most extended treatment of the US economy in the 20th century (Minsky 1986). Minsky acknowledges the pattern of instability can be "irregular" (Ferri and Minsky 1992, 80) and insists that “questions need to be answered in the context of the institutions and financial usages that actually exist, not in terms of an abstract economy” (Minsky 1986, 112). Nevertheless, the irregularity of financial bubbles is quite stark.

A brief reflection on major financial bubbles confirms an enormous variation. Bubbles vary hugely in their duration and amplitude before bursting. The bursting may involve a radical collapse of prices, as in Wall Street in the 1930s, but alternatively often leaves prices higher than when they entered their speculative phases. Bubbles also varied hugely in their consequences. At least according to most accounts, the Wall Street crash of 1929 was the harbinger of the Great Depression. The more modest bubble peaking in 1873 similarly heralded that century’s Great Depression. The Japanese bubble of the 1980s also had profound and lasting if more localized economic effects. Many other bubbles, from Tulipmania onwards, have had more limited impacts (Kindleberger and Aliber 2008). The most recent global financial crisis turned out not to be much of a crisis in terms of changing economic direction (Dymski 2010, Cohen 2017). While the social consequences continued to be felt more than a decade later, credit expansion and growth quickly resumed, at least at a global level. In short, there is little obvious pattern.

This variety also qualifies important attempts to extend Minsky’s hypothesis. Four themes are worth briefly noting. First, in keeping with the claim that stability is destabilizing, Minsky also hypothesizes “that the more severe depressions of history occur after a period of good economic performance” (1995, 85). Second, Minsky’s hypothesis seems to anticipate that the growth in the size and complexity of financial systems would coincide with an increase in the number or severity of crises (Goldsmith 1982, 42). Third, Thomas Palley (2011) and Cédric Durand (2017) go further, to construct models of “super-cycles” overlaying the medium-term financial cycles. At least for Durand, this is predicated on ongoing government interventions to restore financial confidence. Fourth, and in some tension with this, Minsky himself sees the growth of government as likely to attenuate the problems. As government grows, the risk of recession “decreases almost to vanishing point” (1995, 88). The role of government will be discussed in the next section but it seems sufficient here to note that such patterns are not obvious in the data, either of bubbles in specific assets or of the overall economic trajectory (Hoover 2012).

Of course, capitalism's fluctuations are non-random and it is entirely proper to identify systematic disequilibrating factors as Minsky, Marxists and others have done. Recent Marxist engagements, putting financial volatility within the broader context of capitalism's contradictory dynamism and instability (Jessop 2012, Ivanova 2013, Dunn 2014, Kincaid 2016) allow that this takes some very different forms. Capitalism's instabilities and uncertainties stem from its fundamentally anarchic nature, inherent, in the first instance, in the relations of production, more narrowly conceived. If some Marxists have been too quick to pin their allegiance to particular disequilibrating processes as the source of crisis (Clarke 1994), Marx's own analysis identifies various sources of potential dislocation, with any temporary restoration of equilibrium only sending the economy hurtling in new and ultimately unsustainable trajectories. Minimally, however, real or productive economy dynamics both limit and condition credit expansion. Profit generation is fundamental to the generation of speculative credit expansion in various forms of "fictitious capital".

Re-emphasizing real economy dislocations does not involve a reversion to the position Keynes and the Keynesian tradition contest, that money is only a veil and that what happens in finance is mere reflection of those real economy dislocations. Engel's note in *Capital* acknowledges there can be "a monetary crisis, which may appear independently of the rest and only affects industry and commerce by its backwash" (Marx 1976, 236). Money and finance have a moment of their own. Marxist starting points therefore potentially augment rather than invalidate Minsky. Kincaid, for example, reasonably depicts companies loaded with debt in the 2000s and having their cash reserves drained by hostile take-overs as being "Minskyfied" (2016, 30). But financial crises cannot be explained adequately without reckoning on their relations with the contradictory dynamics of productive capital (Jessop 2012) and it becomes necessary to regress the question to why such corporate behavior developed and why bubbles take particular forms; as speculations on currencies, high-tech stock, real estate, cryptocurrencies or whatever. The broader capitalist context helps to "secure" ideas about finance and financialisation.

It is worth stressing that Marxism has no patent on such insights. Already in the *General Theory* Keynes acknowledges that what he calls the "Trade Cycle … is highly complex and that every element in our analysis will be required for its complete explanation" (Keynes 1973, 313). Keynes's addition of a corporate finance motive (Keynes 1937) into his understanding of liquidity preference and interest rate determination also implies mutual determination, albeit in a relation that remains somewhat unclear. Minsky (2008, 57) similarly says that:

> This element of uncertainty centers on the mix of internal and external financing that will be needed; and this mix depends upon the extent to which finance for the investment goods will be forthcoming from profit flows … Profits are available to innovators in financial structures and institutions as well as to innovators in products, production techniques, and marketing. (Minsky 1986, 207, 220).

Again, "a financial system does not exist in isolation. Its robustness or fragility does not depend soley (sic) on interactions within the financial system" (1982, 24). In Kregel's interpretation, Minsky becomes almost Marx like, emphasizing how borrowing is "serviced by the production of profits from the means of production" (2013, 160). Palley's "structural Keynesianism", similarly seeks to extend and embed Minsky's ideas in a broader understanding of capitalism (2009, 3, see also Kotz 2009, Epstein and Wolfson 2013).

But the financial-real partnership has hardly been ventured consistently. Often in Keynes and Minsky and in most of their interpreters, the emphasis remains firmly on how finance influences the wider economy rather than the reverse. So there is overstatement but some substance to charges that "Minsky's cycle theory does not, in short, depend at all on developments on the real side of the economy" (Arnon, 1994, 360, see also Dymski and Pollin 1992, Palley 2009). As the next section argues, that "real" side includes state action, which the constructive critical engagement with the Keynesian tradition and Minsky's hypothesis of financial instability needs to incorporate.

3. The state as an agent of financial instability

This section first articulates the core conceptual claim that a Marxist critique of Minsky's financial instability hypothesis needs to incorporate an understanding of the active role of state agency in reproducing finance and financial instability. This requires an anti-determinist understanding of capitalist states as an essential part of capitalism conceived as a whole. Empirically, the section then draws on several historical examples to illustrate how states contribute to the constitution of financial crisis of different forms, and argues against a reading of the "Keynesian" period from the 1930s to the 1970s as characterized by financial repression now abandoned (Konings 2010, Krippner 2011). State policies and practices affect the forms of finance. They may achieve temporary stability but stability is destabilizing, also when it is achieved by state intervention.

It was argued above that while rejecting a liberal view of crises as exogenous shocks, the Keynes-Minsky vision of financial instability often inverts the state-market binary, substituting a malign state influence with an equally unrealistic vision of states as the solution, never the problem. States remain "exogenous" and therefore beyond understanding but now intervening for the general economic good; able to recover market failures and overcome much of capitalism's antagonism and volatility (Ferri and Minsky 1992). They constrain or thwart the endogenously or market-generated mechanisms. As above, Minsky explicitly sees his work reversing Lucas's conception (Ferri and Minsky 1992, 89), and such a reversal retains the reified separation of economics and politics (Ivanova 2013).

Again, there is a danger of exaggeration and many within the Keynesian tradition recognize the state as an active, historically evolving element of financial reproduction (e.g. Pollin and Dymski 1994). Minsky himself acknowledges that policy may be misguided or fail to adjust appropriately to changing conditions. He describes how financial institutions, becoming less risk averse, may find ways around regulations. "As many decades may pass between the creation of the institutions and the application of interventions, the 'theory' that guides the interveners is likely to be quite different to the 'theory' that guided the institution builders" (Minsky 1995, 84-5). The "thwarting institutions" may be vulnerable to "erosion", "relapse", "regulatory relaxation" and "forgetting". They may be subject to "regulatory capture" or circumvented by financial innovation (Palley 2009, 8, Bernard *et al*. 2014, 101). In a footnote, Ferri and Minsky even acknowledge that in some situations the assurance of state support can itself be destabilizing (1992, 84fn18). But such insights are seldom integrated analytically. Overwhelmingly, the state is active in its effective interventions but passive in its failings. Well-informed policy makers should be able to avoid the pitfalls and as government grows, the risks diminish (Minsky 1995, 88).

The contrast between this benign view of the state and those of most Marxists is especially stark. At the same time, there is a need to steer between structuralist-functionalist readings according to which the state merely reflects or can be derived from the economic base and readings which implicitly reproduce a Keynesian view of exaggerated autonomy, notably reading the evils of the last 50 years as an ill-advised "neoliberal" policy turn. Marx projected but never completed further volumes of *Capital* on the state, on inter-state economic relations, and on the "World Market and Crisis" (Marx 1970, 1973, Jessop 2012, Dunn 2014). However, the implication of the proposed ordering is that the state cannot stand outside or above the economic system but that it has a distinct moment of its own, irreducible to the logic of capital.

This becomes particularly pertinent to a Marxist understanding of money. Money is a social relation not a thing (Marx 2010) and although Marx himself says relatively little on the state or the monetary authorities the state is inextricably within rather than apart from those social relations (Likitkijsomboon 2005, Davis 2010). For money to have "universal validity, it is in the end regulated by law" (Marx 1976, 194). Marx begins with commodity money but then, as Martha Campbell insists, "detaches his argument from gold and leaves room for 'real' money to take any form" (2005, 150). It was entirely possible to move away from commodity money, at least in the "internal sphere of circulation" (Marx 1976, 226). Marx did see gold as necessary at the international level, as "world money" and could not have foreseen how here too, state-backed money would become the norm. As Geert Reuten writes "[i]n hindsight it is easy (but a-historical) to criticize almost all monetary theory prior to, say, 1973 for allotting a major role to metal in the top of the money pyramid" (2005: 89). But now the essential role of the state becomes even more clear, albeit always in dynamic relations with private capital. Everywhere money is produced by a "mishmash between national banks and private banks" (Marx 1981, 529). With states implicated in money affairs from top to bottom, it becomes necessary to investigate how they are implicated in financial crises as an endogenous part of capitalism conceived as a whole.

Finance needs state support. One implication of this is that at times of crisis, government intervention can always be found near the scene of the crime. For the mainstream, liberal, tradition, government becomes a theoretically vacuous, catch-all scapegoat. But the liberal tradition can point to important state actions and inactions that have proved conducive to financial volatility. There are enough examples to inform plausible historical narratives of state culpability, for example in Carmen Reinhart and Kenneth Rogoff's (2011) account of inflationary and currency crises, debt crises, and banking crises. What is wrong is the depictions of these as anomalous, illegitimate distortions. Once states are recognized as an integral part of capitalism in general and of finance in particular it becomes entirely appropriate to investigate how they are also part of its volatility. Reinhart and Rogoff's themes are used in what follows to illuminate this.

For example, it becomes clear that states can, and do, produce inflationary crises. Largely under Keynes's influence, it has become unfashionable to understand inflation in terms of the state's oversupply of money. The Keynesian tradition and any careful reading of the evidence confirms that a monetarist interpretation of the quantity theory of money, envisaging a close relation between prices and the state supply of money is insufficient (Keynes 1973, De Grauwe and Polan 2005). But simply exonerating the state throws the baby of state involvement out with the monetarist bathwater. It remains entirely possible for an increase in state money to fuel price increases, either in general or of particular assets. This is particularly clear in the rare experiences of genuine hyperinflation like those in Germany in the 1920s or Zimbabwe in the 2000s. These could not have happened without states' willingness to print ever larger denomination notes. Even in less dramatic times like those of the 1970s, states had vested interests in paying their own rising bills and running-down debts making them at least tolerant of inflation. Huge injections of liquidity, after the 2007-08 crash and again in the period of the COVID-19 crisis from 2020, also contributed to inflationary processes, albeit that until 2022 most of this occurred in assets not captured by standard measures of consumer price inflation. The money largely went to the rich and price rises were largely expressed in renewed asset bubbles in housing, stock markets and cryptocurrencies.

Inflation within one country can also prompt variations in international currency values, strategies to manage this, and speculation. Again, state strategies are implicated in currency crises but inevitably so. This is true of the gold standard era, in the overtly managed post-WWII Bretton Woods period, and the current period of ostensibly free-floating exchange rates. The gold standard never worked according to an automatic "specie flow mechanism" of liberals' imagining. By the classical age of the late-19th century, British authorities paid more for gold in terms of silver and offered higher interest rates than the US or countries of continental Europe. Preserving the gold standard became costly and came at the cost of increasing balance of payments problems and the ultimate debacle of the 1930s. Similarly, the Bretton Woods system produced stability but at the cost of brittleness and major dislocations when it was abandoned in the 1970s. Since then, leading states have continued to organize the ostensibly free-market or floating currency regime, notably in the international currency agreements of 1985 and 1987, the Plaza and Louvre Accords. Two major crises need to be understood in this context. A major driver of the Plaza and Louvre agreements from a US perspective was to revalue the Yen to limit Japanese export competitiveness. This simultaneously made Japan and Japanese corporations much richer in dollar terms, fostering the bubbles in real estate and stock markets. It encouraged the boom in Japanese foreign investment, acquiring iconic real estate in the US but also counteracting (from a firm if not a national perspective) any decline in competitiveness through overseas manufacturing re-location, not least to Japan's "Asian Tiger" neighbors. In an important sense, these Asian Tiger economies then became third-party victims of the 1995 re-negotiations, reversing Plaza and Louvre in the wake of Japan's post-bubble stagnation. Now, falling Yen values undermined the Tigers' export orientation. The Asian currency crisis of 1997 became the original "Minsky moment" (McCully 2009) but also ground for debates over whether to apportion blame to the state (and "crony capitalism") or to financial liberalization. Without wanting to exonerate the (private) financial speculators or to accept anything exceptionally "crony" about Asian capitalism, it is evident that state strategies of investment and currency pegging were implicated. Pegs created stability but also involved ultimately destabilizing asymmetries. Speculators faced little downside risk because governments could sell their own currency to prevent peg values from rising, but speculators could potentially make vast gains if states, having limited dollar reserves, failed to defend currency values successfully. Speculators, and the liberalizing abolition of capital controls which encouraged speculation, can reasonably be depicted as the proximate cause of the crisis, but the bases were established by the policies of both local states and foreign powers.

State indebtedness is also a recurring source of financial crisis. Of course, credit and debt are integral to capitalism and what is good for private firms can also be good for states. The liberal demonization of state debts, particularly since the Latin American crisis of the 1980s, is illegitimate. That crisis was largely a consequence of US-centered interest rate rises and their recession-inducing effects. But much as in the private economy, indebtedness can produce crises. The classic Mississippi and South Sea bubbles of the early 18th century were inextricably connected with state imperial projects and strategies to fund state debts (Ferguson 2009, 157, Kindleberger and Aliber 2008). There is a long, subsequent history of explicit or implicit default. If the liberal tradition is too quick to point to malfeasance it is quite possible to point to examples of resource misappropriation. More fundamentally, in a competitive capitalist world, state strategies themselves become essentially speculative and good debts turn bad.

The systematic accumulation of state debt has previously been interpreted by more critical scholars as itself a consequence of stabilizing strategies, as Central Banks rescue failing financial institutions, then becoming the bases for Minsky "supercycles" (Durand 2017). State intervention can offset the crisis but only by amplifying the long-term problems. This recovers longstanding ideas that states can attenuate capitalism's crisis tendencies, but only at the cost of a "fiscal crisis of the state" (O'Connor 1973). This resonates with the experiences of leading economies in recent years, notably the US, where financial meltdowns have been followed by only short recessions and sluggish recoveries. It is less clear how well this fits the evidence over a longer period or from other countries but it seems reasonable to see state accumulations of debt as at least a source of financial instability. States that are borrowing in other countries' currencies become particularly vulnerable.

More specifically, Central Banks' role as lenders of last resort can encourage speculation and thence banking crises. The 1913 US Federal Reserve Act was itself developed out of the private system centered on New York banks but therefore also on New York state legislation which fostered trust in them (Gorton 1985). As Gary Gorton writes, "information asymmetry creates the possibility of panic. Depositors could not identify bank-specific risk so all banks were vulnerable to runs" (1985, 279). The principle is ancient, even if "too-big-to-fail" has extended state support across the US financial landscape.

The Federal Reserve Act becomes one important element of how the state contributed to the 1929 crash and why it becomes misleading to see the Keynesian period as the coming of state intervention and regulation. Other elements of regulation and what came to be seen as part of the New Deal were also already in place, notably the McFadden Act, passed in 1927. The state was also more directly implicated through interest rate policy, as identified but misunderstood by liberal critics (Friedman and Schwarz 1963). Low rates were predicated on the booming real economy but also on critical international concerns. Raising US rates would have increased pressure on its international borrowers, potentially undermining the ability of the UK, in particular, to pay its debts. Avoiding one form of crisis was conducive to another.

Conversely, the narrative of successful subsequent regulation also needs to be qualified. First, as substantial as New Deal regulation may have been, it was not in itself sufficient to prevent renewed crises. Already by 1937, the US economy experienced a major downturn and what looks suspiciously like a classic Minsky cycle, with the Dow Industrial rising from 1,802 in July 1934 to 3,644 in February 1937 then crashing to 1,925 by March 1938 (Macrotrends 2021). 83 banks closed in 1937 and another 80 in 1938. These numbers are small compared with those immediately after 1929 but the consistently low, single-figure, rates would only be achieved after 1943 (SAUS 1975). Second, much of the New Deal legislation was pro-finance rather than restrictive. Notably, the Federal Deposit Insurance Corporation (FDIC) guaranteeing deposits again built moral hazard into the system, and was widely criticized at the time for doing so (Galbraith 1995). Regulation-Q, barring interest payments on checking accounts, effectively mandated private individuals to provide banks with interest-free loans and the post-WWII boom period witnessed a steady growth in finance in both absolute and relative terms (Konings 2010, Krippner 2011). The expansion of credit in mass mortgage market could be celebrated as "one of the major economic policy achievements of the last 50 years … creating a secondary market for mortgage loans; and indirectly stabilizing mortgage loans via interest payment deductions" (Pollin and Dymski 1994, 388). Third, at an international level, too, coordination achieved stability but involved asymmetries which contributed to Bretton Woods' ultimate demise. The story is familiar but, in brief, after initial years of global shortage, US dollar outflows escalated. The liquidity functions provided by the dollar, undermined the store of value function based on gold. State strategies in Japan and West Germany utilized the fixed exchange rate regime as the basis of export orientations. The concomitant growth of Eurodollar markets was also encouraged by British authorities and at least tolerated by those in the US (Helleiner 1994). Political pressure contained the disequilibria for a while but the dislocation and shock of Bretton Woods' sudden abandonment in 1971 was all the greater. Finally, whether dated to the 1960s when stock prices peaked, or to the 1970s and economic downturn, the crisis came prior to substantial liberalization. The narrative of state forgetting or being bypassed by financial innovation is unconvincing.

Similarly, several major bubbles followed the demise of the Bretton Woods system prior to substantial deregulation. A notable early speculation involving gold, provides a useful illustration of the essential role of states. Bretton Woods had fixed the value of the US dollar at 1/35 of an ounce of gold. Already before 1971, the market price had begun to deviate substantially from this official price. It reached 41.1 dollars an ounce by 1969, fell back in 1970, then rose again to 40.8 in 1971. Once the official price was suspended, the market price shot up to 58.2 dollars in 1972 and to 97.3 dollars the following year. As trust in the US dollar as the international anchor declined, gold became the prime haven in a rush to safely and the price reached a high in 1980 at $607.8 (World Bank 2022). One vital aspect of the gold market was that after 1978 states sold-off large quantities. US reserves declined by 12 million ounces, French by 20 million and German by 23 million (IMF 2002). By doing this, states helped to stabilize the gold price. But gold remained a valued reserve asset and state's willingness to buy and sell remained a vital determinant of its price.

The Volcker Shock of 1979 is surely impossible to interpret as anything other that the product of policy. It squeezed inflation out of the western capitalist system by crude recession-inducing means. There was a more-or-less global turn to "sound money" and policies creating central bank "independence" – of course meaning independence from democratic oversight, while remaining vital organs of state finance. As above, the turn to high interest rates directly contributed to the Latin American debt crisis of 1982, and "sound money" at least coincided with a series of crises, of national debt and of various assets.

The culpability of states, particularly the US state in the ensuing development of the 2007 sub-prime bubble is also sufficiently well-established to need little repetition. Keynesian critics read this in terms of liberalization and the legitimization of speculative and fraudulent financial practices. It was never simply a state retreat. Alongside the expansion of lender-of-last-resort responsibilities mentioned above, many elements of reform are better read as what Moran (1991) calls "re-regulation" rather than "de-regulation". There was a plethora of new rules and regulatory institutions (Elson 2010). The state-backed mortgage-holding model was longstanding and until 2004, the overwhelming majority of the market for mortgaged backed securities was based on those sponsored by the government agencies, Fannie Mae, Freddie Mac and Ginnie Mae (IMF 2009). Again, with echoes of the 1920s, easy money and low interest rates involved policy choices. These may have been predicated on the "global imbalances", but such imbalances in turn hung on the role of the dollar and on state strategies both within the US and on the surplus countries' willingness to buy and re-cycle dollar denominated US-Treasury paper.

These briefest of vignettes are not meant to imply that private (real and financial) sources of volatility are inconsequential. Quite the contrary. They do, however, consistently show crises being shaped by policy decisions, rather than simply non-decisions. States can and do act to alleviate crises, but relief is always temporary and solutions to financial fragility at one time themselves later become sources of fragility.

Conclusion

This article has built on insights from the Keynesian tradition, particularly on Minsky's hypothesis of financial fragility. In common with an existing Marxist and wider critical literature it also suggests that Minsky's insights need to be more securely embedded in an understanding of capitalism's broader instability. It argued that these critiques can be enriched by emphasizing the role of the state in constituting financial arrangements, against simply seeing the state in the negative, as a “thwarting” or “constraining” institution.

For all its strengths, the Keynesian tradition can mirror the same liberal arguments, treating the state as exogenous and its benign influence as beyond the scope of economic analysis. Specifically here, capitalism would work well if only finance could be put “back in the box”, a task which a well-informed state might yet accomplish, perhaps with a bit of prodding (Palley 2009). If only things were that easy. States actively reproduce finance, if not in conditions of their own choosing. This reproduction of finance includes reproducing its instability. Minsky’s vision of financial instability needs to be secured both “from below”, by integrating it into an analysis of the “private” productive economy and “from above” by integrating an analysis of state agency.

The conclusion here is pessimistic in the sense that states are unlikely to respond to Keynesian wisdom to restrain finance and pessimistic too in the sense that even the best of Keynesian reforms are unlikely to prove sustainable. This is not simply to repeat Marxist truisms that capitalism must go. In the long run we are all dead. Reforms are possible and worth achieving. Moreover, the argument here about the ineliminable role of states in finance also suggests that instead of plunging into a new era of ungoverned and ungovernable finance, we are witnessing a new manifestation of a perennial phenomenon. Rather than simply being passive victims as financialization overwhelms state capacities, states’ actions continue to matter and alternative policies remain possible. But in what remains a dynamic, volatile and disorderly system, reforms are likely to lead to new dislocations and new manifestations of financial instability. As Minsky insisted, “stability is destabilizing”; reforms are temporary and the objective of stabilizing and unstable system is ultimately always likely to be frustrated.

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