



Working Paper No. 1133

Finance, Capitalist Evolution, and Structural Reform: A Backwards Perspective on Hyman P. Minsky*

by

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October 2026

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*This paper is dedicated to Hyman P. Minsky (23 September 1919–24 October 1996), thirty years after his death; to Piero Ferri, who introduced me to Hy; to Esther de Pardo, who passed away this year; and to Alan and Diana, the son and daughter of Esther and Hy. I am grateful to Marc Lavoie, Jan Toporowski and L. Randall Wray for reading the paper at very short notice and for sending me helpful comments and suggestions.

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ISSN 1547-366X

0. ABSTRACT / INTRODUCTION

Thirty years after Hyman Minsky's death, his name is more familiar than his economics. The notion of a "Minsky moment" has helped restore financial instability to macroeconomics, but it has also encouraged a narrowing of Minsky to the proposition that prolonged stability generates leverage, speculation and eventually crisis. This essay adopts a *backwards* perspective on Minsky. It starts from the later work on money manager capitalism, the New Deal, structural reform, the employer of last resort and the socialization of investment and returns from there to the Wall Street paradigm and the Financial Instability Hypothesis. Seen from this perspective, financial instability appears as *one* element of a *broader* theory of capitalist evolution in which financial structures, institutions, policy interventions and the organization of production change together.

I distinguish here between *reading*, *interpretation* and *reconstruction*. A *reading* stays close to Minsky's texts and does not remove their tensions, shifts and occasional ambiguities in order to produce a retrospective consistency. An *interpretation* goes further: it tries to recover the internal logic connecting apparently separate parts of his work. On this level, the financial theory of investment, the Financial Instability Hypothesis, endogenous money, the stage view of capitalism, Big Government and Big Bank, and the later program of structural reform belong to the same evolving project. A *reconstruction* begins where *interpretation* reaches its limits. It retains Minsky's questions while modifying or extending some of his answers in the light of problems that his own analysis leaves unresolved.¹

The reading and interpretation developed in the first part yield three main results. First, the Financial Instability Hypothesis is better understood as a *tendential* and *institutionally specific* theory than as a theorem according to which aggregate corporate leverage must rise monotonically during every expansion. The macroeconomic generation of gross profits, the

¹ Unless otherwise indicated, the interpretation of Minsky developed in the first part of this essay draws principally on John Maynard Keynes (1975), *Can "It" Happen Again?* (1982a), *Stabilizing an Unstable Economy* (1986a), and the essays and papers collected in *Ending Poverty: Jobs, Not Welfare* (2013). It also develops arguments advanced in earlier works of mine, especially Bellofiore and Ferri (2001a, 2001b), Bellofiore and Pennacchi (2014), and other writings cited below. References are deliberately selective. Other works by Minsky are cited when a specific text or formulation matters. Some secondary contributions are also cited before Section 8 when a specific reference seems useful, but citations are not repeated systematically whenever the same interpretive background remains relevant. The principal interpreters are discussed more fully in Section 8, though the survey remains incomplete and cannot do justice even to all the authors referred to.

evolution of margins of safety, refinancing conditions and policy responses all matter. Second, Minsky's *stage theory* is essential to understanding why instability changes form. The transition from managerial to money manager capitalism was not simply an increase in the quantity of finance but a transformation of ownership, corporate control, financial intermediation and the institutional conditions under which positions could be carried. Third, the political Minsky cannot be reduced to stabilization. His *criticism of postwar Keynesianism* increasingly concerned the direction and composition of production, direct employment and the socialization of investment. A *selective* examination of Minsky's interpreters is organized around these problems rather than around rival schools.

The final reconstruction brings together a Schumpeterian moment of initial finance, a Marxian moment of valorization, a Keynes-Kalecki moment of effective demand and gross profits, and Minsky's analysis of balance-sheet time and institutional evolution. It uses this framework to reconsider *money manager capitalism*, the two generations of *privatised Keynesianism*, and Minsky's unfinished problem of the *socialization of investment*. The aim is to recover the larger question Minsky's work leaves open: not only how to stabilize an unstable economy, but what kind of economy we aim to stabilize.

JEL Classification: B31; B52; E12; E44; P16

Keywords: Hyman P. Minsky; financial instability; capitalist evolution; money manager capitalism; monetary production economy; structural reform; socialization of investment; economy of social production

1. BEGINNINGS

The narrowing of Minsky to the “*Minsky moment*” is especially misleading because financial instability was embedded in a much broader view of capitalist development. Hedge, *speculative* and *Ponzi* finance are important, but they do not exhaust a body of work concerned with the evolution of financial institutions, capitalist stages, policy and structural reform. The Minsky I want to discuss is not only the analyst of *financial* fragility. He is a theorist of capitalism as an *evolving institutional* system, a *financial* interpreter of Keynes, a *Schumpeterian* analyst of innovation, a *critic* of postwar Keynesianism, and an economist who considered the New Deal, the socialization of investment and direct public provision of employment as questions of *structural reform* rather than as technical appendices to demand management. He asks not only how an unstable economy can be stabilized, but what kind of capitalism is being stabilized, what kind of output is produced, and for whom the game is fixed.

I personally came to know Minsky in the late 1970s, in the years when he spent part of each year in Bergamo, at first through his friendship with Piero Ferri. One reason for his presence in Italy was his collaboration with Confindustria, the confederation of Italian industrialists; Jan Kregel, then at its research center, had suggested his name. Minsky spent a year in Rome and returned regularly afterward. Those were also the years in which Augusto Graziani and others were developing a monetary theory of production around the theory of the monetary circuit, and I was associated with Graziani’s Seminar on Monetary Economics in Naples. It offered a language in which Minsky could be interpreted from a somewhat different angle than usual.

Minsky’s intellectual biography helps explain why the larger questions never disappeared. (Bellofiore 2020) He was born in Chicago in 1919 into a socialist family. His mother, Dora Zakon, was active in the unions; his father, Sam Minsky, had left Russia after 1905. Gary Dymksi once told me that Minsky called himself a “red diaper” baby. He was active in the youth of the American Socialist Party and later linked his move from mathematics and physics to economics with political engagement. At Chicago, Oskar Lange was decisive. Minsky attended Lange’s course on the economics of socialism and encountered an intellectual constellation in which Marx and Keynes belonged to the analysis of capitalist dynamics rather than to separate ideological boxes. After the war, and after a period in the manpower division of the American military government in Berlin, Minsky went to Harvard. Schumpeter was his first doctoral

supervisor; after Schumpeter's death the dissertation was completed under Leontief. Keynes and Schumpeter, and through Schumpeter also Marx, defined the field Minsky explored for the rest of his life.

The dissertation itself, *Induced Investment and Business Cycles*, already reveals a Minsky considerably richer than the later canonical Financial Instability Hypothesis might suggest. Its aim was to construct an "eclectic" theory of the business cycle combining the relations among broad monetary aggregates with the behavior of individual firms and particular markets. Finance mattered because firms were heterogeneous, balance sheets conditioned their responses, and market structures changed during the cycle. The accelerator was therefore *not* a fixed technical parameter: its realized value depended on financing conditions, firms' vulnerability, entry and exit, and the evolution of market structure. The dissertation already contained important building blocks of the later financial theory (like balance sheets, lender's risk, financial soundness, a hierarchy of financing sources) but embedded them in a broader investigation of endogenous interaction and structural change (Minsky 2004; Delli Gatti and Gallegati 1997; Toporowski 2008).

In one of his most striking formulations, Minsky characterized Keynes and Schumpeter as "Marxist economists, who are conservative and pro-capitalist." The phrase is deliberately paradoxical. It points to what Minsky thought the great dissenters shared: they put money on the ground floor of economic theory. (Minsky 1982b, 1985, 1993) Capitalism could not first be represented as a barter *economy* and then supplied with money, banks and finance as complications. A capitalist *economy* is a *monetary production economy* from the outset. This was also the root of Minsky's insistence on *balance sheets*, *cash flows* and *historical time*. Every economic unit must be represented as a structure of *expected* money receipts set against *dated* money payment commitments. Firms, households, governments and financial institutions are not identical, but they all live in a world in which *positions have to be validated through time*. Investment undertaken yesterday generates commitments today; current income and current financing determine whether those commitments can be met; new investment changes current profits and the financial conditions inherited by the next period. Money matters because it is the form in which these temporal claims are made commensurable and in which failure becomes visible.

This intellectual starting point is why I propose to read Minsky *backwards*. Read forward from the canonical presentation of financial instability, he easily becomes the prophet of a “Minsky moment.” Read *backwards* from money manager capitalism, the stage view, the critique of Keynesianism, the New Deal and the socialization of investment, *another Minsky comes into view*: not primarily the theorist of a moment, but the analyst of capitalist transformation.

“A backwards perspective” does not mean privileging the late writings because they came last. It means taking seriously Minsky’s proposition that *capitalism changes its institutional form*. If that proposition is right, the Financial Instability Hypothesis cannot be expected to appear empirically in precisely the same way in each stage. The stage theory is not secondary to the Hypothesis. It tells us that the forms taken by financial fragility, if and when they develop, are historically specific and depend on the institutional structure in which balance-sheet practices evolve.

My central claim is double. The Financial Instability Hypothesis should be retained but critically reformulated as a *tendential* theory. The tendency I have in mind is not just toward a rise of indebtedness, either in firms or somewhere else in the system. It is the *endogenous erosion of margins of safety* and the *transformation of financial conventions under conditions of successful expansion*. Minsky’s analysis of capitalist stages helps explain the historically specific forms that this process can take. The result is *one theory with two connected aspects*, not two Minskys: *endogenous financial fragility* and *institutional evolution*.

2. THE WALL STREET PARADIGM: KEYNES, SCHUMPETER, FINANCE AND UNCERTAINTY

The premise of Minsky’s economics is what he called the *Wall Street paradigm*. A capitalist economy cannot be understood as a real or barter economy to which money and finance are subsequently added. Economic units are structures of assets and liabilities, *expected* cash inflows and *dated* payment commitments. Capital assets are expensive and long-lived, so decisions taken today bind firms to an *uncertain* future. Investment therefore creates not only productive capacity but also a *financial structure*. In Schumpeter’s terminology, this belongs to *monetary analysis*, as opposed to an analysis in which the essential relations of the economy are first

determined in real terms and money is introduced only afterward (Schumpeter 1954). Minsky's own earlier analysis likewise insisted that money and finance belong on the ground floor of the analysis.

Minsky's interpretation of Keynes provided the central analytical mechanism. (Minsky 1975, 1986a) His two-price system distinguishes the prices of current output from the prices of capital assets. The latter depend on the prospective monetary yields or quasi-rents expected from owning capital assets, together with liquidity preference, interest rates and prevailing financial conditions. The market valuation of capital assets provides the basis for the demand price of newly produced investment goods, while their supply price initially reflects the current costs of producing them. But finance modifies both sides of the comparison. As investment moves beyond what can be financed internally, increasing reliance on external finance raises borrower's risk: greater exposure to contractual commitments lowers the price the investing firm is willing to pay for the capital asset. At the same time, lender's risk raises the effective supply price of investment through higher interest charges and through the other terms attached to finance, including maturity, collateral requirements and covenants.

Investment is carried to the point where the demand price, reduced by borrower's risk, meets the supply price, increased by lender's risk. The volume of investment therefore depends not simply on expected profitability and technical production costs, but on the changing margins of safety of borrowers and lenders and on the financial conditions under which positions can be taken. This is why the decision to invest is inseparable from the decision about how the resulting position is to be financed. Minsky thus transforms Keynes's theory of investment into a *financial theory of investment and an investment theory of the business cycle*.

Schumpeter supplies a second essential element (Schumpeter 1934 [1911]; Bellofiore 1985, 1992; Minsky 1957a, 1993). Bank credit creates purchasing power and allows entrepreneurial projects to be undertaken before their monetary results are known. The banker as *ephor* is therefore not simply an intermediary transferring prior saving to investors. For Minsky, as for Schumpeter, the financial system is an *active* part of capitalist development. Minsky went further by treating banks and financial institutions themselves as profit-seeking innovators. Financial innovation changes instruments, liability structures and the effective supply of finance; restrictive monetary policy may itself provoke innovations designed to economize on reserves or

circumvent inherited constraints. Minsky would later describe the theoretical task as combining Schumpeter's evolutionary capitalist process with Keynes's insight into the fragility generated by capitalist financial structures.

The Keynesian and Schumpeterian elements therefore meet in Minsky without becoming identical. Keynes provides *uncertainty, liquidity, capital-asset valuation and the financial determination of investment*. Schumpeter provides *the monetary and evolutionary role of credit, innovation and the transformation of capitalist institutions*. Minsky's distinctive step is to put *balance sheets, cash-flow commitments and changing financial practices at the centre of the connection between them*. Once successful investment and financing practices alter expectations, margins of safety and accepted financial conventions, the conditions are in place for the endogenous movement from financial robustness to fragility. That is the subject of the *canonical Financial Instability Hypothesis*.

3. FINANCIAL INSTABILITY, MARGINS OF SAFETY, AND THWARTING INSTITUTIONS

The canonical Financial Instability Hypothesis is the *dynamic* development of the investment and finance mechanism described above. An expansion normally begins from a relatively robust financial structure, often after a crisis has made both borrowers and lenders cautious. In Minsky's terminology, *hedge* units expect the cash flows generated by their activities to cover both interest and principal on their liabilities. As expansion succeeds, investment generates income and profits, debts are validated, asset prices are sustained and financing arrangements that had appeared risky prove successful. The experience of success changes what borrowers and lenders regard as acceptable. The resulting movement from hedge to speculative and Ponzi finance is defined by cash-flow relations, *not* by psychological types. Speculative units can meet interest payments from current income but must refinance principal. Ponzi or ultra-speculative units cannot meet even current interest charges from income cash flows and depend on further borrowing, asset sales or capital gains. As the weight of speculative and Ponzi positions increases, the system becomes increasingly dependent on continuing refinancing, favorable asset prices and the maintenance of liquidity.

The central mechanism is the *endogenous* erosion of *margins of safety*. (Kregel 2008) After a financial trauma, substantial cushions separate expected receipts from contractual payments, asset values from debt commitments, and normal liquidity requirements from available sources of finance. Successful expansion makes these cushions appear unnecessarily large. Borrower's risk and lender's risk decline, more external finance becomes acceptable, and liability structures become increasingly dependent on refinancing. Competition among financial institutions reinforces the process: conservative lenders risk losing business to institutions prepared to finance positions on thinner margins. Financial innovation further expands what can be financed, refinanced or accepted as collateral. *Stability is destabilizing* not because economic agents simply become irrational or forget the past, but because successful practices alter conventions, balance sheets and the financial institutions themselves.

This process feeds back into Minsky's two-price system. Rising capital-asset prices raise the demand price of new investment goods; easier financing and lower perceived borrower's and lender's risks permit more investment to be undertaken. Higher investment in turn generates higher gross profits, helping firms to validate inherited liabilities and confirming the expectations on which the expansion was based. The process is therefore cumulative. Investment, profits, asset prices and financial validation reinforce one another. The same interdependence works in reverse. Higher interest rates, weaker expected quasi-rents, increased borrower's or lender's risk, or a deterioration of liquidity can narrow the margin between capital-asset prices and the effective supply price of investment. Investment then falls, profits weaken, previously acceptable commitments become harder to validate, and units attempt to obtain cash by refinancing or selling assets.

A liquidity disturbance can consequently become a solvency crisis. Positions that are viable as long as refinancing remains available may become untenable when market liquidity disappears. If many units try simultaneously to make position by selling position, asset prices fall; lower asset prices deteriorate balance sheets and force further sales. The decline of investment simultaneously reduces the profit flows on which debt validation depends. Minsky's debt-deflation mechanism thus joins asset prices, investment, profits and inherited payment commitments in a cumulative downward process. (Fisher 1933; Minsky 1982a) *The financial*

structure that was validated by the expansion becomes the mechanism through which contraction is amplified.

The canonical version's *upper turning point* is monetary as well as financial. Minsky's supply of finance is not fixed. (Minsky 1957a, 1991; Fazzari and Minsky 1984; Wray 1992; Bellofiore and Ferri 2001c) Over much of the upswing, both demand and supply shift *pro-cyclically*: banks economize on reserves, new liabilities and near-monies are created, and finance can remain highly elastic at only slowly rising short-term interest rates. In this sense the later verticalist-horizontalist opposition misses the dynamic point. The supply of finance can behave *almost horizontally* for a time even though its schedule is *positively sloped*. As the boom matures, however, the demand for short-term finance becomes increasingly inelastic, while greater bank caution or restrictive central bank action can make the supply of finance sharply inelastic, even *near vertical*. The resulting jump in short-term rates worsens refinancing conditions and can produce the *upper turning point*. However, contrary to a mechanical view, a fall in gross profits can also initiate the reversal: Minsky's recurrent formulation that *something happens* should not be interpreted as making one particular trigger logically necessary.

Yet Minsky's capitalism is *not* an unregulated mechanism allowed periodically to liquidate itself. (Ferri and Minsky 1992) Institutions intervene in this endogenous dynamic. His early work on ceilings and floors, developed later in the idea of *thwarting systems*, stressed that policies and institutions can contain destabilizing processes without abolishing them². Successful stabilization itself alters behavior: private agents incorporate the existence of public floors into their expectations, banks and firms adapt to regulation, and financial innovation develops around inherited constraints. The institutional structure after a successful intervention is therefore *not* the same as the one that preceded it.

This is the setting for Minsky's *Big Government* and *Big Bank*. Fiscal deficits sustain income and, crucially, gross profits when private investment contracts, thereby helping to validate private balance sheets. The central bank as lender of last resort supplies liquidity and prevents

² An early anticipation appears in Minsky's 1965 study of California banking. There financial systems are analysed according to whether they damp or amplify disturbances, and Minsky concluded that contemporary financial institutions were less likely than in the past to amplify contractionary forces, although they could not act as shock absorbers in the face of a radical change in expectations (Minsky 1965).

forced asset sales from developing into a wholesale destruction of the financial and payments system. Minsky extended this argument beyond national boundaries in “Conflict and Interdependence in a Multipolar World” (Minsky 1986b). In the dollar-centered international financial structure, Big Bank necessarily acquires an international dimension. Dollar-denominated debts, offshore dollar markets and the international activities of banks mean that the Federal Reserve cannot conduct monetary policy with reference to domestic conditions alone. Its responsibility for maintaining orderly conditions and preventing financial crises entails a lender-of-last-resort function for the international financial system. International financial integration thus creates an *asymmetry*: the viability of the system depends heavily on the United States and the Federal Reserve, while the benefits and costs of maintaining that viability are distributed across different countries, banks, debtors and creditors.

In parts of Minsky’s account of postwar capitalism, *Big Labor* also belongs to this stabilizing institutional configuration by supporting wages and effective demand. These institutions do not stand outside the capitalist process. Their presence changes the private behavior whose instability they are intended to contain.

The *lower turning point* is likewise institutionally determined. In a small-government capitalism without an effective lender of last resort, it may be reached only after monetary contraction, bankruptcies and debt deflation have destroyed enough liabilities to restore a more robust financial structure. Big Government and Big Bank change this sequence. Fiscal deficits sustain gross profits and provide safe public liabilities, while central bank refinancing and securities purchases put a floor under liquidity and asset values. Policy therefore raises the lower turning point. It prevents cumulative collapse, but in doing so establishes new initial conditions from which the next expansion begins.

The title *Can “It” Happen Again?* (Minsky 1982a) should not be interpreted as a prediction that the collapse of the early 1930s must recur. The answer to the question was actually: no. The institutional legacy of that catastrophe, above all Big Government and the lender-of-last-resort function, made a repetition in the same form much less likely. This was a real achievement. But preventing downward collapse did not create equilibrium. Public intervention could sustain profits, protect asset values and validate private commitments, thereby permitting financial structures to evolve further. Minsky’s fundamental instability is therefore also an *upward*

instability: successful stabilization can become one of the conditions under which increasingly adventurous financial practices survive. (Minsky 1982a, 1986a) In postwar managerial capitalism, however, upward instability took an inflationary form. The very mechanisms that prevented debt deflation weakened some of the feedback that in a small-government capitalism would have terminated an expansion through falling profits, bankruptcies and unemployment.

Big Government deficits sustained gross profits and demand; indexed transfers and public expenditure supported money incomes; Big Bank could face the choice between validating an increasingly fragile financial structure and precipitating a crisis by refusing accommodation. Minsky's point was not that Big Government as such was necessarily inflationary. Properly designed fiscal institutions could also act as an inflation barrier. His argument was that the *particular structure* of postwar Big Government, together with administered prices, high overhead costs and the protection of private cash-flow commitments, imparted an inflationary bias to the system. In his striking formulation, *one form of instability, inflation, could result from the very measures adopted to prevent the other, deep depression*.

Minsky's analysis of inflation is therefore internal to his theory of financial instability rather than a separate theory of the price level. In a predominantly private economy, an inflationary expansion contains financial limits: more expensive investment production has to be financed, increasingly fragile positions have to be carried, and financiers may eventually doubt that future cash flows will validate existing prices and commitments. Big Government partly thwarts these limits, while an accommodating central bank may prefer continued inflation to triggering a financial crisis. The stagflation of the 1970s was, for Minsky, evidence that the postwar institutional settlement had generated a form of instability quite different from the debt deflation of the early 1930s. His answer was not to dismantle Big Government, but to change its structure, the composition of expenditure and the financial institutions through which private investment was supported.

The inflationary tensions of managerial capitalism also accelerated an institutional transformation already under way. Financial innovation, liability management and the growth of institutional investors progressively changed the regulated postwar structure and subjected corporate management more directly to financial-market valuation. Minsky would call the new configuration *money manager capitalism* (Minsky 1989; Tymoigne and Wray 2014).

The crisis beginning in 2007 exposed the fragility of this transformed financial structure. Its viability had come to depend on asset prices, refinancing and market liquidity, while public authorities prevented a general debt deflation. The more Minskian question is how the preceding institutional environment, including expectations of intervention, had helped to make that private structure possible.

4. AN INTERNAL PROBLEM OF THE CANONICAL FINANCIAL INSTABILITY HYPOTHESIS

There is an internal difficulty in the canonical formulation of the *Financial Instability Hypothesis*. Minsky often describes an expansion in which nonfinancial firms progressively increase leverage as investment outruns internally generated funds. At the level of the *individual* firm the argument is compelling. Investment in excess of internal funds requires external finance, increases contractual payment commitments and exposes the balance sheet more directly to future cash flows and refinancing conditions. But the same inference cannot simply be generalized to the corporate sector *as a whole*. Kalecki's theory of profits makes the problem clear. (Kalecki 1954; Lavoie and Seccareccia 2001) Investment is not only an expenditure undertaken by investing firms. At the level of the business sector it also generates income and gross profits. One firm's expenditure becomes another firm's receipt. Higher investment may therefore increase the internal funds available to the corporate sector *as a whole* even while particular investing firms increase their indebtedness. The financial position of the sector cannot be obtained by simply aggregating the financing decisions of *individual* firms. The point is instead not to derive the macroeconomic result by aggregating individual financing decisions: the macroeconomic determination of gross profits provides, rather, a *macro-foundation* for the financial conditions confronting individual firms. The difficulty is not wholly external to Minsky's own analysis. As Lavoie and Seccareccia show, in *John Maynard Keynes* Minsky explicitly recognizes that higher realized profits can partially frustrate firms' planned debt

financing. Yet he then returns to the conclusion that expansion raises aggregate leverage without providing the macroeconomic bridge from the representative firm to the business sector.³

*This does not mean, however, that a previously accumulated fund of monetary capital is required for investment.*⁴ The relevant point is rather that the financing of the production of capital goods and the financing of investment are two different questions. Once investment expenditure takes place, it generates income and, in the simple Kaleckian case, gross profits within the business sector. Investment can therefore generate the internal funds that offset, at the aggregate corporate level, the increased indebtedness incurred by particular investing firms. In this macroeconomic sense, *investment may be said to finance itself*, although this says nothing about the monetary finance required to initiate production in the first place. I do not regard this problem as a refutation of Minsky. It does, however, suggest a more careful interpretation of the Financial Instability Hypothesis as a *tendential* theory. The canonical Minsky sequence remains important. Successful expansion encourages investment; firms become willing to rely more heavily on external finance; successful debt validation reduces perceived borrower's and lender's risks; margins of safety are narrowed; and financial practices that previously appeared adventurous become increasingly acceptable. At the level of individual firms this process may indeed generate rising leverage. But the Kaleckian increase in gross profits and retained earnings can counteract the same movement at the level of the corporate sector as a whole.

Here *tendency* denotes a causal process whose direct manifestation may be offset by counteracting mechanisms. Their success does not mean that the underlying sequence has

³ Caverzasi (2012), in a doctoral dissertation I supervised, pursued the issue further within a stock-flow-consistent framework, arguing that the “missing macro link” critique depends on specific assumptions about profit distribution, household saving and financial flows.

⁴ I refer here implicitly to Toporowski's criticism of the monetary circuit, which starts from the proposition that capitalists must already possess a capitalist patrimonial endowment, including deposits and financial assets. Bank-created initial finance consequently loses the constitutive role assigned to it by circuit theory (Toporowski 2020a). Toporowski follows here Chick's “evolutionary” account of banking, according to which banks move historically from intermediating pre-existing funds to creating credit (Chick 1986). My objection is that what evolves are the uses and institutional forms of bank credit, not its logical nature: bank lending creates purchasing power rather than transferring a previously accumulated fund (Graziani 2003; Bellofiore 2019). Chick also makes the stronger claim that new bank finance is required only for additions to production (Chick 1986). I see the two arguments as converging in their rejection of finance to production as the logical starting point (Bellofiore 2027). Even if, historically, access to bank credit depended on pre-existing stocks of wealth and collateral, this would not make them the logical source of the purchasing power created through credit. The point is analogous to Schumpeter's argument that even if money historically originated as commodity money, this does not make the commodity character of money the logical basis of its nature: historical origins may conceal rather than reveal “logical essentials” (Schumpeter 1954, p. 289).

disappeared. The *countertendencies* arise within it, modify it and may allow it to continue for longer. In doing so they can generate conditions in which the *tendency* later operates through mechanisms different from those described in its canonical formulation. Fragility must therefore be sought in the composition and interconnection of balance sheets, maturity mismatches, collateral dependence and refinancing needs, rather than in a necessary rise of a single aggregate leverage ratio. The erosion of margins of safety, as a more general dimension of the process through which the tendency and its countertendencies interact, is crucial in this respect. Rising investment may generate enough gross profits to prevent the aggregate leverage of nonfinancial corporations from increasing. Successful validation may strengthen internal finance. Rising asset prices may improve apparently relevant balance sheet ratios and collateral values. These mechanisms may therefore defeat the predicted deterioration of the corporate balance sheet. But precisely by validating existing positions they can prolong the expansion, sustain higher asset valuations, encourage further financial innovation and induce borrowers and lenders to accept thinner margins of safety.

The victory of the countertendency is therefore *not* a return to the initial financial structure. (Bellofiore 2026) The system that has successfully avoided the canonical result has been *transformed* in the process. New instruments and intermediaries have emerged, refinancing practices have changed, asset prices have acquired a different role, and the conventions governing acceptable financial positions have been revised. The question is then no longer whether the original increase in corporate leverage must reappear somewhere else. The question is how the continuing process initiated by expansion and financial validation operates within the new institutional configuration that its own development has helped to produce.

The United States before 2007 provides an important illustration. (Bellofiore and Halevi 2011⁵; Cynamon and Fazzari 2008) Nonfinancial corporations did not display the cumulative

⁵ The Italian version was written in September 2007 and published soon after. I had been describing the mechanism since the late 1990s under the heading “financial Keynesianism”, renaming it “privatised Keynesianism” in London in November 2007 (at a Marxist conference) and in Dijon in December 2007 (at a Keynesian conference). Hence my joke at a roundtable in Dijon in 2007: “When I go to a Marxist conference I realise how much I am a Keynesian; when I go to a Keynesian conference like this, I realise how much I am a Marxian.” See Chris Harman, “The Outbreak of the 2007 Crisis” (November 2007): <https://www.marxists.org/archive/harman/2007/11/2007crisis.html>. The term “privatised Keynesianism” became widely associated with Colin Crouch’s important analysis, which has many points of contact with mine (Bellofiore and Halevi 2011; Bellofiore 2013; Crouch 2009). Crouch later wrote to me after being alerted that I had used the term and subsequently referred to Halevi and me in some of his writings.

deterioration in leverage suggested by a mechanical repositioning of the canonical hypothesis. The counteracting mechanisms were powerful. Yet the prolonged expansion and the institutional transformations that accompanied it produced a different financial configuration in which fragility became for a long while increasingly concentrated in households, financial intermediaries and market-based finance. This was not the *necessary* migration of a predetermined quantity of fragility from firms to other sectors. It was a *historically specific* outcome of the interaction between the original dynamic and the mechanisms that had counteracted its canonical expression.

This is where Minsky's *stage theory of capitalism* becomes indispensable. The *Financial Instability Hypothesis* identifies a process set in motion by successful accumulation and financial validation. The *stage theory* explains why the institutional forms through which that process develops are themselves transformed. A tendency that does not realize itself through the rising leverage of nonfinancial firms can therefore contribute, through the very countertendencies that restrain that outcome, to the formation of a different capitalism in which financial fragility develops through different agents, balance sheets and mechanisms. Money manager capitalism is the historically specific case to which I now turn.

5. CAPITALISM IN STAGES

Minsky's stage view became increasingly explicit from the early 1980s, particularly in the writings surrounding the centenaries of Marx's death and the births of Schumpeter and Keynes. (Minsky 1989, 1993, 1994, 1996a; Minsky and Whalen 1996; Whalen 2001). He did not believe in a timeless capitalism governed by the same financial mechanism under different historical decorations, and distinguished commercial capitalism, industrial capitalism, financial capitalism, managerial capitalism and money manager capitalism. The exact boundaries are less important than the method. Each stage develops characteristic financial institutions, forms of corporate control, relations between firms and banks, and sources of instability. More importantly, the success of one stage cultivates the conditions of the next. Capitalism transforms the institutional conditions of its own reproduction. This evolutionary perspective, together with the emphasis on innovation, is one of the strongest Schumpeterian elements in Minsky. There is also a Marxian element in this evolutionary logic. *The very mechanisms that sustain an expansion may turn into*

sources of crisis: in Marx, countertendencies that overcome one contradiction may prepare another; in Minsky, successful validation of financial commitments encourages declining margins of safety and increasingly fragile liability structures. The conditions of ascent thus *endogenously* become conditions of crisis (Bellofiore 2011, pp. 9–11).

Minsky's taxonomy was not entirely fixed. In some formulations he distinguished *four* stages, commercial, financial, managerial and money manager capitalism, with industrial development incorporated into the transition from commercial to financial capitalism. In his later, more differentiated formulation, however, he explicitly separated “industrial capitalism and wild cat financing” from both commercial capitalism and “financial capitalism and state financing,” thus yielding the *five*-stage sequence followed here (Minsky 1993; Minsky 1996a, p. 362).

Commercial capitalism was centered on trade, inventories and working capital. Its characteristic finance was short-term and closely connected with commodities in process or in transit.

Merchant and commercial banks financed trade and working capital, often through instruments whose reliability depended on specialized knowledge of merchants, borrowers and other banks. Asymmetric knowledge was therefore already a constituent element of banking. Finance here was primarily tied to the circulation of commodities rather than to the command over large stocks of long-lived productive capital.

Industrial capitalism changed the scale and temporal structure of finance. Machinery, railroads, mines, mills and other long-lived infrastructures required commitments extending well beyond the commercial cycle and could not normally be financed out of the current cash flow of small firms. Investment banking and securities markets consequently expanded, often together with direct or indirect state involvement. Finance increasingly had to connect present command over resources with money returns expected far into the future. The growth of fixed capital thus changed not only production but also the financial institutions appropriate to accumulation.

*Financial capitalism*⁶ developed this transformation further. Corporations themselves became financial entities, while investment bankers, large shareholders and institutions combining commercial and investment banking acquired considerable power over management. The world

⁶ Minsky used both “finance capitalism” and “financial capitalism”. I use the latter throughout, partly to avoid confusion with the many other senses in which “finance” appears in his analysis, and partly to distinguish this historically specific stage more clearly from the later and broader literature on so-called financialisation.

analyzed by Hilferding under the heading of *Finanzkapital* is close to what Minsky had in mind. Corporate securities and the financing of large concentrations of fixed capital moved toward the center of the system. But the very scale of fixed commitments made firms vulnerable when competition and excess capacity prevented output prices and cash inflows from validating inherited debt structures. The Great Crash of 1929 brought that configuration down. The collapse was financial in Fisher's sense of *debt deflation*, but it was simultaneously a collapse of investment, effective demand and the realization of profits. (Hilferding 1981 [1910]; Fisher 1933) A durable exit came only with the Second World War.

Managerial capitalism emerged from the New Deal, the war and the postwar settlement. The financial structure inherited from the war was unusually robust. Business and household debts were relatively low, while the accumulation of public debt supplied the private sector with safe financial assets. Finance was heavily regulated, banking was predominantly based on the holding of loans rather than their rapid distribution through markets, and the New Deal institutional structure restricted the integration of commercial banking with securities activities. Big Government deficits and debt-financed housing supported gross profits, while strong corporate cash flows allowed large firms to rely heavily on internal finance. Power shifted from investment bankers and large shareholders toward corporate managers. The large corporation became a bureaucratic institution with a significant degree of autonomy from financial markets.

This was the world in which the Keynesian policy apparatus appeared to have domesticated financial instability. But, as discussed above, *its success generated another form of instability*. Big Government and Big Bank made another collapse of the early 1930s type much less likely, but the resulting high-profit, high-investment economy had an inflationary bias that became increasingly visible in the 1960s and 1970s. The crisis of managerial capitalism was therefore not simply the return of an old debt deflation. Inflation, financial fragility and the institutional responses to both became part of the mechanism through which the postwar financial structure was transformed.

This point is essential for understanding the *transition* to money manager capitalism. (Minsky 1987) Persistent inflation and rising and increasingly volatile interest rates weakened a financial structure built around regulated deposit rates and relatively stable sources of bank funding. *Banks responded through liability management and new forms of market funding*. Money market

mutual funds competed directly with regulated bank deposits. Regulation was progressively modified or circumvented as financial institutions attempted to protect profitability and expand their balance sheets. Monetary restriction itself created interest rate differentials that opened profitable spaces for new financial techniques. In Minsky's own analysis, *securitization* was in part a delayed response to monetarism: the attempt to constrain bank-based monetary expansion created opportunities for forms of finance operating increasingly *through markets*. At the same time, developments internal to managerial capitalism created a new concentration of financial claims under *professional* management. Employers' pension schemes, mutual funds, insurance companies and other institutional forms expanded: an increasing share of the financial claims generated in the course of capitalist accumulation came under the control of *professional money managers* acting on behalf of households and organizations. The criterion of success increasingly became the appreciation of the market value of assets under management. The very prosperity and institutional development of the postwar order had therefore created agents whose behavior would eventually transform corporate governance.

The transition from managerial capitalism to money manager capitalism was not a simple deregulation story, nor merely the quantitative growth of a previously existing financial sector. The mode of financial intermediation itself changed. Direct, relatively durable relations between banks and borrowers increasingly coexisted with marketable claims, institutional portfolio management and continuous refinancing. Banks were not displaced by markets but changed their own mode of operation, while institutional investors became major owners of corporate securities. Corporate managers again became subject to financial discipline, now through market valuation rather than through the investment banker of the earlier financial-capitalist stage. Nor was money manager capitalism merely "more finance." It was rather a *new* configuration of finance and production. Leveraged buyouts, mergers, restructuring, outsourcing and cost compression transformed the corporation. Vertically integrated firms gave way, in many sectors, to networks and supply chains. Management became acutely sensitive to stock market valuation and required financial returns. Financial institutions increasingly financed positions through continuous refinancing and through the creation and distribution of marketable claims. Employment became more discontinuous and insecure. *Finance affected the organization of production itself.*

Minsky's analysis of this new stage explicitly connected the growing power of institutional investors with the increasing sensitivity of business management to stock market valuation. Minsky's discussion of securitization is particularly revealing because it caught the financial transformation while it was still under way. He explicitly interpreted securitisation as a shift in relative weight from bank funding toward market funding. The thrift institutions provided an early example: high interest rates had damaged their capacity to fund mortgage holdings without eliminating their capacity to originate mortgages, and securitisation allowed origination to continue without the originating institution having to retain the corresponding assets on its own balance sheet. Banks themselves were pushed toward supplementing interest income with fee income, while pension funds, mutual funds and other institutional investors supplied a growing market for the securities being created.

Securitization did more than "spread risk." It separated functions that had previously been combined within a bank or other financial intermediary. Origination, holding, funding, servicing and the ultimate ownership of financial claims could be performed by different institutions. Minsky saw that this would create a more decentralised and varied financial structure, while simultaneously producing financial paper particularly suited to increasingly global markets. He also saw the danger: long securitization chains could allow incompetence and fraud to enter the process and could ultimately expose the lender of last resort to new forms of systemic risk. Minsky did not live to see the mature *shadow banking system*, but he had identified important elements of the institutional logic from which it would emerge.

There is also a largely neglected international counterpart to this institutional analysis. Minsky translated the cash-flow logic of hedge, speculative and Ponzi finance into *international financial relations*. A debtor country may meet foreign-currency commitments from current earnings, may depend on the rolling over of principal, or may have to capitalize interest payments; changes in international interest rates and exchange rates can therefore transform a speculative position into a Ponzi one. His analysis of the balance of payments is organized in successive tiers: contractual payments on existing financial commitments; trade and service flows; rollover and new long-term capital movements; and short-term balancing finance. The international economy is consequently a *hierarchy of payment commitments and refinancing*

relations rather than a collection of national economies connected only through trade balances (Minsky 1986b)⁷.

This perspective also changes the meaning of *international imbalances*. In a credit system, the deficits of some units are the counterpart of the financial positions of others, and their elimination cannot therefore be treated as the general condition for stability. What matters is whether the resulting payment commitments can be validated and refinanced. In the postwar international system this problem was hierarchical because a large part of international debt and liquidity was denominated in dollars. The Federal Reserve therefore operated at the apex of a financial structure extending well beyond the United States: domestic monetary policy affected the conditions under which dollar liabilities throughout the world could be carried, while severe international disturbances could require the Federal Reserve to act, directly or indirectly, as lender of last resort to the dollar system. Minsky's *national* analysis of Big Bank thus had an *international* counterpart.

The stage view provides the historical complement to the tendential interpretation developed in the preceding section. In money manager capitalism, fragility did in fact become concentrated in households, financial intermediaries and market-based finance. This was a historical outcome of a transformed institutional structure, not the necessary displacement of a predetermined quantity of fragility. *A "Minsky moment" was therefore the outcome of a stage, not a timeless law suddenly revealing itself.*

6. MINSKY AGAINST KEYNESIANISM: SOCIALIZING INVESTMENT

The stage view leads directly to a more *political* Minsky. His argument cannot be reduced to a demand for stronger regulation or a more active central bank because he was also a critic of the Keynesianism that had apparently succeeded in stabilizing the postwar economy. The starting point is Keynes's famous conclusion in the *General Theory* that a "somewhat comprehensive *socialization of investment*" would be required to secure an approximation to full employment.

⁷ The paper was presented in a conference in Milan in 1984 which was co-organised by Piero Ferri. An earlier version circulated as Washington University Working Paper no. 74 in December 1984. An Italian translation by Francesco Ciafaloni, published in *Metamorfosi* through my mediation, appeared before the English publication in *Studies in Banking and Finance* in 1986.

Keynes had reached a radical proposition: monetary policy alone could not be relied upon to generate the volume of private investment necessary for full employment.

Keynes, however, immediately qualified the conclusion. (Keynes 1936) Socialization had to proceed gradually and compromise with private initiative. More importantly, for Minsky, Keynes argued that the central defect of capitalism concerned the volume rather than the direction of employment. Once resources were fully employed, the market could retain considerable authority over allocation. Minsky's objection is sometimes presented as the discovery of a logical inconsistency. I do not think that is the best formulation. Keynes's position is coherent on its own assumptions. Its problem, as Minsky argued, is the *conservative* limit of those assumptions. He socializes the volume of investment while conceding the direction and composition of output to the market when full employment is reached.

Joan Robinson later put the political question in the shortest possible form: full employment *for what?* (Robinson 1978 [1972]) If society has to intervene because private investment decisions do not generate an adequate level of employment, there is no reason to assume that the same private mechanism necessarily determines an acceptable composition of output. A high-employment economy can reproduce a composition of production shaped by capitalist profitability rather than by socially determined needs if labor and productive capacity are directed toward military production, conspicuous consumption, environmentally destructive activity, or sectors whose profitability depends on artificial scarcity. The *socialization of investment* therefore raises a question about use values, productive capacity and social priorities.

Here Kalecki's 1943 argument on the *political aspects of full employment* belongs in the background. (Kalecki 1943; Kalecki and Kowalik 1971) I would go further than the usual approach and call that argument *a labor theory of value in disguise*. It should not be reduced to the later profit squeeze thesis. Kalecki's argument was broader. Capitalists could oppose *permanent* full employment because they disliked government intervention in employment as such, because public expenditure could weaken their control over the direction and composition of production, and, above all, because tight labor markets alter discipline in the factory. The threat of dismissal loses part of its force, workers become more conflictual, and the organization of production becomes politically contested. In this sense Kalecki anticipated something fundamental about the crisis of the late 1960s and early 1970s. Paradoxically, this was not the

line he and Kowalik advanced in that conjuncture, when they spoke instead of a crucial reform of capitalism. The 1943 argument reaches deeper: full employment has consequences inside production, where the extraction and organization of labor are at stake, not only in the distribution of income after production.

Minsky did not formulate this argument in Kalecki's language, but his political economy partially converges with it. *Big Government* and *Big Bank* had succeeded in preventing another Great Crash, yet the content of the resulting high-employment regime was conservative. High profits were supported through public deficits, induced private investment, military expenditure and an expanding private consumption whose composition was largely left to corporate profitability. The welfare state relied heavily on transfers rather than direct employment and social provision. Stabilization had addressed the level of aggregate activity without addressing Minsky's further question: what was to be produced, through which forms of employment, and for which social purposes.

If I am right, Minsky's interpretation of Keynes in 1975 was political as well as financial. He treated the *General Theory* as containing the seeds of a revolution that had not reached maturity. The revolutionary element lay not simply in deficit spending but in the recognition that the level of investment could no longer be left to private calculation. Yet postwar Keynesianism allowed that insight to be absorbed into a high-profit capitalism in which the rentier was not euthanized and quasi-rents themselves became objects of speculation. The political problem was what followed from the socialization of investment once its necessity at the aggregate level had been conceded. The last two chapters of *John Maynard Keynes* make the point unusually explicit.

Minsky describes the United States as a controlled rather than a *laissez faire* economy but argues that the controls were being used to sustain private investment independently of its social utility. The *high-investment, high-profit* strategy rested on military expenditure, the artificial stimulation of private consumption and the maintenance of quasi-rents, and Minsky associated it with waste and with deterioration in the biological and social environment. His alternative was what he called a *high-consumption strategy*. This did not mean consumerism or simply a higher propensity to purchase privately produced commodities. It meant reducing the dependence of full employment on high private investment and high quasi-rents through a more egalitarian distribution of income, together with public consumption and public investment. Here the

expression *communal consumption* is crucial: in my view, this means that social use values are provided directly, *in kind* rather than through monetary transfers, in a form closer to the social provision historically associated with the European welfare state. The same alternative required the *socialization of the towering heights*: leading sectors would be socially controlled while a large, growing and prosperous private sector could remain. Together with taxation designed to reduce inequality and limits on permissible liability structures, this was Minsky's *high-consumption, low-private-investment* strategy. The issue was the composition of production and the social content of full employment, not merely its aggregate level.

Minsky's own socialist formation matters here. He never advocated what he called thoroughgoing socialism and showed little interest in general nationalization. But he did envisage a system in which planning determined the rhythm and direction of investment, in which important areas of investment and their finance were removed from the market, and in which control of the finance committees of giant corporations could become a route toward a *decentralized socialism*, or, if one preferred the label, a *guided interventionist capitalism*. For Minsky the name mattered less than the institutional substance.

7. THE NEW DEAL, STRUCTURAL REFORM, AND EMPLOYMENT

Minsky's route beyond postwar Keynesianism led him back to the New Deal. (Minsky 1981)⁸ The return was not nostalgic. He knew perfectly well that Roosevelt was *not* a Keynesian and that Keynes was *not* a Rooseveltian. The New Deal lacked the Keynesian theory of effective

⁸ I first heard Minsky make this argument at the large conference "Le trasformazioni del welfare state tra storia e prospezione del futuro", held in Turin on 15–19 December 1981 and promoted by the Fondazione Lelio e Lisli Basso. He had been invited, I believe, by Ester Fano. I was then a very young economist living in Turin and attended the meeting. The proceedings appeared two years later as Fano, Rodotà and Marramao (eds.), *Trasformazioni e crisi del Welfare State* (1983), and included an Italian translation (marred by some spectacular typographical errors: the most amusing for me was a positive reference to "Riccardo and Marx") of Minsky's 1981 *Telos* article, "The Breakdown of the 1960s Policy Synthesis", under the title "Il fallimento della combinazione tra politiche rooseveltiane e keynesiane negli Stati Uniti". His intervention revealed to me a side of Minsky that had not been at all transparent in the Minsky I had come to know through his conversations in Bergamo. It also helps explain the different emphases among the Bergamo "Minskyans": Piero Ferri was more interested in the cyclical dimension, whereas my own interest, initially centred on financial Keynesianism, gradually broadened to encompass Minsky's New Deal side and his critique of Johnson's War on Poverty; Annamaria Variato perhaps remained the most Minskyan of us all. On this largely neglected dimension of Minsky, see especially Bell and Wray (2004) and Wray's introduction to Minsky (2013); see also Wray (2016, ch. 5).

demand, and Roosevelt's resistance to sustained deficit spending contributed to the interruption of recovery in 1937 and 1938. Yet the New Deal contained something that the Keynesianism of the postwar period had largely lost: *structural reform*. In "The Breakdown of the 1960s Policy Synthesis" in 1981 Minsky's point was precisely that the two traditions had to be recombined rather than simply identified.

For the New Deal, the capitalism that had collapsed after 1929 was not suffering only from an insufficiency of aggregate expenditure. Its financial institutions had failed; debt deflation had to be blocked; downward flexibility of wages and prices had to be contained; work had to be provided directly; and new institutions had to be created. Financial regulation, social insurance, minimum standards, public works and direct employment altered the structure within which markets operated. *Reform* occupied the center of the program. Keynes, by contrast, pressed Roosevelt to give priority to *recovery*. Minsky's proposal was to combine what each lacked: Keynesian effective demand and financial analysis with the New Deal's institutional creativity.

This is the background to the papers later collected in *Ending Poverty: Jobs, Not Welfare*. Minsky's argument was directed against what would later be called an employability approach (Minsky 2013). President Johnson's War on Poverty tried above all to change the characteristics of poor and unemployed people through education, training, and preparation for jobs that the economy was supposed eventually to provide. Minsky reversed the order of causation. A program against poverty had to change the economy by creating employment. His formula was to take the labor force as it is and make fitting jobs available. Supply-side measures could have a role, but they could not substitute for the direct creation of employment.

The objective was what Minsky called tight full employment. By tight full employment, Minsky meant a labor market in which, across a broad range of occupations, industries, and locations, employers at prevailing wages and salaries would prefer to employ more workers than they actually do. It did not imply zero measured unemployment: in 1965, Minsky used 2.5 percent as an interim operational definition for the United States, against the 4 percent target of the Council of Economic Advisers, which he regarded as a slack employment goal. Government had to stand ready to employ those who were willing and able to work, including people whom private employers did not currently wish to hire. The resulting demand for labor at the bottom of the wage structure would raise low wages relative to higher wages and could compress wage

dispersion. Full employment was therefore also a mechanism of redistribution and a change in bargaining conditions, not merely an increase in aggregate output.

For this reason, Minsky's employer-of-last-resort proposal should not be reduced to a technical job-guarantee rule or to a buffer-stock mechanism whose only purpose is to anchor the wage level. The employment itself mattered. Transfer payments can sustain income, and Minsky did not deny that transfers are necessary for people who cannot work or in other circumstances in which income support is required. His objection was to making transfers the central answer to poverty and unemployment. A transfer can redistribute command over an already given output; it does not by itself create the goods and services that unemployment leaves unproduced. Minsky's more fundamental objection was that reliance on transfers as a substitute for employment amounts to accepting the inability of the production process to respond to social goals. Direct public employment had a double function. It provided income from work, but it also produced activities and services that private profitability would not necessarily supply. The New Deal programs were important to Minsky partly because they were institutionally diverse and oriented toward concrete objectives. Federal initiatives could be sponsored by local governments, public agencies, and non-governmental organizations, and projects could be adapted to community needs. Child care, health care, education, recreation, elder care, cultural activities, construction, conservation, parks, and public spaces were not incidental examples. They showed that an employment program could simultaneously change the composition of production and enlarge the provision of social use values.

This is why Minsky's argument cannot be reduced to the proposition that any sufficiently large fiscal deficit will secure the desired result. Deficits that emerge because private expenditure collapses can prevent cumulative contraction and support profits, but the *composition* of the associated expenditure remains decisive. Tax reductions intended to stimulate private investment, transfers intended to sustain consumption, military spending and direct public employment can all raise aggregate demand, but they do not produce the same economy. The political question is what capacities are being created, what services are being supplied and through what institutions people receive income.

I find Parguez's distinction between "good" and "bad" deficits useful here. (Parguez 2014) *Bad deficits* arise ex post from recession, unemployment and collapsing revenues; *good deficits* are

planned and create tangible and intangible social assets through public investment, direct employment and social provision. This is not Minsky's terminology, but it makes explicit the distinction between stabilizing aggregate demand and changing what public expenditure actually brings into being.

Tight full employment posed an inflation problem that Minsky did not evade. If wages at the bottom are deliberately made to rise faster than average wages, an egalitarian employment policy may carry an inflationary bias. His answer was not to preserve unemployment as a disciplinary device. It was to place employment policy inside a wider structure of wage, price and investment policies. In the papers collected in *Ending Poverty* he explicitly argues that an incomes policy may be required and that the destabilizing tendency of investment demand itself has to be brought under control. Full employment, greater equality and financial stability therefore cannot be treated as three independent targets pursued by three independent instruments. They require an institutional program.

The same point bears on Minsky's criticism of the postwar welfare state. His target was not social provision as such. Indeed, his preferred employment program would expand publicly supplied goods and services. What he rejected was a configuration in which policy sustained high profits and private investment while compensating those left behind mainly through *money transfers*. In that setting the state could socialize losses and underwrite private accumulation without acquiring corresponding control over the direction of production. Minsky could describe some forms of government underwriting of private capital as socialism for the rich. The alternative was not less public intervention, but intervention directed toward employment, social provision and the structure of investment rather than toward the protection of private quasi-rents.

Seen in this light, the connection between the *socialization of investment* and the *employer of last resort* is much tighter than it first appears. They are *not* two independent policy proposals. The first concerns *social influence over the scale and direction of accumulation*. The second concerns *the direct creation of employment and of social use values when private profitability does not generate them*. Both reject the idea that public policy should merely validate the outcomes produced by private investment decisions. *Both make the composition of production a political question*. Minsky's attachment to the New Deal should therefore be understood as an attachment to institutional experimentation. He did not propose returning to the precise agencies or programs

of the 1930s. The historical New Deal itself had serious theoretical limits and did not solve the problem of effective demand. What mattered was its willingness to alter the institutional structure of capitalism, to regulate finance, to create employment directly and to establish new forms of public provision. The proper synthesis was not Roosevelt *against* Keynes, but Keynes *plus* Roosevelt against a conservative Keynesianism that reduced the revolution in economic thought to aggregate fine-tuning.

This is the political Minsky that disappears when the employer of last resort is detached from the rest of his argument. A legally guaranteed possibility of useful employment, tight full employment, public provision of social use values, control over destabilizing investment and reform of finance belong to *one* project. The aim is not simply to stabilize a given capitalism at a higher level of activity. It is to *change the institutions* through which employment, investment and production are organized.

8. MINSKY AMONG HIS INTERPRETERS

Only after setting out my perspective of Minsky is it useful to turn to his interpreters. The disagreements are not merely exegetical. They concern where one enters the monetary system, which part of Minsky is treated as central, and how far his political conclusions should be carried. It is more useful to organize the debate around problems than around a gallery of rival “Minskys.” What follows is then deliberately *selective*. The literature on Minsky has made different parts of his work central: the Wall Street paradigm, the Financial Instability Hypothesis, the financial theory of investment, endogenous money, dynamic modeling, the stage view of capitalism, the employer of last resort, and institutional reform. Each line identifies a real part of Minsky. The problem begins when a partial truth is made to stand for the whole.

8.1 The Wall Street Paradigm, Keynes, and Minsky’s Intellectual Identity

Gary Dymski and Robert Pollin resisted the reduction of Minsky to a theory of crises by describing him as a “hedgehog.” (Dymski and Pollin 1992, 1994; Fazzari and Papadimitriou 1992) The large organizing idea is the *Wall Street paradigm*. Capitalism is a system of interlocking balance sheets, cash flows and dated commitments in which positions in long-lived assets connect present decisions to an uncertain future. The Financial Instability Hypothesis is

one implication of that view, not a detachable theory of bubbles. The collections edited by Fazzari and Papadimitriou and by Dymski and Pollin helped establish this broader Minsky well before the expression “Minsky moment” narrowed attention again to financial collapse.

The debate over whether Minsky was “really” Post-Keynesian raises a different question. Minsky himself had preferred the label *financial Keynesian* before he came to be described as a Post-Keynesian. Anna Maria Variato interprets him as a Keynesian of a special kind whose constructive program is too eclectic to fit comfortably within a single school. (Variato 2001) Marc Lavoie defends a stronger Post-Keynesian identification, pointing to Minsky’s own statements, his rejection of self-adjusting equilibrium, the centrality of uncertainty and the interdependence of real and financial variables. (Lavoie 2020) Others disputed the classification. The label matters less than the content. Minsky’s version of Keynesianism is centred on cash flows, balance sheets, financing positions and cyclical processes. It is not a theory whose center is a static underemployment equilibrium. (Minsky 1996b)

Harcourt’s contemporary review of *John Maynard Keynes* was unusually perceptive: while calling Minsky’s account a “highly personal interpretation” of Keynes, he was among the very few who saw it as combining the institutional setting of the *Treatise* with the analytical concepts of the *General Theory*, especially Chapter 17, into a coherent cyclical argument. He also grasped the unity with the final political chapter, praising the move toward egalitarian public spending, reduced reliance on private investment and institutions designed to contain its adverse financial implications (Harcourt 1977, pp. 306–307)⁹.

Daniel Neilson shifts the emphasis further back. (Neilson 2019) His interpretation argues that Minsky’s central insights preceded the later self-presentation as an interpreter of Keynes. Two

⁹ Harcourt ended with an intriguing criticism of the labour-market discussion in Minsky’s Chapter 2. The context matters, however: the chapter is aptly entitled “The Conventional Wisdom”. Since Keynes accepted the first classical postulate but rejected the second, Harcourt argued that adjustment should leave firms on their labour-demand curve rather than workers on their labour-supply curve. Minsky’s construction is, however, more complicated than he implies. Following a shortfall of aggregate demand, employment initially falls, at the existing real wage, to *B*: firms employ only the labour required by effective demand, while more workers are willing to work. If the real wage subsequently falls, the economy may reach *C*, where the quantity of labour supplied has fallen to the level of employment determined by effective demand. At that same real wage, however, the conventional marginal-productivity labour-demand curve would imply a higher level of employment, *C'*: firms would wish to employ more labour if the resulting additional output could be sold. Minsky therefore calls the excess demand represented by *C'–C* “notional, not effective”. Moreover, he immediately questions whether *C* can actually be reached, and subsequently argues that wage and price adjustment may instead leave the economy stuck at *B*.

simple propositions organize the early work: *everyone is in an important sense like a bank*, and financial patterns change. Economic units have to make position, meet payment commitments and obtain liquidity; the devices through which they do so evolve. Neilson recovers the survival constraint, position making and the cash flow mechanics that can disappear when the Financial Instability Hypothesis is retained as a conclusion detached from the monetary practices that generate it.

The two volumes I edited in 2001 with Piero Ferri were an early collective attempt to recover this wider Minsky. Our introduction, “Things Fall Apart, the Center Cannot Hold,” presented his work as a monetary and financial theory of capitalism whose instability cannot be separated from institutional change. The contributions ranged from Minsky’s intellectual formation and methodology to the Wall Street paradigm, financial crises and international finance, and from the macroeconomic foundations of the Financial Instability Hypothesis to dynamic modeling and structural change. Several of these arguments will reappear below where they bear directly on the problems under discussion (Bellofiore and Ferri 2001c). I only refer here to three contributions. Fano traces an intellectual formation that includes the *Treatise on Money*, Lange and Douglas, Simons, and Schumpeter. (Fano 2001) Minsky’s mature work did not grow out of the *General Theory* alone. Foley identifies a methodological problem. Minsky studies institutions that transform liquid claims into illiquid and risky projects, while standard empirical and modeling strategies look for stable relations. (Foley 2001) Minsky did not reject formal analysis; his dissertation and the later work with Ferri show the opposite. The difficulty is to formalize a system whose conventions, institutions and parameters change in historical time. (Minsky 1957b, 1959, 2004; Ferri 2019)

Toporowski’s interpretation of Minsky’s dissertation adds another important methodological dimension. The young Minsky’s “eclectic” business-cycle theory sought to combine relations among broad monetary aggregates with the behavior of individual units and particular markets, while making the parameters of aggregate relations dependent on market process, financial conditions and their evolution over the cycle. Toporowski rightly sees here a strongly Schumpeterian conception of economic method (Toporowski 2008).

8.2 The Monetary Circuit and the Sequence of Finance

The closest dialogue here is with the monetary theory of production. Augusto Graziani's introduction to the Italian edition of *Can "It" Happen Again?* translates Minsky into the language of the monetary circuit. (Graziani 1984; Bellofiore 2019) His Italian textbook, *Macroeconomia*, in its third edition had already interpreted Minsky as treating capitalist production as requiring an initial finance *before* output is produced and sold and thus *before* the income and saving generated by production exist. Kregel, commenting on Graziani's interpretation in a letter to me, described it as a fair translation into circuit language, while noting that Minsky gave little space to finance to production and that Graziani's distribution theory was more Robinsonian. The circuit illuminates Minsky; it is not a theory to be attributed to him retrospectively.

Graziani insists on distinctions among financial relations that are often collapsed. *Initial finance*, or *finance to production*, precedes production and covers both consumption and capital goods (Graziani 2003). *Financing investment* concerns the purchase of capital goods already produced. Investment expenditure generates income, gross profits and *monetary* saving. The corresponding *real* saving, both voluntary and forced, provides the *final finance of investment*, or "*funding*" in Chick's terminology (Chick 1986). It is in this precise ex post sense that investment finances itself. This is narrower than Graziani's *final finance*, the reflux of liquidity to firms through commodity and financial markets (Graziani 2003). *Refinancing* is different again: it is renewed finance required to reproduce an existing liability structure through time rather than just to initiate new production, but its provision is never automatic. It requires a new decision by financiers to roll over or otherwise validate the inherited position. Moreover, a speculative unit requires renewed finance not to initiate production but to continue an existing position through time; if refinancing is denied, activity already under way may have to be interrupted.

Refinancing is very relevant for Minsky. It concerns the reproduction through time of a liability structure already in existence. A speculative unit can service interest but must roll over principal; a Ponzi unit depends on further borrowing, asset sales or capital gains. Here collateral values, market liquidity and the possibility of rolling liabilities become decisive. Financial innovation alters what can be refinanced and therefore what can be carried. Its apparent success can reduce perceived margins of safety until the elasticity of finance suddenly contracts. Put together, these

distinctions prevent three conflations: initial finance with the funding of investment, final monetary validation with the financial reflux that closes the circuit, and refinancing with the finance that opens production. In concrete institutions these relations interact, but analytically they belong to different moments of the monetary process.

Contemporary finance to production need not take the form of a traditional commercial-bank loan held to maturity. Modern market-based finance instead involves chains of banks, dealers, wholesale markets and non-bank intermediaries through which claims are distributed and liquidity supplied (Mehrling 2011). This does not alter the logical priority of initial finance: the expansion of shadow-bank balance sheets itself relies on the prior endogenous creation of purchasing power by the banking system (Michell 2017). Ultimate liquidity backstops, in turn, affect the terms on which positions can be opened and rolled (Mehrling 2011).

8.3 Banks, Financial Innovation, and Monetary Production

Marcello Messori's 1984 analysis of Schumpeter supplies part of the genealogy of this argument. Bank creation of means of payment gives entrepreneurs the monetary means to initiate production without prior saving, before the new income exists, and thereby makes development possible. (Messori 1984) Kregel connects this monetary problem with Minsky from inside the Minskyan tradition. (Kregel 1992) His work keeps together the two price systems, the financing of positions, margins of safety and finance to production while preserving the difference between Minsky and a circuit reconstruction.

Éric Nasica develops the *active role of banks inside this process*. Credit is not a passive response to a financing requirement generated elsewhere. Banks seek profits, select borrowers, innovate, alter the terms on which liquidity is supplied and respond strategically to policy (Nasica 1997, 2000). Alessandro Roncaglia brings Kalecki into the same monetary problem. (Roncaglia 2013) Profits are the cash flows through which business commitments can be validated. Keynes is stronger on uncertainty and finance; Kalecki supplies the macroeconomic generation of profits, distribution and social classes. Roncaglia also points to what remains thin in Minsky: market forms and competition.

Jo Michell extends the circuit argument directly to *shadow banking*, that is, market-based credit intermediation through non-bank institutions and instruments that remain closely connected to the traditional banking system. Shadow-bank liabilities such as repos and money-market claims are not normally means of payment or final settlement but *near-monies* and, in Graziani's terms, *can be treated as forms of final finance*. Their expansion nevertheless presupposes the earlier creation of purchasing power by the banking system: bank lending and deposit creation remain a prerequisite for the endogenous growth of shadow-bank balance sheets. Market-based finance therefore *modifies* the circuit without reversing its logical sequence from *initial finance* to *final finance* (Michell 2017).

Seccareccia (2012–2013) reaches a compatible conclusion from the analysis of the transformation of commercial banking. Securitization and the shift from originate-and-hold to originate-and-distribute banking *transform* the channels through which credit is carried, but commercial banks remain central as *creators* of credit money and *originators* of the assets that feed market-based finance.

Mehrling's *Money View* is most useful here for its hierarchy of monetary promises, market making, dealer balance sheets and the survival constraint (Mehrling 1999, 2000, 2011, 2020). It describes how positions are kept alive and how central bank support can move from lender of last resort to dealer of last resort. The monetary production question is, however, logically prior: what is financed, how purchasing power is created, and how capitalist production is financed before the corresponding income exists. Thus, Mehrling helps describe the financial architecture in which Minskyan positions are carried, but he does not provide a new foundation for the monetary theory of production.

8.4 Financial Instability, Margins of Safety, and Structural Change

Kregel's work on *margins or cushions of safety* changes the interpretation of the *Financial Instability Hypothesis*. (Kregel 2008) The hedge, speculative and Ponzi taxonomy describes positions once they exist. Margins of safety explain how standards of prudence *change*. Successful repayment and rising asset values alter what borrowers and lenders regard as safe. Competition raises the cost of retaining larger cushions when competitors accept smaller ones. In the subprime episode Kregel adds a sharper point. Safety margins were often not merely eroded

during the boom; they were inadequate by design. Securitization, originate-to-distribute lending and delegated credit assessment changed the criteria by which safety was judged.

Piero Ferri adds another perspective about endogenous change, rooted in his long collaboration with Minsky. (Ferri and Minsky 1989, 1992; Ferri 2019) The joint work on *Market Processes and Thwarting Systems* rejects IS-LM as a sufficient macroeconomic framework, integrates product, labor and financial markets dynamically, and seeks processes rich enough to generate instability without making explosion mechanically inevitable. *Thwarting systems* are institutions and policy interventions that contain instability while altering the system they contain. The intermediate run is the horizon in which these adaptations occur. Stabilization is not external to the process; it changes behavior and the structure on which later policy acts.

Ferri's later work extends this program to the intermediate run. With Fazzari and Variato, he combines demand-led growth with an accommodating but non-instantaneous supply side: autonomous demand remains the driver, while capacity adjustment and unemployment become endogenous elements of a bounded but potentially complex dynamic. The point is again to avoid both exogenous-shock dynamics and convergence to a predetermined long-run equilibrium (Fazzari, Ferri and Variato 2020).

Delli Gatti and Gallegati (1997) interpret Minsky's dissertation as the original research program out of which the Financial Instability Hypothesis emerged. They show that it already contains several of its later building blocks, including balance sheets, lender's risk, firms' financial soundness and a hierarchy of financing sources, but within a broader framework in which *heterogeneity, interaction among firms and changing market structure* generate non-linear aggregate dynamics. Their later *agent-based* work develops precisely this dimension (Delli Gatti et al. 2007).

Vercelli's distinction between dynamic and *structural instability* marks the theoretical issue. In *structural instability* the system does not merely fluctuate around a fixed structure; the structure generating the fluctuations changes. A mechanical interpretation of the hedge, speculative and Ponzi sequence misses this dimension. (Vercelli 2000)

Minsky also attracted an Austrian critique. Prychitko (2010) acknowledges that Minsky supplies useful insights into speculative dynamics during the boom but regards his cycle theory as

incomplete and argues that the “Minsky moment” can already be explained by Austrian business-cycle theory. White (2015) states the objection more sharply, rejecting the proposition that debt-based intermediation can endogenously generate boom and bust in an otherwise undistorted market economy. The disagreement is instructive. The analysis developed above points in a different direction. Once credit money is endogenous, financial institutions innovate under competitive pressure, and successful past performance itself modifies margins of safety, *there is no institutionally neutral financial structure to which an “undistorted” market naturally returns*. Central-bank policy can validate, redirect or magnify fragility, but it need not create it.

8.5 The Micro-Macro Problem

Lavoie and Seccareccia formulate a macroeconomic internal criticism of the canonical *Financial Instability Hypothesis*. Their strongest point is that Minsky himself briefly recognizes the difficulty. In *John Maynard Keynes*, higher realized profits can partially frustrate firms’ planned debt financing; yet he then returns to the proposition that aggregate debt ratios rise with expansion without explaining the passage from the representative firm to the nonfinancial business sector. The leverage logic that holds for a single investing firm therefore cannot be transferred directly to the sector as a whole. Their argument supplies the micro-macro qualification required by the tendential interpretation and reinforces the distinction between finance to production, financing investment and final finance of investment (Lavoie and Seccareccia 2001).

Toporowski (2008) reaches a related conclusion from a Kaleckian angle. Investment distributes profits and liquidity across the corporate sector, but the firms incurring debt to invest need not be the firms receiving the corresponding profits. Financial fragility therefore depends on the distribution of liquidity and net indebtedness across firms, rather than on a necessary rise in the gross indebtedness of the corporate sector as a whole.

Lavoie’s stock-flow consistent (SFC) analysis makes the qualification especially transparent: faster growth may generate either rising or falling corporate debt ratios, depending on the financing and behavioral configuration. He accordingly distinguishes a “Minsky regime” from a “Steindl regime” and shows that each can coexist with either debt-led or debt-burdened demand

(Lavoie 2022, pp. 478–479; see also Taylor 2004). Godley’s three-balances identity provides the accounting constraint; disaggregating the domestic private balance between firms and households then makes explicit that a corporate financial surplus must have its counterpart in deficits elsewhere. This helps clarify how fragility may migrate from firms towards households and other sectors rather than disappear.

Passarella¹⁰’s contributions to this debate are partly connected with work we developed together for a while. Corbisiero’s (1998) attempt to supplement leverage with maturity mismatch was taken up and developed by Passarella (2010), but that route did not convince me. Passarella (2012), whose opening analysis drew substantially on some unpublished joint work of ours¹¹, subsequently developed a broader SFC reformulation in which the standard corporate-leverage version of the FIH could rightly no longer be treated as a general law. More recently, Veronese Passarella (2025) has attempted a formal integration of Minsky’s financial-instability analysis with Graziani’s monetary circuit in an IO-SFC model. Lavoie’s later assessment adds other qualifications. (Lavoie 2020) Minsky gave too little attention to household debt, retained in some writings traces of a loanable funds account of interest rate movements, and in early work sometimes explained monetary endogeneity through changes in velocity rather than the reverse causation stressed by later Post-Keynesians. Lavoie also questions assumptions about capacity utilization and costs. These are *corrections* to parts of Minsky’s argument, not reasons to discard the financial theory of instability.

Graziani raised a related point. (Graziani 1984) A hedge position can be hit by a fall in expected returns, while a speculative position need not collapse if refinancing remains available. The taxonomy of financial positions does not by itself determine the occurrence of crisis. This is less a refutation than a reminder of Minsky’s own formulation that the revaluation of financial structures can be sudden “*when anything goes wrong*.” fragility creates vulnerability, while the

¹⁰ Marco Passarella until 29 May 2013; Marco Veronese Passarella from 30 May 2013. Passarella had completed his PhD in the History of Economic Thought at the University of Florence in 2008 with a substantial dissertation on the genesis and development of the Italian monetary-circuit approach, *Finance Matters! Genesi e sviluppo della Teoria del circuito monetario in Italia*. I was one of his supervisors, together with Duccio Cavalieri.

¹¹ Bellofiore, Halevi and Passarella (2009); Bellofiore and Passarella (2010).

reversal may arise through different changes in profits, interest rates or refinancing conditions (Minsky 1977; reprinted in Minsky 1982a, p. 68).¹²

In his dissertation Caverzasi anticipated a more structural reformulation of the problem: financialization could reduce corporate leverage during the upswing while relocating fragility toward households, banks and financial markets (Caverzasi 2012). Caverzasi and Tori (2018) make a similar point in their analysis of the Financial Innovation Hypothesis: the endogenous movement toward fragility prepares the system for a reversal whose immediate trigger is not uniquely specified.

8.6 The Forms of Financial Fragility

What matters is the endogenous erosion of margins of safety and the transformation of financial conventions, not a theorem of monotonically rising corporate leverage. Countertendencies can prevent the canonical balance-sheet outcome while changing the institutional path along which fragility later develops.

The United States before 2007 provides a *historical* instance. Household debt, financial intermediaries and market-based finance became central while the nonfinancial corporate sector could run stronger financial balances. Fazzari's work helps keep the levels separate. Cash flow, leverage and external finance can constrain investment for particular firms without implying that aggregate investment is financed by a prior fund of household saving (Fazzari 2022). Cynamon and Fazzari extend the analysis to households: borrowing against housing and financial wealth can sustain consumption when wage growth is weak, making effective demand dependent on collateral values, asset prices and refinancing (Cynamon and Fazzari 2008).

Toporowski adds the Kalecki-Steindl dimension by *disaggregating* aggregate saving into household saving and firms' saving. (Toporowski 2009, 2020a, 2022) Household saving is a

¹² "Whereas experimentation with extending debt structures can go on for years and is a process of gradual testing of the limits of the market, the revaluation of acceptable debt structures, *when anything goes wrong*, can be quite sudden." (Minsky 1977; reprinted in Minsky 1982a, p. 68).

leakage from firms' receipts, while firms' saving is their net financial accumulation. Thus, abstracting from government and external balances, if household saving exceeds investment, firms are pushed into enforced indebtedness. Before 2007, asset inflation reduced household saving in the United States and Britain to very low levels, in some measures to zero or below, relieving the Steindlian pressure on corporate balance sheets while increasing the fragility of households and financial institutions. Asset inflation thus acted as a countertendency to this particular source of corporate fragility; the system became fragile in a different way when financial inflation could no longer sustain debt.

Toporowski is much less convincing, at least to me, on the monetary starting point. His criticism of Graziani begins with corporations holding deposits and financial assets and makes new bank credit necessary only for additions to existing production (Toporowski 2020a). In this way, finance to production is blurred with the financing of investment, and accumulated monetary capital is presupposed where a monetary theory of production has to explain its origin. Firms can carry liquid balances and retained earnings from previous periods. Those balances are residues of previous circuits. They do not replace the logical need for initial finance to production in the current circuit (Graziani 2003; Bellofiore 2019).

8.7 Capitalist Stages, Money Manager Capitalism, and Modern Finance

Charles Whalen was among the first to make the *stage view* central, initially in joint work with Minsky and later in his systematic interpretation of Minsky's theory of capitalist development; Papadimitriou, Wray and later Tymoigne carried this line of interpretation forward (Minsky and Whalen 1996; Whalen 2001). New Deal and postwar institutions produced a managerial capitalism with stronger private balance sheets, regulated finance, Big Government and large corporations. Its success generated the conditions for another configuration: funded pension schemes, mutual funds, insurance companies and other institutional forms placed a growing share of financial claims under professional management. Money managers became a new mechanism of corporate control. Wray and Tymoigne's *Minsky's half century* follows this transformation from the postwar settlement to the crisis of the new financial structure (Tymoigne and Wray 2014). This line of interpretation restores the historical dimension lost in many post-2007 invocations.

Toporowski (2020b) offers a complementary critique of Minsky's periodization, arguing that it remains insufficiently systematic about the changing structures of long-term corporate finance and capital markets. Drawing in part on Sweezy's (1941) "The Decline of the Investment Banker," he proposes instead a sequence organized around historically changing forms of enterprise finance and the financial processes they generate.

An early Post Keynesian reception should also include Davidson (1978), whose new postscript explicitly sought to synthesize Minsky's analysis of financial instability with Keynes's *Treatise* and *General Theory*. Davidson adopted and reformulated Minsky's taxonomy of financial positions, while also raising a distinctly macroeconomic qualification: the robustness of a financing structure cannot be assessed independently of its effects on aggregate demand and hence on the cash flows validating financial commitments.

There had of course been an earlier route by which Minsky entered the wider discussion of financial crises. Kindleberger's *Manias, Panics, and Crashes* (1978) explicitly adopted what he called the "Minsky model" as a framework for interpreting the historical sequence of speculative booms, financial distress and crashes. The subsequent interaction between the two gave rise to what has often been called the Kindleberger–Minsky model.

After 2007 Minsky also entered *mainstream macroeconomics*, although selectively. Krugman devoted his third 2009 Robbins Lecture at the LSE to "The Night They Re-read Minsky" and later remarked, with characteristic candor, that "now everybody including me quotes him" (Krugman 2009, 2012). Yet the selection mattered. He acknowledged the prescience of Minsky's analysis of financial fragility, but he rejected precisely Minsky's criticism of marginal productivity theory and his adoption of Kalecki's macroeconomic theory of profits and distribution. To most economists, Krugman remarked, this was like "talking Greek;" it was "too heterodox" (Krugman 2009; Bellofiore 2015, p. 13). With Gauti Eggertsson he subsequently translated debt and deleveraging into a *New Keynesian model* (Eggertsson and Krugman 2012): a selective formalization of one Minskian mechanism rather than a reconstruction of Minsky's monetary, institutional and evolutionary analysis. Janet Yellen (2009), returning to the Levy Institute thirteen years after a lecture on the "new" science of credit-risk management, acknowledged the irony: amid what she herself called "A Minsky Meltdown," Minsky had

become “required reading,” as the crisis displayed the kind of systemic breakdown he had anticipated.

Ben Bernanke provides an illuminating contrast. Already in 1983, he grouped Minsky and Kindleberger among those arguing for the inherent instability of finance, but objected that they had done so by departing from rational economic behavior (Bernanke 1983, p. 258), an objection that may have applied more readily to Kindleberger than to Minsky. After the crisis, however, his analysis increasingly centered on systemic vulnerabilities such as leverage, maturity transformation, unstable short-term funding, interconnectedness and shadow banking (Bernanke 2013). The terrain had moved markedly closer to Minsky, even though the theoretical language remained different.

The idea of a *Minsky supercycle* makes explicit another implication of this historical interpretation. Palley distinguishes the recurrent financial cycle from a much longer process in which stabilization itself allows financial fragility to accumulate across successive cycles. (Palley 2011) Dafermos, Gabor and Michell develop the argument institutionally: thwarting mechanisms can contain instability for a prolonged period, but their effectiveness is transformed by profit-seeking innovation and by political and institutional change. The eventual crisis is therefore the outcome of a longer evolution of the financial regime rather than the necessary culmination of each cyclical upswing. This formulation is especially useful if the Financial Instability Hypothesis is understood as a tendency whose direct manifestation may be blocked by countertendencies that simultaneously alter the conditions of its future operation (Dafermos, Gabor and Michell 2023).

Kregel and Burlamaqui sharpen this historical account by showing how commercial banks responded to the erosion of traditional corporate lending through new funding sources, counter-regulatory innovation, fee and commission income and securities-market activities (Kregel and Burlamaqui 2006). This helps explain why money manager capitalism was a transformation of intermediation rather than a simple shift from “banks” to “markets.”

The *Marxian reception* was itself divided. Crotty (1986, 1993) pursued one line by arguing that Keynes–Minsky uncertainty and financial fragility could be incorporated into a Marxian theory of accumulation rather than treated as alternatives to it. Minsky’s financial theory of investment can make the real side *too* dependent on financial valuation. Industrial firms have strategies,

knowledge and conflicts that are not reducible to the demand price of capital assets. Competition among capitals, technical change, corporate organization and the labor process have causal force of their own. Crotty's Marx–Keynes–Minsky comparison restores those dimensions. The point is not to replace finance with production. It is to analyse how financial relations and the organization of production *interact*.

The *Monthly Review* tradition brings out another partial truth. There are clear affinities between Minsky's criticism of postwar Keynesianism and Baran and Sweezy's analysis of waste, militarism and induced private consumption (Minsky 1975; Baran and Sweezy 1966). In *John Maynard Keynes*, Minsky approvingly cited Sweezy's contemporary judgement of *The General Theory* as an intellectual revolution, and made that judgement the starting point for his own thesis that the Keynesian revolution had been aborted (Minsky 1975, pp. 2–3). Sweezy and Magdoff in turn discussed Minsky's book sympathetically in 1977: despite criticizing its neglect of longer-run factors behind prosperity and the return of stagnation, they welcomed the more realistic analysis introduced by its focus on capitalist finance in a cyclical and speculative context (Sweezy and Magdoff 1977). More important for the argument here is the still insufficiently appreciated *late Sweezy*. From the mid-1970s onwards, Sweezy and Magdoff made the mounting dependence on private debt, debt-financed consumption and the autonomous expansion of financial markets central to their account of contemporary capitalism. Finance could prosper while productive accumulation remained weak, absorbing surplus and sustaining effective demand and thereby counteracting stagnation for a time, while simultaneously generating increasing financial fragility. In this sense finance was no longer merely an appendage to monopoly capitalism: it was becoming the “center of gravity” of the system and, in Sweezy's later terminology, the accumulation process itself was being financialized (Sweezy and Magdoff 1978, 1983, 1985, 1987; Sweezy 1991, 1997; Cecchi 2022, 2026).

Joseph Halevi and I sought to recover precisely this neglected contribution of the late Sweezy and Magdoff and to bring it into dialogue with Minsky (Bellofiore and Halevi 2010). The point was not only that financial expansion arose against a background of stagnation. Capital-asset inflation, financial innovation, and mounting private debt could themselves sustain consumption, effective demand, and the realization of profits for a considerable period, while transforming the location and forms of financial fragility. The "real subsumption of labor to finance" was another dimension of the same configuration: the new financial mechanisms joined the disciplining and restructuring of labor to the indebted consumer and the financially dependent saver. Foster and Magdoff later placed Minsky inside a stagnation and financialization account (Foster and Magdoff 2009). Waste, military expenditure, and the expansion of finance are part of the history.

The difficulty lies in making financialization a response to a prior stagnation of productive opportunities. Asset inflation, private debt, and activist monetary policy sustained demand, profits, and accumulation for a time. So-called financialization was a countertendency to stagnation, and its temporary success helped produce the conditions of its crisis. The connection with the Monthly Review tradition also had an early sequel. As I recalled in Bellofiore (2020), already in the 1980s younger economists close to Minsky, notably Steve Fazzari and Randy Wray, began to extend the analysis of financial instability toward debt-financed consumption, partly under Sweezy's influence. This line would later become explicit in work on finance and consumer behavior, household debt, and mortgage finance (Fazzari 1999; Cynamon and Fazzari 2008; Wray 2007).

Other strands of the Marxian reception moved in the opposite direction. Ivanova (2013), for example, argues that the structural origins of the Great Recession lay ultimately in globalized production and the unevenness of capital accumulation, and that a Marxian interpretation therefore goes beyond a Minskyan account centered on finance. My position cuts across this opposition. Minsky should not be reduced to a theory in which finance autonomously causes every crisis, but finance cannot be treated either as a merely secondary expression of contradictions already fully constituted in production. Financial expansion may itself operate as a countertendency, sustaining demand, profits, and accumulation while transforming the conditions under which underlying contradictions subsequently re-emerge.

Minsky's stage view is strongest when it is not made self-sufficient. Minsky explains how financial institutions, ownership, and corporate control change and how successful stabilization alters the next financial structure. It says less about the changing forms of valorization, class conflict, technology, and the organization of labor. The gap is where a Marxian reconstruction can begin. Minsky's stages and a Marxian history of capitalist contradictions need not be forced into one periodization. They can be treated as two intersecting accounts of capitalist transformation.

8.8 Reform, Full Employment, and the Political Minsky

Wray, Papadimitriou and the Levy Economics Institute preserved and published much of the material through which the political Minsky can now be recovered. (Papadimitriou and Wray 1998) Their work kept the employer of last resort, the stage view and institutional reform in view when most discussion centered on the Financial Instability Hypothesis.

Kregel made the connection particularly explicit during the pandemic. With nonessential production deliberately suspended, the problem was the *direct* organization of *social provisioning and of supply, rather than a generic stimulus to demand*; I return to this in Section 11. “What was required was a guarantee not of income but of survival, of what we may call ‘social provisioning’” (Kregel 2020, 3). He then recast the effects of the actual policy response in Minskian cash-flow terms: continuing debt-service commitments, combined with inadequate cash inflows, increased Ponzi positions and dependence on the Federal Reserve as buyer of last resort (Kregel 2020, 6).

The content of public expenditure, the productive capacities it creates and the institutional form through which employment is provided belong to the policy problem. Financial stabilization and social provisioning cannot be separated.

The literature surveyed here brings different dimensions of Minsky into view and also marks the points at which his analysis requires reconstruction. The stage theory needs to be connected more closely to production, class conflict and technical change; the Financial Instability Hypothesis to its macroeconomic conditions; the monetary analysis to finance to production; and the political program to the composition and organization of production. The next section makes that reconstruction explicit.

9. CARRYING MINSKY FORWARD: TOWARD A MARXIAN RECONSTRUCTION

In this Section I move beyond interpretation and toward a Marxian reconstruction of the capitalist monetary process. By a Marxian reconstruction I mean a systematic extension of Marx's critique of political economy. It proceeds with Marx beyond Marx and, where necessary, against particular propositions in Marx, while pursuing the method and the distinctive monetary theory of capitalist production that his critique opened up. This is also the sense in which I use Marxian rather than Marxist: contemporary capitalism cannot be understood by confining analysis to what Marx himself wrote. Marx's critique was *Kritik* in the stronger sense. "Critique" was not "criticism," an exercise in fault-finding. It proceeded by recognizing the truth contained in the position being criticized, while uncovering the limits of the conceptual framework in which that truth had been formulated. Ricardo could therefore remain essential to Marx's theory of value, as Sismondi and Malthus were essential to his understanding of crisis; their positions were superseded while their insights were preserved.

I proceed in the same way with Schumpeter, Keynes, and Minsky on money, finance, and capitalist instability. The conceptualization that follows is mine, although it develops problems Minsky also posed. Its starting point is the monetary sequence of capitalist production and the social content of the monetary relation opened by finance. The use of tendency and countertendency adopted above follows the same logic as my reconstruction of Marx's law of the tendency of the rate of profit to fall: countertendencies may prevail over the direct manifestation of a tendency while transforming the conditions through which it subsequently operates.

The reconstruction I propose brings together Schumpeter, Marx, Keynes–Kalecki, and Minsky as successive analytical moments of capitalism as a macro-social monetary process. Schumpeter provides the monetary opening of the circuit: initial finance creates purchasing power before the corresponding income exists and makes capitalist production possible (Schumpeter 1934 [1911]). Marx provides the inner moment of valorization: production transforms the purchased capacity to work into actual activity, generating potential or latent value awaiting monetary validation (Marx 1976 [1867]). Keynes and Kalecki provide the macroeconomic moment of effective demand, distribution, and gross profits through which the monetary results of production are validated and reproduced (Keynes 1930, 1936, 1937; Kalecki 1954). Minsky adds

the temporal structure of balance sheets and inherited commitments, together with the institutional evolution of the financial forms through which the whole process is organized (Minsky 1975, 1982a, 1986a).

This perspective is based on a forward-looking monetary approach to Marx, which admittedly amounts to a Copernican revolution within Marxian theory itself, grounded in what is most radical in Marx's own work: his macro-social, monetary, non-equilibrium theory of capitalist production (Bellofiore 2026). By macro-social I mean that value and surplus value are constituted at the level of the capitalist economy as a whole, through the interaction of the capital–labor relation and dynamic competition among the many capitals. It is monetary because capitalist production is opened by monetary ante-validation through finance and completed by the ex post monetary validation of commodities. It is out-of-equilibrium because the relevant economic magnitudes are formed while competition, technical change, and accumulation are themselves transforming the conditions under which any equilibrium could be defined. Equilibrium is therefore, at most, a transient result of the process, not its presupposition. This is especially relevant to Minsky: financial instability unfolds through the endogenous transformation of balance sheets, conventions, institutions, and margins of safety, so that the conditions governing the process change as the process itself develops. His stage theory makes the same point historically: capitalism transforms the institutional structure within which its subsequent dynamics take place.

The starting point is neither value already fully constituted in production nor money entering only at the end of the process as the universal equivalent. Value and money must instead be understood processually: value-in-motion and money-in-motion are two aspects of the same movement. Initial finance ante-validates capitalist production. In $M-C \dots P \dots C'-M'$, the initial advance finances the purchase of productive inputs before the resulting commodities have received final monetary validation. In the simplest macro-monetary representation, once transactions within the firm sector are consolidated, its only external payment is the money wage bill. Production generates potential or latent value, whose actualization and quantitative determination, or invalidation, occur only in commodity circulation. The sequence is therefore finance $\rightarrow$ production $\rightarrow$ final monetary validation.

Schumpeter speaks of monetary command over resources. Marx specifies the social relation embodied in that command. In $M-C \dots P \dots C'-M'$, the initial advance finances the purchase of productive inputs before the resulting commodities have received final monetary validation. In the simplest macro-monetary representation, once transactions within the firm sector are consolidated, its crucial external payment is only the money wage bill. Production then has to turn the capacity purchased through that payment into actual work, generating potential or latent value whose social validation still lies ahead. Three categories must therefore be distinguished. "Labor-power" (Arbeitskraft) is the capacity to labor sold as a commodity; "living labor-power" (lebendige Arbeitskraft) is that capacity as it exists in living workers; "living labor" (lebendige Arbeit) is the activity through which it is realized in production.

Capital purchases the commodity labor-power and thereby gains access to the living capacity, but the activity itself, living labor, is not secured in advance: it is a *fluid* that capital must *suck* from living workers through the consumption of their living labour-power. There is no *automatic* passage from capacity to activity which can be taken for granted. Workers may resist, cooperate, bargain, slow down, innovate, refuse or organize, while competition among capitals simultaneously forces technical and organisational change within production.

The capitalist process is traversed by distinct *fundamental uncertainties*. "Fundamental" is understood here not primarily as an uncertainty rooted in human nature in general, nor in money as such, but in the specific social form of capitalist production and in the sequential and temporally irreversible process of its reproduction. At its opening, the required initial finance may or may not be granted: monetary ante-validation is a selective wager by banks and other financiers. In production, the expectations about the quantity, intensity or quality of work capital can obtain from workers may be disappointed. In circulation, the commodities produced still have to encounter effective demand and receive final monetary validation at prices and quantities that cannot be known in advance. The reproduction of inherited financial positions, finally, depends on new decisions to provide funding or refinancing. Liquidity preference, asset valuation and the power of the rentier to remain liquid, refuse renewal or impose new terms therefore bear on the continuation of the process as well as on its opening. These uncertainties belong to the structure of capitalist production itself.

The Keynes–Kalecki moment completes the macroeconomic sequence. Keynes provides the framework of effective demand and liquidity preference within which current decisions are made under uncertainty (Keynes 1930, 1936, 1937). Kalecki makes explicit the macroeconomic result that investment expenditure generates the corresponding saving and gross profits (Kalecki 1954, 1971). Firms determine the *level* and *composition* of production *before* wage earners allocate their monetary incomes, while investment and other autonomous expenditure generate income and alter the conditions *under which inherited commitments can be validated ex post*. The circuit is thus a sequence from finance through production to final monetary validation and, at the same time, a process reproducing the monetary claims and gross profits through which accumulation can continue.

The reconstruction I am suggesting also has an *international implication*. A monetary economy cannot be adequately represented as a set of national economies connected principally through trade balances and current-account surpluses and deficits. Bellofiore, Garibaldi and Mortágua *distinguish saving from financing and net resource transfers from gross financial flows*: a current-account position does not identify who finances whom, how expenditure is financed or where financial fragility is accumulating (Bellofiore, Garibaldi and Mortágua 2015). Gross positions, the currency and maturity of liabilities, refinancing requirements and the institutional structure of payments cannot be inferred from the net balance. Borio and Disyatat make the closely related point that *financing is a gross cash-flow concept whereas saving is a national-accounts concept*, and that *sudden stops are disruptions of gross financing rather than mechanical corrections of current-account imbalances* (Borio and Disyatat 2015).

Seen in this perspective, Minsky’s international analysis appears less marginal than its limited place in his published work might suggest. The regional financial hierarchy explored in the California study already treated access to liquidity as institutionally differentiated (Minsky 1965). “Conflict and Interdependence” extended the problem toward an international hierarchy of monetary and financial positions (Minsky 1986b). The resulting monetary space is structured by interlocking balance sheets, unequal access to liquidity and ultimately unequal access to the relevant central-bank money. Later work on gross financial flows and the global dollar system develops this insight beyond Minsky’s own analysis. Refinancing therefore has a *spatial* as well

as a *temporal* dimension: inherited liability structures must be reproduced across currencies, jurisdictions and hierarchically organized monetary institutions.

10. MONEY MANAGER CAPITALISM AND THE REAL SUBSUMPTION OF LABOR TO FINANCE

This Marxian reconstruction makes it possible to extend Minsky's money manager capitalism to a larger notion capturing something important in so-called neoliberalism. In this reconstruction, so-called financialization[\[1\]](#) is not a parasitic sphere floating above a separate real economy. Financial criteria enter production itself. Required returns, asset valuations, and balance-sheet targets are transmitted into restructuring, outsourcing, benchmarking, supply chains, work intensification, and precarious employment. That is why, echoing Marx, I have described money manager capitalism as a real subsumption of labor to finance (Bellofiore 2011, pp. 13–15). Finance does not become an autonomous source of value, and financial expropriation does not replace exploitation in production. Financial governance becomes one of the mechanisms through which the organization of labor and the extraction of living labor are reorganized. Household debt can intensify the compulsion to work and redistribute income toward financial claims, but it does not abolish the primacy of production in valorization. What money manager capitalism gives us are new forms through which the old exploitation is organized and enforced.

Minsky's stage view and the Marxian periodization I am putting forward should not be collapsed into one another. The intersection announced at the outset can now be made historical. Minsky's sequence from commercial through industrial, financial, and managerial to money manager capitalism follows transformations in the objects and institutions of finance, ownership, and corporate control. The Marxian sequence follows transformations in the technical and social organization of production, in the forms of labor and of the labor process, and in the contradictions and conflicts through which accumulation proceeds.[\[2\]](#) In my Marxian stage approach to profitability crises, the Long Depression of the late nineteenth century can be understood as a crisis of insufficient extraction of surplus value relative to the rising composition of capital (Bellofiore 2011, p. 9). The restructuring set in motion in the late nineteenth century led through the second industrial revolution, trustification, and the growth of corporate finance to the later Taylorist-Fordist reorganization of production and labor. Its success helped produce a

different contradiction, culminating in the Great Crash of the 1930s as a crisis of realization, with an excess of potential surplus value relative to its monetary realization (Bellofiore 2011, p. 9). Postwar demand management overcame that form of crisis while intensifying pressure on labor, until the social conflict of the late 1960s and early 1970s produced a crisis of immediate valorization recalled as the Great Stagflation (Bellofiore 2001, pp. 74–75). Inter-capitalist rivalry, the Vietnam War and its monetary consequences, the collapse of Bretton Woods, and unproductive expenditure also mattered (Bellofiore 2001, pp. 64–75), but the crisis of immediate valorization was one of the key factors, if not the central one: an insufficient extraction of surplus value arising from conflicts and antagonisms within the immediate process of production (Bellofiore 2001, pp. 74–75).

The restructuring that followed the crisis of the 1970s restored the extraction of surplus value while generating the conditions for a fourth major crisis. The Great Recession, or Lesser Depression, was again a crisis of too much potential surplus value, but in a historically new configuration (Bellofiore 2018, p. 384). Asset-price inflation, household indebtedness, and market-based finance sustained effective demand, profits, and accumulation, while at the same time transforming production and labor. The financial mechanisms that had acted as countertendencies to stagnation eventually became conditions of collapse. For this reason, the financial crisis and the crisis of the so-called real economy cannot be separated: finance was constitutive of both the ascent and the breakdown of this form of capitalism (Bellofiore 2018, p. 384).

Across the restructuring that led from the crisis of the 1970s to the Great Recession, the two histories intersect most directly. The rise of money manager capitalism coincided with a technological and organizational transformation through which financial criteria entered more deeply into production, the labor process, and the composition and segmentation of the labor force. Financial and technological restructuring increasingly became mutually reinforcing moments of the same transformation of the capital relation. Kregel and Burlamaqui analyze the reciprocal interaction of technological innovation, financial competition, and evolving expectations, rather than treating technological and financial change as separate processes (Kregel and Burlamaqui 2006).

One aspect of this restructuring is what I have called centralization without concentration. Marx analyzes concentration and centralization as distinct but interconnected processes: accumulation enlarges individual capitals, while centralization combines already existing capitals into fewer and more powerful units (Marx 1976 [1867]). In contemporary capitalism, centralization has continued and intensified without a corresponding concentration of production in the classical form of the ever larger vertically integrated firm (Bellofiore, Garibaldo, and Mortágua 2015). Mergers and acquisitions, together with forms of financial ownership and control, gather strategic power in fewer centers, while production is reorganized through extended or virtual firms, transnational networks, and supply chains composed of legally distinct enterprises. The result is an integrated productive structure without the integrated corporation: technology, design, finance, logistics, and access to final markets are controlled at the strategic nodes of the network, while productive operations and labor are dispersed across firms, contractual forms, and territories. Centralization thus operates through the organizational fragmentation of production rather than through its concentration within the boundaries of the giant firm.

The transformation had a technological and labor-process dimension of its own. The microelectronic revolution opened a new technical field of programmable flexibility, numerical control, and increasingly real-time coordination. Toyotism reorganized labor within that field around just-in-time flows, the management of variation, and a different relation between workers and the productive process. Digitalization subsequently radicalized these possibilities. Networked information systems allow geographically dispersed productive units to be coordinated within a single operational space, while Industry 4.0 develops this logic through cyber-physical systems, sensors, platforms, and continuous data flows. Production can therefore become more fragmented spatially and juridically while becoming more tightly integrated informationally.

The corresponding transformation of work cannot be understood as a mechanical consequence of technology. Technological change opens a field of possibilities, while strategies of valorization, managerial experimentation, workers' resistance, and institutional change shape which possibilities are developed and how they are organized. The resulting forms of labor feed back upon technological trajectories and the organization of production. They can combine wider operational responsibilities and demands for initiative with tighter temporal coordination,

continuous monitoring, and a reduction of the porosity of working time. There is therefore a latency between technological transformation and the labor regime that eventually crystallizes around it, while the material infrastructure that emerges also creates forms of irreversibility. Under money manager capitalism, financial criteria enter this process more directly by selecting technologies, organizational forms, and employment relations according to expected returns and market valuation. Industry 4.0 extends this movement from the individual workplace to networks of production and logistics.

There is a further organizational consequence. In the integrated managerial corporation, planning operated largely a priori inside the firm. Under money-manager discipline, the market is driven into the organization itself: profit centers, benchmarking, outsourcing, and continuous restructuring convert financial comparison into an internal criterion of labor control. The a priori plan of the integrated firm gives way in part to an a posteriori task imposed by market valuation, while financial discipline extends across networks of formally independent firms. Workers become traumatized workers subjected to restructuring and insecurity, manic-depressive savers whose pensions and accumulated wealth are embedded in financial markets, and indebted consumers able to borrow against housing and financial wealth. These figures form one macro-social configuration, though inevitably much is hidden by this aggregate picture. Active monetary policy and asset inflation can reduce saving out of current income and support borrowing and consumption. Finance thereby enters the reproduction of effective demand as well as the organization of labor.

This is the configuration I referred to as *privatized Keynesianism*. So-called Neoliberalism was not *laissez faire*, contrary to what the label inevitably suggests, and it was not a monetarist phase¹³. (Bellofiore and Halevi 2011; Bellofiore 2013) Monetary policy, asset prices and private debt performed part of the demand-management function once associated more directly with public expenditure and wage growth. Central banks repeatedly provided liquidity and protected asset markets. Finance acted as a *countertendency* to stagnation. Weak wage growth created a

¹³ Indeed, what I have repeated many times, that Monetarism was dead by 1982, was, I think, what Minsky was telling us over lunch in Bergamo at the time, although, given my then insufficient command of English, I was never entirely sure that I had understood him correctly. That said, Minsky was not easy to fathom. Many years later, Esther De Pardo, his wonderful wife, whom he married in 1955 and who died this year, told me that Hy's first language was Yiddish, not English.

potential effective-demand problem, but financial expansion could defer it; the deferral was not fictitious merely because it was unsustainable, since for a substantial period it could support output, profits, employment and investment. The *first generation* of privatized Keynesianism can be dated approximately from the Greenspan era after the 1987 stock-market crash to the crisis beginning in 2007 (Bellofiore and Halevi 2011; Crouch 2009). Against a background of weak wage growth and limited permanent discretionary fiscal expansion, effective demand relied increasingly on rising financial and real-estate prices, household borrowing and a credible monetary backstop. Finance therefore had a double role: it restructured production and labor, and it managed effective demand. The dot-com boom and its collapse were the major end-of-1990s precursor: asset inflation and its reversal could destabilize the regime before mortgage debt became the central prop of household demand.

The regime's success produced its fragility. Rising collateral values, capital gains and repeated monetary backstops made aggressive balance-sheet positions look sustainable. Paradoxically, the Great Moderation appeared to be a more stable configuration. In the subprime market, as Kregel stressed, margins of safety were not merely eroded over the boom; many were deficient by design because securitization, originate-to-distribute lending and reliance on ratings transformed the very way safety was assessed (Kregel 2008). The build-up of fragility was concentrated in financial businesses and households, rather than taking the canonical Minskyan form of a sustained debt-financed boom in fixed investment by nonfinancial firms. This does not by itself imply weak accumulation of productive capital in real terms. The falling relative price of equipment, particularly of ICT capital, meant that substantial additions to productive capacity could be obtained with a smaller advance of value than their physical and qualitative expansion would suggest. In Marxian terms, the *cheapening of the elements of constant capital* was itself an important countertendency to the fall in the rate of profit (Bellofiore 2011, p. 8). At the same time, the increasingly pervasive role of machinery and the means of production within the valorization process favored the extraction of a greater flow of living labor from living labor-power (Bellofiore 2001, pp. 74–75).

The rise in indebtedness occurred principally among financial businesses and households, rather than through debt-financed physical investment by nonfinancial firms. When housing prices reversed, deleveraging by households reduced expenditure, individual attempts to repair balance

sheets depressed aggregate income, and claims dependent on continuous refinancing became illiquid. Toporowski's analysis suggests that so-called financialization had not refuted Steindl's mechanism (Toporowski 2009, 2020a). Asset inflation had temporarily removed the household-saving threshold that generated *enforced corporate indebtedness*; once the asset-price mechanism broke down, that source of financial pressure on firms could re-emerge. The outcome can be described as a *balance sheet recession* (Koo 2008), understood here as a system-wide process of balance-sheet adjustment involving households, nonfinancial and financial firms, and the state. Private-sector deleveraging depresses expenditure and income, while the public balance sheet becomes its macroeconomic counterpart; attempts at simultaneous fiscal consolidation can therefore intensify the contraction.

This longer process is captured by the literature on the *Minskyan supercycle*. Palley distinguishes the familiar *basic cycle*, in which financial positions become progressively more fragile, from a system-level process extending across several cycles and transforming institutions, conventions and financial practices (Palley 2011). Dafermos, Gabor and Michell develop this insight by treating *thwarting mechanisms* as historically specific stabilizing arrangements whose success induces profit-seeking adaptation and institutional change that gradually erode their effectiveness (Dafermos, Gabor and Michell 2023). This is close to the use of *tendency* and *countertendency* adopted here: a countertendency can prevent the direct manifestation of financial instability while altering the conditions through which it subsequently operates. The absence of a generalized debt deflation in each upswing is therefore compatible with a cumulative transformation of the form and location of fragility.

The crisis beginning in 2007, conventionally but misleadingly referred to as the 2008 crisis,¹⁴ was the breakdown of this first generation of *privatized Keynesianism*. What appeared as a

¹⁴ I use 2007 deliberately. Not everyone adopts the conventional shorthand “the 2008 crisis”, but it remains remarkably widespread and tends to identify the crisis with its dramatic generalisation after the collapse of Lehman Brothers. In my view, the financial crisis had already been announced by warning signals circulating in financial blogs in January 2007 and began in earnest in June and July of that year. Its effects on real activity were initially very uneven, before becoming generalised. There had been an earlier warning in the downturn extending from late 1999 into 2003. I interpreted that episode, prematurely, as the possible beginning of a major crisis. In March 2000, confirming analyses of Nardozzi and Godley, I had already stressed the dependence of US growth on asset-price inflation and private expenditure, and the danger that a reversal of the financial boom would produce prolonged stagnation and severe financial instability (Bellofiore 2000). The subsequent subprime boom postponed and obscured the larger contradiction rather than removing it. Hence my usual joke that, like Minsky, I have predicted five of the last two great crises.

sudden Minsky moment was the terminal point of a much longer institutional transformation. In my view, the following years formed a *zombie interlude*. Banks and markets were rescued, while austerity was imposed on much of the population. Durand, Alfageme and Grothe periodize the longer supercycle as a 1980–2007 neoliberal financial expansion followed by a 2008–2019 “state-sponsored generalized Ponzi,” in which central-bank balance sheets and public liabilities sustained further financial expansion (Durand, Alfageme and Grothe 2025). I would not adopt the generalized Ponzi label without qualification, since it extends a category defined for cash-flow positions to the system as a whole; but it captures an important feature of the zombie interlude. Crisis management did not liquidate the preceding financial structure but enabled important parts of it to survive and mutate.

Once again, the international dimension of the crisis makes the point especially clear. Tooze’s account shows that what looked through conventional international macroeconomics like a set of national external imbalances was also a *transatlantic* bank run inside a *highly integrated*¹⁵ *dollar-based financial system*. European banks had accumulated large dollar positions whose funding could disappear independently of the current-account positions of their home countries. When private dollar markets froze, the Federal Reserve became the effective international lender of last resort, supplying dollar liquidity directly and through swap lines with a selected group of central banks. The hierarchy was unmistakable: private finance had become transnational, while the ultimate source of dollar liquidity remained concentrated in the United States. This confirms,

¹⁵ Tooze writes: “If we are to grasp the dynamics of this unforecasted storm, *we have to move beyond the familiar cognitive frame of macroeconomics that we inherited from the early twentieth century*. Forged in the wake of World War I and World War II, the macroeconomic perspective on international economics is organized around nation-states, national productive systems and the trade imbalances they generate. [...] But when it comes to analyzing the onset of financial crises in an age of deep globalization, the standard macroeconomic approach has its limits. In discussions of international trade it is now commonly accepted that it is no longer national economies that matter. What drives global trade are not the relationships between national economies but multinational corporations coordinating far-flung ‘value chains.’ *The same is true for the global business of money*. To understand the tensions within the global financial system that exploded in 2008 we have to move beyond Keynesian macroeconomics and its familiar apparatus of national economic statistics. As Hyun Song Shin [...] has put it, *we need to analyze the global economy not in terms of an ‘island model’ of international economic interaction—national economy to national economy—but through the ‘interlocking matrix’ of corporate balance sheets—bank to bank*. [...] For all the pressure that classic ‘macroeconomic imbalances’—in budgets and trade—can exert, a modern global bank run moves far more money far more abruptly” (Tooze 2018, Introduction, p. 8). Though the phrase is Shin’s, the analytical image is pure Minsky: *capitalism as a system of interlocking balance sheets, cash flows and dated payment commitments, whose units must continuously be able to make position*.

in a transformed institutional setting, the problem Minsky had already identified in “Conflict and Interdependence” (Tooze 2018; Bellofiore and Garibaldo 2020).

Toporowski draws a related conclusion from the credit character of the international monetary system. Its reproduction depends on continuing relations among banks, markets and central banks rather than on the settlement of bilateral trade balances. Central-bank swap arrangements do not normally finance international activity; they become decisive when private refinancing in the required currency breaks down. The crisis therefore revealed a monetary *hierarchy* embedded inside financial globalization: the capacity to make position depends not only on the solvency of individual units but also on their access, directly or through their central bank, to the currency in which their commitments must be met (Toporowski 2013). The successful stabilization of this hierarchy allowed the post-crisis configuration to persist, while leaving unresolved the broader contradictions that had emerged with the exhaustion of the first privatized-Keynesian regime.

The ecological crisis became harder to ignore. The pandemic then came and broke the inherited pattern. After 2020, as Bellofiore and Vertova (2026) argue, active fiscal policy returned on a scale that had been ruled out for decades, with deficits, guarantees, subsidies, industrial policy and public support for green, digital and strategic investment. It is misleading to call this the return of the state. *The state never left*. Even the historical rise of *laissez faire* should not be confused with the disappearance of political power from economic life. British industrialization developed within a long mercantilist and protectionist architecture; *formal* free trade came only after industrial supremacy had largely been established. Later, as Marcello De Cecco showed, the international gold standard was not an automatic and politically neutral market mechanism, but a sterling-centered and imperial monetary hierarchy, with the effective gold-exchange mechanism resting crucially on Britain’s hegemonic position. (De Cecco 1974) What changes historically is not the presence or absence of political power over markets, but the *form* through which it is exercised.

I would describe the emerging regime as a *second generation of privatized Keynesianism*. Demand is supported much more directly through public deficits and the state balance sheet, while *the criteria governing allocation, production and the labor market remain largely private*.

Risk is socialized while returns remain private.¹⁶ Market-based finance complicates the monetary backstop. Wholesale finance, non-bank intermediaries and dealer systems can make central-bank liquidity support indispensable to markets formally outside traditional banking. This can turn *lender of last resort* support into *dealer of last resort* support. Public backstops can become conditions of private risk taking, and institutions adapt to the expectation that systemically important markets will not be allowed to collapse.

Artificial intelligence brings the same intersection to a new point. It extends the trajectory from microelectronics and Industry 4.0 by reorganizing the technical division of labour, the distribution of knowledge and decision-making, and the possibilities of algorithmic coordination and control. At the same time, it opens a major new field of accumulation. Here the Marxian and Minskyan sequences intersect with unusual clarity: *financial commitments select and sustain a technological transformation that reorganizes labor, while the prospective returns generated by that transformation are themselves required to validate the liability structures created to finance it.*

The scale and duration of the investment make the Minskyan problem particularly visible. Semiconductors, data centers, energy systems and network infrastructure require enormous advances against prospective quasi-rents lying in a highly uncertain future. Tooze has drawn attention to *hyperscaler capital expenditure* (that is, investment by the largest cloud and data-center operators such as Amazon, Microsoft, Google and Meta), the pressure it places on free cash flow, and the growing involvement of corporate balance sheets and Wall Street in financing data-center infrastructure (Tooze 2026a, 2026b, 2026c). The issue extends beyond whether an AI bubble will burst. It concerns the *liability structures* through which new productive capacity is

¹⁶ Meister (2021) radicalises the asymmetry implicit in public support for financial markets: if the state protects liquidity and asset values, it may also claim part of the upside. Meister (2021) himself makes the contrast with Minsky explicit: whereas he proposes to “harvest” the liquidity premium generated by public guarantees in order to finance justice, he reads Minsky as seeking to abolish that premium through the socialisation or nationalisation of private capital markets. This is illuminating, but it narrows Minsky’s programme and, more importantly, understates the *irreversibility* built into his analysis of financial evolution. Financing decisions leave *inherited* balance-sheet commitments; successful validation of positions changes margins of safety, conventions and liability structures, so that the system never simply returns to its previous state. Big Bank intervention may arrest debt deflation and restore liquidity, but in doing so it also validates positions and changes the institutional environment from which subsequent financing decisions proceed. The issue is therefore not only how to price or “harvest” the public liquidity backstop ex post, but *what financial structure is being reproduced ex ante, under what permissible liability structures, and with what direction of investment.* For a further, more explicitly Marxian critique of the limits of financial optionality, see Bellofiore (2026).

financed and carried, their dependence on expected revenues, asset valuations, collateral, refinancing and market liquidity, and whether this interaction between technological and financial transformation is beginning to alter the institutional structure of money manager capitalism itself.

This is where Minsky's old institutional triad becomes newly revealing. *Big Government* and *Big Bank* are stronger than ever, while *Big Labor* has largely disappeared. The issue is therefore not whether public institutions possess the capacity to stabilize the system, but whose balance sheets, what production and which social relations that capacity is used to sustain.

11. FROM THE SOCIALIZATION OF INVESTMENT TO AN ECONOMY OF SOCIAL PRODUCTION

I think that the Minskyan socializations of investment, employment and finance should be extended into a socialization of the use and development of productive capacity. As argued above, Minsky's critique of the already "controlled" US economy in the last two chapters of *John Maynard Keynes* had already shifted the question from the aggregate level of activity toward what the controls were for (Minsky 1975). His *high-consumption* alternative, the *socialization of the towering heights* and limits on permissible liability structures all pointed in that direction. An *economy of social production* extends this question beyond Minsky's own formulation: what is an already controlled capitalist economy being controlled for?

The argument follows from the *monetary theory of production*. Finance determines who obtains purchasing power before production begins and therefore already performs a form of *private social planning*.¹⁷ It selects which firms can hire labor-power, acquire means of production, introduce technologies and shape future productive capacity. Redistribution after production cannot retrospectively create hospitals, housing, public transport, schools, care services or renewable energy that were never produced. The composition of productive capacity is path dependent. Planning is already internal to a monetary capitalist economy; the political question

¹⁷ In a different theoretical language, Stiglitz and Weiss (1988) similarly stressed the allocative role of banks as *social accountants* and *screening devices*, selecting who obtains access to credit rather than merely clearing a market through the interest rate.

concerns its form, criteria and ends. In a Schumpeterian perspective, monetary finance determines which projects can mobilize labor-power and means of production *before* their outcomes are known (Schumpeter 1934 [1911]). Mises and Hayek understood the power of money and bank credit from the opposite political direction. Mises explicitly recognized that banks can create purchasing power *ex nihilo* and that loans can precede deposits (Mises 1953 [1912]; Bellofiore 1998). Hayek likewise saw that competition among banks can generate an endogenous expansion of credit (Hayek 1933; Bellofiore 1998). Their theoretical and political problem was how, in different ways, to neutralize that autonomous monetary power and restore the primacy of individual intertemporal choices. Schumpeter drew the opposite lesson: the monetary creation and allocation of purchasing power is a constitutive capitalist mechanism of innovation and change (Schumpeter 1934 [1911]).

Today forms of private and political planning operate through finance, large corporations, supply chains, platforms, government budgets and central banks. The current AI investment wave makes the issue especially visible: financing decisions determine which computing, energy and data infrastructures are built, while those infrastructures reshape the future organization of labor and the range of productive possibilities. The choice is who exercises control through these institutions, according to which criteria, and toward which ends. A formally public enterprise can reproduce the imperatives of private profitability; a privately organized activity can be heavily shaped by public planning, regulation and social need. The relevant issue is effective rule over productive capacity, not formal ownership alone.

I have argued elsewhere that modern macroeconomics was itself born out of the experience of the First World War as a theory of the political management not only of the level but of the *composition of production*. In a 1938 letter to Haberler, Keynes dated the break from classical economics back to the Great War (Bellofiore 1992). A mass war could not be financed simply through new taxation or a forced reduction of nominal wages without severe political complications. New liquidity and the resulting inflation instead reduced workers' real consumption through *forced saving*, while production was redirected on an immense scale from consumption goods toward war purposes (Keynes 1930; Bellofiore 1992). In the *Treatise on Money* Keynes recognized that this exceptional case disclosed a normal property of a monetary economy: finance can make decisions about the level and composition of production effective

before individual consumption choices are expressed. This is why the line from the First World War to the *Treatise*, the New Deal, the conflicts of the late 1960s and 1970s and the pandemic identifies a recurrent property of the monetary economy rather than a sequence of exceptional episodes.

An alternative is what I would tentatively call an *economy of social production* (Bellofiore 2021; Bellofiore and Vertova 2026). The phrase names a direction of transformation rather than a ready-made institutional model. Its historical antecedents are conjunctures in which the political and monetary determination of the level and composition of production becomes unusually visible. The New Deal put direct employment and social provisioning at the center. In the late 1960s and 1970s workers and social movements challenged *how, what, how much, where* and *for whom* production was organized. The pandemic of 2020 made the distinction between managing aggregate demand and directing production unusually visible. As recalled, Kregel argued that treating the lockdown as an ordinary demand recession led to the wrong Keynesian response: pushing expenditure could not restore activities that policy itself had suspended. What was required instead was a New Deal-type organization of supply and social provisioning, with “central controls on the determination of production and distribution” and a deliberate redirection of productive capacity toward essential needs (Kregel 2020, 5).

These episodes differ historically, but each discloses a recurrent question about who directs production and for which ends. Public investment, social provision and employment are interventions in the composition of production. Health, education, care, housing, ecological conversion, public infrastructure and social reproduction require deliberate decisions over living labor-power, technology and material means. The socialization of investment therefore reaches beyond the aggregate volume of investment to the *ex ante* selection and development of productive capacities, technologies and forms of work. An economy of social production would make those choices explicit objects of *social conflict* and *collective decision*.

12. CONCLUSION: FROM A MINSKY MOMENT TO A MINSKY PROBLEM

Minsky is now famous for the part of his work most easily detached from the rest. The *Financial Instability Hypothesis* remains indispensable, but it should neither be canonized nor discarded.

Interpreted as a tendential theory and joined to the stage view, it becomes an account of how successful expansion can erode *margins of safety* and transform financial conventions, while the concrete balance-sheet effects remain historically contingent. The theory does not imply that indebtedness must rise monotonically in the business sector or, failing that, somewhere else. In *money manager capitalism* fragility did in fact become concentrated in households, financial intermediaries and market-based finance. That is a historical result to be explained. A Minsky moment is then the visible culmination of a longer institutional process.

The reconstruction proposed here adds a further dimension. From the restructuring following the crisis of the 1970s, Minsky's institutional sequence intersects increasingly with the Marxian transformation of production and labor. *Under money manager capitalism, financial criteria operate through balance sheets and asset markets while also entering the selection of technologies, the organization of firms and supply chains, the fragmentation of labor markets and the extraction of living labor.* The current AI investment wave makes this intersection especially visible: finance ante-validates a transformation of productive capacity whose future returns are simultaneously required to validate the financial positions created to sustain it.

This is also why the more political Minsky matters. Big Government and Big Bank were starting points for a movement from the stabilization of capitalism to structural reform, from aggregate demand to the direction of investment, from welfare to direct employment, and from Keynesianism back to the unfinished problem of the socialization of investment. Successful stabilization can reproduce institutions whose social purpose remains conservative. Carrying Minsky forward means retaining the question he leaves us with: what kind of economy are public institutions stabilizing, how are its productive capacities chosen, how is labor organized, and for whom is social wealth produced? The fashionable Minsky gave his name to a moment. The Minsky worth arguing with leaves us a problem: how the productive capacities of a monetary economy are to be financed, organized and directed, and for whom.

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