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Creative Destruction Meets Financial Instability: Toward a New Synthesis

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ABSTRACT

This paper reconstructs Joseph Schumpeter's major works to propose a coherent new departure

point for analyzing economic and social change. I argue that Capitalism, Socialism and

Democracy (1942) (CSD) marks a radical departure from Schumpeter's earlier attempts in The

Theory of Economic Development (1912 [1934]) (TED) and Business Cycles (1939) (BC) to

merge equilibrium theory with evolutionary dynamics. In CSD, equilibrium disappears, cycles

recede, and capitalism is recast as a process of creative destruction—turbulent, conflictual, and

institutionally embedded. Yet the building blocks of this paradigm—innovation, the

entrepreneurial function, credit creation, capital as a social relation, and the seeds of financial

fragility—were already present in TED and BC, though obscured by equilibrium reasoning.

The originality of this reconstruction lies in recovering Schumpeter's neglected concept of the

"secondary wave," buried in BC, which anchors financial fragility within the creative destruction

paradigm and provides the bridge to Keynes's liquidity preference and Minsky's financial

instability hypothesis. Reconstructed in this way, Schumpeter's trilogy yields a framework in

which credit, innovation, technological disruptions, and financial fragility are inseparable.

The synthesis illuminates both the resilience and the instabilities of contemporary capitalism and,

when extended, helps to explain the logic of "hybrid institutional architectures"—above all the

"China model," today's most ambitious and misunderstood experiment in innovation-led, state-

directed development in contemporary political economy.

KEYWORDS: Schumpeter; Keynes; Minsky; creative destruction; innovation; conflict;

secondary wave; liquidity preference; financial fragility; economic and social change

JEL CODES: B15; B25; B52; E32; E44; O30; O43; P16

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1. INTRODUCTION

"Schumpeter: Radical Economist." That was the provocative title of an essay by Nathan Rosenberg (1994) on Schumpeter's 1942 book. The essay described *Capitalism, Socialism and Democracy* (CSD) as "the mature statement of the most radical scholar in the discipline of economics in the twentieth century" and insisted that Schumpeter's later work deserved "far more serious attention" than it had received—even from self-styled Schumpeterians" (Rosenberg 1994, 41). Rosenberg's insight was sharp yet largely ignored.

This paper endorses, extends, and deepens Rosenberg's message. My contention is twofold. First, that CSD represents a radical departure from Schumpeter's earlier works—*The Theory of Economic Development* (TED, 1912 [1934]) and *Business Cycles* (BC, 1939). Both books, despite their theoretical brilliance, remained trapped in equilibrium reasoning and yielded incoherent accounts of capitalist evolution. In CSD, by contrast, equilibrium disappears, cycles recede, and competition through innovation—creative destruction—emerges as the central dynamic of capitalism.

At the core of my argument is Schumpeter's neglected concept of the "secondary wave." It specifies the transmission by which an innovation-financed upswing evolves into a credit-driven expansion and, eventually, into over-indebtedness and fragility. In this sense, the secondary wave provides the missing hinge: it anchors financial instability within the creative-destruction framework and makes visible the conceptual bridge to Keynes's emphasis on expectations and liquidity preference and to Minsky's theory of financial instability.

Second, this rupture is more than a matter of intellectual history. It provides a new departing point for analyzing capitalism, one that is far better suited to understanding both the turbulence

¹ This reconstruction builds on, but significantly deepens, an earlier formulation in Burlamaqui (2019, Ch. 2). For its initial seeds, see Burlamaqui and Kregel (2005).

² The "secondary wave," as I will show below, is a hidden gem, but one deeply buried in *Business Cycles*: it appears only as Section C of Chapter 4 in the first volume. Small wonder that so few commentators ever recognized its critical importance. The irony is that these pages contain the very mechanism that anchors financial instability within creative destruction, and thus the conceptual bridge to Keynes and Minsky.

of twentieth-century capitalism and the structural transformations of the twenty-first. Schumpeter's reconstruction in CSD anticipated a view of capitalism as an open-ended, conflict-ridden, and financially driven process—one that resonates powerfully with Keynes's (1936, 1937) and Minsky's contributions (1978, 1982, 1986a and 1986b) and offers fertile ground for analyzing contemporary experiences such as China's developmental trajectory (Burlamaqui 2020, 2025b).

The paper proceeds in six steps. Following this introduction, Section 2 revisits TED to highlight its enduring innovations but also its entanglement in equilibrium theorizing. Section 3 turns to BC, a work that is simultaneously a theoretical failure and a gold mine for business historians, where we also find early seeds of a "macro-financial" analysis later developed by Hyman Minsky. Section 4 examines CSD as a radical departure and reconstructs its main building blocks into a coherent analytical framework. Section 5 crystallizes the new synthesis of creative destruction and financial instability, highlighting Schumpeter's secondary wave as the missing link. Section 6 concludes by sketching the outlines of a renewed theoretical synthesis—one that integrates Schumpeter, Keynes, and Minsky into a coherent framework for analyzing the dynamics of economic and social change.

2. SCHUMPETER'S THEORY OF ECONOMIC DEVELOPMENT: THEORETICAL INNOVATIONS ON SHAKY FOUNDATIONS

Schumpeter's *Theory of Economic Development* (TED, 1912/1934) is at once a dazzling and contradictory work. It dazzles because it offers conceptual innovations that anticipated much of twentieth-century radical political economy; it contradicts itself because it embeds those innovations in an equilibrium framework fundamentally at odds with the evolutionary thrust of the book. Development in TED begins from equilibrium, is disrupted by clusters of innovations, and then returns to a new equilibrium—a sequence Schumpeter asserts but cannot explain, since the very mechanism of transition is missing from the theory.³

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³ In Schumpeter's own words: "according to our theory there must always be a process of absorption between two booms, ending in a position approaching equilibrium, the bringing about of which is its function" (Schumpeter, 1934 [1997], 244). And again: "the economic nature of depression lies in the diffusion of the achievements of the boom

Recessions are portrayed as "therapeutic," restoring balance and clearing the ground for the next wave of expansion.⁴ This attempt to fuse structural change with equilibrium analysis generated paradoxes later exposed by critics,⁵ and turned TED into an incoherent whole.

Yet, once equilibrium is stripped away, TED reveals a set of insights that remain strikingly prescient. First, Schumpeter redefined development as an endogenous process, driven not by external shocks but by forces arising from within capitalism itself. The key driver is innovation, which Schumpeter names as "new combinations" at first, but is broadly understood to include not only new technologies but also new products, new forms of organization, new markets, and new sources of supply. What gives these new combinations their developmental power is their diffusion trough the economic system. From this perspective, development by means of innovations is not a smooth or cyclical adjustment but a cumulative, conflictual, and institutionally embedded process of structural transformation.

Second, Schumpeter placed finance at the heart of capitalism's dynamics. Credit, in his hands, is not a passive transfer of existing savings but the creation of new purchasing power "out of

over the whole economic system through the mechanism of the struggle for equilibrium" (Schumpeter 1934 [1997], 250). The quotations speak for themselves. Schumpeter presupposes equilibrium as both a starting and end point but never provides a satisfactory rationale for why development should necessarily follow this pattern—nor explains the precise mechanism through which an economy, once displaced from an assumed equilibrium position, would inexorably converge toward another.

⁴ "Recession has a function: to disseminate the innovation cluster and to restore equilibrium..." (ibid.).

⁵ That major weakness in Schumpeter's scaffolding was spotted and elegantly shown by Nelson (2012, 903): "At the time, he was writing TED Schumpeter seemed to believe that his theory of economic dynamics and neoclassical equilibrium theory of prices, while oriented to different phenomena, could co-exist comfortably. My argument is that they couldn't. Schumpeter's theory of innovation driven economic development not only put forth a different view of what was most important about capitalist economies. It diverged from theory that stressed equilibrium conditions regarding the assumed general context for economic action taking. It was virtually impossible to buy conceptually into both at the same time."

⁶ "By development, therefore, we shall understand only such changes in economic life as are not forced upon it from without but arise by its own initiative, from within" (1934[1997], 114).

⁷ In TED, the notion of innovation is scarcely employed, and the idea of "competition by means of innovation"—the relentless rivalry among firms and entrepreneurs—is still absent. The Schumpeterian understanding of competition as "creative destruction" begins to surface in BC, but it is only in CSD that it acquires its definitive formulation.

nothing." Bankers are therefore not neutral intermediaries but producers of credit, and in this sense the true "capitalists" of the system. They decide which entrepreneurs and which projects are funded, thereby shaping the trajectory of economic change. The money market, he wrote, is "the headquarters of the capitalist system." This was a remarkable anticipation of later Keynesian and Minskyian views of capitalism as a monetary-production economy in which investment depends on credit-creation rather than the prior accumulation of savings.

Third, TED gave conceptual primacy to the *entrepreneurial function*. Entrepreneurs carry out "new combinations," overcoming twin barriers of uncertainty about the future and the inertia of established routines.¹¹ Schumpeter alternated between personifying this role as "new men founding new enterprises" and treating it as a systemic function that could be institutionalized within corporations or even within the state. In doing so, he foreshadowed the later routinization of innovation that would feature centrally in CSD.

Fourth, TED advanced a distinctive view of profits and capital. In contrast to equilibrium theory, where profits should not exist at all—except perhaps as the ambiguous "salaries of capitalists"—Schumpeter defined them as transitory monopolies created by successful innovations. They are not anomalies to be competed away but the normal reward for disrupting the circular flow,

⁸ "In this sense, therefore, we define the kernel of the credit phenomenon in the following manner: credit is essentially the creation of purchasing power for the purpose of transferring it to the entrepreneur, but not simply the transfer of existing purchasing power. To bridge it is the function of the lender, and he fulfils it by placing purchasing power created ad hoc at the disposal of the entrepreneur" (1934 [1997], 154)

⁹ "The capitalistic credit system has grown out of and thrived on the financing of new combinations in all countries, even though in a different way in each. To provide... credit is clearly the function of that category of individuals which we call capitalists." (1934 [1997], 120)

¹⁰ "The money market is always, as it were, the headquarters of the capitalist system, from which orders go out to its individual divisions, and that which is debated and decided there is always in essence the settlement of plans for further development. All kinds of credit requirements come to this market; all kinds of economic projects are first brought into relation with one another and contend for their realization in it" (1934[1997], 176).

^{11 &}quot;...The entrepreneurial function is attached 'to the creation of new things, to the realization of the future value system. It is at the same time the child and the victim of development" (1934[1997], 152). It's worth noting here that there is a curious reversal of roles with reference to Marx for whom the worker is the hero and the victim, the one who creates the surplus-value but also the victim of the way the surplus is appropriated. For Marx, the core conflict in the system is between capital and labor. For Schumpeter, it is between innovation and tradition, or "old" and "new."

destined to vanish only as imitation erodes the innovator's advantage. ¹² Capital, correspondingly, is not a stock of goods but a social relation of production, linking bankers and entrepreneurs through credit. ¹³ In this respect, Schumpeter echoed Marx in defining capital as a relation of control, while simultaneously anticipating Keynes and Minsky by making credit and debt relations the key drivers—or, more precisely, the essential enablers—of innovation and economic change.

Fifth, Schumpeter treated interest in a distinctive way. On the one hand, it enables innovation: entrepreneurs rely on credit to fund new combinations, and in most financial systems, credit is generally priced through interest. On the other hand, interest is also a brake: a "tax on entrepreneurial profit," or a permanent claim on the surplus generated by innovation. As such, it represents an institutionalized claim that diverts a share of entrepreneurial profit to creditors.¹⁴

In this sense, interest is not an inherent structural feature of development or economic change but an institutional—legal arrangement. It is indispensable under private credit systems, but not

¹² "Entrepreneurial profit is a surplus over costs. From the standpoint of the entrepreneur, it is the difference between receipts and outlay in a business" (1934 [1997], 180) "Since the entrepreneur has no competitors when the new products first appear, the determination of their price proceeds wholly, or within certain limits, according to the principles of monopoly price. Thus, there is a monopoly element in profit in a capitalist economy" (1934 [1997]: 181).

¹³ "We shall define capital, then, as that sum of means of payment which is available at any moment for transference to entrepreneurs.... The kernel of the matter lies in the credit requirements of new enterprises" (1934 [1997] 157) "With this proviso, only one fundamental thing happens on the money market, to which everything else is accessory: on the demand side appear entrepreneurs and on the supply side producers of and dealers in purchasing power, bankers" (1934 [1997],175) ... "Thus, the main function of the money or capital market is trading in credit for the purpose of financing development" (1934 [1997], 176). Evidently, Schumpeter's focus in *The Theory of Economic Development* is on a development-oriented financial system. One could venture that he deliberately isolates this enabling function of finance—bankers as "entrepreneurs' enablers"—for analytical purposes. Yet this framing is partial: it largely brackets out the rent-seeking, speculative, and destabilizing dimensions of finance. The fact that most financial systems today diverge sharply from Schumpeter's depiction does not diminish the value of his insight, but it does underscore its incompleteness.

¹⁴ As Schumpeter himself noted, interest "is not, like profit for example, a direct fruit of development in the sense of a prize for its achievements. It is on the contrary rather a brake on development, a kind of 'tax on entrepreneurial profit'" (Schumpeter 1997, 260). A clarification is worth stressing here: Schumpeter's recognition that interest functions as a brake on development is not a mere technicality but an implicit policy statement—one that Keynes would later radicalize in The General Theory, where he recast interest as a form of rent extraction and argued for the "euthanasia of the rentier."

conceptually necessary for the process of innovation and profit itself.¹⁵ In highlighting this, TED quietly introduced a fundamental axis of conflict — between entrepreneurs and bankers, debtors and creditors—into the very core of capitalist dynamics.

Taken together, these elements make TED a work of contradictions but also of brilliance. Its last chapter, which reduces development to a cyclical fluctuation between equilibrium positions, sits uneasily beside the book's earlier insights that portray development as a process fundamentally opposed to equilibrium. Nelson (2012, fn.2) has argued that the two logics cannot coexist, and Shionoya (1997), showed that Schumpeter himself admitted as much in the unpublished Chapter 7 of the German edition, where he stated that "development and equilibrium are opposite phenomena excluding each other." The English edition excised this passage, leaving behind a puzzling theoretical amalgam.

But if we disentangle the scaffolding of equilibrium from TED's conceptual core, its theoretical innovations stand out with clarity: endogenous innovation, the centrality of finance, the entrepreneurial function, capital as a social relation, and interest as both an enabler of innovation and a conflict-ridden brake—an institutional claim that links entrepreneurial dynamism to creditor—debtor tensions at the heart of capitalist dynamics.

These themes prefigure not only Keynes and Minsky but also the reconstruction of capitalism offered in CSD. In this sense, TED provides the initial building blocks that CSD would later rearrange into a new paradigm.

¹⁵ This distinction has contemporary resonance. Within public banking, credit is often extended without market-based interest payments, particularly in strategic sectors. In such cases, credit creation enables innovation without extracting a rent in the form of interest. Contemporary China offers the clearest example: its institutional architecture shows how credit, innovation, and profit can be linked in ways that bypass creditor rents — a possibility Schumpeter only hinted at but never fully theorized.

¹⁶ "Development and equilibrium are opposite phenomena excluding each other" (Schumpeter 1912, 489, reproduced in Shionoya 1997, 39).

3. BUSINESS CYCLES: A THEORETICAL FAILURE, A HISTORICAL TREASURE, AND THE HIDDEN SOURCE OF MINSKY

3.1 Theoretical Failure and Business History Foundation

When Schumpeter published his two-volume Business Cycles (1939), he saw it as his magnum opus—the book that would secure his place at the summit of economics. The outcome was very different. The reviews, by leading figures such as Kuznets (1940, 257-71), Lange (1941, 192-96), Tinbergen (1951, 109–11), Hansen (1951, 129–132), and Grossman (1941, 181–89), were harsh. 17 They noted the book's theoretical confusion, its numbing accumulation of statistics, and its tortuous attempt to fuse equilibrium with a three-cycle schema (Kitchin, Juglar, and Kondratieff). As Paul Samuelson later quipped, it read like the "epicycles of pre-Copernican astronomy" (1998, 1).

The verdict was clear: as a theory of capitalist dynamics, BC was a failure. Its equilibrium scaffolding, once again, contradicted Schumpeter's own historical material. But, as Thomas McCraw rightfully pointed out, this failure should not obscure two enduring contributions.

First, BC is a monumental work of business and technology history. Its hundreds of pages of case studies on industries, firms, and technologies provided a model of historically grounded analysis that influenced Chandler, Lazonick, McCraw, and generations of business historians. In this sense, the book was not a dead end but a foundation for what became modern business history.¹⁸

¹⁷ Simon Kuznets' review of *Business Cycles* was particularly devastating. Spanning 14 pages, it shows no mercy in exposing contradictions and weaknesses. After a concise summary, he raises "a host of crucial questions and disturbing doubts" (1940, 262). On the unidimensional causal mechanism, he notes that discontinuity of opportunities might apply to epochal innovations such as steam or electricity, "but we can hardly expect significant fluctuations...associated with the Juglar or Kitchin type" (264). On data and theory, he observes that "the paucity of formal statistical analysis...lead[s] to a doubt whether Professor Schumpeter's concept of equilibrium and the fourphase model of business cycles are such to permit of application to statistical analysis" (265). Turning to Kondratieff cycles, he argues that no satisfactory explanation has been given as to why fifty-year swings should recur, since the factors cited (wars, inventions) lack cyclical character (267). The verdict is damning: Schumpeter's schema of three nested cycles, his equilibrium-based four-phase model, and his attempt to link entrepreneurship and innovation to observed fluctuations "cannot be considered, on the basis of the evidence submitted, even tolerably valid" (270). After such a Blitzkrieg, little remains standing.

¹⁸ McCraw judged *Business Cycles* to be Schumpeter's "least successful book" in terms of its stated aims, yet emphasized two overlooked contributions: it pushed Schumpeter toward a more historical-empirical approach that

Second—and more importantly—it contains a hidden theoretical gem. Buried beneath the cycle scaffolding is Schumpeter's most penetrating discussion of innovation, its diffusion and their macrofinancial implication: the concept of the secondary wave.

3.2 The Secondary Wave: Innovation Diffusion, Credit Expansion, and Financial Fragility

Hidden, as a mere section of a chapter (Section C of Chapter 4 of the first volume), it is easy to see why so few commentators have recognized its importance. Yet these 16 pages contain the seed of a Schumpeterian macrofinance. For here Schumpeter traced how the effects of innovation, once set in motion, diffuse through the economy via credit creation and speculative expansion, transforming an innovation-led upswing into a broader prosperity progressively detached from its initial fundamentals and increasingly fueled by speculative finance. In doing so, he sketched a mechanism through which capitalist expansion generates financial fragility.

Schumpeter begins from the primary process already familiar from *The Theory of Economic Development*: innovations embodied in new plants and equipment create fresh entrepreneurial outlays, which spread outward through suppliers, workers, and local businesses. Prosperity, in this sense, is first driven by innovation and the expansion of productive capacity. But this is only the starting point. As new demand ripples through the system, old firms respond by expanding existing lines of production, households begin to spend and borrow in anticipation of rising incomes, and speculative activity of all sorts takes hold. In Schumpeter's words, "each loan tending to induce another loan, each rise in prices another rise" (1986 [1939], 121). What begins as credit for entrepreneurs undertaking new combinations soon generalizes into credit for consumption, real estate, stock purchases, and the enlargement of old industries.¹⁹

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shaped his later work, and it anticipated modern business history. In McCraw's words, it was "a noble failure that paid unexpected dividends both to the author and to scholarship" (2006, 231). For Schumpeter's later works, see 1949a, 1949b, 1949c and 1954.

¹⁹ "If innovations are being embodied in new plant and equipment, additional consumers' spending will result practically as quickly as additional producers' spending. Both together will spread from the points in the system on which they first impinge and create that complexion of business situations which we call prosperity. Two things are then practically sure to happen. First, old firms will react to this situation and, second, many of them will 'speculate' on this situation' (Schumpeter: 1989 [1939], 121).

The key feature of the secondary wave is precisely this decoupling of credit creation from innovation. Loans increasingly finance activities that do not enhance productivity.²⁰ Farms are bought at prices sustainable only if agricultural output continues to rise; businesses borrow to expand along familiar lines without efficiency gains; households take on debt assuming current incomes will persist or grow indefinitely. In these cases, Schumpeter noted, "there is no increase in productivity at all," and this is what renders the system vulnerable. Once expectations falter and prices cease to rise, debt contracted on the assumption of permanent prosperity becomes unpayable, collateral values collapse, and widespread liquidation ensues.²¹

In this way, the secondary wave reveals the mechanism by which prosperity, through innovation diffusion and expanding credit, generates fragility. Once credit extends beyond innovation, it amplifies the upswing but also ensures that downturns become more destructive than a mere clearing of obsolete firms. In Minsky's terms, fragility evolves into instability, often culminating in a financial crash that reverberates through the entire economic system.²²

As Schumpeter emphasized, depression does not merely involve necessary adjustment; it brings "abnormal liquidation," wiping out even viable firms that lack financial support and exposing the reckless, fraudulent, or simply unlucky ventures that proliferated during the boom. The debt-deflation dynamic described by Irving Fisher is already visible here: overindebtedness induced by easy money leads to forced sales, falling asset values, and further rounds of liquidation in a self-reinforcing spiral. Banks call in loans, deposits shrink, and efforts to restore liquidity intensify the very contraction they are meant to avert" (1986 [1939] 124–26).

²⁰ "On the other hand, we must recall that credit creation spreads from its "logical" source, financing of innovation, throughout the system. It intrudes by way of credit's being created for any kind of expansion that cannot be financed by existing funds and by way of entrepreneurs' not repaying what they borrow within the cycle and very often never repaying all of it or reborrowing regularly part of their working capital. *On the surface, therefore, credit creation tends to lose its relation to innovation and becomes an instrument for financing business in general*". (Schumpeter: 1989 [1939], 121, emphasis added).

²¹ "Once a prosperity has got under sail, households will borrow for purposes of consumption, in the expectation that actual incomes will permanently be what they are or that they will still increase; business will borrow merely to expand on old lines, on the expectation that this demand will persist or still increase; farms will be bought at prices at which they could pay only if the prices of agricultural products kept their level or increased" (1986 [1939], 123).

²² "The speculative position is likely to contain many untenable elements which the slightest impairment of the values of collateral will bring down. Part of the debt structure will crumble. Freezing of credits, shrinkage of deposits, and all the rest follow in due course" (1986 [1939] 124).

To be sure, Schumpeter still framed this analysis within his cumbersome equilibrium cycle scheme, distinguishing phases of prosperity, recession, depression, and revival, each gravitating toward a new "neighborhood of equilibrium." (1986 [1939], 166–67). This scaffolding makes the exposition both convoluted and, in retrospect, confusing.

Yet beneath it lies a penetrating insight: the diffusion of innovation through the credit system generates not only growth but also fragility, which can metastasize into full-blown financial instability—not as an external shock, but as an inherent byproduct of capitalist development. Its full importance becomes clear when placed in dialogue with Keynes and Minsky. Keynes's emphasis on expectations, uncertainty, and liquidity preference provides the theoretical bridge for understanding why debt expansion in the secondary wave proves so precarious.

Minsky's financial instability hypothesis formalizes the sequence that Schumpeter had already intuited: an innovation-led upswing evolves into speculative and Ponzi finance, balance sheets are extended on fragile assumptions about future cash flows, and a small shock suffices to trigger systemic crisis. However, Minsky's formulation reduced the story to financial fragility leading to financial instability alone—a mechanism that appears almost exogenous to the forces of real expansion²³.

Schumpeter, by contrast, located the origin of fragility in the very process of economic development itself: the diffusion of innovation through credit creation. For him, crisis was not an external event, still less a pathology²⁴ induced by finance alone, but the counterpart of capitalist

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²³ To be sure, Minsky repeatedly stresses "investment" and even asserts that "the financial instability hypothesis leads to an investment theory of the business cycle" (1982, 160). Yet the way he articulates this connection is frequently opaque—rich in intuition but conveyed in a dense and sometimes convoluted fashion that leaves the precise mechanism elusive.

²⁴ Although Schumpeter described *depressions* as "pathological," marked by *abnormal liquidations*, he also recognized that they could be avoided or at least mitigated through public policy. As he put it: "proof, even if it were more satisfactory than it is, that depression will find a 'natural' end, does not in itself constitute an argument for letting things take their course or trusting to 'the restorative forces of nature.' *The case for government action in depression remains, independently of humanitarian considerations, incomparably stronger than it is in recession*" (Schumpeter 1986 [1939], 162). In effect, Schumpeter was already pointing toward the positive roles of "Big Government" and "Big Bank" as stabilizers of capitalism — policy hallmarks later canonized by Minsky.

expansion—a dynamic in which prosperity and fragility arise from the same mechanism. That makes Schumpeter's account a genuine theory of capitalist evolution.

Furthermore, here Schumpeter came closest to articulating *a financial theory of economic instability rooted in innovation*. He described how prosperity evolves into over-indebtedness, how speculative expectations become self-validating until they collapse, and how falling collateral values trigger "abnormal liquidation" and crisis. The banking system, far from merely lubricating growth, amplifies fragility through reckless lending and speculative excess. The secondary wave thus transforms prosperity into fragility, pushes it toward financial instability, and ultimately plants the seeds of depression.

In modern terms, this was Minsky *before* Minsky. What Schumpeter called the secondary wave already contained the essential logic of the financial instability hypothesis.²⁵

This overlooked exploration matters. For decades, BC has been remembered as a theoretical failure. Yet if we reconstruct its macrofinancial analysis on its own terms, stripping away the equilibrium scaffolding and multiple-cycle scheme, we uncover a hidden source of modern financial instability theory. However, BC does not itself provide the missing link between TED and CSD; rather, only when properly reconstructed, the link becomes visible. TED identified the finance—innovation nexus; BC revealed how financial expansion could turn innovation-led growth into fragility and crisis; CSD finally broke free from equilibrium reasoning and reformulated capitalism as an evolutionary process of creative destruction.

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²⁵ In the Marx–Schumpeter–Keynes centennial volume, Minsky contributed an essay rich in insight but merciless toward Schumpeter. In "Money and Crisis in Schumpeter and Keynes," he declared: "The crisis of capitalism evoked a magnificent theoretical performance from Keynes; Schumpeter's response was banal" (Minsky, 1986b, p. 112). He went further: "Schumpeter's 1939 Business Cycles is a retrogression from his 1911 Theory of Economic Development. The three cycles—Kitchin, Juglar, and Kondratieff—of Schumpeter's business-cycle theory is mechanical and the vast presentation of data is numbing rather than enlightening" (p. 114). Strikingly, nowhere in Minsky's writings does one find recognition that Schumpeter had, in *Business Cycles*, already groped toward themes—financial speculation, leverage, financial fragilization, and the path towards financial instability—that would later define Minsky's own originality.

4. CAPITALISM, SOCIALISM, AND DEMOCRACY: CREATIVE DESTRUCTION AS A RADICAL DEPARTURE

While BC may be judged a theoretical failure—despite containing a brilliant sketch of the innovation—financial fragility nexus—CSD (1942) marked a genuine conceptual breakthrough. In CSD, Schumpeter finally broke free from the "equilibrium trap" that had haunted his earlier works. The scaffolding of cycles and equilibrium, so prominent in TED and BC, disappears. What emerges instead is a vision of capitalism as an evolutionary process, driven by competition through innovation and defined by turbulence, instability, and conflict.

Although largely overlooked, this rupture was consequential. Whereas most interpreters treat Schumpeter's trilogy as a continuum, my argument is that CSD marks a decisive departure from the equilibrium frameworks of TED and BC.²⁶ Equilibrium no longer anchors the system; instead, change itself becomes the system's only constant.²⁷ Cycles give way to waves of industrial revolutions. Competition is no longer a matter of price adjustment at the margin but of existential rivalry through new products, processes, and organizational forms. Capitalism's engine is "by nature a form of economic change," and the name Schumpeter gave to this engine—"creative destruction"—became the most enduring metaphor in political economy.

4.1 From Cycles to Waves, from Equilibrium to Turmoil

CSD abandons the language of recurring cycles and replaces it with a dynamic of successive industrial revolutions. The old schema of Juglar, Kitchin, and Kondratieff vanishes. In its place, Schumpeter speaks of "waves" of innovation—clusters of new methods of production, new goods, and new organizational forms that periodically "reshape the existing structure of industry." These waves are disruptive: they create winners and losers, displace industries and

²⁶ For a comprehensive, and systematic, treatment of Schumpeter's trilogy as a continuum, see Andersen, 2009.

²⁷ Schumpeter himself put it bluntly: once monopolistic competition and oligopoly are acknowledged, "many of the propositions which the Marshall-Wicksell generation of economists used to teach with the utmost confidence become either inapplicable or much more difficult to prove... [above all] the fundamental concept of equilibrium" (1942, 79)

regions, and generate unemployment and social turmoil.²⁸ Capitalism, therefore, is not a self-regulating system tending toward balance, but a system whose normal state is disruption and disequilibrium.

In this context, equilibrium is not only irrelevant but misleading. What defines capitalism, Schumpeter insisted, is the gale of creative destruction: the incessant process by which new firms, products, and technologies displace the old. This formulation reveals a second, crucial source of conflict within the Schumpeterian framework: the antagonism between the new and the old. In *The Theory of Economic Development*, innovations entered the system in a comparatively smoother, almost organic fashion.

In CSD, however, the competitive landscape is reimagined as one of permanent winners and losers. At the very heart of the creative-destruction paradigm lies not harmony but a political economy of conflict—a dynamic that spares no participant, since every incumbent risks being undermined by newcomers. This general conflict complements, and intensifies, the earlier opposition Schumpeter identified between bankers and entrepreneurs.

4.2 Competition and Innovation: The Core of Creative Destruction

For classical and, especially, neoclassical economists, competition meant many firms producing homogeneous goods, driving prices down toward costs. Schumpeter inverted this picture. In capitalism as it actually operates, competition is not about price-taking but about innovation-driven monopolization. Every firm seeks to differentiate its product, create a niche, or establish temporary market power. Far from being aberrations, "monopolistic practices"—from price-fixing to product differentiation to planned idle capacity—are strategies of survival in a world of relentless innovation.

²⁸ In his words: "...in this turmoil competition works in a manner completely different from the way it would work in a stationary process, however perfectly competitive. Possibilities of gains to be reaped by producing new things or by producing old things more cheaply are constantly materializing and calling for new investments...In order to escape being undersold, every firm is in the end compelled to follow suit, to invest in its turn and, in order to be able to do so, to plow back part of its profits, i.e., to accumulate. Thus, everyone else accumulates." (1942, 31–2)

In this framing, bigness is not a sign of inefficiency but often of strength. The very firms decried as "monopolists" are frequently those most responsible for technological advance and rising standards of living. In Schumpeter's iconoclastic formulation, large corporations may have contributed more to prosperity than competitive small firms.²⁹ Competition through innovation is fiercer and more consequential than competition through prices.

Creative destruction thus reframes innovation not as marginal improvement but as the core fuel of capitalism. New commodities, new technologies, and new organizational forms do not merely alter prices or outputs at the margin; they undermine the foundations of existing firms and industries. Innovation, therefore, is not incremental adjustment but qualitative transformation. Crucially, Schumpeter emphasized that innovation need not be radical or technological. It also includes organizational, financial, legal, and institutional changes. *In this sense, creative destruction provides a general theory of innovation*, encompassing everything from new consumer goods to corporate mergers, from credit instruments to regulatory frameworks.

The conflictual dimension of this process was only indicated by Schumpeter, but its implications are crucial. Each wave of innovation generates a confrontation between the old and the new—between incumbent firms defending their assets, routines, and political influence, and challengers seeking to displace them. This is not merely an economic struggle over market shares but a political one over institutions, regulation, and legitimacy. Creative destruction, therefore, cannot be understood as a neutral or harmonious mechanism: it is inseparable from a political economy of conflict. Innovation breeds winners and losers, unsettles coalitions, provokes resistance, and forces realignments of power.

This conflictual lens also makes creative destruction a powerful tool for analyzing contemporary capitalism: the struggle between platform firms and traditional industries, fossil fuels and

²⁹ A glance at the S&P 500 offers ample confirmation. The very firms most often accused of monopolistic dominance—Apple, Alphabet, Amazon, Nvidia, Tesla—are also those that have driven technological frontiers and reshaped consumption patterns worldwide. Their trajectories illustrate Schumpeter's point: competition through innovation has proven far more transformative than competition through prices. Yet his celebration of "bigness" must be tempered by the recurring tendency of dominant firms to entrench power and invite antitrust concerns. Shift the lens to the Hang Seng China Index and the names change—Haier, Tencent, Alibaba, BYD, Xiaomi—but the pattern remains: scale and dominance coupled with relentless innovation. Schumpeter would have recognized them instantly.

renewables, or global tech giants and national regulators all exemplify the same dynamics of old versus new that Schumpeter intuited but left underdeveloped.

4.3. Entrepreneurs, Rationalization, and the State

In TED, Schumpeter had oscillated between the entrepreneur as a heroic figure and the entrepreneur as a function. In CSD, the function takes precedence. In an age of large corporations, innovation is rationalized and embedded in organizational routines. The "heroic entrepreneur" recedes; the entrepreneurial function becomes institutionalized.³⁰

Here Schumpeter absorbed Weber's diagnosis of rationalization³¹: capitalism advances not through individual visionaries alone but through the bureaucratization of innovation. This widespread rationalization, he argued, would ultimately pave the way for socialism, since innovation could be performed just as effectively by state bureaucracies as by private entrepreneurs. In one of his most provocative claims, Schumpeter insisted that the true "pacemakers of socialism" were not agitators but the Vanderbilts, Carnegies, and Rockefellers—the very titans of big business whose bureaucratic organizations demonstrated how innovation could be rationalized and scaled.

Regarding the role of the state, Schumpeter first outlined the key role of its fiscal foundations in his 1918 essay on the "Tax State," with traces of an entrepreneurial function appearing throughout his writings. Only in *CSD*, however, does the state move from the margins to the

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³⁰ It is worth stressing that Schumpeter never implied that individual entrepreneurs would vanish from the scene. The contemporary prominence of figures such as Steve Jobs, Jeff Bezos, Soichiro Honda, Jack Ma, or Elon Musk illustrates that entrepreneurial vision and charisma still matter. What Schumpeter anticipated, however, was that their role would increasingly coexist with—and often be overshadowed by—the innovation capacity of large private and public institutions: corporate R&D laboratories, government procurement programs, universities, and other hybrid organizations.

³¹ An important clarification is in order here. Weber's analysis of socialism was rooted in his broader vision of rationalization as an "iron cage": a process of increasing efficiency and calculability that, while technically effective, threatened individuality, charisma, and cultural meaning. In this sense, Weber anticipated socialism as a rationalized state order managing the economy, but without enthusiasm for its innovative potential. Schumpeter, by contrast, absorbed Weber's diagnosis of rationalization yet reinterpreted it as a functional driver of economic change. For him, the routinization of innovation within large corporations already demonstrated that entrepreneurship was a function, not an individual trait; socialism would simply extend this rationalization of innovation into the state. Where Weber saw cultural decline, Schumpeter saw economic continuity, and even improvement (See Weber [1918] and Collins [1986, Ch5] for an excellent comparison of Schumpeter and Weber's analysis of capitalism, stressing their similarities).

analytic core. What had long been implicit—governments as rescuers in crisis, financiers of innovation, and entrepreneurs in their own right—comes fully into focus in his conception of socialism as a system of "managed" creative destruction. Here the entrepreneurial state fully flourishes, and it is precisely at this point that the bridge to China becomes analytically irresistible.³²

4.4 Finance, the Puzzle of CSD, and the Secondary Wave's Missing Link

Perhaps the most enigmatic feature of CSD is the near absence of finance. In TED and BC, the finance—innovation nexus was central. Bankers were the Ephors of the system, credit creation the lever of change, and reckless banking the source of fragility. In CSD, however, banking and finance nearly vanish from view. The creative destruction paradigm seems to proceed without its monetary and credit foundations.

Why this silence? One explanation is that Schumpeter had already said what he wanted to about finance in his earlier works and felt no need to repeat it. Another is that, by the late 1930s, he believed large corporations, with retained earnings and access to capital markets, had diminished the role of banks.³³ Either way, the absence is striking.

But it is also revealing. For creative destruction to function as a truly comprehensive paradigm, it must be enriched—by Keynes's analysis of the nexus among uncertainty, expectations, and liquidity preference; by Minsky's theory of financial fragility; and above all by Schumpeter's own neglected financial theory of innovation diffusion, crystallized in the concept of the "secondary wave."

³² A trajectory that my recent work on Schumpeterian Socialism and China seeks to develop (Burlamaqui 2020, 2025b, 2025c and 2025d).

³³ That appears to be Minsky's own interpretation of "Managerial Capitalism" as well. In a 1992 paper titled "Schumpeter and Finance", he writes: "The role of bankers as the ephors of the decentralized market economy was reduced when government took over the responsibility for the adequacy of profits to aggregate demand. The flow of profits that followed from the deficits of government and from debt-financed housing construction meant that the internal cash flows of firms could finance their investments. Managements of established firms which had some market power that protected them from competition could be independent of their investment bankers" (1992, 110).

As I showed, the secondary wave provides the crucial bridge. In BC, Schumpeter described how an initial innovation-led upswing, financed by credit, spills over into a broader credit expansion detached from productivity gains: households borrow against rising incomes, firms expand existing lines of production, and speculation in asset markets flourishes. The secondary wave shows how prosperity becomes increasingly finance-led, how balance sheets stretch, and how fragility accumulates until a downturn triggers crisis.

The key inference from Schumpeter's secondary wave is that the diffusion of innovation—particularly of cross-sector impact, and general-purpose technologies—is not only a technological and productive process but also a macrofinancial one. It spreads through the system via Keynesian multiplier effects yet remains embedded in uncertainty. This makes it vulnerable to shifts in expectations and liquidity preference, thereby opening the path to financial fragility. In this way, financial instability can be anchored directly as an outcome of creative destruction.³⁴ ³⁵

Turning to the politico-institutional dimension, the conflict between bankers and entrepreneurs—one of Schumpeter's most penetrating insights—is also absent from CSD. In TED, bankers were not portrayed as mere guardians of prudence but as quasi—venture capitalists, supplying credit to visionary entrepreneurs while exacting interest as a "tax on profit." This tension lay at the very heart of the innovation process: credit both enabled creation and limited its returns. Seen in this light, the missing financial foundations of CSD are not only analytical gaps but also silences about the conflicts that make innovation possible.

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³⁴ For example, the dot-com boom of the late 1990s and early 2000s epitomized this sequence: genuine technological breakthroughs in information technology spurred waves of investment, magnified by credit and speculation, and culminated in a systemic crash. A similar pattern is arguably unfolding today in the surge of investment and valuations around artificial intelligence—an innovation with genuine transformative potential yet already showing the hallmarks of a speculative bubble (See Cassidy 2002, and Thornhill 2025. Nairn (2018) provides a broader analysis of the impact of technological waves on finance and speculation).

³⁵ It is puzzling that Minsky, who wrote his doctoral dissertation under Schumpeter's supervision until the latter's death in 1950, never integrated Schumpeter's theory of innovation into his own framework. Despite the evident affinities between Schumpeter's finance–innovation nexus and Minsky's financial instability hypothesis, Minsky consistently treated Schumpeter as marginal to his project. This neglect is all the more striking, as already noted, in light of Schumpeter's concept of the "secondary wave" which already contained the essential logic of financial fragility that later became the hallmark of Minsky.

Recovering this conflict is indispensable, for in today's financialized capitalism it has not disappeared but mutated—from the tension between profit and interest into a broader clash in which finance itself often turns predatory. Here, bankers mutate into "financial entrepreneurs," turning from cautious gatekeepers into risk-loving speculators and rent-seekers, while the broader FIRE sector prospers through predation rather than creation. Rents, fees, and assetstripping displace productive profits and compress wages. In this sense, financialized capitalism represents not the culmination but the antithesis of Schumpeter's creative-destruction framework: instead of financing innovation against incumbency, finance increasingly undermines it, redirecting accumulation toward extraction rather than renewal (Hudson 2015; Cristhopers 2020; see fn34 below).

5. THE NEW SYNTHESIS CRYSTALLIZED: CREATIVE DESTRUCTION MEETS FINANCIAL INSTABILITY

Reconstructing Schumpeter's insights yields a paradigm in which capitalism is evolutionary rather than equilibrating. Its normal state is transformation, not balance. Development cannot be reduced to cyclical adjustments around a stable core but must be understood as an irreversible process of structural change that continually reshapes the system itself. The result is the outline of a theory of development propelled by credit creation and by competition driven through varied channels of innovation, while embedded in uncertainties—technological, financial, institutional, and legal.

Innovation, accordingly, is systemic, multifaceted, and inherently conflictual. It embraces not only technological breakthroughs but also new products, organizational forms, financial instruments, business models and institutional arrangements. By undermining existing structures while creating new ones, innovation emerges as capitalism's central fuel. Here lies the seed of a general, conflict-laden theory of innovation-driven development, extending far beyond technology.

Competition is redefined. It is not the neoclassical process of price-taking among homogeneous firms but a dynamic of monopolization, differentiation, and disruption. Rivalry through innovation, not price, drives firms to seek temporary monopolies and defend their niches. This yields a reconceived theory of competition, one that acknowledges turbulence, uncertainty, and temporary monopolization of market niches as normal features of capitalism.

Profits are thus *transitory rents* from successful innovation. They arise from temporary advantages and erode with diffusion and imitation. There is no intrinsic mechanism to equalize returns across sectors. This reframing establishes profit as the normal, but fleeting, reward for creative destruction rather than a deviation from equilibrium.³⁶

Capital itself is not a stock of goods but a social relation, i.e., a link between bankers, entrepreneurs and investors in general, mediated by credit creation. Investment does not depend on prior savings, but rather on the willingness of financial actors to back new ventures. The outcome is a financial theory of development in which credit allocation is the decisive lever of change.³⁷

³⁶ A glaring omission in this reconstruction is the neglect, especially by Schumpeter, of rent extraction and rent keeping mechanisms, that have become not anomalies but structural features, of "Late corporate capitalism metastasis into Financialized Capitalism". These mechanisms operate through intellectual property rights—patents, trademarks, copyrights, and trade secrets—alongside exclusionary acquisitions, tax avoidance strategies, fiscal haven legislation, and successive waves of financial deregulation. As Katharina Pistor has aptly shown in The Code of Capital (2019), legal coding transforms private claims into durable sources of rent, while Lazonick and many others have documented how financialized corporate governance entrenches rent distribution at the expense of innovation-led growth. No solid synthesis of capitalism's dynamics can remain credible without incorporating these dimensions. This is not the place to develop them in detail, but it is precisely where my work will turn next: extending the Schumpeter–Keynes–Minsky framework to encompass the political economy of rent extraction (see Burlamaqui and Kattel 2013; Lazonick 2014; Pistor 2019).

³⁷ Or lack of change, as financialized capitalism is displaying across the globe. Credit flows increasingly fuel asset inflation, buybacks, and speculative trading rather than productive investment. Michael Hudson (2015; 2021) emphasizes how the FIRE sector has turned into an extractive mechanism, appropriating rents through debt and asset-price inflation. Brett Christophers (2020; 2023) documents how rentier capitalism reshapes accumulation around ownership and control of scarce assets. Lazonick and Shin (2019) shows how shareholder-value ideology entrenches financial engineering at the expense of innovation. Taken together, these contributions underline the dual character of credit allocation: it can power structural transformation or entrench stagnation and rent extraction. Addressing this duality reinforces the urgency of further investigations on the political economy of rent extraction—a theme Keynes already hinted at, and Minsky started to develop in his writings on "money manager" capitalism. Schumpeter's secondary wave carried the seeds of such an extension, but he left them undeveloped.

The interest rate functions simultaneously as enabler and brake: it makes credit creation possible, yet at the same time constitutes a claim by creditors on entrepreneurial profits and other streams of revenue. In Schumpeter's framework, this was not a neutral mechanism but the expression of a deeper structural conflict between bankers and entrepreneurs—between those financing innovation and those carrying it out. Interest is therefore not a "natural price" but a legally encoded institutional claim, embedding the debtor–creditor struggle at the very core of the system. This provides a nuanced conception of the interest rate as a politically charged policy instrument rather than a neutral toll in the policy toolkit.

The secondary wave anchors the multiplier, liquidity preference, and financial fragility within the creative-destruction framework. An innovation-led upswing, initially financed by new credit, progressively mutates into a macrofinancial dynamic driven by credit expansion and speculation, and ultimately into over-indebtedness and instability. In this sequence, prosperity sows the seeds of its own undoing. What emerges is the germ of an integrated theory of capitalist instability.

From this follows a recognition that fragility and uncertainty are endogenous to capitalist development. Stability is not natural but institutional: created through conventions, regulation, and public policy, yet always precarious and subject to erosion. Here we discern the essential role of institutions as economic, financial, and social stabilizers that make temporary order possible.

Finally, the state itself emerges as entrepreneurial. It can mobilize finance, direct innovation, stabilize crises, and even assume the entrepreneurial function directly. Far from correcting the market from outside, the state is integral to the very process of creative destruction. This crystallizes the organic role of an entrepreneurial state in steering evolutionary transformation and managing its destructive fallout.

In short, CSD marked the decisive departure that TED and BC only foreshadowed. Reframed in light of their conceptual innovations, creative destruction becomes the departure point for a Schumpeter–Keynes–Minsky synthesis in which innovation, credit, conflict, technological turbulence, financial fragility, and state action are inseparable.

6. CONCLUSION

Schumpeter's intellectual journey began with an uneasy marriage of Walras and Marx, equilibrium and evolution. In *The Theory of Economic Development*, he uncovered the transformative power of innovation and the centrality of finance, yet encased them within an equilibrium cycle. In BC, he deepened his financial insights and pioneered business history, even anticipating Minsky's fragility hypothesis, but buried these breakthroughs beneath a cumbersome scaffolding of multiple cycles. Only in *CSD* did he finally break free, recasting capitalism as a process of creative destruction.

At its core, this paper seeks to advance the very intellectual synthesis Minsky once demanded:

"The task confronting economics today may be characterized as a need to integrate Schumpeter's vision of a resilient intertemporal capitalist process with Keynes' hard insights into the fragility introduced into the capitalist accumulation process by some inescapable properties of capitalist financial structures" (Minsky, 1986b: 121).

The contribution is twofold. First, it interprets CSD not as a continuation but as a rupture—though one whose seeds were already germinating in TED and BC, still constrained by equilibrium reasoning. Second, it recovers Schumpeter's neglected concept of the secondary wave and integrates it into CSD's new analytical framework, thereby embedding the multiplier, liquidity preference, and financial instability within the dynamics of creative destruction.

Once reconstructed in this way, Schumpeter points directly to Keynes and Minsky. The redefinition of capitalism through the lens of creative destruction not only permits but compels their integration. What emerges is not a patchwork but a coherent framework: capitalism as an evolutionary system, propelled by innovation and competition, financed by credit, and destabilized by its very successes.

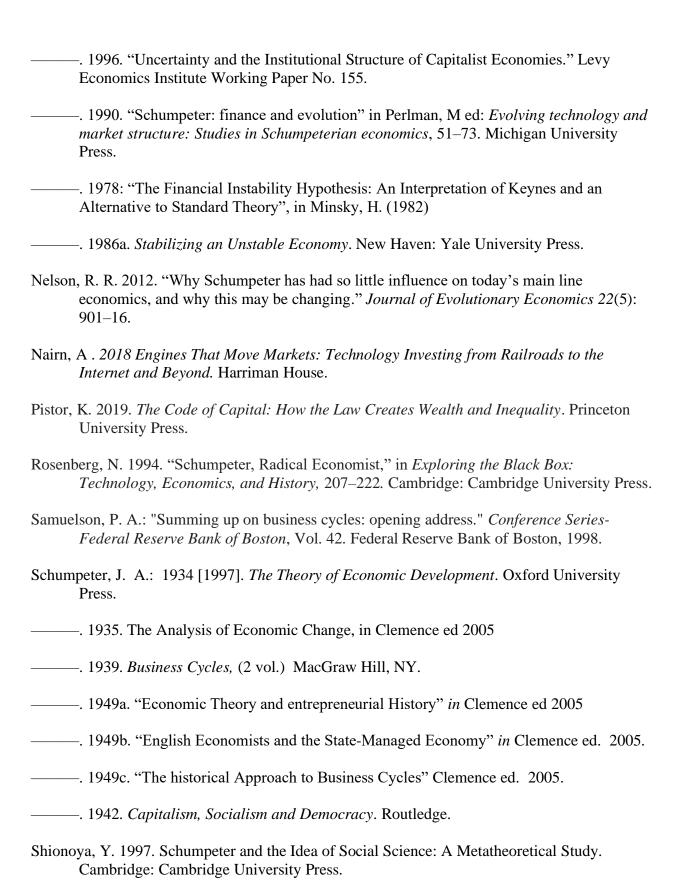
This synthesis plants the seeds of a paradigm for our time. One that places conflict at the heart of innovation and finance, offering a powerful lens to grasp structural change and predatory finance

alike. It illuminates both the resilience and the instabilities of contemporary capitalism, and, when extended, helps to explain the logic of "hybrid institutional architectures"—above all the "China model," today's most ambitious and misunderstood experiment in innovation-led, state-directed development in contemporary political economy.

REFERENCES

- Andersen, E. S. 2009. Schumpeter's evolutionary economics: a theoretical, historical and statistical analysis of the engine of capitalism. Anthem Press.
- Burlamaqui, L. 2015. "Finance, Development and the Chinese Entrepreneurial State." *Brazilian Journal of Political Economy* 35(4).
- ———. 2020. "Schumpeter, the entrepreneurial state and China". IIPP Working Paper. London.
- ———. 2025a. "Financial Fragility without Financial Instability-Reform in the Chinese Banking System: Zhu Rongji's and Its Aftermath." The Levy Institute Working Paper Series, No. 1086.
- 2025b. "China: Socialism with Schumpeterian Characteristics Institutions, Innovation, and the Politics of Creative Destruction." Working Paper No. 2, Colégio Brasileiro de Altos Estudos, UFRJ.
- ———. 2025c. "Xi Jinping's Managed Creative Destruction and the Construction of a Eurasian Order: Advancing Socialism with Schumpeterian Characteristics." Working Paper No. 3, Colégio Brasileiro de Altos Estudos, UFRJ.
- ———. 2025d. "Managed Creative Destruction, the Entrepreneurial State and Socialism: China Trought Schumpeterian Lenses." (Forthcoming).
- Burlamaqui, L. and J. Kregel. 2005. "Innovation, competition and financial vulnerability in economic development." *Revista de Economia Política* 25(2): 5–22.
- Burlamaqui, L., A. Castro, and R. Kattel. 2013. *Knowledge Governance: Reasserting the Public Interest*. Anthem Press, London.
- Burlamaqui, L. and R. Kattel, eds. 2019. *Schumpeter's Capitalism, Socialism and Democracy: A Twenty-First Century Agenda*. Routledge.
- Cassidy, J. 2002. Dot.con, The Greatest Story Ever Sold: How America Lost Its Mind and Money in the Internet Era. HarperCollins, 2002
- Christophers, B. 2020. Rentier Capitalism: Who Owns the Economy, and Who Pays for It? Verso.
- ——. 2023. Our Lives in Their Portfolios: Why Asset Managers Own the World. Verso.
- Clemence, R. 2005. Schumpeter, J-Essays: On Entrepreneurs, Innovations, Business Cycles and The Evolution Of Capitalism. Routledge.

- Collins, R. 1986. Weberian Sociological Theory. Cambridge University Press.
- Thornhill, J. 2025. "Brace for a crash before the golden age of AI." *Financial Times*, August 21, 2025. https://www.ft.com/content/a76f238d-5543-4c01-9419-52aaf352dc23
- Grossman, H. 1941. "Business Cycles." Zeitschrift für Sozialforschung 9.1: 181–89.
- Hansen, A. 1951. "Schumpeter's Contribution to Business Cycle Theory." *The Review of Economics and Statistics* 33(2): 129–32.
- Hudson, M. 2015. Killing the Host: How Financial Parasites and Debt Bondage Destroy the Global Economy. ISLET.
- ———. 2021. The Destiny of Civilization: Finance Capitalism, Industrial Capitalism, or Socialism. ISLET.
- Keynes, J. M. 1937. "The General Theory of Employment." *Quarterly Journal of Economics* 51 (2): 209–23.
- ——. 1936. *The General Theory of Employment, Interest and Money*. New York: Harcourt Brace.
- Kuznets, S. 1940. "Schumpeter's business cycles." *The American Economic Review* 30.2: 257–71.
- Lange, O. 1941. Review of Business Cycles in Review of Economics and Statistics, November.
- Lazonick, W. 2014. "Profits without Prosperity." Harvard Business Review, September 2014.
- Lazonick, W. and J. S. Shin. 2019. *Predatory Value Extraction: How the Looting of the Business Corporation Became the US Norm and How Sustainable Prosperity Can Be Restored.*Oxford University Press.
- McCraw, T. K. 2006. "Schumpeter's business cycles as business history." *Business History Review* 80(2): 231–61.
- Minsky, H. P. 1982. Can 'IT' Happen Again: Essays on Instability and Finance. Routledge.
- ——. 1986b. "Money and crises in Schumpeter and Keynes" in *The Economic Law of Motion of Modern Society*, edited by Wagner e Drukker. Cambridge: Cambridge University Press.
- ——. 1996. Money Manager Capitalism. Levy Institute Public Policy Brief No. 39.



- Tinbergen, J. 1951. "Schumpeter and quantitative research in economics." *The Review of Economics and Statistics* (1951): 109–11.
- Weber, M. "Socialism," in: *Max Weber: Essays in Sociology*, edited and translated by H. Gerth and C. W. Mills. New York: Oxford University Press, 1946, 267–301.