

# Entrepreneurship and Creative Destruction: Towards an Integrated Framework for Political Economy

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## ABSTRACT

The relationship between entrepreneurship and institutions has attracted substantial scholarly attention in recent decades, yet the major theoretical traditions in entrepreneurship theory have largely developed in isolation from one another, as if describing incompatible or mutually exclusive phenomena. This paper argues that such fragmentation is both unnecessary and analytically costly, and proposes a synthesis that integrates the four most influential traditions — Schumpeterian, Kirznerian, Knightian, and Baumolian — into a unified framework for institutional political economy. The first part of the paper offers a systematic and comparative review of these four theoretical traditions, identifying the specific dimension of entrepreneurial action each one illuminates and the limitations that emerge when each is considered in isolation. The second part constructs an integrated conceptual framework that articulates four analytical dimensions — innovation, epistemic discovery, judgment under uncertainty, and institutional environment — as interdependent components of a general theory of the entrepreneur. The third part applies this framework to the empirical analysis of creative destruction as a structural dynamic of contemporary capitalism, engaging critically with recent evidence on declining business dynamism, market concentration, and productivity dispersion. We argue that the apparent paradox of a capitalism producing unprecedented technological innovation while simultaneously exhibiting declining measures of entrepreneurial dynamism cannot be resolved through any single theoretical tradition and requires precisely the kind of multi-dimensional analysis the integrated framework provides. Implications for institutional theory and economic policy are discussed.

**Keywords:** *entrepreneurship, creative destruction, institutional economics, Schumpeter, Kirzner, Knight, Baumol, business dynamism, uncertainty, innovation, political economy.*

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## 1. INTRODUCTION

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Few questions have proven as persistently elusive for political economy as that of the entrepreneur's role in capitalism. The paradox is striking: capitalism as a historical system depends on entrepreneurial action for both its reproduction and its dynamism, yet the major currents of modern economic thought — Walrasian general equilibrium, New Keynesian macroeconomics, the neoclassical growth models of Solow and his successors — have consistently treated the entrepreneur as an exogenous variable, a *deus ex machina* that intervenes in the model without being explained by it. Even in the endogenous growth models of Romer (1990) and Aghion and Howitt (1992), where innovation explicitly drives long-run growth, the agent who produces that innovation remains in large measure a representative optimiser facing well-defined constraints rather than the entrepreneur in the rich, concrete sense that the political economy tradition has attempted to theorise.

This omission is not trivial. As Hébert and Link (1988) observe, the entrepreneur has been the 'missing link' of economic theory: omnipresent in the discourse of capitalism and absent from its formal models. The field of institutional economics, however, has a particular stake in this question that goes beyond the general interest of any sub-field of economics. If entrepreneurship is fundamentally shaped by the institutional environment — by the rules of the game, in North's (1990) famous formulation — then a satisfactory theory of entrepreneurship is simultaneously a contribution to institutional theory, and vice versa. The connection between institutions and entrepreneurial behaviour is not merely an interesting research agenda item; it is one of the central transmission mechanisms through which institutional arrangements translate into economic performance, growth, and the long-run distribution of prosperity across societies. North's (1994) emphasis on the role of institutions in reducing uncertainty for human interaction connects directly to the Knightian tradition: institutions are, among other things, mechanisms for managing and distributing the burden of genuine uncertainty that Knight identified as constitutive of entrepreneurial action. Recognising this connection opens new avenues for institutional analysis that have not been fully exploited in the existing literature.

Political economy has produced at least four major attempts to theorise this connection, each offering a different answer to the same fundamental question. Joseph

Schumpeter located the entrepreneur at the centre of capitalist dynamics as the agent of disruptive innovation — the protagonist of the creative destruction that defines capitalism's forward motion. Israel Kirzner redefined the entrepreneur as the discoverer of previously unnoticed profit opportunities, as the tireless coordinator of the market disequilibria that competition constantly generates. Frank Knight characterised the entrepreneur as the agent who assumes the burden of genuinely irreducible uncertainty, whose economic function is to exercise the judgment that no actuarial formula can replace. And William Baumol shifted the question toward the institutional environment itself: not who is the entrepreneur nor what are their cognitive capacities, but where do the prevailing rules of the game direct their talent.

These four traditions have coexisted with remarkably little dialogue between them. The specialist literature tends to treat them as rival approaches: one is Schumpeterian or Kirznerian, one privileges innovation or discovery, uncertainty or institutions. Textbooks in the history of economic thought present them as alternative answers to the same problem, without exploring the possibility that they are in fact complementary answers to distinct but deeply interrelated questions. This paper proposes a different reading. Its central thesis is that the four traditions are not rivals but complements: each captures an analytically distinguishable — yet empirically simultaneous — dimension of the same complex phenomenon we call entrepreneurial action. Integrated into a unified framework of institutional political economy, they illuminate aspects of entrepreneurial behaviour that no single tradition can explain with comparable precision and breadth.

The paper's argument is of particular relevance to institutional economics for three reasons. First, the Baumolian tradition already occupies a natural place within the institutional economics programme, since its core claim — that the orientation of entrepreneurial talent depends on the structure of institutional incentives — is precisely the kind of claim that institutional economists have been best equipped to analyse empirically. Second, the integration of Baumol with the Schumpeterian, Kirznerian and Knightian traditions allows institutional economists to move beyond the question of whether institutions shape entrepreneurship (which is relatively well established) toward the more precise question of which institutional configurations foster which types of entrepreneurial activity. Third, the integrated framework provides new analytical tools for interpreting the empirical evidence on declining business dynamism in advanced

economies — a phenomenon with profound implications for theories of institutional change and economic development.

The paper is organised as follows. Section 2 offers a systematic comparative review of the four entrepreneurship theories, identifying the conceptual core and analytical limitations of each tradition when considered in isolation. Section 3 constructs the integrated framework, arguing for the logical compatibility and empirical complementarity of the four dimensions, deriving the propositions that structure the synthesis, and positioning the proposed framework relative to prior integration attempts. Section 4 reviews the empirical evidence on creative destruction in contemporary capitalism and applies the integrated framework to its interpretation, with particular attention to the declining business dynamism hypothesis. Section 5 concludes with the theoretical and policy implications of the analysis, including reflections on the Baumolian dynamic of endogenous institutional erosion — the process by which successful capitalism may generate the institutional conditions for its own dynamism to stagnate — which we identify as one of the most important open questions for the institutional economics research programme.

## **2. FOUR THEORIES OF THE ENTREPRENEUR: A COMPARATIVE REVIEW**

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The history of economic thought has produced numerous attempts to characterise the entrepreneur, from Richard Cantillon's eighteenth-century identification of the entrepreneur with the function of bearing market uncertainty — buying at certain prices and selling at uncertain ones — to contemporary developments in knowledge-based and dynamic capabilities theories of the firm. Jean-Baptiste Say emphasised the entrepreneur's coordinating function as an organiser of production; Alfred Marshall incorporated the entrepreneur as a fourth factor of production alongside land, labour and capital; and in the late nineteenth century, Hawley and Bates Clark debated the nature of entrepreneurial profit as the reward for risk-bearing. Each era and each national tradition in economic thought has produced its own theory of the entrepreneur, reflecting the concrete problems that capitalism posed in that specific historical moment. This section concentrates on the four traditions that have proven most analytically fertile in the context

of contemporary institutional political economy and that constitute the pillars of the integrated framework proposed in the following section. The goal is not merely expository but comparative: to identify what dimension of the entrepreneurial phenomenon each approach privileges, with what arguments, and what aspects recede into the background as a consequence of that analytical priority.

## **2.1 The Schumpeterian Entrepreneur: Innovation, Disruption, and Creative Destruction**

Schumpeter's theory of the entrepreneur is arguably the most influential and most cited of the four traditions reviewed here, though also one of the most frequently misunderstood in its finer distinctions. Capturing it fully requires distinguishing between two stages in Schumpeter's intellectual development, separated by more than three decades of work and by a markedly different diagnosis of capitalism's future trajectory.

In the first stage, articulated in the *Theorie der wirtschaftlichen Entwicklung* of 1912 — whose English translation, *The Theory of Economic Development*, appeared in 1934 — Schumpeter conceives of the entrepreneur as a heroic individual agent whose essential function is to break the 'circular flow' of an economy in static equilibrium through the introduction of what he calls 'new combinations'. These new combinations encompass five analytically distinct categories: the introduction of a new good or a new quality of an existing good; the introduction of a new method of production not yet validated by experience in the relevant industry; the opening of a new market, regardless of whether that market previously existed; the conquest of a new source of raw materials or semi-manufactured goods; and the reorganisation of any industry through the creation or destruction of a monopoly position. The entrepreneur in this conception is neither a property owner nor a capitalist but a functional agent whose defining characteristic is innovative action: the capacity for vision and initiative to combine factors in ways not previously attempted.

In the second stage, whose fullest expression is *Capitalism, Socialism and Democracy* (1942), Schumpeter updates his diagnosis with a decisively more sombre tone that has generated considerable controversy in the secondary literature (McCraw, 2007). Mature capitalism, he argues, has institutionalised the innovation process within the research and development departments of large corporations, making the individual

heroic entrepreneur progressively obsolete as an agent of change. Innovation becomes a routine activity, bureaucratically managed by teams of technicians and managers applying established procedures to known problems. The 'hero' of the nineteenth-century capitalism is being displaced by the manager of the twentieth. Yet the process of creative destruction does not disappear: it remains the 'essential fact' of capitalism (Schumpeter, 1942, p. 83), now operating through more complex and impersonal organisational structures.

The concept of creative destruction — which Schumpeter transforms from his reading of Marx — captures the double nature of the innovation process. Every genuine innovation not only creates new value; it simultaneously destroys the value of the existing structures that it renders obsolete. New technologies displace old ones; new firms erode established positions; new markets corrode existing ones. This simultaneity of creation and destruction is, for Schumpeter, the 'essential fact about capitalism' (1942, p. 82): the process that gives capitalism both its vitality and its constitutive instability. Without creative destruction, capitalism would settle into a stationary equilibrium unable to reproduce the conditions of its own prosperity.

The principal limitation of the Schumpeterian theory, noted by its contemporaries and elaborated subsequently by the Austrian tradition, lies in the treatment of innovation as a largely exogenous and discontinuous perturbation. The Schumpeterian entrepreneur irrupts into the system as a disruptive force from outside, without the theory systematically explaining how opportunities for innovation are generated, perceived and selected in the ordinary course of market competition. The theory describes with great richness what the entrepreneur does — introduces new combinations — but is comparatively reticent about how the entrepreneur comes to perceive that those combinations are possible and profitable before the market confirms it. Furthermore, by emphasising the disruptive character of innovation, Schumpeter tends to present the entrepreneur in opposition to the equilibrium market system, when in reality the great majority of everyday entrepreneurial activity occurs within that system and in response to its signals rather than in rupture with it. This gap — the process of discovery prior to innovation — would prove to be the precise point of entry of the Kirznerian tradition.

## **2.2 The Kirznerian Entrepreneur: Alertness, Discovery, and Market Process**

Israel Kirzner's theory of the entrepreneur begins from a radically different diagnosis of the entrepreneur's role in the economy. Kirzner develops his analysis within the Austrian tradition of market process theory inaugurated by Ludwig von Mises, and his analytically relevant starting point is not the equilibrium that the entrepreneur disrupts, but the state of permanent disequilibrium in which every real economy operates. In any market situation, there exist profit opportunities that have not yet been noticed: prices that do not reflect all available information, plans based on erroneous expectations, discrepancies between the valuations of buyers and sellers that could be exploited to mutual advantage. The Kirznerian entrepreneur is precisely the agent who discovers these discrepancies and acts upon them before others do so (Kirzner, 1973).

The central concept of Kirznerian theory is *alertness*: a cognitive and attitudinal disposition to perceive what others have not yet perceived, to 'see' profit opportunities before they become evident to the broader market. Alertness does not in principle require ownership of resources — the Kirznerian entrepreneur can in theory act without capital of its own, mobilising others' resources by virtue of its powers of persuasion — but rather a special sensitivity to the informational imperfections of the environment. The market process is, in this reading, a continuous and never-completed process of entrepreneurial discovery: each entrepreneurial action corrects a disequilibrium, brings the plans of agents closer to mutual consistency, and tends — asymptotically, never definitively — toward a state of equilibrium that is, however, constantly disturbed by new circumstances.

The difference with Schumpeter is fundamental and deserves precise articulation. The Kirznerian entrepreneur is an equilibrator, not a disruptor. Where Schumpeter describes the entrepreneur as the agent who destroys existing equilibrium to create a new one — generating transitory monopoly profits for the innovator — Kirzner describes the entrepreneur as the agent who tends toward equilibrium by correcting existing disequilibria. From Kirzner's perspective, the Schumpeterian contribution correctly captures certain exceptional episodes of radical innovation but elevates these episodes to the status of general paradigm when they are in reality the limiting case of the entrepreneurial process. Most everyday entrepreneurial activity is not disruptive innovation but the discovery of arbitrage opportunities: perceiving that a good can be purchased more cheaply in one market and sold at a higher price in another, that a segment of demand is being served inadequately, that a production process can be reorganised at

lower cost. This activity of coordination and arbitrage is, in the Kirznerian view, as central to the functioning of the market as Schumpeterian radical innovation, though it operates more silently and incrementally.

The limitation of Kirznerian theory is in some respects the mirror image of the Schumpeterian limitation. By emphasising the coordination process and movement toward equilibrium, it tends to undervalue the episodes of radical innovation that entirely reconfigure the market structure within which alertness itself operates. The discovery that an unmet demand exists for a cheaper telecommunications service is a Kirznerian process of arbitrage adjustment; the invention of the mobile telephone, with all its creative-destructive implications for fixed telephony, retail commerce and banking, is a Schumpeterian process of radical disruption. A complete theory of the entrepreneur must be capable of accounting for both phenomena and, crucially, for the relationship between them across time.

### **2.3 The Knightian Entrepreneur: Genuine Uncertainty, Judgment, and Profit**

Frank Knight's contribution to entrepreneurship theory is, in many respects, the deepest from a philosophical and epistemological standpoint, and the one that has proven most difficult to incorporate into formal economic models. His central work, *Risk, Uncertainty and Profit* (1921), departs from a conceptual distinction that has become one of the most influential contributions of twentieth-century economics: the distinction between risk and genuine uncertainty.

Risk, in Knight's definition, refers to situations in which the probability distribution of possible outcomes can be calculated, either a priori — as in games of chance with known distributions — or through statistical inference from a sufficiently large class of similar past cases. Risk is, in principle, insurable and quantifiable: it can be transferred to third parties at a price determined by the insurance market. Genuine uncertainty, by contrast, describes situations for which no known or calculable probability distribution exists: genuinely novel situations, unique events for which no relevant statistical precedents are available. This form of uncertainty cannot be insured or quantified; it can only be confronted through the exercise of the decision-maker's judgment.

The function of the entrepreneur in the capitalist system is, for Knight, to assume precisely this burden of irreducible uncertainty that attaches to every genuinely novel economic decision. The entrepreneur is not simply someone who takes risks in the technical sense — any investor in financial assets with known return distributions takes calculable risks. The entrepreneur is someone who makes decisions under genuinely uncertain conditions, committing resources to projects whose profitability cannot be determined in advance by any actuarial procedure. Entrepreneurial profit is therefore neither a wage for work performed, nor a rate of return on capital invested, nor a calculable risk premium: it is the reward — or the cost — of exercising judgment (*Urteil*) under irreducible uncertainty. When that judgment proves correct, profit emerges; when it proves mistaken, loss is the result.

This conceptualisation has far-reaching analytical consequences that extend well beyond a mere taxonomic classification. First, it places at the centre of entrepreneurship theory the question of knowledge and its constitutive limits: the entrepreneur is not an optimiser with complete or incomplete information but an agent who acts under a radical ignorance about the future that no information acquisition can fully resolve. This epistemological dimension connects Knight's theory to Hayek's (1945) later work on dispersed and tacit knowledge in the economy — knowledge that is not merely incomplete but fundamentally non-centralizable — and to the broader research programme of Austrian market process theory. Second, it offers an ontological foundation for the other two traditions: both Schumpeterian innovation and Kirznerian discovery are, at bottom, exercises of Knightian judgment under genuine uncertainty. The decision to introduce a new combination and the decision to act upon an arbitrage opportunity are both decisions taken without certainty about the outcome, committing resources under conditions of genuine uncertainty that no predictive model can eliminate. Third, it offers a theory of income distribution that does not depend on marginal factor productivity: entrepreneurial profit is a residual that can only be assessed *ex post*, not a price predetermined by known market conditions. Fourth, and most relevant for institutional economics, the Knightian framework implies that institutional arrangements which reduce certain forms of uncertainty — through clear property rights, enforceable contracts, predictable regulation — can dramatically alter the propensity of agents to exercise entrepreneurial judgment, since they reduce the effective uncertainty that

judgment must navigate even if they cannot eliminate genuine Knightian uncertainty altogether.

The principal limitation of the Knightian tradition is its predominantly microeconomic and individualist character. By concentrating on the cognitive and decisional conditions of the individual entrepreneur — their disposition toward judgment, their tolerance for uncertainty, their willingness to commit resources — it leaves in a secondary position the question of how the institutional environment in which the entrepreneur operates configures, constrains and directs the exercise of judgment. Two agents with identical capacities for judgment under uncertainty may produce radically different economic outcomes if they operate in institutional environments that reward different types of activity at different rates. This institutional dimension of the historical and cross-national variation in entrepreneurship would prove to be the central contribution of the fourth tradition.

#### **2.4 The Baumolian Entrepreneur: Institutions, Incentives, and the Allocation of Talent**

Baumol's 1990 article, 'Entrepreneurship: Productive, Unproductive, and Destructive', published in the *Journal of Political Economy*, is one of the most cited and influential contributions to institutional political economy of the past three decades, and has generated a highly productive programme of empirical and historical research (Boettke and Coyne, 2003; Sobel, 2008; Djankov et al., 2002). Its central argument is elegant in its apparent simplicity: entrepreneurial talent — understood as the capacity and disposition to identify and exploit opportunities for gain — exists in relatively stable proportions across societies and historical periods. What varies radically between epochs and societies is not the quantity of available talent, but the structure of institutional incentives that determines toward which activities that talent is directed.

Baumol distinguishes three types of entrepreneurial activity according to their relationship to social value creation. *Productive* entrepreneurship directs talent toward technological and organisational innovation, the creation of new goods and services, and the improvement of production processes; its activity generates private gains that reflect genuine social value creation. *Unproductive* entrepreneurship directs capability toward rent-seeking — political lobbying for regulatory privileges, strategic litigation, the

capture of government contracts — potentially generating private gains without net social value creation, and in many cases destroying value through the distortion of competitive rules. *Destructive* entrepreneurship deploys talent in activities that generate private gains at the expense of a net destruction of social value: organised crime, active corruption, purely defensive patent warfare. The type of entrepreneurship that predominates in a society depends not on the innate distribution of talent in the population but on the institutional rules of the game that determine the relative returns of each type of activity (Baumol, 1990, p. 897).

The most important implication of the Baumolian argument is political and historical. If the problem of economic development is not a scarcity of entrepreneurial talent but its misdirection by defective institutional rules, then the focus of public policy must shift from the direct promotion of entrepreneurship — start-up subsidies, public venture capital, reduction of administrative entry barriers — toward the design of institutions that make productive entrepreneurial activity sufficiently rewarding and unproductive activity sufficiently costly. This thesis connects entrepreneurship theory to the broad tradition of institutional economics inaugurated by North (1990), for whom institutions are 'the rules of the game in a society' that structure human interaction and reduce uncertainty, and elaborated more recently by Acemoglu and Robinson (2012) in their analysis of extractive versus inclusive institutions as the primary determinants of divergent long-run economic trajectories. In the Baumolian framework, entrepreneurship is ultimately an institutional phenomenon: a reflection of the rules of the game rather than of the individual characteristics of agents. This claim represents the strongest possible argument for placing the theory of the entrepreneur at the centre of the institutional economics research programme rather than treating it as a peripheral sub-field.

The principal limitation of the Baumolian tradition is the inverse of the Knightian one: by privileging the institutional environment as the fundamental explanatory variable, it tends to treat the individual entrepreneur as a passive agent who responds mechanically to predetermined incentives. This view loses the cognitive and decisional dimension that the Knightian and Kirznerian traditions had placed at the centre of analysis: the constitutive uncertainty of every entrepreneurial decision, the irreducible judgment that uncertainty demands, the active alertness that allows the perception of opportunities where others see only routine. An entrepreneur who simply responded to institutional

incentives in an automatic way would not, by the standards of any of the other three traditions, qualify as genuinely entrepreneurial in the relevant sense of the term. Moreover, as Foss and Klein (2012) note, the Baumolian framework does not explain how entrepreneurs identify which institutional rules are most advantageous to exploit — a process that itself requires the exercise of alertness and judgment, bringing us back to the Kirznerian and Knightian dimensions that the institutional framing had bracketed.

### **3. AN INTEGRATED FRAMEWORK: COMPLEMENTARITY, SYNTHESIS, AND INSTITUTIONAL FOUNDATIONS**

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The comparative review of the four traditions reveals a systematic pattern that cannot be accidental: each captures a real and relevant dimension of the entrepreneurial phenomenon while tending to undervalue or ignore the dimensions privileged by the others. Schumpeter emphasises radical innovation and leaves in the shadow the daily process of discovery and coordination. Kirzner illuminates that process of discovery but underestimates the episodes of innovational disruption that reconstitute the very market structure within which alertness operates. Knight grounds both traditions ontologically in the irreducible uncertainty of entrepreneurial judgment but neglects the institutional environment that shapes how much uncertainty agents are willing to bear and toward which activities they direct their judgment. Baumol integrates that institutional dimension but tends to treat the entrepreneur as a passive responder to incentives, losing the cognitive agency that the other three traditions had carefully constructed. Each limitation is the necessary correlate of each tradition's analytical strength: the price of theoretical focus is always some degree of empirical scope narrowing.

This systematic complementarity strongly suggests that the four traditions are not rivals in the strict sense — theories making incompatible predictions about the same phenomenon — but pieces of the same conceptual puzzle, describing analytically distinct dimensions of an empirically unified phenomenon. The argument of this paper is that they can be integrated into a unified framework of institutional political economy without loss of internal coherence for any of them, and with substantial explanatory gain for the whole.

#### **3.1 Four Dimensions of Entrepreneurial Action**

We propose that every relevant entrepreneurial action can be analysed simultaneously along four dimensions corresponding, respectively, to the central insights of each tradition.

The first is the **innovation dimension**, of Schumpeterian provenance: the degree to which entrepreneurial action introduces genuine novelty into the economic system. This dimension varies along a continuous spectrum from pure arbitrage — which introduces no novelty but exploits pre-existing informational discrepancies without altering market structure — to radical innovation that entirely reconfigures existing productive and market structures, destroying the value of established assets and creating new opportunities and threats for all actors in the system. Between these extremes lies a broad range of incremental innovations, process improvements, local adaptations and creative recombinations that are empirically the most frequent, though the least spectacular.

The second is the **epistemic dimension**, of Kirznerian provenance: the process of discovering previously ignored or unexploited profit opportunities. This dimension captures alertness as an active cognitive capacity — the agent's sensitivity to environmental disequilibria, the ability to perceive discrepancies between prices, costs, qualities and needs, and the process through which these perceptions are transformed into decisions to act. The epistemic dimension is analytically prior to the innovation dimension: the entrepreneur must first perceive an opportunity — whether of arbitrage or radical innovation — before being able to act upon it. In this sense, the Kirznerian framework provides the micro-foundation for the Schumpeterian one: it explains the perceptual and cognitive conditions under which entrepreneurial action becomes possible.

The third is the **decisional dimension**, of Knightian provenance: the degree of irreducible uncertainty under which the entrepreneur operates and the exercise of judgment that uncertainty demands. This dimension is transversal to the first two: both the discovery of arbitrage opportunities (epistemic dimension) and the introduction of radical innovations (innovation dimension) involve decisions taken without certainty about the outcome, committing resources under conditions of genuine uncertainty that no predictive model can eliminate. The decisional dimension captures the constitutively open and uncertain nature of entrepreneurial action — its irreducibility to an algorithmic

procedure — and grounds both the Schumpeterian and Kirznerian dimensions in a common epistemological foundation.

The fourth is the **institutional dimension**, of Baumolian provenance: the environment of formal and informal rules that frames, constrains and orients the other three dimensions. Institutions — property rights, the legal system, regulatory norms, social conventions governing commercial activity — are not simply the backdrop against which entrepreneurial activity occurs but an active determinant of what type of innovation proves rewarding, which opportunities are perceived as such and acted upon, and how the burden of uncertainty is distributed among the different participants of the economic system. The institutional dimension shapes the space of possibilities within which the other three dimensions operate, and constitutes the mechanism through which macro-level institutional arrangements translate into micro-level entrepreneurial behaviour and, ultimately, into aggregate economic performance.

The integration of these four dimensions into a unified analytical framework produces a picture of the entrepreneurial phenomenon that overcomes the limitations of each tradition in isolation. An integrated analysis can explain, for instance, why the same individual capacity for discovery — identical alertness in the Kirznerian sense — may translate into productive entrepreneurial activity in a favourable institutional environment and into rent-seeking in an unfavourable one (Baumolian dimension); why the same institutional environment may produce incremental innovation in periods of relative technological stability and radical disruption in periods of accelerated transformation (Schumpeter-Kirzner articulation); and why genuine uncertainty implies that the returns to entrepreneurial activity are always uncertain *ex ante*, regardless of the degree of innovation or the quality of the institutional environment (Knightian dimension).

### **3.2 Logical Compatibility, Temporal Sequence, and Institutional Configuration**

A possible objection to integrating the Schumpeterian and Kirznerian traditions concerns the apparent contradiction regarding equilibrium: how can the entrepreneur simultaneously tend toward equilibrium and disrupt it? The answer lies in recognising that both processes operate not on the same system at the same moment, but in temporal sequence — and that this temporal sequence is precisely the sequence of capitalist dynamics.

The logic of this sequence may be formulated as follows. In a first phase, the Schumpeterian entrepreneur introduces a radical innovation that disrupts the existing equilibrium and generates transitory monopoly profits from the pioneer advantage. This innovation simultaneously creates a set of secondary disequilibria: informational discrepancies between early adopters and laggards, opportunities for imitation and incremental improvement, segments of demand unmet by the new product in its initial form. These secondary disequilibria are precisely the opportunities that the alertness of Kirznerian entrepreneurs discovers and exploits. The post-innovation adjustment process — through imitation, arbitrage and incremental improvement — progressively erodes the innovator's monopoly gains, tends to reduce prices toward costs, and approximates the system toward a new equilibrium. But that new equilibrium is eventually disrupted by a new round of Schumpeterian innovation, restarting the cycle. Creative destruction is thus the dynamic synthesis of both processes: Schumpeterian disruption followed by Kirznerian coordination, in a sequence that generates capitalist development as an unintended emergent result of decentralised entrepreneurial action.

The Knightian dimension is transversal to this entire sequence. Both the decision to innovate — bearing the costs of introducing a new combination whose market acceptance is uncertain — and the decision to exploit an arbitrage opportunity — acting on a price discrepancy that may disappear before it can be captured — involve decisions taken under genuine Knightian uncertainty. No actuarial procedure can determine *ex ante* the probability of success of a radical innovation or an arbitrage operation; both require the exercise of a judgment whose correctness can only be assessed *ex post*. The Knightian dimension thus provides the epistemological foundation of the Schumpeterian and Kirznerian dimensions: it explains why entrepreneurial action is neither routine nor fully predictable, and why entrepreneurial profit cannot be reduced to a factor price.

The Baumolian institutional dimension operates as the configuration variable of the system as a whole. Institutions determine the relative returns of each type of entrepreneurial activity and therefore the proportion of available entrepreneurial talent directed toward productive innovation, coordinating arbitrage, or unproductive rent-seeking. In an institutional environment with well-defined and enforced property rights, an effective rule of law, low corruption and pro-competitive regulation, the returns to productive entrepreneurship are sufficiently high to attract talent toward innovation and

discovery. In an environment with extractive or weak institutions — the type that Acemoglu and Robinson (2012) identify as the central explanation for divergent national economic trajectories — the returns to rent-seeking and regulatory capture may exceed those of innovation, redirecting talent toward unproductive or destructive activities. The institutional dimension thus explains the historical and cross-national variation in the intensity and direction of creative destruction that no other tradition can account for satisfactorily on its own.

### **3.3 The Four Propositions of the Integrated Framework**

The integrated framework may be summarised in four complementary propositions that articulate the contributions of each tradition:

P1 (Schumpeterian Proposition): Capitalism is sustained and developed through a continuous process of creative destruction driven by entrepreneurial innovation. The introduction of new combinations — new goods, methods, markets, resource sources and organisational forms — is the driving force of long-run economic growth, and the process of destruction that accompanies every genuine innovation is as constitutive of capitalism as the process of creation.

P2 (Kirznerian Proposition): Schumpeterian innovation permanently generates disequilibria and informational imperfections that are discovered and corrected by entrepreneurial alertness. This process of discovery and coordination produces incremental adjustments that are quantitatively dominant in the everyday functioning of the market, though they are less visible and dramatic than episodes of innovational disruption. Both processes — disruption and coordination — are interdependent and mutually sustaining.

P3 (Knightian Proposition): Both innovation and discovery operate necessarily under genuine Knightian uncertainty. The exercise of entrepreneurial judgment — the willingness to commit resources under genuinely uncertain conditions — is the epistemological condition of possibility for both processes. Entrepreneurial profit is the residue of this exercise of judgment, assessable only *ex post*.

P4 (Baumolian Proposition): The direction and intensity of entrepreneurial activity — innovative, arbitrage-based and subject to uncertainty — are ultimately determined by

the institutional environment. Institutions define the relative returns of different types of entrepreneurial activity and, therefore, the productive, unproductive or destructive orientation of the entrepreneurial talent available in society.

These four propositions are logically independent in the sense that none strictly follows from the others, yet empirically interrelated in such a way that each conditions and modifies the explanatory scope of the others. The integrated framework thus constructed is not the sum of four theories, but a higher-order theory that articulates and mutually enriches them.

### **3.4 The Integrated Framework in Relation to Prior Synthesis Attempts**

The integration proposed in this paper is not the first in the literature, and it is worth positioning it carefully with respect to the most relevant antecedents. Hébert and Link (1988) offer the most complete historical survey of entrepreneurship theories, identifying twelve distinct functions that the economic literature has attributed to the entrepreneurial figure; however, their analysis is fundamentally expository and does not propose a systematic integration framework with predictive capacity. Casson (1982, 2000) develops a decision-theoretic approach that integrates elements of Knight and Kirzner, modelling the entrepreneurial function as the capacity to take high-quality decisions in contexts of imperfect information; but it leaves in a secondary position both the Schumpeterian dimension of radical innovation and the Baumolian dimension of the institutional environment, limiting its scope to the individual logic of decision-making.

The most proximate contribution to the framework proposed here is that of Foss and Klein (2012), who construct a theory of the firm based on the Knightian concept of entrepreneurial judgment, incorporating the Kirznerian notion of discovery and the Schumpeterian notion of innovation as special cases of a more general process of asset creation under uncertainty. Their analysis is rigorous and has generated a productive secondary literature in the theory of the firm. The principal difference with respect to the present paper is that Foss and Klein concentrate on the theory of the firm — on the question of why firms exist and how they should be organised — and assign a secondary role to the macro-institutional Baumolian dimension, which is central to the analysis of variation across countries and historical periods in the intensity and orientation of the entrepreneurial process. The framework proposed in this paper is more ambitious in

scope: it aims to be a theory of the entrepreneur in capitalism as a historical system, not merely in the firm as an organisational unit, and therefore assigns the institutional dimension a weight symmetrical with that of the other three dimensions.

It is also worth noting that the complementarity between Schumpeter and Kirzner has been productively explored by Holcombe (1998) and Harper (1996), who argue that the Kirznerian discovery process and the Schumpeterian innovation process succeed one another in a temporal sequence that generates economic development as an unplanned emergent result. The specific contribution of this paper relative to these earlier works is the explicit integration of the Knightian dimension — the epistemological grounding of both processes — and the Baumolian dimension — the institutional configuration variable of the system — into that sequence, and the derivation of four propositions with differentiated empirical implications that can orient research on contemporary capitalism.

#### **4. CREATIVE DESTRUCTION IN CONTEMPORARY CAPITALISM**

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This section applies the integrated framework to the analysis of creative destruction as a structural dynamic of contemporary capitalism. The empirical starting point is the paradox noted in the introduction: advanced economies simultaneously exhibit an unprecedented acceleration of frontier technological innovation — in artificial intelligence, precision biotechnology, energy storage technologies — and a deceleration of the conventional measures of entrepreneurial dynamism that have historically constituted the empirical manifestation of creative destruction. Resolving this paradox requires precisely the type of conceptual distinction that the integrated framework provides: distinguishing between the different dimensions of entrepreneurial action and their specific empirical correlates.

##### **4.1 Indicators of Business Dynamism: State of the Evidence**

The empirical literature on creative destruction has developed over the past two decades a relatively consensual set of *proxy* indicators of entrepreneurial dynamism. The most widely used and best-documented are four. The firm entry and exit rate measures the pace of renewal of the business population: how many new firms are created and how many disappear in a given period as a proportion of the total number of existing firms —

an indicator of what Schumpeter called the 'perennial gale' of competition. The job reallocation rate captures the net flow of jobs between growing and shrinking or disappearing firms: a measure of the speed with which productive resources move from less to more productive uses, which is the empirical expression of the Kirznerian coordination process. Productivity dispersion across firms reflects the heterogeneity of the productive fabric: high dispersion indicates the coexistence of highly productive and very low-productivity firms in the same sector, suggesting that resource reallocation is imperfect or subject to significant friction. And market concentration indicators — the Herfindahl-Hirschman index, price-cost margins, the market share of leading firms in each sector — measure the degree to which competition is being displaced by dominant positions.

The evidence for the United States, the market for which most comprehensive data exists, is consistent and empirically robust. Decker, Haltiwanger, Jarmin and Miranda (2014) document that the firm entry rate declined steadily from the late 1970s onwards, independently of the business cycle and exogenous shocks: the decline precedes the Great Recession of 2008–2009 and continues in its aftermath. Quantitatively, the firm entry rate fell from approximately 13 per cent in the early 1980s to around 8 per cent in the 2010s. The job reallocation rate declined similarly. Haltiwanger, Jarmin and Miranda (2013) show that this deceleration particularly affects young high-growth firms — the type of firm the literature consistently identifies as the primary engine of net job creation and disruptive innovation — while large established firms maintain their position with greater ease. This asymmetry is suggestive of an institutional mechanism: as barriers to entrepreneurial entry and exit increase, the Schumpeterian process of creative destruction loses its distributive character.

For Europe, the evidence is qualitatively similar although with important cross-country variations that suggest the mediating role of national institutions. The OECD (2022) report documents a widespread decline in firm entry rates across most member countries during the past two decades, more pronounced in Southern European countries than in Nordic ones — a pattern consistent with the Baumolian hypothesis that institutional quality mediates the orientation of entrepreneurial talent. This decline is especially notable in high-productivity service sectors and technology-intensive industries, precisely the sectors where theory predicts creative destruction should be most

intense. Productivity dispersion across firms has increased in most OECD countries, indicating that the reallocation of resources from less to more productive firms has slowed or occurs with greater friction than in previous decades.

Beyond these flow indicators, evidence on market concentration offers a complementary perspective. Autor, Dorn, Katz, Patterson and Van Reenen (2020) document the rise of 'superstar firms': a small number of companies that concentrate a growing share of employment, sales and profits in their respective sectors, while the rest of the sector experiences a relative erosion of its position. This pattern is consistent with a dynamic in which innovation generates increasing returns and network effects that favour consolidation around a few leaders, reducing the space within which new entrants can challenge established positions through either Schumpeterian disruption or Kirznerian arbitrage.

#### **4.2 The Declining Business Dynamism Hypothesis and Its Interpretations**

The most influential interpretation of the described evidence is the 'declining business dynamism' hypothesis, associated primarily with the work of Decker, Haltiwanger and collaborators for the American case, and formalised theoretically by Akcigit and Ates (2021). According to this hypothesis, contemporary capitalism has entered a phase of reduced competitive dynamism, with a secular decline in the rate of business fabric renewal, reduced innovative pressure on established firms, and growing persistence of market leadership positions — a pattern that, if sustained, would represent a structural weakening of the creative destruction mechanism that Schumpeter identified as capitalism's essential self-renewal capacity.

Akcigit and Ates (2021) propose a specific mechanism to explain this decline through an endogenous growth model with knowledge diffusion between firms. Their argument is that established large firms have developed increasingly effective strategies to protect their frontier positions — accumulating defensive patent portfolios, acquiring emerging competitors before they can challenge incumbents, lobbying for regulatory barriers to entry — widening the productivity gap with their followers and reducing the latter's incentives to invest in their own innovation activities. The key explanatory mechanism is the reduction of technology diffusion: when leading firms retain their technology rather than diffusing it, followers have less on which to build, and the creative

destruction process loses momentum. This mechanism is essentially Baumolian in structure: the unproductive activity of large firms — technological and regulatory rent-seeking — erodes the institutional environment favourable to creative destruction.

However, the declining business dynamism hypothesis is not without significant empirical and conceptual challenges, and the most recent literature has importantly qualified its conclusions. Three lines of criticism deserve attention in the context of the integrated framework proposed here.

The first is the 'missing growth' hypothesis. Brynjolfsson, Rock and Syverson (2021) argue that conventional productivity and economic activity indicators systematically underestimate the contribution of digital intangible assets to growth. Digital goods and services — software, platforms, databases, algorithms — have economic characteristics that make them difficult to capture in national accounting systems: they are non-rival in use, have reproduction marginal costs close to zero, and generate network externalities that extend their social value far beyond their market transaction price. If this hypothesis is correct, the measured slowdown in productivity and conventional business dynamism may be partly a statistical illusion — the creative destruction process would be operating with intensity in digital space, generating value that instruments inherited from the industrial economy fail to adequately capture. The Schumpeterian innovation process, in this reading, is not weakening but transforming its substrate from physical capital to intangible assets.

The second line of criticism points to the geographic concentration of contemporary innovation. Although aggregate business dynamism indicators for OECD countries show a declining trend, this trend coexists with a notable intensification of innovative activity in highly specialised geographic ecosystems: the technology clusters of Silicon Valley, Boston-Cambridge, Tel Aviv, Berlin, Stockholm and Shenzhen, among others. Creative destruction may be concentrating geographically in high-density innovation nodes where the combination of specialised human capital, active venture capital, university research ecosystems and favourable institutions creates exceptional conditions for radical innovation. National or even regional measures of business dynamism increasingly fail to capture this phenomenon when they aggregate these high-innovation nodes with vast low-dynamism peripheries.

The third critique is perhaps most relevant from the perspective of the integrated framework proposed here. Conventional business dynamism indicators capture the Kirznerian dimension of the entrepreneurial process more accurately — the discovery and exploitation of incremental arbitrage opportunities, the adjustment and coordination that follow market perturbations — than the Schumpeterian dimension of radical innovation. An economy may exhibit low firm entry rates and high measured market concentration and simultaneously be producing radical innovation of great historical significance, if that innovation is being developed by existing large firms or by a small number of high-impact start-ups not adequately reflected in aggregate flow indicators. The digital economy in particular generates forms of creative destruction — the rapid displacement of established platforms by newer ones, the disruption of entire industries through software-based business models — that are poorly captured by conventional measures calibrated for the physical firm entry and exit dynamics of the industrial economy. The paradox of contemporary capitalism may not be so much a decline of creative destruction in the strict sense as a transformation of its morphology: the shift from a process distributed across many small and medium competing firms — the pattern of twentieth-century industrial capitalism — to a process concentrated in fewer large actors that command the capital, talent and data assets necessary for frontier innovation in the platform economy. If this interpretation is correct, the appropriate policy response is not to stimulate more firm entry as such, but to ensure that the institutional conditions allow challengers to compete effectively against established platforms and that the benefits of digital innovation are broadly distributed rather than captured by a narrow elite of shareholders.

### **4.3 Interpretation Through the Integrated Framework**

The reviewed empirical evidence acquires a more nuanced and analytically more precise interpretation when examined through the four dimensions of the proposed integrated framework. Each dimension illuminates a distinct aspect of contemporary capitalism's apparent paradox.

From the Schumpeterian dimension, the relevant question is whether the rate of radical innovation — the introduction of new combinations that destroy the value of established assets and reconstitute market structure — has actually diminished. The available evidence does not permit a definitive answer, but points toward a hypothesis of

sectoral and temporal concentration: radical innovation may not have diminished in absolute terms but has concentrated in specific phases and sectors — successive waves of digitalisation, the platform revolution of the 2010s, the current transition toward generative artificial intelligence — with intermediate periods of lower innovative intensity in which dynamism indicators decline. This pattern would explain the coexistence, documented across multiple studies, of high productivity growth at the technological frontier and near-stagnant productivity in the broader business fabric. The Schumpeterian process may be alive but geographically and sectorally bounded in ways that aggregate national indicators fail to capture.

From the Kirznerian dimension, the reduction in firm entry rates may be interpreted in two opposing ways with very different implications. The pessimistic interpretation is that entry barriers have risen — through the concentration of data assets in a few platforms, the hardening of intellectual property protection as a barrier rather than an incentive, and the capacity of large firms to acquire or neutralise new entrants before they can challenge established positions — reducing the space available for Kirznerian alertness and the discovery of new market opportunities. The benign interpretation is that the discovery process has become more efficient: fewer failed attempts are needed to identify viable opportunities because venture capital markets, incubation ecosystems and information flows have grown more sophisticated and better calibrated. Distinguishing between these interpretations requires information on the quality and economic impact of new entrants, not merely their quantity — information that conventional entry rate indicators do not provide with sufficient granularity. This analytical gap itself represents an important agenda for empirical institutional research.

From the Knightian dimension, the reduction in business dynamism could reflect a change in the social distribution of judgment under uncertainty. If the returns to productive entrepreneurial activity are increasingly uncertain — because digital technology cycles are shorter and obsolescence faster — while the returns to regulatory rent-seeking are more predictable — because captured regulatory positions offer stable rents — one would expect precisely the observed pattern: greater concentration of talent in established large firms, which can sustain uncertainty through scale and diversification, and reduced independent entrepreneurial activity that implies bearing irreducible risks without that safety net. This hypothesis connects directly to the institutional dimension.

From the Baumolian institutional dimension, the most concerning hypothesis suggested by the reviewed evidence is that the decline in business dynamism in advanced economies partly reflects a deterioration of the institutional environment that historically favoured productive entrepreneurial activity. The increase in market concentration, the growing complexity of the regulatory framework that raises compliance costs for new entrants, the hardening of intellectual property protection as an instrument of competitive exclusion rather than innovation incentive, and the political capture of sectoral regulators by established industries are all indicators of a Baumolian tendency: the displacement of talent from productive toward unproductive activity, and the consolidation of advantage positions through non-innovative means. If this interpretation is correct, the implications for institutional theory are significant: it suggests that advanced capitalist economies are experiencing endogenous institutional degradation — a process in which the very success of productive entrepreneurship generates sufficient rents to finance the lobbying activities that redirect future entrepreneurship toward rent-seeking.

## **5. CONCLUSIONS: THEORETICAL AND POLICY IMPLICATIONS**

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This paper has argued that the four major traditions in entrepreneurship theory — Schumpeterian, Kirznerian, Knightian and Baumolian — are complements rather than rivals, and that their integration into a unified framework of institutional political economy produces substantially greater explanatory power than any of them considered in isolation. The principal theoretical contribution of the paper is the proposal of a four-dimensional analytical framework — innovation, epistemic discovery, judgment under uncertainty, and institutional environment — that captures the conceptual core of each tradition without sacrificing the internal coherence of any of them.

The proposed synthesis does not amount to an eclectic sum of the four traditions, which could result in a theory that explains everything and predicts nothing with rigour. The four propositions of the integrated framework are logically independent of one another: they formulate empirically distinguishable claims about distinct dimensions of the entrepreneurial phenomenon, and can therefore be subjected to differentiated empirical testing. Their articulation in a unified framework allows the identification of which type of explanation is most relevant in which type of historical and institutional

context: the Schumpeterian dimension is most explanatory in periods of radical technological transformation and in frontier sectors; the Kirznerian, in periods of post-innovation adjustment and coordination and in mature markets with persistent informational imperfections; the Knightian, when the analytical focus is the nature of individual decisions under genuine uncertainty and the role of risk distribution mechanisms; the Baumolian, when the objective is to compare entrepreneurial behaviour across different institutional environments or to explain its historical and cross-national variation.

The application of the integrated framework to the empirical evidence on creative destruction in contemporary capitalism reveals a more nuanced picture than that offered by conventional business dynamism indicators. The apparent paradox of a capitalism producing accelerated technological innovation while simultaneously exhibiting signs of declining dynamism can be resolved, at least partially, by recognising that creative destruction is not a uniform, stable and homogeneously distributed process but a dynamic that adopts different forms — morphologically, geographically and sectorally — in different moments and institutional contexts. What appears to be changing in contemporary capitalism is not necessarily the intensity of creative destruction but its architecture: the size of the actors who drive it, the sectors in which it concentrates, the financing mechanisms that sustain it and the regulatory instruments that govern it.

The implications for public policy are significant and deserve at least provisional articulation. If the Schumpeterian diagnosis is most relevant — if the problem is a genuine reduction in the rate of radical innovation — the priority policies are those that strengthen basic science systems, support venture capital in the highest-uncertainty stages, and reduce regulatory barriers to technological experimentation. If the Kirznerian diagnosis is most appropriate — if the problem is a reduction in the space for discovery and arbitrage — competition policy and reduction of entry barriers are the adequate instrument. If the Knightian diagnosis is the determining one — if the problem is an inadequate social distribution of the uncertainty burden that discourages independent entrepreneurial judgment — then attention must be directed toward financing and risk distribution mechanisms that make bearing genuine uncertainty socially accessible beyond the confines of large established organisations. And if the Baumolian institutional diagnosis is central — if the problem is institutional deterioration that diverts talent

toward unproductive activity — then the public policy priority is not to promote entrepreneurship but to reform the institutions that direct its orientation: to strengthen competition policy against the anti-competitive practices of established firms, to reform the intellectual property system to restore its function as an incentive to innovation rather than a barrier to competition, and to reduce the regulatory capture that allows established industries to insulate themselves from the competitive challenge of new entrants.

From the perspective of institutional economics specifically, these findings point to a research agenda centred on the endogenous dynamics of institutional change as they relate to entrepreneurship. The Baumolian interpretation of declining dynamism suggests that productive entrepreneurship carries within itself a potential institutional contradiction: successful innovative firms generate sufficient rents to finance the lobbying activities that, over time, redirect the incentive structure of the institutional environment toward rent protection rather than innovation promotion. This dynamic — which one might call Baumolian institutional erosion — is not easily captured by existing models of institutional change, which tend to emphasise either exogenous shocks or gradual path-dependent drift. Understanding the mechanisms through which successful capitalism can generate the institutional conditions for its own dynamism to stagnate is one of the most important questions that institutional political economy can address.

The research agenda opened by this paper remains extensive. Among the questions that merit further development: a more rigorous formalisation of the integrated framework that allows the derivation of testable predictions suitable for empirical work in the NIE tradition; a systematic comparative empirical analysis that tests the framework's hypotheses across different institutional and geographic contexts, exploiting cross-national variation in dynamism indicators and institutional quality measures; an extension of the analysis to emerging economies in Latin America, Sub-Saharan Africa and South-East Asia, where the interaction between institutional quality, uncertainty and innovation takes specific forms with particularly urgent policy implications for development; a more detailed examination of the mechanisms through which the Baumolian institutional environment can be reformed — through competition law, intellectual property reform, anti-corruption measures and democratic accountability mechanisms — without discouraging entrepreneurial activity during the transition process; and a deeper engagement with the question of how institutional change itself can

be understood as an entrepreneurial process in the Kirznerian and Knightian sense, with agents discovering opportunities for institutional innovation and exercising judgment under uncertainty about whether proposed institutional changes will produce the intended effects. The four traditions that this paper has attempted to integrate have substantial contributions to make to all of these questions, and their sustained dialogue within the institutional economics programme is likely to prove considerably more productive than their continued theoretical separation.

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