THE FIRM AND THE ORGANIZATION OF PERCEPTIVENESS UNDER DYNAMIC EFFICIENCY

ARTUR MARION CEOLIN*

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I. INTRODUCTION

Perceptiveness is a central characteristic of entrepreneurship (Huerta de Soto, 2010). Nevertheless, in concrete market processes, perceptiveness does not automatically lead to the exploitation of opportunities. To become economically effective, it must be embodied in an organized structure of production; that is, it must lead to a particular arrangement of resources through which entrepreneurs seek profit.

In the *Theory of Dynamic Efficiency*, this problem becomes especially relevant. While this perspective clarifies how coordination is an open-ended entrepreneurial process, it remains insufficiently clear how perceptiveness is translated into an operative structure of production. Recent contributions have sought to apply the framework of dynamic efficiency to different dimensions of economic organization, clarifying its implications for the emergence and organization of the firm (Marion Ceolin, 2025), yet the implications of this framework have not yet been systematically integrated.

I address that gap by explaining how the firm emerges as the deliberate order through which entrepreneurial perceptiveness becomes operational in production. In this context, firms enable entrepreneurs to overcome the limits of individual action by

* PhD in Social and Legal Sciences from Universidad Rey Juan Carlos (URJC). Fellow, Instituto Mises Brasil.

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coordinating the use of heterogeneous resources and the division of labor. The firm thus emerges not merely as the setting in which operations take place, but as the institutional arrangement that makes entrepreneurial plans executable in the market process.

This challenge requires a concept that the *Theory of Dynamic Efficiency* has not yet fully developed: governable perceptiveness. Within the firm, entrepreneurs hire labor and therefore depend on the perceptive capacities of multiple agents whose knowledge they cannot control. Governable perceptiveness refers to the portion of the distributed perceptiveness of agents within the firm that the directing entrepreneur can orient toward a coherent production plan. It is a relational and organizational concept that describes the degree to which the creative and interpretive capacities of others can be brought into productive coherence under entrepreneurial direction.

Governable perceptiveness provides the analytical thread connecting three dimensions of the firm. First, the article explains the emergence of the firm as a response to the limits of individual perceptiveness and as the means through which entrepreneurial perceptiveness becomes institutionalized in production. Second, it examines the internal organization of the firm under dynamic efficiency as a deliberate yet revisable order through which entrepreneurs coordinate heterogeneous assets under dispersed knowledge and uncertainty. Third, it argues that firm boundaries reflect the limits of governable perceptiveness, since expansion weakens the entrepreneur's capacity to govern the perceptiveness of agents within the firm, generating constraints on expansion that are epistemological in nature rather than contractual or technological. In doing so, it moves beyond current developments in the *Theory of Dynamic Efficiency* by offering a comprehensive and integrated analysis that connects the emergence of the firm, its dynamic internal organization, and its endogenous boundaries within a single coherent framework.

II.
THEORETICAL BACKGROUND

The *Theory of Dynamic Efficiency*, developed primarily by Huerta de Soto (2004, 2010) and further elaborated by Espinosa (2022), Matarán (2024), Ravier (2020), Wang (2017, 2023), among others, conceives the market process as an open process of social coordination grounded in entrepreneurial creativity.

In this sense, a particular individual capacity is central to the human feature that allows entrepreneurs to create (or, in Huerta de Soto's words, discover ex nihilo) profit opportunities: perceptiveness. Perceptiveness is the interpretive ability that grounds individual thymological understanding of market conditions and future-oriented economic calculation, leading to entrepreneurial planning and choice (Huerta de Soto, 2010).

This point is especially important for understanding production. In Austrian capital theory, production is not a merely technical combination of inputs, but an intertemporal coordination of heterogeneous capital goods, complementary functions, and human plans. Mises (1998) emphasizes that production always requires action oriented toward future states of affairs, while Lachmann (1956) and Huerta de Soto (2006) stress that capital goods derive their economic meaning from the plans in which they are embedded. More recently, Bylund (2016, 2020, 2022) argues that production involves the organization of specialized tasks and complementary capabilities under uncertainty. From this perspective, entrepreneurial perceptiveness not only identifies market opportunities; it must also be translated into a concrete arrangement of capital, labor, time, and knowledge.

It is here that the firm becomes theoretically relevant. Huerta de Soto (2010, pp. 117-118) describes the firm as an island of organization that arises from individual perceptiveness. The role of the entrepreneur as the organizer of production has deep roots within the Austrian tradition. For Mises (1998), entrepreneurs are the agents who determine the allocation of capital through economic calculation, bearing the consequences of their choices. Rothbard (2004) extended this view, arguing that the capitalist-entrepreneur combines resources according to a plan, in pursuit of profits, while remaining exposed to the uncertainty of the future (D'Andrea, 2024).

The firm can therefore be understood as a deliberate order through which the entrepreneur seeks to render perceptiveness operational in production. Drawing on Hayek's (1964, 1973) distinction between spontaneous orders and organizations, the firm is not a spontaneous market order, but a purposive arrangement governed by rules, plans, authority, and coordinated expectations. It emerges when entrepreneurial judgment requires a relatively coherent structure capable of aligning heterogeneous resources and multiple agents toward a conjectured future end.

However, although the *Theory of Dynamic Efficiency* offers a powerful account of entrepreneurship, creativity, and social coordination, it does not yet fully specify how entrepreneurial perceptiveness is converted into an organized structure of production. It leaves underdeveloped the internal mechanisms through which perceptiveness becomes firm organization, the way deliberate coordination is revised through time, and the limits that constrain the entrepreneur's ability to preserve coherence as the firm expands. This article addresses that gap by examining the emergence, internal organization, and boundaries of the firm under dynamic efficiency.

The theoretical relevance of the firm has been addressed from different perspectives in the literature, focusing, for example, on resources (Penrose, 1959; Barney, 1991) and knowledge (Grant, 1996; Kogut & Zander, 1992). Although these perspectives contributed to the understanding of the role of the firm in the market process, the perspective of dynamic efficiency adds relevant propositions to the literature, as Huerta de Soto (2004, 2010) takes into consideration the characteristics of subjective knowledge created in the entrepreneurial process.

III. THE EMERGENCE OF THE FIRM IN THE THEORY OF DYNAMIC EFFICIENCY

Within Huerta de Soto's framework, firms arise as organizational solutions to the intrinsic limits of individual perceptiveness (Huerta de Soto, 2010, pp. 117-118). Although entrepreneurship is fundamentally an individual act, the cognitive and practical capacities of any single entrepreneur are necessarily bounded. As Huerta de Soto (2010) emphasizes, individuals face constraints in their ability to assimilate, interpret, and coordinate dispersed knowledge within complex economic environments.

As entrepreneurial projects grow in scope and intertemporal complexity, the entrepreneur's subjective plan increasingly exceeds the limits of individual action (Huerta de Soto, 2010, pp. 33-34). The entrepreneur must increasingly depend on the perceptive capacities of others, raising the question of how much of that distributed perceptiveness can be governed toward a coherent, productive plan. At this point, the firm emerges as a deliberate organizational structure that enables the entrepreneur to extend their own perceptive capacity beyond personal constraints. Through the firm, entrepreneurs are able to integrate multiple sources of knowledge, coordinate heterogeneous resources, and structure production processes that could not be sustained through isolated individual action alone.

In this sense, firms function as mechanisms through which entrepreneurial perceptiveness is expanded and operationalized. By creating internal structures of coordination, division of labor, and authority, entrepreneurs transform their subjective interpretations of market conditions into organized patterns of production (Marion Ceolin, 2025). The firm thus becomes a means of amplifying individual perceptiveness. It embeds perceptiveness in an institutional arrangement capable of mobilizing the knowledge and capacities of multiple actors. Once individual capacity reaches its limits, firms enable entrepreneurs to delegate tasks and distribute cognitive responsibilities.

There is an intellectual division of labor (Mises, 1920) or dispersion of knowledge (Hayek, 1937, 1945), and that does not mean a dispersion of collectible information, but a dispersion in the generation of entrepreneurial knowledge in the entrepreneurial process. This limitation appears when individuals reach the point at which they can no longer profitably act upon the opportunities they have conceived.

Although the organization of the firm depends on the entrepreneur, it cannot be reduced to the entrepreneur alone. Production requires the coordinated participation of multiple individuals, each possessing specific knowledge and creative capacities. Under dynamic efficiency, the entrepreneur must therefore establish an arrangement that cannot be governed through complete central control (Huerta de Soto, 2010, p. 118). The division and dispersion of knowledge impose natural limits on centralized control. This makes some degree of internal decentralization unavoidable.

The firm is not a mere extension of entrepreneurial perceptiveness, but rather the institutional locus in which perceptiveness becomes a coherent plan of production. The firm provides the institutional framework that turns perceptiveness into organized action. It must be embedded in a stable structure of execution that preserves the coherence of the entrepreneurial plan through time, aligns complementary capital goods (see Lachmann, 1947, 1948, 1956) within a single direction of action, and organizes a division of labor around that plan.

Such plans require an institutional arrangement capable of preserving coherence through time. In this sense, the firm is the deliberate planning order that makes entrepreneurial perceptiveness operational[1]. Entrepreneurs can act outside firms, as they can discover and pursue profit opportunities in many settings. Nevertheless, some plans cannot be carried out through isolated market transactions, requiring the coordinated use of heterogeneous capital. They require stable complementarities among resources (Lachmann, 1947, 1948; Barbieri, 2001).

Firms are not arbitrary creations, but specific institutional arrangements that emerge from perceptiveness, put it into motion, and are committed to the employment of means in production. In this sense, the firm is the deliberate planning order through which entrepreneurial interpretation is converted into the coordinated performance of a plan of production.

The conditions of entrepreneurial projects involve more than the simple employment of isolated capital goods (see, e.g., Klein, 2016). They require the coordination of heterogeneous resources, the combination of complementary assets, and the assignment of specific functions to both capital and labor within an intertemporal

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[1] Felin and Zenger (2009, 2017) argue that entrepreneurs act as theorists, formulating subjective conjectures about how resources can be combined to create value. The firm emerges as the concrete expression of this entrepreneurial theory. The firm is the institutional arrangement through which a conjecture is tested.

process. Capital goods acquire their productive meaning only within a plan (Huerta de Soto, 2006). The plan specifies their role in a causal sequence of actions, and such sequences frequently depend on the disciplined alignment of multiple tasks performed by different individuals (Lachmann, 1956; Mises, 1998). The firm enables the entrepreneur to construct and maintain this alignment by providing a deliberate allocation of resources. Penrose's (1959) conception of the firm as a bundle of productive services, rather than resources per se, emphasizes that what matters is not the objective characteristics of resources but the entrepreneur's subjective interpretation of how they may be deployed.

Under dynamic efficiency, the firm is especially important because entrepreneurial plans often require complementarities that cannot be fully exploited through isolated market exchanges. Entrepreneurs frequently depend on the coordination of interdependent assets and capabilities, which must be arranged as a coherent, productive system rather than as a set of independent transactions. In this sense, firms serve as the locus where entrepreneurs can mold unique combinations of heterogeneous resources into complementary structures of production, enabling the development of capabilities that reflect the particular requirements of each project.

Moreover, within the firm, entrepreneurs can align not only material capital goods but also the division of labor and the discretionary allocation of tasks. By hiring employees to perform specific functions, entrepreneurs incorporate additional knowledge and productive capacity into their plan while preserving the unity of direction required by the enterprise. The firm, therefore, becomes the institutional arrangement through which entrepreneurs coordinate the contributions of multiple individuals, integrating their actions into a single productive order oriented toward entrepreneurial ends.

Finally, the firm also provides the practical framework for economic calculation within entrepreneurial projects. Entrepreneurs define means and ends, evaluate alternative uses of resources, and act under uncertainty, seeking profit opportunities through the organization of production (Mises, 1998; Huerta de Soto, 2010). In this context, the firm emerges as the arrangement that makes such plans operational by organizing the use of capital and labor into a coherent structure capable of producing for uncertain future markets. The firm is therefore not merely an auxiliary instrument of entrepreneurship, but a central institutional means through which entrepreneurial plans are articulated, executed, and sustained in the market process.

When entrepreneurs hire the labor of others, they can partially guide the exercise of perceptiveness within the firm. Employees are not mere executors of commands. They are themselves perceptive agents, continuously creating entrepreneurial knowledge that the directing entrepreneur can neither fully anticipate nor completely control. What the entrepreneur can do is establish the conditions (through command, rules, and the development of a shared perspective of action) under which the perceptiveness of others is partially oriented toward the coherence of the productive plan. This is the meaning of governable perceptiveness: not the entrepreneur's own perceptiveness extended over the firm, but the portion of the distributed perceptiveness of agents within the firm that can be directed toward a common productive purpose.

This concept relates to the distinction between original and derived judgment developed by Foss, Foss, and Klein (2007). While the original judgment belongs to the directing entrepreneur, the derived judgment is exercised by agents who receive delegated authority within specific domains of the productive structure. Governable perceptiveness is the perceptiveness that operates under derived judgment: the portion that can be productively oriented toward the execution of the entrepreneurial plan.

The portion that cannot be oriented through derived judgment becomes, from the standpoint of the directing entrepreneur, ungovernable. When delegated judgment exceeds the entrepreneur's capacity to keep agents' perceptiveness oriented toward the production plan, delegation tends to become unproductive or even destructive, as derived judgment would no longer be aligned with the production plan. Therefore, one of the limits of delegated judgment is the boundary of governable perceptiveness.

There is, therefore, an inherent limit to how far this governance can reach. Beyond a certain point, the perceptiveness of agents within the firm escapes the entrepreneur's directing capacity — it becomes ungovernable, dispersed, and potentially dissonant with the productive plan. It is precisely this limit that the following sections will examine: first by considering how the internal organization of the firm is structured to maximize governable perceptiveness, and then by showing how the boundaries of the firm are endogenously determined by the point at which perceptiveness ceases to be governable.

IV.
THE ORGANIZATION OF THE FIRM UNDER DYNAMIC EFFICIENCY

1. The Firm as the Organizational Expression of Perceptiveness

Once entrepreneurial goals are established, entrepreneurs put capital into motion by creating an entity capable of executing a specific productive activity. Within the firm, resources acquire meaning in relation to the entrepreneur's plan. Capital goods are assigned functions, labor is organized into roles, and complementary assets are combined in ways that would not necessarily emerge through spontaneous market coordination alone. The firm becomes the locus where entrepreneurs design and implement an internal structure that enables the practical execution of intertemporal production plans.

From this perspective, the organization of production within the firm can be understood as a process of transforming perceptiveness into a deliberate arrangement. Entrepreneurs make asset allocation decisions, establish internal patterns of specialization, and structure the division of labor so that the various elements of production become mutually consistent. In doing so, the firm allows heterogeneous resources to be organized as a coherent system, coordinating complementary assets toward entrepreneurial ends.

In this sense, the organizational expression of perceptiveness is simultaneously the first act of governing it: by assigning functions, structuring roles, and combining complementary assets, the entrepreneur begins to orient the distributed perceptiveness of agents toward the productive plan.

Firms possess a structuring component. They are structured entities that result in the coordinated use of resources. They incorporate a division of labor, defined by entrepreneurs, and often based on the guidelines they previously defined. As Hayek (1973) explained, orders involve an arranged state of affairs. In deliberate orders, the state of affairs results from direct deliberation. The founders and controllers of the order establish a system in which work and resources are coherently organized. Within firms, the task of orientation and arrangement of affairs is an entrepreneurial task.

If the firm is a deliberate planning order that renders perceptiveness operational, the central theoretical task is to specify the transformations through which entrepreneurial interpretation becomes a workable, though revisable, pattern of execution. Perceptiveness does not by itself yield organizational coherence. It must be institutionalized into a plan-execution architecture that sustains intertemporal complementarities, aligns heterogeneous capital uses, and copes with dispersed and continually changing knowledge.

Entrepreneurs are responsible for the combination and re-combination of assets (Lachmann, 1947, 1956). They do not simply design a structure and then allow individuals to perform within it, since they cannot achieve an equilibrium position in the market process. Conditions are changing, and entrepreneurs are constantly seeking better use of resources and anticipating consumer demand.

2. **Authority, Rules, and the Governance of Distributed Perceptiveness**

Against this background, entrepreneurial authority within firms functions primarily as a coordination mechanism for heterogeneous and complementary capital goods, rather than merely as a hierarchical control structure. Authority is not an end in itself, nor is it reducible to discipline or monitoring.

The governance of distributed perceptiveness within the firm differs from the problem addressed by principal-agent theory (Jensen & Meckling, 1976). Principal-agent theory focuses on incentive alignment under information asymmetry between a principal and an agent with potentially divergent interests. The present account treats the central organizational challenge not as one of aligning incentives but of orienting the distributed and continuously created perceptiveness of agents toward a coherent production plan.

Authority serves the practical role of ensuring coherence among interdependent activities, aligning the use of resources with the entrepreneurial plan. With authority, entrepreneurs can turn their perceptiveness into a deliberate planning and coordination structure, turning subjective plans into organized sequences of tasks and productive routines.

The scope of the structure is not mechanical: entrepreneurs arrange not only the work of machines but also the individual performance of certain tasks, which require the employment of specific entrepreneurial knowledge. Thus, the relevant dimensions of organization design[2] (Joseph & Sengul, 2025) are not mechanical settings but prospective arrangements of authority, coordination, capital goods, and work.

The knowledge-based view of the firm (KBV), developed by Grant (1996) and Kogut and Zander (1992), offers a partial parallel to the argument developed here. For the KBV, the firm exists precisely because it integrates and coordinates dispersed individual knowledge more efficiently than markets can. The primary problem of organization is therefore epistemological: how to combine specialized knowledge held by different individuals into a coherent, productive outcome.

This resonates with the Austrian account of dispersed and tacit entrepreneurial knowledge. However, a fundamental divergence separates the two frameworks. From the perspective of dynamic efficiency, entrepreneurial knowledge is not a stock but a flow: it is

[2] Joseph and Sengul (2025) synthesized various research on the subject and identified four interconnected dimensions of organization design: configuration, control, channelization, and coordination.

created ex nihilo through the exercise of perceptiveness, modified continuously as entrepreneurs reinterpret market conditions, and cannot be centralized or fully articulated. The organizational implications are profound: the *Theory of Dynamic Efficiency* holds that no such optimal knowledge integration is attainable, since the knowledge to be coordinated is itself being created and revised throughout the process of coordination.

For a firm to rely on commands alone, knowledge would have to be concentrated in the commanding authority, and a command would have to be formulated for every relevant fact (Ioannides, 2003). In a dynamically efficient and complex reality, firms cannot rely only on commands. In this sense, a type of organizational rule is developed. These rules that coordinate the work are different from the rules that emerge naturally in spontaneous orders. As Hayek (1964) pointed out, rules of organizations are rules developed to direct the performance of specific tasks, presupposing the deliberate disposition of employees by command. Based on this structure, rules regulate the details of actions.

Within the structure of the firm, individuals may also develop a shared interpretive orientation, which gives individual action a more cohesive sense-making framework. Rules are relevant to stabilize and govern individual action, but they also have their limits. Proxy-entrepreneurs must incorporate a specific action framework and an interpretive perspective that guide the performance of derived judgment. This shared perspective enables the use of specific entrepreneurial knowledge while maintaining the coherence of the entrepreneurial plan in pursuit of profit and entrepreneurial purposes.

Individuals are not tabula rasas that can receive complete indoctrination, but their ideologies influence them in their choices. As Mises (1998, pp. 178-184) explains, ideologies are the doctrines concerning individual actions and social arrangements. Therefore, ideologies have a particular role in shaping our interpretation of facts and guiding our actions. Firms cannot mold the capacities of their employees ex nihilo, but they can orient them by fostering particular knowledge and encouraging a more coherent pattern of action. This is not an instantaneous process; firms develop such a shared perspective through continuous recruitment, selection, and development.

There is no delegation without authority. Entrepreneurs control the residual rights to the employment of their capital, and they decide whether to exercise those rights directly or indirectly (through delegation). Intrapreneurship is constantly constrained and depends on the entrepreneurial authority, which decides the limits for the exercise of intrapreneurship within the firm.

The concept of intrapreneurship has been extensively analyzed in management literature (Burgelman, 1983; Pinchot, 1985). The present account extends this perspective: where Pinchot and Burgelman focus on the structural and incentive conditions for intrapreneurial activity, the *Theory of Dynamic Efficiency* highlights that the creative perceptiveness of employees is neither fully predictable nor fully governable by the directing entrepreneur.

The delegation of governable perceptiveness is not arbitrary, as it is mediated and disciplined by monetary calculation. As Mises (1944, pp. 32-33) explains, economic calculation provides the entrepreneur with an indispensable tool for measuring the efficiency of delegation. It allows the entrepreneur to evaluate whether delegated judgment is being productively exercised by intrapreneurs. Without calculation, delegation becomes uncontrollable, as the entrepreneur loses the means to assess whether the distributed perceptiveness of agents is generating value or dissipating it. Monetary calculation enables the entrepreneur to align distributed perception across the firm's productive structure.

In contemporary organization theory, coordination is one of the main tasks of design (as in Burton & Obel, 2018; Joseph & Sengul, 2025). It is a key aspect of the organization of the firm, understood here as a dynamic arrangement that coordinates the inter-subjective creation of entrepreneurial knowledge and the organization of purposeful actions within a production process.

3. **Provisional Coherence: Organization Under Dynamic Efficiency**

The provisional nature of organizational coherence follows directly from the nature of governable perceptiveness itself. Since the perceptiveness of agents within the firm is continuously created and revised, the governance of that perceptiveness can never be fully stabilized.

There is a paradox in the relationship between firms and entrepreneurial knowledge. Firms contain a specific plan. They are created to organize resources, as entrepreneurs see them as the most suitable structure for their goals (Huerta de Soto, 2010, p. 117). By contrast, the dynamically efficient process of entrepreneurial creation is a spontaneous process based on individual perceptiveness. Indeed, based on this paradox, Huerta de Soto (2010, p. 117) proposes that there is a critical size for the firm related to the volume of entrepreneurial knowledge it can efficiently coordinate. In his understanding, the division of knowledge becomes broader and deeper, and the expansion and integration of each firm becomes more difficult. The nature of entrepreneurial knowledge may therefore counteract the trend towards the "economies of scale" (Huerta de Soto, 2010, p. 118).

As action is future-oriented, the internal organization of the firm must be continually revised in light of changing entrepreneurial perceptions, which in turn modify entrepreneurs' knowledge and their interpretation of how resources should be organized. In this sense, an optimum structure is unattainable.

The firm reflects entrepreneurs' subjective evaluations about resources and how people are likely to act, resulting in a particular perspective on how consumers can be satisfied. Hence, the firm is a deliberate order, the most appropriate means to exercise entrepreneurship and organize production processes. Entrepreneurs, guided by their interpretation of markets and subjective deliberation, establish a unique organizing perspective that shapes the firm's architectural development. Firms are deliberate entrepreneurial orders precisely because entrepreneurship is their essential aspect.

Every design is therefore an active real-time experiment, a product of entrepreneurial subjective perceptiveness grounded on ex-ante evaluation. There is no perfect positioning or quantifiably efficient design of a firm. In this sense, a firm under dynamic efficiency is understood as a provisional organization of complementarities, an attempt to convert expectations into workable responsibilities and interfaces.

Within this dynamic process, the internal organization of the firm is never fully settled. Firms develop arrangements that continually seek to create value, and the process of internal organization depends not only on entrepreneurial decisions but also on how intrapreneurs employ the creative capacities they develop within the firm.

V.
GOVERNABLE PERCEPTIVENESS AND THE BOUNDARIES OF THE FIRM

Huerta de Soto's theory implies that the limits of governable perceptiveness ultimately constrain the boundaries of the firm. In a way that parallels Rothbard's (2004, pp. 645-651) extension of the economic calculation argument, Huerta de Soto (2010, p. 117) offers a complementary explanation of firm boundaries that goes beyond contractual or purely technological accounts.

As Huerta de Soto (2010, p. 118) explains:

> "In fact, as the division of knowledge becomes broader, deeper, and more detailed, and social and economic processes grow more complex as a result, it becomes more difficult for a company to integrate vertically and expand, since its management has to interpret and use a larger volume of more complex information."

Huerta de Soto emphasizes the interpretive limits involved in organizing production as the division of knowledge deepens (Mises, 1998; Huerta de Soto, 2010). At a certain point, the complexity of these processes exceeds the capacity of managers to interpret and apply the knowledge required for coordination. Huerta de Soto therefore posits a critical size beyond which further expansion becomes inefficient, not because coordination is impossible in principle, but because the interpretive demands of integration become increasingly unmanageable (Huerta de Soto, 2010, pp. 117-118).

This limitation becomes particularly evident when internal integration reduces the scope of external market prices for capital goods. As firms expand and internalize transactions, market price signals are replaced by internal transfers and administrative estimates. Even when managers attempt to approximate market values, such calculations remain inevitably arbitrary, since they lack the informational and disciplinary function of genuine exchange (Mises, 1998; Huerta de Soto, 2010).

The limits of firm growth, for Penrose (1959), derive from managerial capacity: the ability to coordinate an expanding resource base coherently over time. This resonates with the argument developed here, insofar as both accounts locate the boundaries of the firm in a cognitive and coordinative constraint rather than in technological or contractual factors. The present account may therefore be read as recovering the subjectivist and dynamic spirit of Penrose's original insight within a more rigorous entrepreneurial framework, while rejecting the objectivist turn taken by mainstream RBV.

The epistemological nature of governable perceptiveness distinguishes the present perspective from the principal theories of the firm in the literature. Transaction cost economics (Coase, 1937; Williamson, 1985) locates the existence and boundaries of the firm in comparative governance costs. The knowledge-based view (Grant, 1996; Kogut & Zander, 1992) shifts the focus to knowledge integration, treating the firm as a superior mechanism for combining dispersed individual knowledge into productive outcomes. The resource-based view (Barney, 1991) explains the firm through the possession and deployment of valuable resources and capabilities. In each case, the firm is understood largely as a response to given conditions that exist independently of the entrepreneurial act of interpretation.

The *Theory of Dynamic Efficiency* inverts this logic. Firms emerge as expressions of entrepreneurial perceptiveness about how resources, knowledge, and complementarities can be organized to create value that does not yet exist. The relevant constraint is therefore not the cost of contracting, the difficulty of knowledge absorption, or the availability of strategic resources, but the entrepreneur's capacity to sustain governable perceptiveness as the firm's productive structure grows in complexity. This is an epistemological constraint in the precise sense: it concerns not what the entrepreneur knows, but the entrepreneur's ongoing capacity to interpret, coordinate, and revise a structure of production whose knowledge base is itself being continuously created and dispersed throughout the market process. Where governable perceptiveness reaches its limits, the firm reaches its boundaries: not because contracts become too costly or resources too scarce, but because productive coherence can no longer be sustained internally.

There is a limit at which the entrepreneur loses the ability to influence and coordinate the different activities of individuals within the firm, leading to a loss of coherence. The recognition of subjectivity and individual perceptiveness allows a more precise understanding of the limits of the firm. In addition to the calculation limitation, there is an entrepreneurial limitation in coordinating individual perceptiveness.

This limit manifests in two directions. Under-delegation concentrates more power in the entrepreneur than can be effectively exercised, generating overload and organizational rigidity. In this situation, entrepreneurs concentrate more decisions in their own hands than they can effectively exercise and therefore fail to capitalize on employees' perceptive capacity. The firm, therefore, could expand its delegation and scope of activities, but under-delegation blocks these developments.

Over-delegation, by contrast, fragments productive coherence. As intrapreneurs operate increasingly autonomously, the rules established by the entrepreneur become less easily transmitted, and agents progressively escape orientation. Over-delegation occurs when the scope of delegated judgment exceeds the limits of governable perceptiveness, leading to an unproductive or destructive exercise of judgment. Although agents may appear "efficient" within their narrow domains of action, their decisions may generate dispersed and non-cohesive results at the level of the entrepreneurial plan, thereby undermining entrepreneurial profitability.

Beyond a certain scale, these problems are compounded by the difficulty of sustaining the ongoing creation of entrepreneurial knowledge. As organizational complexity increases, the firm faces greater challenges in generating, transmitting, and coordinating the dispersed knowledge necessary for effective adaptation. The widening gap between the complexity of the productive structure and the interpretive capacity of those directing it weakens the firm's ability to reorganize resources competitively. In this sense, the firm's boundaries reflect the limits of organizationally governable perceptiveness: the point at which further expansion undermines the entrepreneur's capacity to coordinate heterogeneous resources in a coherent and economically meaningful way (Huerta de Soto, 2010).

VI. IMPLICATIONS

By clarifying the relevance of the firm for the dynamically efficient market process, the present article has several theoretical implications. For the theory of the firm, the article offers an entrepreneurial-cognitive microfoundation of the firm. Firms should not be treated merely as contractual arrangements, but as deliberate orders through which entrepreneurial perceptiveness becomes a structured organization of production. Firms are not mere appendices to entrepreneurship, but essential devices for the execution of entrepreneurial plans. The firm, therefore, acquires a microfoundation centered on perceptiveness, rather than only on contracts, resources, or transaction costs.

For internal organization and organization design, the argument suggests that coordination within the firm should be understood as an epistemological and entrepreneurial problem, not merely as a technical one. Internal structure serves to preserve coherence under conditions of dispersed knowledge, heterogeneous capital, and uncertainty. In this sense, the article dialogues with the literature on organizational design, knowledge coordination, and entrepreneurial governance, while adding a specifically Austrian account of how internal organization emerges from the need to operationalize entrepreneurial perceptiveness. Organizational design is not merely a technical arrangement of tasks, incentives, or routines, but rather a provisional structure through which the entrepreneur seeks to preserve coherence among heterogeneous assets, dispersed knowledge, and evolving expectations.

Regarding firm boundaries, the article implies that the limits of the firm do not derive from technology, contracts, monitoring costs, or transaction costs alone, but from the limits of governable perceptiveness. As productive structures become more complex, the entrepreneur's capacity to interpret, coordinate, and maintain coherence weakens, generating endogenous limits to expansion. In this way, the article links firm emergence, internal organization, and firm boundaries within a unified account of production under dynamic efficiency.

For entrepreneurship theory, the article implies that entrepreneurship should not be understood only as the discovery or creation of opportunities, but also as the organization of production required to make those opportunities operational. Entrepreneurial action does not end with perception; it requires the construction of arrangements capable of transforming perceived possibilities into coordinated productive activity. The firm is thus the institutional continuation of entrepreneurship in the domain of production.

More broadly, the article contributes to the *Theory of Dynamic Efficiency* by showing that the firm is not external to the market process, but one of the institutional forms through which dynamic efficiency is pursued. If dynamic efficiency depends on creativity, coordination, and the continuous generation of new possibilities, then the firm must be understood as one of the central structures through which entrepreneurial creativity becomes organized, tested, revised, and executed over time.

VII. CONCLUDING REMARKS

This article has introduced governable perceptiveness as the central concept for understanding the organization of the firm under dynamic efficiency. Governable perceptiveness is the portion of the distributed perceptiveness of agents within the firm that the directing entrepreneur can orient toward a coherent, productive plan. The firm is, therefore, precisely the deliberate order through which this governance becomes possible: the institutional arrangement that transforms individual perceptiveness into coordinated, executable productive action.

I proceeded with the argument in three steps. First, the article explained that firms arise as a response to the cognitive and practical limits of individual entrepreneurship, serving as mechanisms that extend perceptiveness beyond personal boundaries by coordinating heterogeneous resources, dispersed knowledge, and intertemporal plans. Second, it examined the internal organization of the firm as a deliberate coordination in which entrepreneurs continuously reshape complementary assets and the division of labor. Third, it argued that the limits of governable perceptiveness endogenously determine firm boundaries. Beyond a critical size, the entrepreneur's capacity to govern the distributed perceptiveness of agents can no longer sustain productive coherence, as the deepening division of knowledge and growing complexity undermine the entrepreneur's ability to maintain coherence in the production arrangement.

These arguments constitute an integrated account of the firm that connects emergence, internal organization, and boundaries within a single coherent framework of dynamic efficiency. The concept of governable perceptiveness is the analytical thread that makes this integration possible, allowing the development of microfoundations of the firm within the *Theory of Dynamic Efficiency*. The firm is a central institutional form through which entrepreneurial creativity becomes organized, tested, revised, and executed over time. The article thus advances the *Theory of Dynamic Efficiency* by showing that the emergence, internal organization, and boundaries of the firm can be understood as different expressions of the same problem: the governance of distributed perceptiveness under entrepreneurial direction.

Conflict of interest

The author declares that he has no conflict of interest.

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