

## THE DIVISION OF LABOR AND THE FIRM: AN AUSTRIAN ATTEMPT AT EXPLAINING THE FIRM IN THE MARKET

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*ABSTRACT:* This paper reviews Austrian approaches to the firm and drafts a theory that emphasizes the firm as a market phenomenon. Here the firm is a vehicle for imaginative entrepreneurs to create artificially high factor density, thereby increasing its internal “extent of the market” to support specialization of factors beyond the general level of division of labor in the market. The firm therefore becomes a product of, and prospective catalyst for progressing the market’s overall division of labor, and the firm emerges as an entrepreneur-generated means toward increased efficiency and more roundabout production. It consequently may play a crucial role in the evolution of market structure and, by extension, the development of civilization.

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**JEL CLASSIFICATION:** L22, L23, L26

## INTRODUCTION

The theory of the firm has been a neglected area of study in mainstream economics. Despite Ronald Coase bringing the issue up for discussion in 1937, it was not on the research agenda until the 1970s. Even now, as both Coase and Oliver Williamson, the founder of and prominent scholar in the transaction cost<sup>1</sup>-focusing analysis of firm organization, have received the Nobel Prize in economics,<sup>2</sup> the area remains in the periphery of economic analysis.

Part of the reason the firm is not considered worthy of analysis in the economic mainstream is undoubtedly, to a degree, because it should not exist. Coase (1937) famously asked, from a mainstream neoclassical perspective, why there are firms and why they are so common in the market. After all, he argued, if the price mechanism is the overall efficient means of allocating resources to their best use, then the organization of a firm must be inefficient and, hence, should not survive. Coase answered his own question, pointing out that it may be costly to utilize the price mechanism and that the existence of such transaction costs provides a rationale for firms.

This conclusion follows directly from the Coasean identification of the firm as being organized very differently from the market's "atomistic competition"—it is strictly non-cooperative and hierarchical, whereas the market is characterized by horizontal price-based cooperation. His explanation for the existence of firms was therefore

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<sup>1</sup> Transaction costs were originally defined as the cost of carrying out a transaction by means of the price mechanism (Coase, 1937; 1960), but have more recently been more narrowly defined as e.g. information costs (Stigler, 1961), monitoring costs (Alchian and Demsetz, 1972), measurement costs (Barzel, 1982), and maladaptation costs arising due to the risk of opportunism (Williamson, 1979).

<sup>2</sup> The official name of the prize commonly referred to as the "Nobel Prize in Economics" is the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. It was not part of Alfred Nobel's original will, but was established in 1968 by the Sveriges Riksbank (Sweden's central bank) and is awarded every year by the Royal Swedish Academy of Sciences on behalf of the central bank.

that an “entrepreneur-co-ordinator”<sup>3</sup> is able to produce at lower cost by reproducing market allocation of resources through *directing* factors of production rather than utilizing the price mechanism.

Later analyses of the firm, such as in Transaction Cost Economics (Williamson, 1967; 1973; 1979), build on Coase’s insight but do not generally question his fundamental (but problematic) conjecture of the firm as a hierarchical and authority-based substitute to the market. Adopting the Coasean dichotomy, scholars have focused primarily on the discrete “firm-or-market” decision despite the difficulty of making real market phenomena fit squarely into the two categories.

More recently, scholars have attempted to study the intricacies of the multitude so-called “hybrid” governance structures (Williamson, 1991; see also e.g., Ménard, 2010), i.e., market organization of such nature that fits neither of the models used. Without going into the specifics of transaction cost theory, it seems the problems in the study of the firm and other organizational structures in the economy are due to the Coasean definition. As the studies show, most governance structures are neither purely market nor hierarchy, but hybrid.

Many Austrian economists tend to look favorably on Coase’s work (see e.g., Boettke, 1998; Foss and Klein, 2009). The reason for this is likely because Coase correctly identifies transaction cost economizing (1937; 1960) as an important part of economic calculation, but also because the Coasean view seems to offer a real alternative to the simplified mathematical models of mainstream economics. While it is true that the Coasean question has often been interpreted as a critique of the commonly used oversimplified mathematical models, it can just as well be seen as the very opposite. After all, Coase originally asked why there are firms from a position *within* the neoclassical framework and he (as does Williamson) relies fully on neoclassical assumptions. Rather than challenging them, his solution to the identified problem was to add to the neoclassical framework the concept of transaction costs.

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<sup>3</sup> Coase uses the word “entrepreneur” to denote what we would call a manager. The Coasean entrepreneur has little in common with the entrepreneur as discussed in e.g. Mises ([1949] 1963) or Rothbard ([1962] 2004).

One would think that the Austrian view, which is generally very critical of the over-simplifying neoclassical framework, would have supplied a theory of the firm based on sound economic theory. But despite the focus in Austrian economics on what Klein (2008a) calls “mundane economics,” and the fact that “the Austrians [have] so many necessary ingredients for a theory of the firm” (Foss and Klein, 2009, p. 3), there is no Austrian theory of the firm. Only recently have attempts been made to formulate a basis for such a theory, many of them accepting the Coasean definition of the firm.

The current state of the Austrian inquiry of the firm is assessed in the following section. I argue that the existing attempts fail to convincingly explain why there are firms because they are too narrowly focused on specific characteristics rather than on the firm in the market. I argue that Austrian economics already provides a sound basis for studying and explaining the existence of firms, and outline a theory of the firm that builds on an Austrian understanding of the market process and the division of labor. In the following section I show how Austrian approaches to studying the firm can easily be connected with core components of the mainstream theories of the firm. I also show that Austrian economics already has the power to explain firms as phenomena of and in the market, and that firms can be seen as providing entrepreneurs with a vital function. I conclude with a discussion on potential future research, in which I show how firms may play a much more important role in the specialized exchange economy than previously understood.

## PILLARS OF AN AUSTRIAN THEORY OF THE FIRM

Whereas the theory of the firm has been a neglected area of study in mainstream economics, it has been missing from the Austrian economics literature. Foss and Klein (2009) say it is “surprising” that Austrian economics from the beginning had many of the necessary components to construct a viable theory of the firm, “yet it was left to non-Austrian Ronald Coase to frame and analyse the problem of the existence, boundaries, and internal organisation of the firm” (2009, p. 3). While it is indeed surprising that Austrians did not identify this important area for economic analysis, it is

unfathomable that Austrians *after* Coase still did not seriously attempt to formulate an Austrian theory of the firm.

In fact, even as mainstream economists began to realize Coase's contribution, some thirty years after "The Nature of the Firm" (1937) was published, Austrians still had no such theory. About two decades after the rediscovery of Coase (1937) by Williamson (1967; 1973; 1979) and others (see e.g. Alchian and Kessel, 1962; Alchian, 1965; 1968; Alchian and Demsetz, 1972; Demsetz, 1967; Klein, Crawford and Alchian, 1978; McManus, 1975; Monsen Jr and Downs, 1965; Silver and Auster, 1969), O'Driscoll and Rizzo stated that "there is no [...] Austrian theory of the firm" (1985, p. 123) and another decade later Foss (1994) made the same observation and could still, a few additional years later, safely theorize about "the Austrian lack of interest in the firm" (Foss, 1997, p. 176). More than seventy years after Coase's seminal article, Foss and Klein identified that "a small Austrian literature on the firm has emerged" but that "[u]ntil recently the theory of the firm was an almost completely neglected area in Austrian economics" (2009, p. 2).

Even though there still is no Austrian theory of the firm, there are, as Foss and Klein point out, several attempts to formulate perspectives and approaches that can be used as pillars for an Austrian theory of the firm. A common starting point is the use of FA Hayek's (1937, 1945) analysis of the market in terms of knowledge; the firm here becomes a designed structure or planned order to distribute, support, and control information necessary for competitiveness in the production process (Foss, 1994; 2001; 2002; Garrouste, 2002). The purpose of this organization—*taxis* (Hayek, 1973)—is for the designer/entrepreneur to remain in control of vital information as well as with whom—and how—to share it. The firm is in effect seen as a vehicle, structured around purposeful direction (cf. Ioannides, 2003), aiming to standardize and distribute information and information use, and establish controlled communication. The firm is the entrepreneur's solution to his knowledge problem.

Closely related to the knowledge-based Austrian approach to the firm is the view of the firm as primarily a production process (Loasby, 2002) and the consequent focus on technology and the use thereof (Langlois, 2002). This body of literature emphasizes the structure of production and capital through time as analyzed by e.g. Böhm-

Bawerk (1890), Hayek (1941; [1935] 1967; [1939] 1969), Hicks (1973), and Lachmann ([1940] 1977; [1956] 1978). It can be argued, however, that the nature of the problem in the production-based analysis of the firm is the same as in the knowledge-focusing literature. For instance, Dulebecco and Garrouste (1999) claim that both brands of literature focus each on one of two sides of the same coin—coordination—the former focuses on coordination of knowledge and the latter on coordination over time of stages of production.

Whereas coordination in a planned or designed structure (organization) is an interesting approach to understanding the firm, it often fails to recognize the full extent of the role of the entrepreneur in the market process. The entrepreneur is indirectly of interest in the coordination approaches—since the entrepreneur is the *coordinator* (cf. Coase 1937)—but with a focus limited to the organization of a firm, the role of the entrepreneur as “the driving force behind the social creation of wealth” (Herbener, 1992, p. 79; cf. Mises, [1949] 1963) is necessarily neglected.

The entrepreneur, whether as a coordinator of a firm or “self-employed,” acts under uncertainty (Knight, [1921] 1985; Kirzner, 1985; Langlois and Robertson, 1995) with the purpose of gaining profits. Indeed, entrepreneurship is “a synonym for exposing oneself to the uncertainty of a loss” (Sautet, 2000, p. 73) and uncertainty arises, at least in part, due to the heterogeneity (or specificity) of resources and capital. Entrepreneurial action is in effect arbitrage between the status quo and a more efficient use of resources (Kirzner, 1973), bridging between now and the expected future, and hence creates value and increases calculability. It is effectively the driving force in the market process.

It is not surprising, then, that several authors have tried to construct an entrepreneurial theory of the firm (see e.g. Foss, 1994; Sautet, 2000). However, since entrepreneurship is a phenomenon existing both in the market and the firm, the entrepreneurial theories of the firm often fail to distinguish clearly between them. And this misses the point of Coase’s original identification that there are “alternative methods of co-ordinating production” (1937, p. 388): the firm and the market. In other words, the entrepreneurial firm’s boundaries are not clearly defined when based solely on the occurrence of entrepreneurship. The theories still fail to explain why the entrepreneur under certain circumstances needs to create

a firm and otherwise does not. Dulbecco and Garrouste (1999) attempt to overcome this problem through merging the entrepreneurship view of the firm with that of the structure of production, but stop short of a theory.

## THE AUSTRIAN PERSPECTIVE

The common denominator of the embryonic theories discussed above is that they focus on a single but important service provided by the existence of firms in the market. While there is value in all of these approaches, neither of them seems to offer a sufficiently convincing argument for the function of the firm in the dynamic market process (Kirzner, 1992; 1997; Lachmann, [1940] 1977). Rather, they seem to conceptually overlap and reinforce one another; the approaches to the firm provide fragmental knowledge that contributes to an Austrian understanding of the firm in the market but do not supply or fully support a universal view or theory. The question that should be asked but cannot be answered by these individual approaches is thus what function the firm as a generic phenomenon has in the market and, consequently, how it creates value; we must ask what is the rationale for and function of the firm in the market.

In other words, the theoretical approaches above fail in part for the same reason that theories of the firm developed from within the framework of mainstream economics are unable to explain the firm phenomenon: they focus on single characteristics rather than the whole, and therefore lose the big picture view of the firm in the market. Because of the emphasis on the value of specific attributes or uses of the firm, they fail to correctly address the issue of how and why firms *emerge* in the market process.

This problem is easy to realize if we for a moment turn to mainstream economics. From this point of view, which is fundamentally static, the firm is, as Coase correctly identified, an aberration, but it turns out to be so in two very peculiar ways. On the one hand, to Coase, who focuses on the superiority of the price mechanism, there can be no firms in the market since a firm, according to the Coasean definition, does not utilize the price mechanism within its boundaries and therefore, as a consequence, must be inefficient by definition. On the other hand, according to the economic

model of "perfect competition," in which the starting point is that all market actors are firms, there is no room for specialization or heterogeneity as the presence of such would deviate from the modeled efficient state.<sup>4</sup>

Williamson's analytical framework was motivated by Coase's line of reasoning but stresses conclusions based on the more recently influential perfect competition model in its theoretical construct. To Williamsonians, specialization is a real-world phenomenon that counteracts and ultimately prevents competition: where there is high-intensity specialization, especially in the form of what transaction cost economists refer to as asset specificity, it limits competition and creates situations where economic actors can and will act opportunistically (Williamson, 1993). This in turn creates strong incentives for the actors, whether they are firms or individuals, to integrate their activities under one common governance structure. Consequently, the firm emerges as a way for the actors to save themselves from the predatory incentives that arise due to competition-preventing specialization.

These two views are problematic from an Austrian perspective. The Coasean view primarily in its definitional construct and conclusions, i.e., that the firm is something distinctly different and separate from the market, rather than its problematization of the existence of firms. In fact, Austrians should agree with Coase that the price mechanism overall establishes an efficient allocation of resources, and therefore that there should be no need for organization. Austrians should also agree with Coase that there are costs to transacting that need to be considered by actors in production and trade, which may explain why many Austrians, as previously mentioned, tend to be favorable to this view. Coase's work should be problematic, however, since the Coasean firm is but (when most successful) a reproduction of market resource allocation dependent on managers directing resources. This conclusion implies that the Coasean manager to some degree manages to overcome the knowledge problem and supersede the price mechanism, thereby

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<sup>4</sup> According to the economic model of "perfect competition" there is no specialization, since all firms are perfectly homogeneous and equal: they have the same information, the same production processes, the same cost function, and the same opportunity to supply products to the market.



accomplishing what Hayek claimed to be impossible (1935; 1937; 1940; 1945; 1978; [1948] 1980) in socialist structures greater in scope (and, oftentimes, also in scale) than the Coasean firm.

The Williamsonian view, however, which seems to take a point of departure in the perfectly competitive model and then theorizes on possible incentive-based solutions, should seem attractive to Austrians in its analysis rather than its problematization. Whereas the Williamsonian analysis of the firm is, like its Coasean counterpart, based on a static equilibrium view of the market, it recognizes heterogeneity in the real market and attempts to explain actors' behavior using primarily the specificity of assets and situations.<sup>5</sup> In contrast to the Coasean firm, Williamson does not explicitly emphasize that the firm is a means to supersede the price mechanism; rather, the firm is different from the market since it integrates relatively highly specialized assets while the market organizes assets that are more easily substitutable.

From an Austrian perspective, the static nature of these attempts' analyses of the existence of firms makes them unacceptable. However, Austrians should also recognize that both theories potentially contribute to our understanding of why there are firms: the Coasean view correctly stresses the superiority of the price mechanism in the market, and Williamson correctly identifies that specialization (specificity) is an important characteristic in the market. An Austrian would say, however, that the market efficiently allocates resources through the price mechanism *and* is characterized by a high degree of specialization. Indeed, Mises talks of the specialization of capital and other assets in a way that is strikingly similar to the application of Williamsonian asset specificity:

The division of labor splits the various processes of production into minute tasks, many of which can be performed by mechanical devices. It is this fact that made the use of machinery possible and brought about the amazing improvements in technical methods of production. Mechanization is the fruit of the division of labor, its most beneficial achievement,

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<sup>5</sup> Williamson (1991) distinguishes between six types of asset specificity: site (location) specificity, physical asset specificity, human asset (knowledge) specificity, brand-name capital (experiential knowledge), dedicated assets (general-purpose investments specific for a particular transaction), and temporal (sequential) specificity (cf. Klein, 2000).

not its motive and fountain spring. Power-driven specialized machinery could be employed only in a social environment under the division of labor. Every step forward on the road toward the use of more specialized, more refined, and more productive machines requires a further specialization of tasks. ([1949] 1998, p. 164)

Mises flips Williamsonian reasoning on its head through establishing that specialized assets are the result of overall specialization, which is the reason for market efficiency and continued progress (Salerno, 1990). In other words, the problem discussed by Williamson is what causes the efficiency of the market as assumed by Coase; Mises's view integrates the particular foci of both theories and indirectly shows that their respective focus on specifics leads them astray from the aim to explain and understand phenomena in the market.

In the same manner, the Austrian approaches to the theory of the firm as described above focus too narrowly on individual attributes of firms, traits of entrepreneurs, or specific characteristics of the context in which firms exist. Whereas they undoubtedly contribute to our understanding of firms, these embryonic theories are unable to explain the existence, and—especially—the emergence, of this phenomenon due to their limited scope. In fact, following Mises ([1949] 1998), and, more generally, the Austrian understanding of division of labor and the market (cf. Rothbard, 1991), we can construct a view of the firm incorporating the core elements of the Austrian approaches mentioned above.

As we will see in the following sections, there is no reason for an Austrian theory of the firm to see the firm as primarily “residual” (Dulbecco and Garrouste, 1999, p. 43), as has often been the case up to this point.<sup>6</sup>

## THE FIRM IN THE SPECIALIZED EXCHANGE ECONOMY

Mises awards specialization a central role in the capitalist economy, but he goes further than that. According to Mises, the

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<sup>6</sup> Compare Langlois who states about Hayek that “[his] theory of the market is not fully general (...) the business firm is an anomaly or lacuna in his theory of economic order” (1994, p. 2).

“intellectual and spiritual phenomenon” of human society “is the outcome of a purposeful utilization of a universal law determining cosmic becoming, viz., the higher productivity of the division of labor” (Mises, [1949] 1998, p. 145). Specialization is not a problem in the way that Coase and Williamson seem to see it. In the market process, specialization is not only always existent but a source of efficiency and a reason the market works and is increasingly productive; in the static view of Coase and Williamson, specialization disrupts and provides a rationale to replace the market with hierarchy. We need only briefly touch on the theory of division of labor to realize that these views are actually compatible; in fact, both Coase and Williamson provide—without realizing it—clues to a sound economic theory of the firm incorporating not only their respective strong points, but also the Austrian insights in the approaches to the firm discussed above.

The “greatest improvement in the productive powers of labour” (Smith, [1776] 1976, p. 7) is due to the division of labor. Its effectiveness is “limited by the extent of the market” (Smith, [1776] 1976, p. 21), i.e. the extent of the power of exchanging. This limit is better understood as the effective reach in the market, which is dependent on market *density* (Marx, [1867] 1906) or the “closeness” of actors in the market. Density exists in two dimensions, describing the dynamic nature of closeness in human interaction and the material conditions for such interaction, respectively. The former is defined as the degree to which “individuals [are] sufficiently in contact to be able to act and react upon one another... and the active commerce resulting from it” (Durkheim, [1892] 1933, p. 257). The latter is understood as the degree of population concentration including the development of means of communication and transportation (Land, 1970), where progress in communication and transportation technology enables greater material density.

Sun and Lio (2003; cf. Young 1928) make a related point showing how increased specialization in the market depends on the overall improvement in existing transaction conditions in the market. Information asymmetries arise since “[s]pecialization not only means that one knows more and more about less and less, but also implies that one knows less and less in terms of percentage of the knowledge possessed by the society as a whole” (Sun 2005, p. 20). That is, transaction costs increase, and this generates increased incentives

for cooperation. The connection between the division of labor and transaction costs through specialization should therefore be clear.

Let us yet again turn to Coase's and Williamson's theories of vertical integration of transactions in firms to investigate to what degree they are compatible with the Misesian view of division of labor reinforced by the concept of density. As has already been briefly noted, they are quite compatible.

Of interest here is Coase's view that "the costs of organising [...] will increase with an increase in the spatial distribution of the transactions organised" (Coase, 1937, p. 397) and therefore that the marketing (transaction) costs increase as the transactions are dispersed over large spatial distances. He continues, saying that "[i]nventions which tend to bring factors of production nearer together [such as the telephone and the telegraph], by lessening spatial distribution, tend to increase the size of the firm" (1937, p. 397) since such technological support decreases the costs of organizing within the firm. Increased real or perceived density of a transaction therefore tends to increase incentives for organizing. This is compatible with the Marxian and Durkheimian view that high density supports increased specialization.

This is also compatible with Williamson's analysis of the effects of asset specificity (Klein, Crawford and Alchian, 1978; Williamson, 1979; see also e.g. Vandegrift, 1998), where assets with a high degree of specificity with regard to a specific transaction greatly increase costs of opportunism and therefore provide incentives to integrate the transaction in a single organization/firm (cf. Joskow, 1987). This seems to suggest that high degrees of specialization should exist primarily *within* firms and that integrated transactions should tend to be more specialized than non-integrated such, since the incentives (due to higher costs of opportunism through high-specificity transaction organizing on the market) call for integration. We should therefore find a higher degree of density in the carrying out of integrated transactions, i.e. within firms, than in transactions organized primarily through the price mechanism in the market.

We can hence conclude that the firm is different from the market external to it, at least in some respects, in accordance with the views of e.g. Coase (1937), Williamson (1996), and Mises (1944; [1936]

1951; [1949] 1998; cf. Foss, 2001). It also seems that the difference between firm and market is primarily in the degree of utilized specialization, where the firm's organization allows for and should see a higher degree of specialization.

That the firm's organization allows for a higher degree of specialization follows from the insights of both Coase and Williamson. We have already seen that Coase predicts higher costs following a greater degree of spatial dispersion, which may be a reason firms tend to concentrate factors geographically. But even where doing so is not the case, communication should generally be more effective and efficient through already established channels within a firm than through market channels. In other words, the relative density or closeness of factors is generally higher within the firm than for transactions of equal distribution that are external to it.

Furthermore, following Williamson's analysis, we find that the higher degree of specialization within firms should imply stronger connections between factors in a particular production process. The reason for this is the more roundabout production processes that follow specialization, and the fact that the stages in these more roundabout production processes must be more specialized *to each other*—i.e., the factors are essentially *co-specialized*—than is necessarily the case in the market. It follows that a firm, through effectuating a higher degree of specialization, should do so through providing a milieu of effectively higher density than comparable production processes in the market.

Identifying the firm as a vehicle for creating higher density, thereby supporting or allowing for a higher level of specialization or division of labor, allows us not only to reconnect the theory of the firm with that of the market, but also allows us to take advantage of the existing contributions in mainstream theories while incorporating all the strong points of the Austrian approaches to the firm—and doing so in an overall context of understanding the market as a dynamic “process.” The firm is no longer a “residual” but an important institution providing a fundamentally important function to the market through leading the way towards greater division of labor.

Just as Coase recognizes in his limited theoretical understanding of the firm, the entrepreneur is crucial to the creation and existence

of firms. In direct contrast to Coase, however, we do not recognize the firm as an “island of conscious power” (Robertson, 1923, p. 85; quoted in Coase, 1937, p. 388) organized around a manager-entrepreneur. Rather, the firm is created through the leadership of an entrepreneur in the Austrian sense (Witt, 1998), who aims and acts to exploit an *imagined* opportunity (Klein, 2008b; Witt, 2007; cf. Mises, [1949] 1998 ; Knight, [1921] 1985; Cantillon, [1755] 1931) for profit through establishing a previously unknown or untried arrangement of factors and, hence, a different and higher level of specialization (Schumpeter, [1911] 1934). This can only be achieved through guiding factors into an arrangement with artificially increased density.

## THE ENTREPRENEUR AND THE STRUCTURE OF THE FIRM

While the existing approaches to an Austrian theory of the firm inform us in trying to understand the firm in the market, they do not sufficiently define the firm in its market context and do not distinguish it or its role in the market process. We have also seen that the transaction cost theories of the firm in mainstream economics, while at a certain level being surprisingly compatible with the Austrian perspective, hint at, but fail to take into account, the importance of specialization within the firm in contrast to specialization in the market.

The previous section but stressed the compatibility between Austrian approaches and core elements in the theories of Coase and Williamson, and suggested a possible role for the firm in the market process. It should be noted that we have done little to define the firm and explain how it can be distinguished from the market, and we also do not yet have a theory for how to identify its boundaries. The previous discussion suggests that the firm is an arrangement of factors with higher density than transactions carried out in the market, thereby supporting a higher level of division of labor, but this only suggests that the structure of the firm *could* be different from that of the market. We have yet to establish a definition of the firm that separates it from common market transactions, and discern the means to identify the firm’s distinct properties.

The obvious starting point for theorizing on the firm is to discuss the role of the entrepreneur in the market process. It is also important to consider how establishing a firm can help the entrepreneur to exploit profit opportunities. The question that we must ask, but that is conspicuously missing in the literature on entrepreneurship and the firm, is why entrepreneurs in some situations create or organize firms whereas in other situations they do not. Klein (2008b), following the Cantillon-Knight-Mises view of entrepreneurship as judgment, argues that opportunities are subjective phenomena (Foss et al., 2008) and therefore that they “exist... only in the minds of decision makers” (Klein, 2008b, p. 176). It follows from this subjective nature that entrepreneurs cannot simply be alert (Kirzner, 1973; 1979) to opportunities and that these cannot be merely “discovered” (Alvarez and Barney, 2007). In fact, the entrepreneur *imagines* opportunities and, depending on his judgment and economic calculation of anticipated future prices (Mises, [1949] 1963), chooses to act in order to realize the imagined profit.

Klein (2008b) concludes from this, following Knight’s ([1921] 1985) view of entrepreneurship as judgment-based action, that the role of the entrepreneur is “to arrange or organize the capital goods he/she owns” (Klein, 2008b, p. 184; cf. Foss, Foss and Klein, 2007; Foss et al., 2002) so as to realize the imagined profits. It follows that the factors of production are arranged in a way specific to the imagined outcome and, therefore, due in part to the heterogeneity of capital, that the level of specialization is necessarily higher than presently exists in the market.

It further follows that the entrepreneur, when seeking human resources to realize his imagined outcome, has specific tasks or services in mind that may not currently be traded in the market. In other words, the entrepreneur imagines a structure of production in which factors are assigned specific tasks they may not yet be fully qualified for but to which they need to adapt. There may therefore not yet exist market prices for these services; in this sense, the entrepreneur is necessarily also an innovator (Schumpeter, [1911] 1934).

Another difference is obvious if we compare the uses and services of factors in the market, what Coase calls “atomistic competition,” and their services within the firm, where the factors’ arrangement is necessarily dependent on the entrepreneur’s leadership and his guiding factors to form the imagined and yet-to-be-established



structure of production. In the former market, no factor can specialize to a degree substantially greater than already existing in the market. The reason for this is that the services offered must be demanded by producers of goods of a lower order (cf. Menger, [1871] 2007), without which supply of such services would generate a loss. Also, “atomistic competition” requires self-employed individuals to dedicate time and energy to administrative services: marketing, search for customers, sales, cost accounting, stock, financing, reporting or accounting, as well as customer support etc. Some of these services could be outsourced, but this is possible only to a certain degree and outsourced services still require administration of contracts and contractual relationships, and, perhaps, legal services and arbitration.

In contrast, factors within the firm specialize to the degree supported by the entrepreneur’s imagined structure of production, which we have already established must, in some sense, be more specialized than the market. The level of efficiency in carrying out these tasks or services should therefore be greater (Romer, 1987; Yang, 1988; Young, 1928) and could so reimburse factors for their specialized investment and provide the entrepreneur with profits. Furthermore, through creating a new arrangement of factors, the entrepreneur is able to centralize administrative support services within the firm, thereby relieving the productive factors of the requirement to carry out incidental services in addition to directly productive such. This has two greatly efficiency-enhancing effects: the productive services can focus on their primary services, thereby increasing the level of specialization through avoiding switching between relatively unrelated tasks; also, the entrepreneur may assign factors purely administrative roles, which allows them to specialize in such things as marketing, sales, accounting, and finance to a degree not possible in the external market.

We can draw at least two conclusions related to the firm-theoretical discussion above. Firstly, we must conclude that the firm cannot be simply a reproduction of market allocation of resources, as in the case of the Coasean firm, but should commonly be structurally different from the market. The firm is not only different in terms of allocation of resources, but also in the intensity or extent of their specialization. Logically, different allocation should follow the entrepreneur’s imagined structure and be made feasible through



the increased specialization emanating from it. A firm cannot be established without the entrepreneur.

Secondly, the firm is distinctly different in all the dimensions discussed in the Austrian approaches to the firm. It is necessarily different in terms of coordination of knowledge and its implemented structure of production since it is an attempt to realize benefits based on an entrepreneur's imagined opportunity; it is necessarily established and maintained under uncertainty; and it is the embodiment of entrepreneurial imagination. The conclusion we draw is that the firm cannot be one of these things, but must necessarily comprise all of them.

## THE NATURE OF THE FIRM

Even though we have now established what the firm is in relation to the market as well as how it relates to existing theories of the firm, we have yet to discuss how the phenomenon of the firm, as a creation by entrepreneurs to seize their imagined opportunities, may be manifested in, and therefore distinguished from, the market. To do so, we must see to how firms can be organized by the entrepreneur.

First, we need to establish that the entrepreneur, in the cases where his own labor power is not enough, needs to procure labor factors in the labor market. We have already discussed how market actors are limited in their use of the division of labor by the market's density, but also in the sense of compatibility: one cannot specialize far beyond the level of specialization of those factors that are currently bought and sold in the market. To do so requires long-lasting contractual relations and, in practice, integration of co-specialized factors in firms. In order to attract labor factors, the entrepreneur needs to provide them with payment greater than their expected market price. The reason for this is that the entrepreneur will require their specializing to a degree not currently saleable in the market, which means committing to the entrepreneur's imagined structure of production. The price offered must therefore exceed that offered in the market while covering costs of, e.g., the risk of Williamsonian opportunism. Doing so, the entrepreneur necessarily assumes much of the risk facing the labor factors.

It should be noted that the contract between entrepreneur and labor factor includes two important aspects that distinguishes it from most other market contracts: the specified payment exceeds that offered in the market, but it also requires the factor to invest in “over-specializing” and co-specializing with other factors in accordance to the attain the entrepreneur’s imagined ends. This relationship is interpreted by Coase (1937) and others as essentially one of authority or fiat power (Simon, 1951; [1945] 1957), where the entrepreneur-manager gains the right to direct factors according to need. However, it should be clear that this contract does not in essence differ from the common market contract—the difference consists primarily in the extra payment for the additional requirement (over-specialization). The entrepreneur therefore has no “power” over the factor in addition to common contractual terms. In fact, it can be argued that the entrepreneur is at the mercy of factors, since they need to be informed (at least in part) of the entrepreneur’s imagined opportunity and therefore, if the contract is canceled, may themselves take advantage of this information in the market place (Conner and Prahalad, 1996; Foss and Foss, 2006; Foss, 1999).

The type of “authority” established through contracts within the firm is but authority through leadership and, possibly, superior knowledge of processes and objectives. The entrepreneur compensates factors to renounce regular market yield and instead specialize according to the entrepreneur’s needs. Coase’s view of the firm where “a workman moves from department Y to department X, he does not go because of a change in relative prices, but because he is ordered to do so” (1937, p. 387) does not tell the true story. The workman will only be asked to move to department X if the entrepreneur’s guidance toward exploiting the imagined opportunity so requires *and* if he will, in department X, still carry out the specialized services as stated or implied in the contract. The function provided by the individual factor should still be approximately the same, even though the workman may need to co-specialize with other factors as his position in the production process changes. Coase’s statement is true in that the move is not directly guided by prices but by the entrepreneur, but false in that the workman is not ordered but *asked* to carry out the already contractually established set of specialized services (the function)

in a new position in the structure of production. Coasean authority, in the sense used in his 1937 article, is only possible if factors can be used interchangeably and, consequently, are homogenous.

The firm, it must be concluded, is formally but a nexus of contracts (Jensen and Meckling, 1976) between entrepreneur and factors, and there is no basis for fiat powers in such a contractually established structure (Alchian and Demsetz, 1972). What distinguishes the firm from cooperative actions taken by actors in the market place is primarily its coordinated structure of production as imagined by the entrepreneur, which is not supported by the market's level of specialization. The firm's division of labor is, owing to the entrepreneur, not the same as in the market.

## THE ROLE OF THE FIRM IN THE MARKET

The firm as described here potentially plays an important, if not crucial, role in the market process. As was established above, the entrepreneur uses the firm as a vehicle to take advantage of more intense specialization in a structure of production not yet feasible through market contracting with actors. Within the firm, factors are allowed (if not required) to specialize to the imagined structure of production through the increased density brought about through the leadership of the entrepreneur. It follows that the firm may be more efficient than production in the market due to its utilization of a greater division of labor, and that a successful firm not only outcompetes other market actors but also provides leadership toward greater market productivity and efficiency.

In other words, the firm is not solely a vehicle to generate entrepreneurial profits—it also serves the market function of a pioneering benchmark for competitor entrepreneurs in terms of its novel structure of production. The latter has an effect on the market through guiding not-so-imaginative (or not-so-successful) entrepreneurs toward better organizing of factors. As actors in the market follow the leadership of successful entrepreneurship, the overall specialization intensity in the market subsequently increases. The firm here functions, through the discovery process of competition (Hayek, 1978), to “push” the market toward greater divisions of labor. This has primarily two effects: the market becomes increasingly efficient through utilizing greater divisions

of labor, and the individual firm can only temporarily stay ahead of the competition unless it engages in continuous structural improvements and innovation through its entrepreneurial function (cf. Stigler, 1951).

The former effect has already briefly been mentioned. The latter is important for us to understand the dynamics of the firm. Entrepreneurial profits can be generated only for as long as it takes other market actors to reproduce successful structures, which creates a pressure upon any entrepreneur to constantly innovate and improve the firm's internal productive structure. Part of this dynamic should include outsourcing of non-essential firm services, especially administration and incidental such. As the market structure "catches up" in terms of overall specialization for the particular services, the entrepreneur can take advantage of market actors specializing in, e.g., marketing and accounting services. In so doing, he can fully make use of the efficiencies achieved by other entrepreneurs for non-core services while utilizing the price mechanism. He also minimizes the number of factors relying on his leadership, thereby releasing resources for his pursuit to seize newly imagined opportunities.

## CONCLUDING REMARKS

We have shown that the Austrian school of economics does not have a theory of the firm, but that it provides a strong foundation for a better understanding of the firm as a market phenomenon. Two conclusions can be drawn about the current state of the economic theorizing of what constitutes a firm and what its function in the market place is. First, the Austrian attempts to engender theories of the firm have been too narrow in scope to provide a sufficient basis for studying firms. Second, the theories of the firm in mainstream economics are even more narrowly focused and, seven decades after their inception, still fail to properly describe and explain the firm.

This paper attempts to show that the theory of the firm is a fruitful area of research and that much can be gained from formulating a theory of the firm that combines the strengths of the Austrian school with the strong points of the mainstream theories. In fact, the existing Austrian approaches may be inter-compatible as well as compatible with several important contributions of mainstream

theories. In addition, it is possible to formulate a theory of the firm that takes advantage of all these strong points.

It was also shown that the firm need not be understood as a phenomenon separate from the market. Rather, adopting a “big picture” view with the firm *in* the market allows us to gain knowledge of the role the firm plays (the function it provides) in the market. We can also trace how the market structure in turn is affected or even to some extent determined by the existence of firms. Furthermore, we can learn how the market process and market structures affect the internal organization of the firm.

This paper identifies the firm as a vehicle for entrepreneurs to realize imagined opportunities. The firm here plays an important role on primarily two levels: on a micro level, it provides a means to generate entrepreneurial profits through creating an artificial environment supporting a greater division of labor and new ways of structuring production; on a macro level, it provides the important function of pushing the market, through the discovery process of competition for profits, toward greater specialization and division of labor. Interestingly enough, even though the firm was explained in terms of division of labor from Adam Smith to Ronald Coase, and despite the fact that those such as Ludwig von Mises awarded the division of labor a central role in the economy and civilized society, no theories at present rely on the division of labor to explain firms. The theory outlined in this paper, in contrast, builds on the strong tradition of notable economic thinkers such as Adam Smith, Karl Marx, and Ludwig von Mises.

We should also note that the theory discussed in this paper is fully compatible with the Mengerian view of entrepreneurship. In fact, the firm as an entrepreneurial creation aimed to realize an imagined structure of production draws on all of Menger’s dimensions of entrepreneurial activity. Writes Menger:

Entrepreneurial activity includes: (a) obtaining *information* about the economic situation; (b) economic *calculation* ...; (c) the *act of will* by which goods of higher order ... are assigned to a particular production process; and finally (d) *supervision* of the execution of the production plan so that it may be carried through as economically as possible. (Menger, [1871] 2007, p. 160)

Finally, the contribution of this paper lies not in providing another Austrian outline for a theory of the firm. The main contributions are in (1) identifying the role of the division of labor and specialization in the firm as well as in the market and the possible interaction—indeed, interdependence—between firm and market, (2) providing a basis for combining previous attempts to approach the theory of the firm from an Austrian perspective, and (3) to show that there are gains from trade with mainstream theories in this area of study.

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