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The enterprise is the actual place for the entrepreneurial function in economic theory

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Abstract

The enterprise is an historical phenomenon specific to capitalism. It is a fictional agent created by accounting and sanctioned by law. It is based on capital and its purpose is to yield monetary profit. Within the framework of the market economy, production is organized according to the decisions and actions of the aggregate of these artificially created agents. This paper demonstrates that the “entrepreneur” as used in economic theory is nothing but a personification of the enterprise. In the most renowned economic theories of entrepreneurship, the entrepreneurs are supposed to be in possession of the resources they employ. Yet the functions which these theories ascribe to the entrepreneurs implicitly presuppose that the latter not only possess resources, but that they actually own them. Without capital, which grants the power to obtain property rights in resources, entrepreneurs would not be able to bear the losses that come along with the entrepreneurial functions. The theories violate their own definitions by changing their object from a “pure” and property-less entrepreneur to a capital-owning agent. These theories can be reinterpreted, therefore, as applying not to the pure entrepreneur but to the capital-based enterprise. They then become theories of how and according to which principles enterprises organize the production process in capitalism. In contrast to the theoretical construct of the entrepreneur, enterprises are even present, though only implicitly, in neoclassical equilibrium analysis. They provide the setting of optimal decision making and therein constitute the tacit rationale of the notorious assumptions of complete foresight and perfect rationality.

Keywords:

Theory of the entrepreneur; Capitalist enterprises; Equilibrium

JEL-classification:

D50, L26, P12

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1. Introduction

Despite the immense importance of entrepreneurs for the market economy, economists have yet to find a way to integrate them into the main body of economic theory. The present paper does not add another theory that once more situates the entrepreneurs outside the equilibrium framework of neoclassical economics. Instead, it reinterprets the established theories of the entrepreneur and unites them in an explanation of how the production process is organized in capitalist societies. In this, it shows that the idea of the entrepreneur is no less a part of equilibrium economics than of disequilibrium economics.

In order to be able to integrate the idea of the entrepreneur into the neoclassical framework, we must accept that we are dealing with a *historically specific* phenomenon. Current economic theories of the entrepreneur fall short because they define the entrepreneurs, explicitly or implicitly, as *universal* agents and thus put them on an equal footing with the technical production factors of labor, land, and the produced means of production.

Entrepreneurs, however, do not have a function in the production process as such. Rather, their function lies on a different level: the level of organization. And in contrast to the *technical* problems of production which are in principle the same in all eras and all economic systems, the *organization* of production is historically specific. In some ancient societies, the patriarch might have directed the production process personally; in socialism, it is the planning board that organizes the employment of the production factors; and in capitalism, it is profit-oriented and capital-based enterprises which perform this function. These enterprises are “unique” to this economic system, as Lewin (2011: 177) expresses it.

In accordance with this observation, the present paper argues that the universal theoretical construction of the “pure entrepreneur,” employed by most theories of the entrepreneur, cannot be thought through to the end. The established theories of the entrepreneur can be shown to tacitly shift their object, at one point or another, from the pure entrepreneur to the capital-based enterprise. In short, these theories are actually theories of the enterprise, not of the pure entrepreneur.

Once they have been reinterpreted in this way, the different theories of the entrepreneur can be shown to dovetail in an explanation of how and according to which principles enterprises determine the use of the factors of production in capitalism. Furthermore, it can be shown that the enterprise, as opposed to the pure entrepreneur, has a place even within the equilibrium framework of neoclassical economics. Based on the distinction between the sphere of production and the sphere of organization, the place of the enterprise in equilibrium can be identified as the rationale behind the often criticized assumption of perfectly rational and

informed agents. This assumption amounts to a translation into mathematical language of a perfectly functioning organization of the production process by profit-oriented enterprises according to the wishes of consumers and factor owners. Therefore, although enterprises are not visible in neoclassical micro-theory, they are, on the level of organization, an implicit but necessary precondition of it.

Following up on recent claims by Hodgson (2014; 2015a), section 2 closely examines some important historically specific features of capitalism in order to better understand the organization of this economic system. It starts from Karl Marx's famous formula 'Money – Commodity – Money' and, by drawing on the extensions to this formula by Zwiedineck-Südenhorst (1930) and Braun (2015), provides a schematic description of the way the production process is actually organized in the market economy. The main agent in this regard is the enterprise, a fictional agent based on capital, created by accounting, and usually sanctioned by law (Stauss 2007; Biondi 2007). It operates in what will be called the "business sphere," the sphere of organization of capitalism. Section 2 also presents the reasons why, despite the tenet of methodological individualism, it is the *enterprise* that is chosen as the central agent in this paper and not the *entrepreneur*. Section 3 makes two important and interrelated points. First, it demonstrates that the common theories of the entrepreneur do not succeed in their attempts to isolate the entrepreneurial function. Regardless of whether they maintain that the entrepreneur is the one who brings about equilibrium (Kirzner 1973), the one who destroys equilibrium and thus creates development and progress (Schumpeter 1911), or the one who bears the uncertainty which prevails in disequilibrium (Knight 1921; Mises 1949), they must all amalgamate their entrepreneur with the capitalist, otherwise the respective entrepreneurial function cannot be fulfilled. The argument partly extends the criticism that has been put forward by Hébert and Link (2009) and Foss and Klein (2012). A major shortcoming of these theories is that the entrepreneurs are only considered to be *in possession and control* of the resources they allocate. They must also, however, *own* some capital in order to bear the consequences of their actions, especially the potential emergence of losses. Second, section 3 also shows that the impossibility to separate the entrepreneur from the capitalist is due to the fact that the said theories are not universal, despite assertions to the contrary, but actually relate to the historically specific organizational framework of the market economy. Therefore, the agent they are implicitly talking about is not the "pure" entrepreneur, but the enterprise as presented in section 2. In section 4 I show that, after some mild reinterpretation, these theories dovetail perfectly with each other in a description of how and according to which principles the enterprise organizes the market economy. The

enterprise is alert to price differentials, creates new lines of production and business, and takes on the uncertainty of producing for the market which would otherwise have to be borne by the owners of the production factors. In performing these functions, the enterprise occupies the center stage of the production process under capitalism as it was indicated by Cantillon (1755), Say (1803), and Hawley (1927). Section 5 finally qualifies Baumol's (1968, 2010) often repeated claim that there is no place for the entrepreneur in neoclassical equilibrium economics. In this section, I show that the organizational sphere of capitalism with its profit-oriented enterprise is actually the rationale behind the often criticized assumptions of perfect rationality and complete foresight.

2. The organization of production in the market economy

2.1 The business sphere

The factors of production – labor, land, and the produced means of production – are a necessary part of all production processes. They are universal and general technical inputs to all human production in all thinkable forms of societies, no matter whether we look at Stone Age, Soviet communism, or modern capitalism. The definition of these factors of production can therefore rest on rather technical criteria, e.g., their durability or the mode of their reproduction. With the entrepreneur, however, economists try to add someone to this picture who, it will be seen, is not a universal factor of production. The entrepreneur does not belong to the sphere of production but to the sphere of organization which is not universal but historically specific.

The argument that each epoch of history is characterized by a particular way of organizing the production process has been stressed by Karl Marx, the American Institutionalists, and the German Historical School. The production process – the technical collaboration of production factors in the creation of the product – never stands by itself. It is always embedded in a sphere that is located on a different level and gives meaning to it. Robinson Crusoe combines the factors because he wants to provide for his personal subsistence. A socialist planning board does so because it pursues social objectives, be they the provision of the citizens according to their needs or the victory in an arms race. In modern capitalism this is done by enterprises whose purpose is to breed money out of money by investing it in input factors, combining them, and selling the resulting product on the market. I now analyze the principle according to which enterprises organize the production process under capitalism. In subsection 2.2, I explain why I chose to call the central agent 'the enterprise,' not 'the entrepreneur,' which seems to be an undue anthropomorphism.

The gist of the way that enterprises organize the production process shines through in Karl Marx’s famous formula

Money – Commodity – Money’

The be-all and end-all of a typical profit-oriented enterprise in capitalism is the ‘proliferation’ of money. Actions in the organizational sphere of capitalism start with an investment of a certain amount of money and end, if everything works out as planned and hoped for, with money revenues exceeding investment. Marx’s formula captures why the production factors of land, labor, and produced means of production – which are nothing but the “commodities” – are set in motion in capitalism: they are bought for money in order to make more money, i.e., they are part of business. That is why I am going to call the organizational sphere of capitalism the *business sphere*.

How do the monetary processes which take place in the business sphere accomplish the organization of production? Zwiedineck-Südenhorst (1930: 1069), a member of the Historical School of Economics, elaborated on Marx’s formula in order to better illustrate the business sphere of capitalism and described the production process therein with a scheme that was recently adapted and elaborated on by Braun (2015: 33).

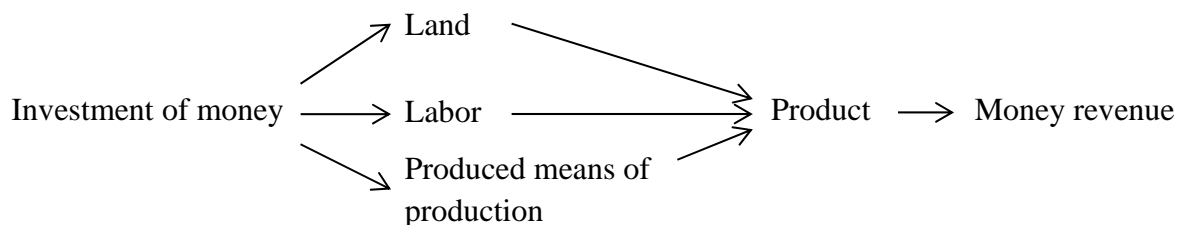


Figure 1: Production within the business sphere

This scheme illustrates the logic of production in the business sphere. Enterprises do not combine the factors of production in order to merely produce output. These technical events are but means to a superordinate end. Enterprises are ultimately interested in the processes that occur in the business sphere which frames the production process. For them, the purpose of production is to allow for *money revenue* in excess of *money investment*. The standard by which the success of production is measured and in respect of which it is organized is profitability – the relationship between these two monetary magnitudes. The question for an

enterprise is not whether production has been successful, or whether the combination of land, labor, and produced means of production made sense from a technical point of view, but only whether its money investment has paid off (Liefmann 1928: 11). In line with this, the accounting system of enterprises does not calculate profits and dividends in relation to some technical features of the production process, but to the *money* figures which belong to the business sphere.

Adam Smith's famous metaphor of the "Invisible Hand" was supposed to convey exactly the paradox that seems to be inherent in this situation. How is it possible that the technical production process is organized by self-interested and profit-oriented enterprises that do not care about the technical results of production? I will revert to this question in sections 3 and 4 where I show how the established theories of the entrepreneur can be applied to the explanation as to how the business sphere organizes production.

2.2 The enterprise as the central agent in the business sphere

In section 2.1, I have chosen to call the agents in the business sphere 'the enterprise,' and not 'the entrepreneur.' This is a procedure against which Jensen and Meckling (1976: 311) famously warned in their classical paper. For them, the personification of the firm is "seriously misleading" because "[t]he firm is not an individual." Behind what is called the firm there is a "complex process in which the conflicting objectives of individuals [...] are brought into equilibrium within a framework of contractual relations." As Gindis (2009: 27) notes, the *contract* and the *transaction* are generally considered to be the basic unit of analysis and the essence of all forms of economic organization.

I do not maintain that the enterprise is a rational and conscious entity that acts in and of itself. The enterprise consists of a network of contracts between real persons (or organization that themselves consist of real persons) who have various claims on its capital and its profit. As a system of individual acts it can (and arguably must) be analyzed on the basis of methodological individualism (Teubner 1988: 132).

Even Jensen and Meckling (1976: 310 f.) admit, however, *that enterprises are treated as individuals before the law*. Legal practice has sanctioned the idea that an enterprise can be regarded as an *entity* by assuming a fictional legal personality. And even though the enterprise is only a *fictional* entity, it should be clear that the enterprise is not an artificial construct by some economic theorists. It is a fiction that is sanctioned by law in capitalist societies. Gindis (2015: 1), for example, points out that it has the "capacity for property, contract, and litigation."

The reason why I chose this fictional entity – the enterprise – as the central agent in the business sphere, and not the entrepreneur, is that the well-known theories of the entrepreneur are actually theories of the enterprise. So to make this clear at the outset, I do not maintain that the object of the theory of the entrepreneur *should* necessarily be the enterprise. What I try to show is that it unconsciously *is* this object. That it is not completely far-fetched to focus on the enterprise becomes clear if we have another look at the logic of action in the business sphere.

As was shown above, the starting point of any action in this sphere must be money; money with which production factors can be purchased in order to profit from the (expected) sales on the market. A person in itself – a “pure” entrepreneur so to speak – is not enough to decide the fate of any production factor. Without the power to move the factors according to one’s wishes, one cannot start any actions in the business sphere. *The power to purchase goods and services*, therefore, is a central requirement for the agents who want to act in this sphere. In this regard, it is important to note that the proliferation of money via the investment of money has also been called the “process of circulation of *capital*” – the subtitle of the second volume of Marx’s *Das Kapital*. Capital, in this sense, can be defined as *all business assets which are destined for acquisition and evaluated in terms of their (actual or estimated) historical money costs*. As money can be a business asset, too, the definition comprises all stages of the process described in figure 1 (with “labor” referring to labor *services* only, not laborers). It should go without saying that this definition of capital deviates from the usual ones in that it does not consider capital to be a production factor (Hodgson 2014; 2015a). So a different way of saying that money is the starting point of action in the business sphere is that *capital is and must be at the basis of the actors in the business sphere*. In capitalism, capital is the power that allows agents to organize the technical production process and to move the factors of production. And here we see why it suggests itself to pick the *enterprise* as the agent of the business sphere: the enterprise is an agent that is actually *based on and unthinkable without capital*. It is an artificially created actor whose purpose is to yield profit on the money – the capital – that has originally been invested in it.

As Biondi (2007: 249; 2013: 397, 404) explains, an enterprise is created by artificially separating capital from its owners by financial accounting. The enterprise thus constitutes what can be called a fictional, capital-based person; it has also been termed an “accounting entity” (Stauss 2007: 230; Liefmann 1928: 14). In the words of Werner Sombart (1919: 101), the enterprise “assumes a separate existence” and becomes “an entity which emerges as a subject conducting individual economic acts and which leads a separate life, outlasting the life

of individuals.” Sombart (1919: 119) adds that the creation of a separate fictional actor is one of the main purposes of double-entry bookkeeping which “accomplishes the ultimate separation of the sum of money invested acquisitionally, i.e., in order to make profit, from all natural purposes of subsistence.”

As I concentrate on the enterprise as an entity, it is not necessary to distinguish between equity capital and borrowed capital. From the point of view of the enterprise and its accounting system, both forms of capital are involved in the acquisitive activities as “entity capital” (Biondi 2013: 397). In this regard, one word must be said about companies without limited liability. Sometimes it happens that stockholders of an unlimited enterprise are forced by law to remargin capital in order to cover liabilities. In essence, this means that the capital of the unlimited enterprise is not completely separated from the private wealth of its owner or owners. The enterprise may be an accounting entity, in this case, but legally it does not stand on its own feet. So far as this is the case, it is fine to speak of those real persons who share into the capital risk of the enterprise as actual “entrepreneurs.” They are persons who are directly connected to their enterprise by shouldering a part of the losses that might be involved in the business actions of the latter. Yet, it must not be forgotten that even in these cases the real person is only an entrepreneur – a part of the enterprise – to the extent that his private wealth can be seized in order to cover liabilities of the enterprise. One could also say that the capital of the enterprise extends to the private wealth of its owners or shareholders and that they therefore can be called entrepreneurs.

3. The enterprise in the business sphere as the object of the theory of the entrepreneur

The enterprise does not belong to the sphere of production, but to the sphere of organization of capitalism which I have called the business sphere. The profit-oriented enterprise is an historical phenomenon specific to capitalism which is either not at all or only tangentially present in other economic systems (like socialism). Economists, however, have tried to find a concept that captures the idea of an organizing agent but still fits into the universal and ahistorical models of economics. They tend to define the entrepreneur in a universal way, as an agent who is on the same level as the factors of production, or even a fourth factor of production (e.g. Baumol 2010: 188), and who therefore has a certain function that is not only relevant in the market economy, but everywhere humans live and act. Schultz (1975: 832), for example, bemoans that the concept of the entrepreneur is restricted to “businessmen” and wants it to include all individuals who are “in the act of reallocating their resources;” he mentions laborers, housewives, students, and consumers.

This section demonstrates that the attempts to define a “pure entrepreneur” who fulfils nothing but a general entrepreneurial function have failed. The theories that are based on these definitions all tacitly scrap the idea of the “pure” and universal entrepreneur at some point. The core of the problem is related to a general confusion that Hodgson (2015b) noticed in the economics of property rights. The assumed entrepreneurial functions are supposed to rest merely on the *possession of and the control over resources*. Yet, in each of the definitions, the entrepreneurial function not only necessitates control over resources, but actual *property rights* in them. The entrepreneur, in other words, must not be pure, but has to be an owner of capital which grants the power to obtain property rights in resources. What these theories are implicitly discussing, then, is not a pure entrepreneur of any kind, but rather the enterprise in the business sphere.

3.1 Entrepreneurship as alertness to unexploited opportunities of profit-making

According to Israel Kirzner (1973), the most important feature of entrepreneurship is the alertness to so far unexploited opportunities to profitable actions. He emphasizes the entrepreneur’s ability to discover profitable opportunities already existing but not detected. The entrepreneur exploits these opportunities and thus makes them disappear. In more technical language, the entrepreneur spots disequilibrium and generates a tendency towards equilibrium.

To be sure, Kirzner is well aware of the hypothetical character of his association of alertness with a special class of people, i.e., the entrepreneurs. He explicitly approves the point of view according to which each human action contains an entrepreneurial element, and he (1973: 31) emphasizes that, therefore, also each acting human displays a certain amount of alertness. It is a mere theoretical construction when Kirzner isolates the element of alertness and assigns it to persons he labels the “pure entrepreneurs.” Kirzner (1973: 33) assumes that all decision-makers but the pure entrepreneurs are passive, optimizing price takers who simply optimize against the background of assumed data. Only the pure entrepreneurs carry the entrepreneurial element, that is, alertness. It is important to stress that Kirzner does not mean that the entrepreneur is an accounting or legal fiction that is actually used in real life, like the enterprise. Rather he takes the entrepreneur as a *theoretical* makeshift that allows economists to grasp the entrepreneurial function.

Kirzner seems to succeed in isolating the entrepreneurial function from the factors of production, but also and especially from capital, understood as financial power. Kirzner’s pure entrepreneur does not own capital (Kirzner 1973: 38; Foss and Klein 2012: 34). In order

to be alert, one *needs to have possession of and control over resources, but one does not need any proper funds*; it is enough to find another person who owns funds and who is willing to lend them to pure, alert entrepreneurs. As Ikeda (1990: 78) puts it, Kirzner's pure entrepreneur is not a "resource owner," but rather "marshals resources from their owners in the pursuit of profit opportunities."

Kirzner's theory has been criticized for ignoring uncertainty (Hébert and Link 2009: 88). The alertness to opportunities can only explain entrepreneurial *gains*, not entrepreneurial *losses*, because the pure and penniless entrepreneur could never suffer a loss. How can you bear a loss without owning any funds? To discover a free ten-dollar bill within one's grasp, that is, something obtainable for no costs at all (Kirzner 1973: 39), may be an incident of alertness – although it would better be termed "luck" (Demsetz 1983: 277) – but it does not explain the emergence of profit *and loss*. Kirzner's concept of alertness, whose function is to discover opportunities for profitable change after all, would have to be combined with a state of certainty where all changes have already been factored in so that no losses can evolve (see Knight 1921: 37). Kirzner therefore provides a theory of entrepreneurship that is incomplete (Hébert and Link 2009: 88; Foss and Klein 2012: 66). His attempt to completely separate the entrepreneur from the capitalist fails because he must implicitly assume static conditions in order to protect the property-less entrepreneur from being subject to losses. In equilibrium, however, the function of alertness is redundant; and in disequilibrium, where losses are inherent, the task of being alert can only be fulfilled by someone who owns funds (or some form of collateral) and can withstand a loss. Therefore, the entrepreneur must also command capital.

That Kirzner's theory is not a theory of the pure entrepreneur but of the enterprise in the business sphere becomes clear even by what he writes himself as long as he does not discuss the theoretical construction of the pure entrepreneur itself. Then, Kirzner refers to the alertness as an historical phenomenon that is not present in all human actions. Kirzner presupposes the existence of a price system and the framework provided by the business sphere. Kirzner's entrepreneur is alert to *price differentials* that he might exploit by buying inputs on the cheap market and selling the output on the dear one. The entrepreneurial decision, in his words, is "a decision to *buy* in order to *sell* subsequently" (Kirzner 1973: 40, emphasis added), and pure entrepreneurial profit is "the difference between the two sets of prices" (Kirzner 1973: 39).

This description of entrepreneurial alertness fits the enterprise in the business sphere perfectly. After all, enterprises are mostly about buying low in order to sell high. They are and

must be alert to price differentials in order to make sense at all. In contrast to Kirzner's pure entrepreneur, however, the enterprise is able to bear uncertainty. Up to the amount of its equity capital it can make good for losses. The enterprise, because it is based on capital, can perform the function of alertness even in a world of change where not all seemingly profitable opportunities *ex ante* turn out to be profitable *ex post*.

3.2 Entrepreneurship as creative destruction

In principle, Schumpeter does not describe a fundamentally different process than Kirzner. What he does do is to tell the story the other way round. His entrepreneurs also try to exploit profitable opportunities. Yet, in order to do so, they have to destroy the existing equilibrium, not to generate it. If they want to make profit, they have to establish new combinations of the production factors. The function of Schumpeter's entrepreneurs is to be the leaders in this process of creative destruction of the old and the establishment of the new. They pull the production factors out of the combinations where they have been integrated before and put them into more profitable ones.

Similar to Kirzner (1973), this description of the functions of the entrepreneur omits the problem of uncertainty (Kanbur 1980; Barreto 1989: 30; Hébert and Link 2009: 74).

Schumpeter's entrepreneur does not have to bear losses. There is no negative counterpart to the profit the entrepreneur makes. Profit is paid for the new combinations of production factors, for the development the entrepreneur creates (Schumpeter 1911: 235), but losses do not have to concern the entrepreneur. That is not to say that Schumpeter overlooks the uncertainty of these actions altogether; yet, uncertainty is not taken on by the entrepreneurs *qua* entrepreneurs, but by the capitalists who fund them and who, in the end, also carry the losses (Schumpeter 1911: 217). Schumpeter's pure entrepreneur, like Kirzner's, does not own capital (Foss and Klein 2012: 32).

It is easy to see that Schumpeter does not succeed in his attempt to isolate the entrepreneur from the capitalist. The entrepreneurs' function to break the production factors out of their present employment and to newly combine them presupposes that they possess these factors so that they can dispose over them. But in the capitalist system, the power to do so, according to Schumpeter (1911: 165 ff.), is provided not by the entrepreneurs themselves, but by the capitalists or the banking system in the form of purchasing power (Metcalf 2004:165). In the market economy, creative destruction can only be accomplished by *combining* the entrepreneur – the leader – with the capitalist who provides the necessary purchasing power. More importantly, this destruction results in profit *or* loss. To argue, like Schumpeter does,

that the remuneration for creative destruction goes to the entrepreneurs when it is positive, but to the capitalists when it is negative, surely begs the question of whether it makes sense to speak of two separate functions. The entrepreneur and the capitalist cannot be separated in the explanation of creative destruction. Again, it is the enterprise, not the “pure” entrepreneur, which performs the function attributed to the entrepreneur.

Unlike Schultz (1975: 833) maintains, Schumpeter does not confine the entrepreneurial function exclusively to the business sphere, but considers more or less all economic players to behave entrepreneurially (Demsetz 1983: 276; also Kalantaridis 2004: 22). Yet he pays due attention to the way the market economy is organized which is why it is easy to extract from his own writing how his view dovetails with the business sphere as presented in section 2. Schumpeter (1911: ch. 3) discusses in detail the questions as to how entrepreneurs are able to enforce the new combinations *in the economic system of capitalism* and why they actually do it. In the original German edition, he even added a long appendix to the section on capital, which has been (partly) translated into English only lately (Biondi 2008), where he delves into financial accounting as actually performed by enterprises. In this whole discussion Schumpeter obviously embeds the process of creative destruction in the business sphere of the market economy. His entrepreneur needs money in order to pull the production factors out of their current assignment, and the ultimate goal of this process of creative destruction is to earn money. Obviously, Schumpeter’s story corresponds perfectly to the role of the enterprise in the business sphere. As against the pure and property-less entrepreneur, however, the enterprise can actually perform the function of creative destruction as it has, in its entity capital, the financial power to bear the losses that might result because of the uncertainty involved.

3.3 Entrepreneurship as decision-making under uncertainty

Ludwig von Mises (1949) served as the model for Kirzner’s later use of the “pure entrepreneur” as a mere theoretical construction. Many years before Kirzner, Mises (1949: 253 f.) had argued that the pure entrepreneur as used in economic theory is only an “imaginary figure,” a “methodological makeshift.” Unlike Kirzner, however, Mises does not try to isolate, with his entrepreneur, the element of *alertness* in all human actions, but the element of *uncertainty*. The term entrepreneur refers to “acting man *exclusively seen from the aspect of the uncertainty* inherent in every action” (Mises 1949: 254, emphasis added). Mises distinguishes his theoretical construct of the pure entrepreneur clearly from the factors of production. He also emphasizes that the pure entrepreneur “does not own capital” and

“remains propertyless” over the course of the production process (Mises 1949: 254). Accordingly, Mises runs into the same difficulties as Kirzner does with his penniless entrepreneur.

As it is the function of the pure entrepreneur to deal with uncertainty, he is also the one who, according to Mises (1949: 255), “earns profit or suffers loss.” Loss, however, cannot fall onto anyone who is property-less. Mises (1949: 254) himself states that losses only affect the entrepreneur *in so far as he owns funds*; otherwise, “they fall upon the lending capitalists.” Mises (1949: 254) even admits that the *pure* entrepreneur, the one who does not own any funds, is merely “an employee of the capitalists.” Mises’s pure entrepreneur is, in other words, *not* exposed to uncertainty. This means that his entrepreneur is not able to perform the entrepreneurial function as defined by Mises himself – to take on the uncertainty involved in human action – without also becoming a capitalist and owning funds. Mises’s pure entrepreneur cannot be separated from the capitalist. It is the organizational framework of the market economy with its capital-based enterprises that sneaks in through the backdoor once more.

In his treatment of the entrepreneur, which otherwise resembles the one by Mises, Knight (1921) comes a little closer to explicitly acknowledging the historical specificity of the entrepreneur. Although Knight (1921: 236 f.) also considers uncertainty to be prevalent in all human actions, his entrepreneurs do not bear *all* uncertainty in the economy. Rather they deal with a specific form of uncertainty, namely the uncertainty of producing for a market (Knight 1921: 241). Still, Knight does not want to group the entrepreneur and the capitalist together. He concedes at least the possibility, though “rare and improbable,” of a pure and propertyless entrepreneur who contributes nothing but the responsibility for the ultimate decisions to the production process (Knight 1921: 299 f.). Implicitly, Knight (1921: 355) himself invalidates this proposition with his observation that *only property* can make the guarantee against the net loss of a business venture, that is, that only property can bear uncertainty.

Mises’s and Knight’s approach is carried forward, among others, by Casson (2003) and Foss and Klein (2012) who explicitly link the uncertainty-bearing by entrepreneurs to resources that are put at risk. This literature scraps the idea of a pure and penniless entrepreneur altogether. Ownership and entrepreneurship thus cannot be separated and entrepreneurial judgment always “implies asset ownership” (Foss and Klein 2012: 20). This way, a historically specific element of the market economy – property rights – seems to be introduced into the definition of the entrepreneur as the bearer of uncertainty.

Without any further qualification, however, the mere presence of property rights as such does not explain sufficiently how entrepreneurs bear uncertainty and thus perform their function. After all, property rights over resources are presupposed in the analysis of all human decision-making. Even otherwise property-less workers own scarce resources, namely their time and their working power, and therefore their choice between leisure and labor is nothing but the allocation of scarce resources in the face of uncertainty. That according to the view in question the entrepreneur is still a universal phenomenon and all people must be considered to be entrepreneurs shines through in Casson and Wadeson (2007: 286) for whom the mere fact that entrepreneurial activity has opportunity costs – the commitment of time e.g. – suffices to demonstrate that entrepreneurship is based on the ownership of resources. Foss and Klein also comprise more or less all human actions within their definition of entrepreneurship. When they state that it is the entrepreneur who ultimately decides on the utilization of resources (Foss and Klein 2012: 40, 98 f.), they would have to include the worker, the land owner, and the capitalist who are all ultimate decision-makers in this sense. When they speak of property rights, they simply mean the possession of and the control over resources. A property right, in this literature, signifies the ability to freely choose among alternatives and thus turns out as a universal category (Hodgson 2015b: 11) – as does their concept of the entrepreneur. In accordance with their Austrian approach to capital as a collection of heterogeneous producer goods, Foss and Klein (2012, ch. 5) are mainly concerned with the decisions on and the control over the use of heterogeneous assets, which is a matter of possession, and not so much with the question of how the uncertainty involved in producing for the market is actually dealt with by capital-based enterprises which hold property rights in these assets. Their universal definition does not isolate the entrepreneur from the owners of the factors of production. The distinctive feature of the entrepreneur gets lost if *all* decision-makers are considered to bear uncertainty in the sense that they have to bear the consequences of their choices. But once again we observe that, in their actual discussions, the respective authors do not adhere to their definitions. They do not deal with all decisions on the utilizations of resources, but they nearly exclusively focus on the enterprise in the market economy. The uncertainty they are concerned with is not the uncertainty a laborer bears in the face of massive lay-offs during an economic crisis, or of a non-commercial forest owner in times of increasingly extreme meteorological events. What they are investigating, along the lines of Knight (1921: 240 f.), is the uncertainty that is involved in producing not for oneself or on order, but for the general market. The investment of actual money – or resources evaluated in money – in the production process has uncertain outcomes, and it is this kind of uncertainty

that entrepreneurs shoulder: whether they get back what they have invested before. At one point, for example, Foss and Klein (2012: 39) explicitly limit their approach to a “market setting” and state that they “are mainly interested in a specific kind of uncertainty-bearing, namely the deliberate deployment of resources in anticipation of financial gain.” In short, what is at issue is a historically specific phenomenon, i.e., the uncertainty that is implied in the Marxian formula Money – Commodity – Money’, the scheme which describes the actions of enterprises in the business sphere of capitalism.

4. How and why the enterprise organizes the production process

Although they fail to isolate the entrepreneur from the capitalist, the theories of the entrepreneur presented in the last section do not have to be discarded. It must only be made clear that they are not theories of the entrepreneur as a theoretical construct, but are rather theories of the enterprise in the business sphere of capitalism. It is easily possible to reinterpret them such that they perfectly harmonize with the idea of the enterprise as a fictional person, created by accounting and based on capital, and that organizes production by maximizing monetary profit. What is more, when these theories become embedded in the business sphere and freed from the theoretical construction of the pure entrepreneur, they make important contributions to the understanding of how enterprises actually organize the production process under capitalism.

Let us begin with Knight’s and Mises’s theory of the entrepreneur as the bearer of uncertainty. This approach might not be able to isolate the pure entrepreneur, but it strongly helps to understand the reason for the existence of the business sphere in the first place. If we substitute, in this theory, the enterprise for the entrepreneur, it becomes obvious why it is the enterprise which ends up deciding on the use of the production factors.

As was shown above, all actors, not only enterprises (or entrepreneurs), bear uncertainty. What demarcates the enterprise from other actors when it comes to the bearing of uncertainty is that the *uncertainty it bears arises because it provides (relative) certainty for others*. This becomes obvious in Knight’s (1921: 271 ff.) discussion of the non-contractual character of profit. Profit is a residual income. Its height is not and cannot be fixed in advance. In contrast, wages, rent, and interest are contractual incomes. Their recipients are freed from the necessity to produce for an uncertain market as they receive a fixed remuneration from an enterprise independently of the ultimate outcome. This does not mean that they do not have to face any uncertainty. For various reasons, their contracts might unexpectedly be terminated, or not prolonged, or even defaulted on by the employing enterprise. But as long as the contracts

hold, they are exempt from the uncertainty of producing for the market which is regularly accompanied by losses. Inasmuch as an enterprise pays wages, rent, and interest, that is, contractual income, it assumes uncertainty for others by creating a kind of certainty that otherwise would not exist.

The idea that it is the function of the entrepreneur to organize the production process, and therefore to bear the uncertainty of producing for the market, has already been indicated by Cantillon (1755). It was later developed by Say (1803) and Hawley (1927) (see Barreto 1989: ch. 1). Hawley in particular recognized that the entrepreneur cannot be put on equal footing with the factors of production. According to him, the factors of production do not combine, they *are* combined. “The entrepreneur is the only combiner of the three subsidiary productive factors” (Hawley 1927: 417). In Hawley’s words, the entrepreneur “dominates the whole productive process” (1927: 414) and “is necessarily the governing factor in economic activity” (1927: 415). In the terminology of this paper, I would summarize Hawley’s point by saying that the entrepreneur belongs to the sphere which organizes the production process. On the other hand, however, Hawley (1927: 419) clearly and explicitly separates the entrepreneur from the capitalist. He does not recognize that the function of combining the factors of production imperatively necessitates the power to do so. In capitalism, this power is granted by capital. Although Hawley is on the right direction, he fails to apply his theory to the *enterprise* but tries to construct a universal theory of the entrepreneur.

To continue my argument, the reason why production is conducted according to the rules of the business sphere, why the owners of factors of production allow profit-oriented enterprises to decide upon the use of these factors, is that enterprises grant them some kind of insurance by paying them a periodic income that is, at least to some degree, independent of the outcome of production. Enterprises do not bear a universal form of uncertainty, but a special form that only emerges where there is production for the market. In order to be able to do so, they must be based on capital out of which income can be paid without there being a guarantee of recovering it later.

While the uncertainty theory of the entrepreneur, after some reinterpretation, gives a reason why capital-based enterprises in the business sphere are able to direct the production process in capitalism, it does not explain how these enterprises actually bring order into this process and how production is brought to respond to consumer wishes. In this regard, Israel Kirzner’s theory of the entrepreneur contributes the decisive argument. Kirzner’s entrepreneurial function of alertness, if attributed to the enterprise in the business sphere, perfectly explains why profits tend to disappear and how factor costs systematically tend to approach consumer

goods' prices. Braun (2015) has described the way how competition within the business sphere and the alertness of enterprises towards price spreads make sure that the allocation of the production factors tends to be aligned with consumer preferences. The objective of the individual enterprise is to maximize the spread between the money spent on factors of production and the money received from selling its products to downstream enterprises or, in the end, to consumers. An alert enterprise invests its capital in those industries and lines of production where the factors of production are underpriced compared to the consumer demand and where therefore large profits are probably to be had by adapting production processes. Whether it makes profit or not can easily be verified by its accounting system as both costs and revenues are expressed in money terms, or at least can be evaluated in money. In profitable lines of production, competition between different alert enterprises brings about a tendency of factor costs to rise and product prices to fall. In loss-making industries, the opposite will be the case. Consequently, there is a tendency for production factors to move into profitable industries and, furthermore, for marginal expenditures on factors to correspond to the discounted marginal revenues of product sales. In the (hypothetical) case of equilibrium, factors are allocated optimally with regard to consumer preferences. The scope of Kirzner's theory is limited, however, because it takes the price system for granted. The enterprise is alert to price differentials and pushes disequilibrium prices toward their equilibrium values (Foss and Klein 2012: 65). This implies that it can only help to better allocate factors in those production processes that already exist. Mere alertness to prices does not explain how new lines of production come into being and complement or supersede others. On this point, Schumpeter's theory of the entrepreneur proves itself helpful. It explains how enterprises conquer new markets and extend the business sphere to create and/or organize new lines of production, thus provoking technical progress. The assignment of creative destruction to the enterprise also provides an explanation as to how prices come into being in the first place, that is, how the business sphere develops and spreads. True, Schumpeter (1911) assumes as a starting point a circular flow equilibrium where, as in Kirzner's theory, the price system already exists. However, his famous notion of enforcing new combinations explicitly covers two cases where the entrepreneur or, in our case, the enterprise does not come upon existing prices, but establishes new ones (Schumpeter 1911: 100 f.). The enforcement of new combinations can mean, among other things, the production of a new good or a new quality of a good, and the exploitation of a source of raw materials or intermediate goods that has been disregarded or inaccessible before. In both cases, it is not possible to draw on already existing prices. One enterprise must be the first one ever to pay a

price for a certain good or production factor or the first one ever to put a certain good up for sale. In other words, if Schumpeter's theory is applied to the enterprise, it can explain how enterprises drag inputs and outputs into the business sphere and thus spread the organizational framework of the market economy.

All three theories of the entrepreneur taken together provide a fair view on how the business sphere with its profit-oriented enterprises organizes the production process under capitalism. What remains to be done is to clarify the role the enterprise plays in neoclassical economic theory with its focus on equilibrium analysis.

5. The entrepreneur in equilibrium

The economic theories of the entrepreneur have failed in their attempts to define the entrepreneur in a universal way. Their entrepreneurs could all be reduced to an historical phenomenon called the enterprise. This entity operates in what has been called the business sphere of capitalism and there performs the functions usually ascribed to the entrepreneur. It is alert towards profitable spreads in the price system, extends the business sphere to cover new ground, and takes on the uncertainty that is involved in an economic system where the output of production has to be sold on the market.

Although it can be argued that the enterprise performs in real life the functions ascribed to the entrepreneur by the theories of the entrepreneur, it seems difficult to imagine how the enterprise could be integrated into the main body of economic theory. The approach presented so far comprises several notable theories of the entrepreneur, and therefore shares their central shortcoming: like them, it does not seem to be reconcilable with the equilibrium framework of standard economics. Schultz (1975: 828) condensed this point by saying that it is the specific task of the entrepreneur "to deal with economic disequilibria."

That the entrepreneur does not fit into the equilibrium framework of neoclassical economics is generally taken for granted. According to Baumol (1968: 67; 2010: 13 f.), entrepreneurs do not have a place and are simply not necessary in standard neoclassical micro. The standard model is basically an instrument of optimality analysis of well-defined problems (also Demsetz 1983: 274). Households and firms determine their optimal decision values simultaneously. Households, in setting their supply of the factors of production, fully take into account the firms' decision on the production of consumer goods and vice versa. The instant coordination of the simultaneously set decision values implies that the income of the households, i.e., of the factor owners, generates itself. Income is paid as a direct, simultaneous – and optimal – reaction to the households' decision on the amount and the direction of

consumption which itself, of course, depends on the households' income again. The firm, in this model, does not provide any room for entrepreneurship, however defined. It is taken to perform mathematical calculation in order to yield optimal results for its decision values. No separate acting person or entity like the entrepreneur is necessary in this model.

It has been argued in addition that, after the neoclassical theory of the firm had been completed in the 1930s by John Hicks, Paul Samuelson, and R. G. D. Allen, the entrepreneur even had to be dropped because otherwise the internal consistency of the theory would have been jeopardized (Barreto 1989: chaps. 3-5).

Despite these discouraging statements, it can be shown that the enterprise and the business sphere nonetheless play a central role even in neoclassical micro-theory. They are what can be called the historically specific institutional setting behind the notorious assumptions of perfect rationality and complete foresight of all decision-makers. In the neoclassical equilibrium model, these assumptions are the substitute for an explanation as to how and why the allocation of the production factors is perfectly aligned with consumer preferences. To repeat, firms and households are simply assumed to know the utility and production functions and to be capable of *calculating* from that the demand and the supply schedules and their optimal decision-values (Leibenstein 1966: 397). Their behavior is considered optimal in that they regain equilibrium instantaneously (Schultz 1975: 829).

Now, behind this perfect alignment of factors and preferences via omniscient and omnipotent decision-makers is nothing but the working of the business sphere as illustrated in figure 1 and described in section 4. In their trading activities, the enterprises in the business sphere translate the technical characteristics of the different production processes and the preferences of the consumers and owners of the production factors into market prices. In their attempts to maximize the spread between the money spent on factors and the money received from selling their products to other enterprises or to consumers, they create a tendency to align the production process with the preferences of consumers and factor owners. In equilibrium – the theoretical final state of rest – perfect coordination results.

The business sphere is the precondition of the tendency towards equilibrium. It is the institutional setting implicit in neoclassical equilibrium analysis. The coordination of factors according to consumer wishes which is, in the model, accomplished by optimizing decision-makers actually rests upon enterprises calculating in money and trying to make monetary profits on top of their invested capital. *The business sphere of profit-oriented enterprises, in other words, does not and must not disappear in equilibrium.* It is implicitly present under the guise of the assumption that all decision-makers are perfectly rational and informed.

Equilibrium simply denotes the fictional endpoint of the competitive market process, a situation where the capital the enterprises are based on does not earn profit any more, but still bears interest according to the equilibrium rate.

There is no reason to assume that outside the institutional setting of the market economy any coordination would take place at all, let alone a perfect one. This is not to say that the organization of production and the coordination of the different factors could not theoretically be accomplished in a different way. The business sphere is the sphere of organization specific to capitalism. Other economic systems might find different solutions to the problem. The debate on the possibility of economic calculation under socialism has brought to light, however, that this will be no easy task and even sympathizers of a socialist economic order admit that so far there is “no viable alternative” to the coordination of the complex activities of modern economies by markets characterized by profit-oriented enterprises (Hodgson 2015a, ch. 12). As long as no alternative has been found, the rationale for the assumptions of perfect rationality and complete foresight is the working of the business sphere which creates the tendency towards the equilibrium which neoclassical theory focuses on.

6. Conclusion

This paper has demonstrated that in order to find the place of the entrepreneur in economic theory we must distinguish two levels: the level of production and the level of organization. Whereas production is a universal technical phenomenon, the organization of production is historically specific. In the economic system of capitalism, production is organized by enterprises which calculate in money and try to maximize their profits by buying low and selling high on the market. They operate in what has been called the business sphere, the organizational sphere of capitalism where actions are basically oriented by what Marx has grasped in his formula Money – Commodity – Money’.

The theories according to which the entrepreneurial function is either alertness, or creative destruction, or uncertainty-bearing, are correct in the sense that each of them focuses on an aspect that is important for the enterprise in the business sphere. Yet, they do not locate their entrepreneurs in the business sphere but try to put them on equal footing with the technical and universal factors of production. Therefore, they all define entrepreneurship as an aspect of human action that is present in all historical contexts, not only in capitalism.

I have shown for each of these theories that they fail to properly isolate the entrepreneurial function. At some point or another, they cannot do without implicitly or explicitly introducing the ownership of capital as a necessary precondition for those who perform the

entrepreneurial function. Based on this result, I have demonstrated that these theories only make sense when they are applied to the enterprise within the business sphere of capitalism. They then become historically specific theories of the way capitalism is organized. Furthermore, it becomes obvious that they are not mutually exclusive, but that each of them describes one aspect of the organizational activities of the enterprise. By distinguishing the two levels and assigning the entrepreneurial function to the level of organization, I was also able to pinpoint the place of the entrepreneur in equilibrium. The neoclassical assumptions of perfect rationality and complete foresight of all agents are simply a different way of expressing the idea that production is organized perfectly and that we as economists do not have to bother with this question while discussing allocative or distributive questions. The rationale behind these assumptions, however, is the business sphere with its profit-oriented enterprises which tends to align the technical givens with consumer preferences. Without this organizational sphere, neither the assumptions nor the resulting equilibrium would make sense.

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