# **Chapter 3 Entrepreneurial Tools**

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**Abstract** The required tools for the analysis of the entrepreneur and their economic actions are absence and some confusion does exist which impedes theoretical development and empirical testing. The aim of this article is to set out a collection of analytical tools which in turn makes it difficult to draw-up economic policy used to foster entrepreneurship. For this purpose, the present paper given attention to the identification of the nature of the entrepreneur and his economic function; to study the composition and quality of the entrepreneurial network and the factors which affect the appearance of said economic agents.

#### 3.1 Introduction

The economy is a tool-box; but the set of tools is not complete. The appropriate tools for the analysis of the entrepreneur and their economic actions are notable for their absence (Fellner 1983; Barreto 1989).

Numerous authors have rummaged in the box searching for the appropriate tools, or have even tried to create other new ones. Nevertheless it is certain that even amongst those researchers engaged in this area of economic investigation that we term "entrepreneurship", no methodological agreement exists regarding the research programme and its heuristic that might help us avoid the confusion that often arises (Machlup 1967).

It is true that the entrepreneur is a difficult agent to observe in its pure state (Shapiro 1983). It is perhaps for this reason that there appears to be lack of empirical data on the composition of the entrepreneurial network, as well as on the possible indicators of the qualities of the said network.

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<sup>&</sup>lt;sup>1</sup> See Baumol (1995), Kilby (1971), Kirzner (1973), Casson (1982), Wu (1989), Schultz (1990), Adaman and Devine (2002), amongst others.

Also problems exist in detecting the nature of the entrepreneurial function. At times, this function appears in a moment of innovation and after, as occurs with the "Schumpeterian phantom", disappears for a long period of time. Other times, it is the prey, as Kilby affirms, which everyone says they have seen but no one has been able to capture.

Many have written about the relevance of entrepreneurs in a period of economic growth and their role at the heart of economic activity within market systems.<sup>2</sup> And there exist countless articles on how economic theory has forgotten the entrepreneur.<sup>3</sup> Also, it is certain that we can find serious studies on entrepreneurial action,<sup>4</sup> but which have not been accepted as constituting general economic theory by the academics working in this field.

The truth is that the tool-box continues to be relatively empty and some confusion does exist which impedes theoretical development and empirical testing, which in turn makes it difficult to draw-up economic policy for the promotion of entrepreneurial activity.

Nevertheless, we believe the literature neglects the existence of some tools, more or less accepted, that could be utilised to generate an economic theory of the entrepreneur that could be integrated, without too much distress, into economic analysis.

The aim of this article is to set out a series of themes relevant for the elaboration of a general theory of the entrepreneur and, accordingly, to establish a collection of analytical tools with which to deepen our understanding of the role of the entrepreneur and perhaps to facilitate the development of future research in the field.

The present paper is structured along different study themes in which, in each case, the initial hypothesis and proposed tools will be set out. In essence it seeks to advance in the identification of the nature of the entrepreneur and his economic function; to study the composition and quality of the entrepreneurial network and the factors which affect the appearance of said economic agents.

<sup>&</sup>lt;sup>2</sup> The work of Treadway (1969) y Hawawini (1984), are examples of models of entrepreneurial behaviour amidst uncertainty, while the work of Williams (1983), Grabowski y Vernon (1987), Romer (1990) and Segerstrom (1991), amongst others, represents attempts to create a model around the Schumpeterian innovative entrepreneur. Chandler (1990), Scherer and Ross (1990), Dosi (1988), Thurik (1996) and Carree (2002) demonstrate the influence of entrepreneurial activity in the changes in the productive structure towards those that favour economic growth. Also the empirical literature shows the effects of entrepreneurial activity on economic growth (Leff, 1979; Wennekers and Thurik, 1999; Carree and Thurik, 2003).

<sup>&</sup>lt;sup>3</sup> See Baumol (1968), Kilby (1971), Kirzner (1973), Casson (1982), Blaug (1986) or Schultz (1990).

<sup>&</sup>lt;sup>4</sup> One can cite the work of Wilken (1979), Baumol (1983), Casson (1982), Kilby (1982), Jones and Svejnar (1985), Roskamp (1979), Kilhstrom and Laffont (1979), Chamley (1983), Bond (1986), amongst others.

## 3.2 Entrepreneurs: Agents and Productive Figures

## 3.2.1 Initial Hypothesis

We consider that it is possible to introduce the figure of the entrepreneur into diverse theoretical constructions—the theory of oligopoly and monopoly, the theory of innovation and growth, welfare economics, the theory of organization, management science, statistical description, operational research and consultation—if we correctly differentiate between the various productive factors.<sup>5</sup>

In our paper we accept as our initial hypothesis, following the tradition of Cantillon, Say, Marshall and Walras amongst other authors (O'kean and Menudo 2003), that entrepreneurial activity constitutes an additional productive factor, along with natural recourses, labour and capital (Schultz 1975; Baumol 1990; and Casson 1982, 1997).

## 3.2.2 Factors, Agents and Income

If we accept entrepreneurial activity as constituting a further productive factor, the resultant four productive factors determine other productive agents that have property rights or the availability of these factors. Thus, four productive agents can be identified: owners of natural resources, workers, capital and entrepreneurs. These four factors bestow on their owners four distinct incomes: natural resource rents, work salaries, interest or rents form capital and entrepreneurial earnings.

Table 3.1 allows us to differentiate between the productive factors, the agents that are owners of these factors or develop this productive action, and the income that these productive agents receive. In this way we can emphasize four production factors, four productive agents and four incomes, where "entrepreneurial earnings" refers to the income received for the carrying out of the entrepreneurial function, later defined.

Table 5.1	ractors,	agents	and	incomes	

Productive Factors	Productive Agents	Incomes
Land, Natural resources	Landowner, Owner	Rent
Labour	Worker	Salary
Capital	Capitalist	Interest
Entrepreneurial function	Entrepreneur	Entrepreneurial earnings

<sup>&</sup>lt;sup>5</sup> There also exist writings that do not consider entrepreneurial activity as a factor of production (Abraham and Gurzynski 1987), considering that entrepreneurial activity and the decision-making process as unconsciousness (Harper 2003). The entrepreneurial activity is more than a stock of knowledge, and without rejecting these approaches, our objective is to develop theoretical arguments with a strong basis and general applicability that will go beyond the hunches and impulses found in all decision-making.

## 3.2.3 Productive Figures

The main difficulty in studying the entrepreneurial function derives from the impossibility of visually isolating the entrepreneurial agent. In reality what can visualised is what we call productive figures, which tend to be physical persons that bring together diverse productive agents and therefore the property or the availability of diverse production factors. Thus, the owner is the person in which the role of capitalist and entrepreneur coincide; the manager refers to that person who is both entrepreneur and worker; the self-employed person a fusion of entrepreneur, worker and capitalist; and we can call farmer the physical person who combines the four productive factors and the four productive agents.

Table 3.2 illustrates some of these possible productive figures, and in this way we differentiate between owner (entrepreneur and capitalist), the manager (entrepreneur and worker), the self-employed or artisan (entrepreneur, capitalist and worker) and the farmer (in which the four productive agents coincide), applying a terminology to these productive figures which has a certain classic ring to it but which still remains useful for our objective.

Undoubtedly the productive entrepreneurial "agent" is often confused with the "productive figure" of the owner and this causes considerable confusion regarding entrepreneurial activity and principally about the origins of the incomes it generates. In general, the accumulation of interests or capital rents and entrepreneurial earnings coincide in the figure of the owner.<sup>6</sup> And for this reason it could be convenient to use the term "profit", as payment from the productive figure which includes the entrepreneurial agent, but always bearing in mind that said term also refers to different incomes as payment of different factors.

This productive figure tool can permit a more efficient empirical approach to the study of the managerial/entrepreneurial function, accepting that in general our analysis is concerned with productive figures rather than agents.

**Table 3.2** Agents and productive figures

Productive Figures	Owner	Manager	Artisan Self-employed	Farmer
Owner				
Worker				
Capitalist				
Entrepreneur				

<sup>&</sup>lt;sup>6</sup> As we all know, the concept of profit is conceived in different ways according to the perspective adopted. Thus, it may refer to book profit, tax profit or financial gain and includes all the productive activity costs, including those of opportunity. According to the property structure, conditioned by the productive figure (self employed, owner, corporate entity), the size of the profits will differ. In addition, if we accept one of the basic hypothesis of entrepreneurial theory, such as the existence of market disequilibrium, which leads to profit opportunities, the concept of profit must open the way for the creation of a surplus, which will be appropriated by some economic agent or other, according to the definition of the firm's property rights.

## 3.3 Entrepreneurial Function Vectors

Without doubt the biggest advance and agreement reached in entrepreneurial theory is due to the greater importance given to studying the role of the entrepreneurial function (functional hypothesis) instead of concentrating on identifying the figure of the entrepreneur (indicative hypothesis), which until now has been an unfruitful line of investigation.

From the various contributions it can be concluded that the entrepreneurial function is composed of four vectors or theoretical principals, with perhaps the addition of one other that could be of use. This structuring in vectors permits us to combine the different theoretical contributions in a compatible way, with the aim of developing a single entrepreneurial function. Thus, we avoid the controversies over which concept of the entrepreneur is the most important or useful (Kirzner, 1979b). Each vector implies a study area where specialists employ their own concepts. The integration of these vectors claims to understand what the specialists working in the other areas are doing so as fuse them together to form a single and generic entrepreneurial function.

Amongst the main vectors four grand theories on the managerial/entrepreneurial function stand out:

(a) Leibenstein' entrepreneur responsible for reducing those inefficiencies that are always existent in the company's production processes.

We can briefly sum up Leibenstein's contribution (1969, 1979) in an entrepreneurial scenario characterised by the permanent existence of inefficiencies brought about by transaction costs, the lack of specification inherent in labour contracts and gaps in knowledge. These inefficiencies incur costs far superior to the theoretically minimal ones. The firms do not minimize their costs and a degree of inefficiency exists (X-Inefficiency) that has to be reduced. The entrepreneur for Leibenstein is the agent permanently responsible for reducing the degree of inefficiency in his firm. It is here that the first role of the entrepreneurial function can be identified.

(b) Kirzner's entrepreneur who seizes the profit opportunities that always exist in the market.

The second theory we consider is devised by Kirzner (1973, 1979a, 1985), who thinks that the entrepreneurial function is more justified in the market process than in the firm and in an environment of insufficient information. This lack of information means existing profit opportunities are only surmised by the most perceptive. Detecting these profit opportunities and undertaking the necessary actions to take advantage of them constitute, for Kirzner, the essence of the entrepreneurial function. Entrepreneurs are therefore agents that contribute significantly to the process of market equilibrium and amongst their qualities one should stress their permanent state of alert in an environment in which information is not perfect.

(c) Knight's entrepreneur that faces up to uncertainty by predicting the future.

The introduction of time and uncertainty regarding the future, constitute the basis of Knight's theory (1921) on the entrepreneur and the third vector of the entrepreneurial function. To understand this theory it is necessary to differentiate between a situation of risk and a situation of uncertainty. Faced with a situation of risk, the agent responsible knows the possible scenarios and calculates the possibilities of said scenarios occurring. Faced with a situation of uncertainty the scenarios are unknown and its possibilities non-existent. In general decisions that have implications over a long period of time are subject to situations of uncertainty. The entrepreneur is the agent responsible for converting a situation of uncertainty into a situation of risk. He tackles uncertainty, he determines the possible scenarios that could arise and analyses the probability of their occurring. The agent who is the owner of the financial resources will be the one who assumes the risk. Knight's entrepreneur will have to venture to prophesize on the future and will act accordingly; his function is none other than to confront risk. The scenario where he acts is not a situation of imperfect information which he perceives and other economic agents ignore, as Kirzner claimed, but rather one where he will evaluate the future environment, a situation in which there is no information.

#### (d) Schumpeter's innovative entrepreneur.

The fourth entrepreneurial function theory is the aforementioned contribution of Schumpeter's innovative entrepreneur. The Schumpeterian entrepreneur operates within the context of a cyclical process of economic development. The entrepreneur is an agent that destroys the equilibrium with the process of creative destruction. This action is the essence of economic development since it provokes adaptive responses by the rest of the agents. The nature of the creative response consists of companies, industries or economies acting outside the existing practical field. This is characterised by the fact that the aforementioned ordinary inference rules on pre-existing data cannot be applied; because it models the following course of events and their results over the long term; and thirdly, it has evidently linked, to a greater or lesser extent, to: the quality of personal available in a society, the relative quality of the personal, that is to say, the quality available in a determined area of activity relative to the quality simultaneously available in other fields, and the decisions, actions and way individuals behave (Schumpeter 1947).

For Schumpeter (1912) there exist five types of innovation: introducing a new good or distinct quality of this good; introducing of a new production method; opening a new market; securing the exploitation of a new source of raw materials or semi-manufactured goods; and creating a new industrial organisation.

The Schumpeterian entrepreneurial theory has become the most characteristic of all the existing proposals, in the frustrated attempt to introduce the entrepreneur into conventional economic theory (see Blaug 1983).

His innovative entrepreneur is pretty different from the capitalist, manager, owner, or even the company itself, although several of these facets do coincide in

the same physical person (Schumpeter 1947). His function does not consist especially in invent anything nor create in any way the conditions that the company exploits. In consists of achieving results (Schumpeter 1950).

The dynamic process brought about by the innovative entrepreneur is well known, and leads to a new market equilibrium and the gradual disappearance of the extraordinary profits responsible for the "adaptive response". For Schumpeter, strictly speaking, the imitator is not the entrepreneur, and the innovative agent, will cease to be considered as such if he does not carry out new combinations in practise effectively (Schumpeter 1912).

It is for this reason that we have referred to the Schumpeterian ghost, to the extent that for Schumpeter an agent is only an entrepreneur when he innovates but ceases to be one when he takes on other, non-innovative, activities. This presupposes, by definition, that the entrepreneurial function is excellent and that entrepreneurs are invisible most of the time.

(e) Finally we can define a fifth entrepreneurial function; typical of the way of the entrepreneur behaves in politicized markets, where the State intervenes to alter the economic environment, for its own benefit or for that of a particular group. The essence of this theory lies in the relevance of the State in the modern economy. As a result of its actions new economic environments and new profit opportunities arise. In general, the entrepreneurial agent will keep an eye the totality of actions that constitute the economic policy of the different governments. Some entrepreneurs will even be tempted to influence strategic public agents—those that take the really relevant decisions—so that the actions carried by the public agencies favour their own interests. If these actions constitute part of the entrepreneurial function, or is merely rent-seeking, is a good subject for discussion; similarly if this activity is legal or whether it borders corruption. But they exist. There are many entrepreneurial agents that apparently "waste time" maintaining this type of relations. This vector allows us to appreciate the importance of the institutional representation of entrepreneurial interests, if its representatives manage, through concerted public action, to guarantee a more favourable economic environment for its associates whose interests they represent (see O'kean 1991).

# 3.4 Entrepreneurial Network

How to step from the functional hypothesis to the indicative hypothesis? That is to say, to step from studying what the entrepreneur *does*, to studying who the entrepreneur *is*. For us the entrepreneur is the one who performs one or all of the entrepreneurial function vectors, an action that results in the design and implementa-

 $<sup>^7</sup>$  Regarding the debate between the functional and indicative approaches see Casson (1982), Sánchez Gil (1966) and O'kean (1991).

tion of the company's competitive strategy. This assumption, due to its importance, requires a brief explanation.

Firstly, we think that the entrepreneurial agent is that or those that design or implement the company's strategy. This permits us to overcome the traditional limitations of the indicative hypothesis, and, at the same time, to conceive that in some companies the entrepreneur is an individual agent, while in others the entrepreneurial function is carried out by various people, by way of the staff or management team.

The strategic design, once again, will deal with reducing inefficiencies, innovation, searching for new profit opportunities, or the definition of future scenarios. Understanding some of these vectors, through the design or implementation of the competitive entrepreneurial strategy, contributes to the performance of the entrepreneurial function.

On the other hand, as we will see below, being a entrepreneur does not mean being an "excellent entrepreneur". If these vectors are not undertaken with excellence, the quality of the entrepreneurial function will be carried out poorly, but will still be carried out.

## 3.4.1 Composition of the Entrepreneurial Network

The group of agents that perform the entrepreneurial function, be it in a certain sector, region or country constitute the entrepreneurial network of said sector, region or country. It permits us to conceive the entrepreneurial network as being composed of two types of entrepreneurial agents: individual entrepreneurs, and in the case of larger firms, corporate entrepreneurs, in which the entrepreneurial function is carried out by diverse natural persons. Amongst the individual entrepreneur we can even differentiate between employers and the self-employed (own-account worker), as we have done in fig. 3.1, two professional categories on which we can find homogenous statistical data in the quarterly labour market surveys, carried out by the national statistics office.

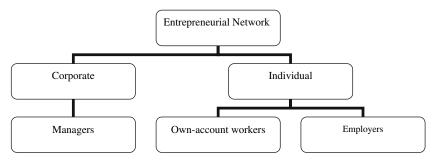


Fig. 3.1 Entrepreneurial network

## 3.4.2 Quality of the Entrepreneurial Network

Not all entrepreneurs carry out their activities to the same level of quality. We disagree, as we have indicated, with those, such as Schumpeter or Schultz amongst others, that think that the entrepreneur is only considered as such when he performs a certain vector of entrepreneurial function with *excellence*, ceasing to be so once his activity converts itself into a routine. For this reason we consider necessary to distinguish between four categories within the entrepreneurial network, dealing with its quality, as we did in fig. 3.2, differentiating between, an excellent entrepreneurial network, imitator, routine, and inexistent or insufficient (see O'kean 1991).

While the first category of the network would be that which is capable of designing and implementing innovative strategies, which reduce inefficiencies, confront uncertainty and perceive and grab new profit opportunities, the second would be characterized by agents who study the competitive strategies of the best, and copy them. The entrepreneurial network would be routine when it is predominantly made up of companies that, year after year, continue to manage their entrepreneurial without appreciable change. Finally, if, on studying a region or country, a lack of entrepreneurial activity is noted, the entrepreneurial network is then to be considered vacuous or insufficient for the economy's employment and growth requirements.

The entrepreneurial network categories also permit us to suggest a sequence of entrepreneurial promotion policy, that could invigorate a routine network, shifting it towards imitation and finally towards excellence or directly confront the inexistent/insufficient entrepreneurial network scenario. Frequently entrepreneurial promotion policies are designed without really knowing the quality of the entrepreneurial network, and seek to attain a degree of excellence, which given the initial network, cannot be achieved immediately.

Undoubtedly the indicators of entrepreneurial network quality is of the tasks yet to completed and the work of Sweeny (1987), amongst others, can serve as a reference, although one has to recognise that perhaps this may be one of the most complex tasks pending.

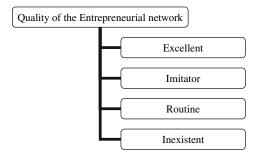


Fig. 3.2 Quality of the entrepreneurial network

## 3.5 Variables that Affect the Appearance of Entrepreneurs

What determines that a entrepreneurial network is sufficient with respect to its components, and excellent regarding its quality? This is a key question in economic development and of concern to all economists working on this topic. It is also the most relevant question from an economic policy point of view.

If the entrepreneurial function represents another production factor, the logical thing would be to use the same focus in its analysis as with the rest of the factors and consider the functioning of the entrepreneurial market. But attempts to systematise the entrepreneurial market have been diverse and fairly unsuccessful.<sup>8</sup> The most difficult question is to determine the demand of the entrepreneurial function, since in the individual entrepreneur (the most characteristic), the same person physical person is at the same time, both the supply and the demand, and this clashes with the traditional market vision in which the suppliers and customers compete amongst themselves.

A way to advance in the study of the factors that determine the appearance of entrepreneurs is to consider, on one hand, the factors which affect the desire to carry out this activity (that would be the demand), and on the other hand, the costs and necessary requirements to carry out his function (that we could identify as the supply).

To determine why the different economic agents wish to be entrepreneurs we can apply Kirzner's theory on the entrepreneurial function and affirm that the expected benefits of carrying out the entrepreneurial function are the main incentive to be entrepreneurs. Whether it was reducing entrepreneurial inefficiencies, recognising market disequilibrium that could reap profit opportunities, confronting uncertainty or innovating, the economic agents will decide to be entrepreneurs if they can obtain profits, company earnings to be exact, which is how we have called their specific income.

What does the possibility of seizing these company profits depend on?

- 1. Firstly, the general economic conditions, and, naturally, the macroeconomic policy is relevant. (see Audretsch, Wennekers and Verheul 2002)
- 2. Secondly, the degree of economic competition, given that if the information tends to be perfect, entrepreneurial agents will be in better conditions to detect profit opportunities and to initiate actions to seize said profits, that in regulated or imperfect markets. (see Lumpkin and Dess 1996; Thurik 2003).
- 3. On the quality of the entrepreneurial network itself, since an excellent entrepreneurial network will better detect entrepreneurial opportunities than

<sup>&</sup>lt;sup>8</sup> See Kilby (1971), Hammeed (1974), Casson (1982), Schultz (1980), Kaiser (1990) and O'kean (2000).

<sup>&</sup>lt;sup>9</sup> The development of these question can be seen in our work referred to above, in which the factors that influence the desire to be entrepreneurs such as expected income are presented as entrepreneurial demand and costs and requirements as the supply in the entrepreneurial market, noting that the term market is used as a theoretical tool; see O'kean (2000).

another of poor quality (Aldrich and Zimmer 1986). Policies for the promotion of entrepreneurs, accumulated experience and improved entrepreneurial management knowledge, can help to improve the quality of the entrepreneurial network (O'kean et al. 1988; Audrestsch et al. 2001).

4. Finally, technological change can leave an excellent entrepreneurial network obsolete, incapable of detecting new opportunities, new business, and an environment that nobody understands (Tansik andWolf 1996).

And with regard to supply, costs, and requirements, what does the entrepreneurial network's size depend on?

- 1. Firstly on psychological and social factors that make a sufficient number of suitably well-qualified agents decide to be entrepreneurs. <sup>10</sup> Education, social recognition, and, on occasions, values and even religious ideas affect the desire to be entrepreneurs (Lavoie 1991; Tiessen 1997). <sup>11</sup> Also channels for social advancement, and if entrepreneurial activity is the only way, marginalised social groups can rise up the social ladder (see Ulijn and Brown 2002).
- 2. On the necessary intellectual knowledge and the cost of acquiring it. Although one has to bear in mind that this knowledge, acquired in Universities and Business Schools, only represents a small percentage of the knowledge necessary to carry out the entrepreneurial function (see Murphy et al. 1991; Arenius and De Clercq 2005)
- 3. On required non-intellectual knowledge, that is much more important, and mainly is the result of experience and as such is a question of time and the right environment. The case methods followed in some Business Schools is a way of helping to acquire this knowledge (see Harper 2003).
- 4. On the availability of property laws governing the productive recourses necessary to carry out the entrepreneurial function (Hayek 1960, Rizzo 1985). This implies that the entrepreneur does not have to be the owner of the capital resources, but must be able gain access to them.
- 5. On the salary level that could be obtained in an equivalent job position given the candidate's profile and education, as an opportunity costs (Casson 2001). One would have to add a bonus to this salary for the greater dedication, responsibility and professional risk involved in being a entrepreneur.
- 6. On the total administrative paperwork that needs to be completed to be able to carry out entrepreneurial action.
- 7. Finally on transaction costs in the economy, that allows entrepreneurial activity to proceed in a swift and fluid manner, or on the contrary submits it to restrictions and barriers which hinder its completion (Williamson 1979).

<sup>&</sup>lt;sup>10</sup> For an extensive review of the literature on the psychological factors of entrepreneurial activity see Brockhaus (1982), Gilad (1986), Ginsberg and Buchholtz (1989), Kets de Vries (1977) and Harper (2003).

<sup>&</sup>lt;sup>11</sup> For a reference on the role of culture in productive activity, especially in those aspects relative to entrepreneurial activity see Casson (2000).

From this collection of variables, one can conclude that it is possible to outline an entrepreneurial promotion policy which affects some of these variables, when the policy-makers consider that the situation is critical. A society may have an insufficient, poor quality network owing to psychological and sociological factors, a lack of intellectual and non-intellectual knowledge, elevated transaction costs etc. Knowing the characteristics of the entrepreneurial network in which one wishes to act, is an unavoidable pre-requisite, and it does not appear that some successful experiences in a particular entrepreneurial network are transferable to another different productive network. Thus, for example, facilitating a population's access to finance makes no sense if they have no desire to be entrepreneurs or do not possess the necessary knowledge to take on this economic function.

## 3.6 Concluding Remarks

The economic theory on the entrepreneurial function is in need of some common analytical tools, and which help avoid confusion. In our opinion it is possible to establish some basic assumptions that could contribute to advancement in this direction.

We believe that we must accept the entrepreneurial function as another productive factor, and include it therefore in the production functions and in growth theory and recognise its importance within distribution theory (although this still requires effort in accepting the entrepreneurial market as a theoretical abstraction).

The difference between productive agent and productive figure could be very useful. It avoids confusion and may contribute to indispensable statistical research in order to know the economic reality and to be able to check theories and policies.

With regard to this differentiation, to distinguish between profit and entrepreneurial earnings is equally useful, the former being the total payments received by the productive figure in which the entrepreneurial agent is integrated and the latter concept the entrepreneurial agent's specific payment.

Considering the function as a sum of vectors in which we can integrate different theories can avoid debates which often produce more heat than light. The four vectors outlined which correspond to the theories forwarded by Leibenstein, Kirzner, Knight and Schumpeter represents a fairly common starting point.

The delimitation of the entrepreneurial network in its different typographies is the first step towards the study of the facts and to produce relevant statistics. Differentiating between individual entrepreneurs and corporations, and between employers and the self-employed, represents an interesting advance and permits the use of initial statistics via the quarterly survey of the labour market, carried out by national statistics.

Understanding that the entrepreneurial network is of varying quality, and accepting that an entrepreneurial agent is an entrepreneur even when he may not carry out, with excellence, some of the vectors that constitute the entrepreneurial function, opens up an interesting field of investigation which advances in a barrage of

indicators about the quality of the network and advises policy-makers responsible for entrepreneurial promotion to adapt policies to suit the reality of the network on which they wish to intervene.

Knowing the variables that influence the appearance of entrepreneurs—accepting as a basis our proposed tools, and which are not yet complete—is the starting point for whatever entrepreneurial promotion activity. A factor for growth whose importance fortunately almost nobody brings into question.

Advancement in the study of the entrepreneurial function requires a common effort in the theoretical sphere and to complete the economic analytical tool-box. Entrepreneurial action is too important an economic activity for Economics and Business Administration students not to be able to find the entrepreneur in any introductory text to the subject. We must continue to advance in this research programme.

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