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*The Market for Entrepreneurs: The Story of a
Failure*

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Keywords: History of Economic Thought, Entrepreneurship,
Profit, Production and Organizations, Institutions and Growth.

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Department of Economics

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Abstracts

This work analyses the particular and repeated attempt to introduce the entrepreneur into economic activity through the market for entrepreneurs. We shall examine the few suggestions — Richard Cantillon, Jean-Baptiste Say, Alfred Marshall and Frank Knight — that propose it. The analysis of the writings of these authors enables us to draw relevant conclusions from their attempts to develop an economic theory of the entrepreneur from the perspective of the market for entrepreneurs.

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1. Introduction

The treatment given to the entrepreneur by commonly accepted economic theory has been repeatedly denounced by diverse and relevant authors (Baumol 1968, Kilby 1971, Kirzner 1973, Casson 1982, Blaug 1986, Schultz 1991). It is remarkable that such an essential agent in economic activity has gone almost unnoticed by orthodox economic analysis. There have been several heterogeneous attempts to explain and overcome this shortage (Baumol 1968, Barreto 1989, Hébert & Link 1989). However, throughout the history of economic ideas there have been exceptions to this situation, such as the contributions by Jean-Baptiste Say, Alfred Marshall, Frank Knight and Joseph A. Schumpeter, and they are frequently used for definitions of entrepreneurial activity.

A proposal to introduce the entrepreneur into economic theory sets out to treat his economic performance as a production factor. It considers that the activity of entrepreneurs, their link to different productive actions and their economic payment are subjected to the same laws as any other factor — i.e., the laws of the functioning of competitive markets. This market for entrepreneurs approach has given rise to interesting and well-developed contributions — e.g., Kilby (1971), Hammeed (1974), Casson (1982), Kaiser (1990), O’Kean (2000) and Lee & Venkataramen (2006) — which, with more or less success, have put forward formalisations to understand the role of the entrepreneur in economic activity. However, these works have not had much of an impact on conventional economic analysis or on the scientific field that focuses on business management. Nor does the concept of a market for entrepreneurs appear in reference works on the historic development of entrepreneur theories, such as Redlich (1949), Hoselitz (1951), Hébert & Link (1982, 2009), Blaug (1986), Ekelund & Hébert (1990), Elkjaer (1991) and Marco (1998).¹ This generalised indifference contrasts with the wide reach of the works in which the first proposals appear. Jean-Baptiste Say’s *Traité d’Economie politique* was the most used manual in the first Political Economy lectures in European universities in the 19th century, spreading the ideas of classical thought, and the *Principles of Economics* (1890) by Alfred Marshall summarised the neoclassical economy used as a reference by the whole academy and in particular in the Anglo-Saxon world from the year of its first edition.

This work analyses the particular and repeated attempt to introduce the entrepreneur into economic activity through the market for entrepreneurs. Why did these authors use the concept of a market? What did they understand by the market for entrepreneurs? Why does it become a shared place for all of them despite their different definitions of an entrepreneur? Why, despite the relevance and spread of their works, did this approach have such little influence on the development of a necessary theory despite the importance of entrepreneurs in real economic functioning and in growth? To answer these questions we shall examine the few suggestions — Richard Cantillon, Jean-Baptiste Say, Alfred Marshall and Frank Knight — that propose a market for entrepreneurs. We shall dedicate the four

¹ Only Hébert & Link (2009, 20) mention its use by Jean-Baptiste Say, classifying it as an analogy.

following epigraphs to the analysis of the theory of the market for entrepreneurs in the works of the abovementioned authors and we shall finish with some final conclusions that may be of use when seeking to understand the obstacles that exist when studying the market for entrepreneurs and perhaps contribute to overcoming them.

The analysis of the writings of these authors enables us to draw relevant conclusions from their attempts to develop an economic theory of the entrepreneur from the perspective of the market for entrepreneurs. Firstly, the market for entrepreneurs stems from a concern to determine the payment of the entrepreneur than from the impact of his activity on the function of production, although a common line can be observed as regards the relevance of entrepreneurial activity in economic growth, the difficulties that arise when the number of entrepreneurs increases, and the set of personal characteristics that make up the profile of the entrepreneurial agent. In this case, the impact of the classical view of the theory of value is evident when it forces the authors to explain entrepreneurial function as another production cost. Secondly, the market for entrepreneurs is, for all of the authors and in different ways, the consequence of considering entrepreneurial activity as another productive factor. For J.-B. Say, it is only an argument to present entrepreneurial earnings that are subjected to the competitive system, like other factors. Marshall explains, with the functioning of the market for entrepreneurs, the adaptation of the supply of entrepreneurs to sectors with opportunities of profit or to a better position in the sector/firm. In this same vein Knight outlines the elements of the market for entrepreneurs with better precision in terms of demand. Indeed, the third conclusion is the existence of vast difficulties when determining the demand for entrepreneurs and proposing solutions that would facilitate continuity in the literature. Knight's approach should have opened up a subsequent development analysing the value of the marginal productivity of entrepreneurial function and basing the demand for entrepreneurs on this. But this was not so. Defining an entrepreneurial factor unit that can continuously vary and understanding that the demand for entrepreneurs is made by the owner of the capital, regardless of whether we are dealing with a productive figure or a joint stock company, can open up the path for new developments.

2. Richard Cantillon: Entreprises and Entrepreneurs

Richard Cantillon developed a theory for approaching entrepreneurial function which served as a reference in nearly all subsequent studies (Hébert & Link 1989). This banker, who carried out his professional activity in Continental Europe prior to the Industrial Revolution, mainly observed an agricultural and commercial economic activity. In his theoretical structure he considered that land is the source or material from where wealth is extracted, while labour is the way of producing it. Of this bipartite view of productive factors he takes three agents who obtain income from the productive process: the landowners, the employees and the "entrepreneurs". Thus, for the first time, the entrepreneur appears as a criterion to classify individual economic activity and as a necessary function for production, alongside land, labour and capital (Redlich 1949, Blaug 1986). The appearance of capital in Cantillon's work is more associated with the monetary resources needed to develop the entrepreneurial

activity, and thus he considers that the surplus of the entrepreneurial activity takes the form of profit if the entrepreneur has his own financial resources, or of interest if these resources must be borrowed. This means that the figure of the entrepreneur in Cantillon, to a certain extent, combines the actual entrepreneurial function and the ownership of the business, since capital assets as we understand them today rarely appear in the *Essai sur la nature du commerce* (1755).

Cantillon presents a circular view of economic activity which includes a division of social classes according to the nature of their income: entrepreneurs have an uncertain income, employees earn a determined income and agricultural landowners earn an income that is independent of this circulation. The thirteenth chapter of the first part, called “The circulation and exchange of goods and merchandise as well as their production are carried on in Europe by Undertakers, and at a risk”, is extremely important in our subject of study. Here production is determined by the decision-making of the entrepreneurs, who establish production levels by pursuing a residual profit, defined as the difference between the known costs and the uncertain income, which will determine their continuity in the business. Structural uncertainty makes it difficult to know both the total demand – i.e. inhabitants and their expenditure – and the particular demand of each producer.² On the one hand, the response to this situation is the adaptive behaviour of entrepreneurs which helps to calculate (with the help of opportunity cost) and modify production until it reaches the satisfactory combination for each circumstance. On the other hand, the entrepreneur plays an essential role in the disequilibrium between value and price. Acting with the aim of obtaining this difference turns the entrepreneur into the driving force of trade because he seeks profits in the market through differences in prices, the estimation of the demand and the exploration of the surroundings. The market is therefore both the effect and cause of entrepreneurial activity.

All these Undertakers become consumers and customers one in regard to the other, the Draper of the Wine Merchant and vice versa. They proportion themselves in a State to the Customers or consumption. If there are too many Hatters in a City or in a street for the number of people who buy hats there, some who are least patronised must become bankrupt: if they be too few it will be a profitable Undertaking which will encourage new Hatters to open shops there and so it is that the Undertakers of all kinds adjust themselves to risks in a State. (Cantillon 1755, 42)

The market is a distribution method which also delimits the number of entrepreneurs and their remuneration in each place. The adjustment is made on the basis of the entrepreneur obtaining opportunities of profit and the appearance of losses due to the decrease in the price of assets. These opportunities will depend on the level of the economy’s total demand

² Consequently, the demand for merchandises or the number of participants, alongside the producers’ errors explain the temporary differences between an inconstant market price and the permanent value of the asset. For Cantillon, the demand is determined by humour, fantasy, consumption. But the last cause for his modifications is the changing consumption pattern of the sovereign, which upsets the expenditure of imitating landowners, and, consequently, the market price.

for expenses which in the end conditions the number of existing entrepreneurs. In the description of this dynamic process, there is considerable confusion between the company and the entrepreneur because, for Cantillon, any decision about the quantity to produce means uncertain results and, consequently, the exercise of the entrepreneurial activity. In any case, it only reveals the existence of a limit to the quantity of resources needed for the economy, also in the case of the entrepreneur.

Cantillon's work presents an economic activity that is oriented towards the market. But it was only the first step in a wider intellectual process. As Karl Polanyi pointed out, a market economy needs to encompass all production elements, applying the concept of merchandise to the resources needed for production (Polanyi 1944, 75-6). This was not the case for Richard Cantillon, or for Adam Smith. Not until the beginning of the 19th century did Jean-Baptiste Say present a market that encompassed the entire production sphere, from products to resources.

3. Jean-Baptiste Say: The Market for Entrepreneurial Services

In order to begin it is important to remember that Say exercised a entrepreneurial activity. As is well-known, after being expelled from the *Tribunat* for his ideas against Napoleonic interventionism and until he returned to Paris in 1813, he acquired English machinery and developed a cotton establishment in Auchy on which almost five hundred families from the town depended. As a result of this industry, the town became very prosperous (Clement 1854). Therefore, it comes as no surprise that Jean-Baptiste Say's work represented a break with the traditional concept of production. François Quesnay considered production to be a present from nature, while Adam Smith restricted production to material goods. For J.-B. Say, to produce was to give utility to a substance before it lacked it or to increase the utility that it already had (Say 1819, I:7). Nature and human action are the key agents because they produce value. The relationship between both has three fields of management: (i) the use that human action can make of it to change it, (ii) legislation to delimit the private property of nature and (iii) the consideration of nature as a powerful driving force for the wellbeing of society (Steiner 2000, 3). The result is three sets of resources or *productive funds*: capital, natural resources and the *industry of man* – i.e. the knowledge and skills that enable individuals to produce.

For J.-B. Say, these funds are subject to a property right – of an absolute, exclusive and permanent nature – which grants its bearer total freedom of use and guarantee of its fruit. This utility generated by the funds for production becomes a merchandise which, under the term “productive service”, can be an object of exchange.³ Its owners are the capitalist, the landowner and the industrial man, respectively, although the latter can be broken down into a “man of science”, an “entrepreneur” and a “worker” because human activity in production

³ These services can be the subject of accumulation, are perishable, non-consumable, inalienable and profitable – the compensation receives the name of salary, interest and rent, respectively.

always involves three operations: the generation of knowledge, its application and the carrying out of tasks (O’Kean & Menudo 2002). Therefore, the entrepreneurial service consists of the management of knowledge for the creation of merchandise.⁴

Both final goods and resources needed for production are useful and therefore have a value determined by the market (Steiner 1997). In the chapters devoted to profit, J.-B. Say describes five productive service markets to explain the establishment of the prices of resources. Fund owners refuse to accept the uncertainty of their use in exchange for a secure income and the entrepreneur requires factors for production (Say 1843, 324). The residual difference between the pay of resources, the “revenue”, and the income obtained for the use of each one, known as “profit”, makes up the entrepreneur’s salary. This uncertain salary is also the price of the entrepreneurial service and, as with all merchandises, “The price of their labour is regulated, like that of all other objects, by the ratio of the supply, or quantity of that labour thrown into circulation, to the demand or desire for it.” (Say 1826, 330).

J.-B. Say approaches the issue of the market for entrepreneurs in a section of chapter VII of book II of *Traité d’économie politique*, called “Of the Profits of the master-agent or adventurer in industry”, and in chapter VIII of the fifth part of *Cours complet d’économie politique pratique*, called “Des profit que font les entrepreneurs d’industrie en particulier”. The titles clearly anticipate that, for J.-B. Say, this market is a means of explaining entrepreneurial profit.

The first topic discussed by J.-B. Say is the factors determining the quantity of entrepreneurial services available. There are three main reasons for the scarcity of entrepreneurs: (i) access to capital, (ii) entrepreneurial skills –judgement, perseverance and knowledge of the world, as well as knowledge of the business itself– and (iii) the risk of production. Entrepreneurial activity requires a combination of the abovementioned conditions, which does not appear with frequency. This insufficiency explains why the price of entrepreneurial services is higher than the prices paid to the landowner or the capitalist (Say 1843, 329). The issue of the demand for entrepreneurs has a purely symbolic role, in the best of cases. Only the chapter of *Cours complet* presents, without explicitly referring to the demand, capitalists who need the entrepreneurial service so that their funds are used (Say 1843: 328).

The second issue discussed is the difference between the profits of different activities. According to J.-B. Say, “abstract” economists described how the different earnings in different sectors tend to disappear, but without stating anything about the causes of inequality or about the reasons for their tendency to differ. J.-B. Say believed that profits were not only an incentive for entrepreneurs; but also a price providing information about the entrepreneurial activity in each productive sector (Say 1843, 329). Education, natural skills, the risk the activity entails, uncertainty about earnings or scarce competition help to obtain a

⁴ “It may be remembered, that the occupation of adventurer is comprised in the second class of operations specified as necessary for the setting in motion of every class of industry whatever; that is to say, the application of acquired knowledge to the creation of a product for human consumption.” (Say 1826: 330).

high profit compared to the earnings of other entrepreneurial services.⁵ But in the long term, we only find entrepreneurial earnings that are in proportion to the degree of skill or talent needed (Say 1843, 330). In such cases, rare skills lead to high earnings because the supply cannot increase.⁶

In both topics there is no attempt at explaining the adaptation process of this market for entrepreneurs. There is only one reference to the necessary competition that must exist between its participants so that scarcity can influence profit.

True it is, that productive agents always endeavour to direct their agency to those employments, in which the profits are the greatest, and thus, by their competition, have as much tendency to lower price, as demand has to raise it; but the effects of competition can not always so nicely proportion the supply to the demand, as in every case to ensure an equal remuneration. Some kinds of labour are scantily supplied, in countries where people are not accustomed to them. (Say 1826: 321).

As a research topic J.-B. Say even separates the supply of entrepreneurs from the market for entrepreneurs. He presents the scarcity of entrepreneurial services as an obstacle for economic growth because the extension of these talents is a determining factor for industrialisation.⁷ Firstly, he observes that these talents are not equally distributed in all areas. Institutions and religious and cultural factors can encourage or stand in the way of the spread of entrepreneurial skills (Say 1843, 141). This set of skills serves to determine the features a nation or individual is lacking in order to be industrious. This is the main cause of the economic underdevelopment of countries because nations can acquire these skills and also lose them in a slow process that places countries on different levels of development. J.-B. Say rejects the convergence between economies in the short term, since the speed at which entrepreneurial qualities spread is very slow, much more than that of scientific knowledge (Say 1828, 17).

Therefore, the only way of obtaining entrepreneurial qualities, at a lower cost and greater speed than through experience, is through education. It involves specific training that is applicable to the productive task –not the acquisition of general knowledge– and helps to determine the viability of a project and its difficulties. This training saves on resources, previously wasted, by confronting impossible companies and by removing the high opportunity costs generated by experience. Also, the spirit of management, of saving, and promptness, firmness and caution are specifically highlighted by J.-B. Say as talents developed through entrepreneurial studies, compared to technical knowledge that is acquired with technological training.

⁵ In the comments made by J.-B. Say to Heinrich Friedrich Storch, he considered that ordinary industry profits could change on account of a partial monopoly based on rare talents.

⁶ This perspective is closer to “the value of the Ability to deal with disequilibria” (Schultz, 1975) than to the exogenous approach of innovation used by Schumpeter.

⁷ This proposal has been mentioned frequently in the literature. See Wilken (1979), Leibenstein (1979), Baumol (1983) and Bond (1986).

J.-B. Say proposes a market for entrepreneurs as a means of explaining the payment of a service that consists of managing knowledge for production. There is no attempt at developing its functioning, only the need to include competition when determining entrepreneurial earnings. For Say, it is not a useful tool when dealing with topics such as the distribution of the entrepreneurial activity among sectors or economic development, perhaps due to the problem of the concept of the demand for entrepreneurs. In any case, the market for entrepreneurs was forgotten by its disciples, although they kept up a notable discussion about entrepreneurial activity. Jean Gustave Courcelle-Seneuil, Charles Dunoyer, Jean-Antoine Chaptal, and Adolphe Blanqui wrote about topics linked to entrepreneurial skills (Marco 1998), while Joseph Droz, Karl H. Rau and Leroy Baulieu involved the entrepreneur in the distribution of wealth and in the subject of profit (Knight 1921).

4. Alfred Marshall: The Market for Business Abilities

Alfred Marshall's *Principles of Economics* devotes three full chapters to the entrepreneurial function. In book IV, chapter XII gives a detailed account of entrepreneurial tasks, business skills and how these are influenced by types of organisation, while entrepreneurial earnings are the subject of chapters VII and VIII of book VI.

To discuss the question of entrepreneurial activity, Marshall sets out a functional approach which leads to the classifying of different productive figures –e.g., executives, producers, craftsmen and professionals– as entrepreneurs. There is no single function for this:⁸

They 'adventure' or 'undertake' its risks; they bring together the capital and the labour required for the work; they arrange or 'engineer' its general plan, and superintend its minor details. Looking at business men from one point of view we may regard them as a highly skilled industrial grade, from another as middlemen intervening between the manual worker and the consumer. (Marshall 1920, 293).

Any individual who bears uncertainty, organises and supervises production is an entrepreneur, although the assumption of risks goes beyond the rest because uncertainty is the nature of their activity (Marshall 1920, 293).

As in J.-B. Say's work, the origin of the analysis is the relationship between the individual and his environment, although knowledge has a different role for Marshall (Marshall 1920, 139). Marshall understands production to be a process of choice and action in time, meaning "the need for a sequence of decisions by economic agents" (Loasby 2001, 10). Change is not a mere variation of some elements because time changes the available knowledge.⁹ Prediction

⁸ Hébert & Link (1989) refer to Marshall's Darwinism to explain the absence of a single function or set of skills that define the entrepreneur.

⁹ Today we are talking about an uncertainty that excludes any probabilistic method that can be demonstrated as correct (Knight 1921, Sarasvathy 2008).

and provision are necessary elements in view of the possibility of coming across events that contain surprise, imagination and incentives to rethink and change behaviour. Given the cognitive limitations, the entrepreneur takes a stance against uncertainty through the control of processes or events, which he was previously able to understand. Therefore, the company is a structure for the development organised from said knowledge (Loasby 1999). The capital and organisation become production agents, alongside labour and land, with knowledge being “our most powerful engine of production” (Marshall 1920, 139).

These three results from the original labour and land – i.e. capital, organisation and knowledge – appear as a single unit of resources called “business power in command of capital”. The argument put forward by Marshall for this treatment is the impossibility of increasing production via capital without skills to be able to use it.

... we saw how the supply of business power in command of capital may be regarded as consisting of three elements, the supply of capital, the supply of the business power to manage it, and the supply of the organization by which the two are brought together and made effective for production. (Marshall 1920, 596).

The agents or elements needed for production appear in the form of an offer, that is, a quantity of resources available at a price, called the “supply price”.¹⁰ In the chapters of book VI, the idea of a market for businesses abilities enables Marshall to analyse entrepreneurial earnings as the price paid for the use of this resource. These pages seek to demonstrate the proportional correspondence, in an industrial organisation of an efficient society, among the services provided to society by those who undertake or manage a business and the payment they obtain for the work.¹¹

Marshall begins his analysis by specifying the entrepreneurial services that are rewarded. The enterprise is only rewarded for “direct profits” generated for society, and not for the “indirect” ones. He illustrates this concept by differentiating between the innovative entrepreneur and the imitating entrepreneur.

In this connection we may divide employers and other undertakers into two classes, those who open out new and improved methods of business, and those who follow beaten tracks. The services which the latter perform for society are chiefly direct and seldom miss their full reward: but it is otherwise with the former class. (Marshall 1920, 597-8)

Both are entrepreneurs, but in the case of the innovator, a correspondence between their contribution to society and their compensation is not possible. Therefore, the entrepreneur

¹⁰ “Supply is taken to mean the stock of the commodity in question which is on hand, or at all events ‘in sight’. (...) Supply means broadly what can be produced for the price in question.” (Marshall 1920, 379).

¹¹ “... this will by itself go but a small way towards proving that the existing industrial organization of society is the best conceivable, or even the best attainable; and it must not be forgotten that the scope of our present inquiry is limited to a study of the action of causes that determine the earnings of business undertaking and management *under existing social institutions*.” (Marshall 1920, 598).

only receives payment referring to the direct services that he/she provides and any other impact does not receive compensation. As such, it comes of no surprise that those enterprises that are better equipped to *prosper* in their surroundings prevail; and not necessarily those that are better equipped to *be of benefit* to their surroundings. Innovation is especially beneficial for society, but without any special feature that differentiates it from other business tasks allowing a company to progress.

Unlike J.-B. Say, Marshall sets out to explain the functioning of the market for entrepreneurs. More specifically, the earnings of entrepreneurs are determined by the adaptation of the supply of entrepreneurs to the demand for their business skills.

During all this inquiry we have had in view chiefly the ultimate, or long-period or true normal results of economic forces; we have considered the way in which the supply of business ability in command of capital tends in the long run to adjust itself to the demand. (Marshall 1920, 618; see also 313).

The supply of entrepreneurs does not create its own demand, it adapts to it. Marshall uses the simile of the law of the fight for survival, and the consequent multiplication of the best adapted organisms, to explain market behaviour; a “general rule of the law of substitution” creates the scenario facilitating the exercise of business abilities, and the supply of entrepreneurs multiplies to adapt to these. The classic principle of the substitution of factors is not effective to determine the combination of inputs and, therefore, is replaced by a new development which brings about an increase in the efficiency of the work through entrepreneurial function. Small increases in efficiency have permanent effects, on the function of production, and otherwise, because each entrepreneur develops different associations and identifies different problems.¹² Successes and failures cause an increase in knowledge, a new organisation of same and a replacement of methods of industrial organisation with those providing cheaper merchandise directly and immediately (Marshall 1920, 597). This principle of substitution allows for the existence of a *profit* that pays the interest of the capital, the price of the task of managing the business and the price of the organisation of resources (Marshall 1920, 605-6).

This supply is characterised by mobility, both towards sectors with opportunities of profit (horizontal movement) and towards a better position in the sector (vertical movement).¹³ The supply of entrepreneurs seeks business activities or organisations that generate valuable services. This process is known as “competition” although it has nothing to do with the concept of rivalry. It is a task that is aimed at detecting the potential earnings provoked by the principle of substitution and at making them a reality.

¹² Several authors have explained the relationship between entrepreneurial function, efficiency and economic growth from different approaches (Leibenstein 1969, Kaldor 1972).

¹³ In the case of England, Marshall believes that this type of mobility is high: “... we see, even at this early stage of our inquiry, some good reason for believing that in modern England the supply of business ability in command of capital accommodates itself, as a general rule, to the demand for it; and thus has a fairly defined supply price.” (Marshall 1920, 313).

The motive force is the competition of undertakers: each one tries every opening, forecasting probable future events, reducing them to their true relative proportions, and considering what surplus is likely to be afforded by the receipts of any undertaking over the outlay required for it. All his prospective gains enter into the profits which draw him towards the undertaking; all the investments of his capital and energies in making the appliances for future production, and in building up the "immaterial" capital of a business connection, have to show themselves to him as likely to be profitable, before he will enter on them: the whole of the profits which he expects from them enter into the reward, which he expects in the long run for his venture. (Marshall 1920, 618).

The result is an opportunity of profit that has become an intangible asset for those who want to acquire it. Those who want to appropriate the opportunities of profit that the entrepreneur can generate will demand business skills.

The whole value of his business connection to him when working it is a notable instance of Conjunction or Opportunity *value*. It is mainly a product of ability and labour, though good fortune may have contributed to it. That part which is transferable, and may be bought by a private individual, or by a large amalgamation of firms, must be entered among their costs; and is in a sense a Conjunction or Opportunity *cost*. (Marshall 1920, 625-6).

Marshall illustrates the adaptation process of the market of business abilities with different figures: managers and employers. In the first case, the director of the firm delegates functions to the managers or heads of department, turning them into entrepreneurs. A set of resources will be more efficient if they are supervised, and this justifies the salary of this task. Thus a ratio of manager/resources efficiency appears in each organisation, which expresses the need for these skills in the company and, therefore, the demand for these entrepreneurs by the employer.

... society, acting through the individual employer, offers an effective demand for their services until that margin is reached at which the aggregate efficiency of industry would be increased by adding workers of some other trade more than by adding the foremen whose wages would add an equal amount to the expenses of production. (Marshall 1920, 599)

In the case of employers or directors of firm, the principle of substitution appears in a company's growth process. Entrepreneurs perform all the entrepreneurial functions until an increase in size forces them to delegate the supervision –i.e., the abovementioned phase. If the growth of the company is successful, they will receive payment for their organisation skills, that is, they will acquire the opportunities of profit that they themselves had detected.¹⁴ Lastly, they may also need entrepreneurs to delegate the task of managing the business. In

¹⁴ In addition, they have a better knowledge of their activity and new business opportunities to undertake.

short, the replacement of big companies with small ones, or vice versa, creates the need for company managers and directors, i.e., a demand for entrepreneurs.¹⁵

In the case of joint stock companies, the supply of business skills can be clearly identified with the need for a task of direction and management. There is compensation for those who provide the ability to manage and organise the business.

Hitherto we have considered almost exclusively that form in which the whole responsibility and control rests in the hands of a single individual. But this form is yielding ground to others in which the supreme authority is distributed among several partners or even a great number of shareholders. Private firms and joint-stock companies, co-operative societies and public corporations are taking a constantly increasing share in the management of business; and one chief reason of this is that they offer an attractive field to people who have good business abilities, but have not inherited any great business opportunities. (Marshall 1920, 302)

Marshall considers that these tasks are also business functions although they do not entail assuming the business risk. Joint stock companies generate different types of conflicts of interest between capital and management. Despite this, Marshall explains the success of these companies on the basis of honesty that can make up for, in the decisions of directors and managers, the lack of risk that the use of capital entails.¹⁶

The result of market adjustment is the entrepreneurial earnings. Marshall uses the long term to determine the correspondence between expected income and final results. The long term is not a temporal concept; it refers to the result of the entrepreneur's failures and successes in a sector. If they are honest and have normal skills, the result is called normal and fair profit (Marshall 1920, 617). These earnings will form part of the cost of the activity, both if the entrepreneur was paid by a third party and if the entrepreneur is paid directly by him.

And if he is a man of normal ability (normal that is for that class of work), and is on the margin of doubt whether to make the venture or not, they may be taken as true representatives of the (marginal) normal expenses of production of the services in question. Thus the whole of the normal profits enter into true or long-period supply price. (Marshall 1920, 618-9)

Marshall outlines three arguments to explain *abnormal* entrepreneurial earnings. Firstly, an exceptional entrepreneur will obtain extraordinary earnings and the price for his services will be different to the normal profit (Marshall 1920, 614). Secondly, sectorial differences come into play. The amount of capital used in productive activities is different in each sector, as well as the speculative degree of the business and the ability to not generate external

¹⁵ "Throughout this struggle between large businesses and small, we see the principle of substitution constantly in operation; the large employer substituting a little of his own work and a good deal of that of salaried managers and foremen for that of a small employer." (Marshall 1920, 601).

¹⁶ "It is a strong proof of the marvellous [sic] growth in recent times of a spirit of honesty and uprightness in commercial matters, that the leading officers of great public companies yield as little as they do to the vast temptations to fraud which lie in their way." (Marshall 1920, 303).

economies (Marshall 1920, 612-14). Lastly, Marshall refers to the limitations of the supply. The only barrier of entry to the market of business skills are “natural qualities” because business ability depends little on the effort or investment made to obtain it – unlike regulated knowledge or technical skills. In this case, only some training is required in order for business faculties – i.e. judgement, promptness, resource, caution and firmness – to turn a person into a leader and an answer to practical problems (Marshall 1920, 606). Marshall highlights two limitations to the supply of entrepreneurs. On the one hand, the scarcity of abilities and the costly training for some activities explain the extraordinary earnings (Marshall 1920, 608). On the other hand, some opportunities of profit are only accessible to that part of the population that has access to the social networks provided by capital.

... a rise in the income to be earned sets in operation forces tending to increase the supply of those capable of earning it; and in either case, the accurate extent to which the supply will be increased by a given rise of income, depends upon the social and economic condition of those from whom the supply is drawn. (Marshall 1920, 303)

Although Marshall led British economic theory and its teaching until 1920, his thoughts on business activity were broken down into relevant contributions about location, innovation and coordination costs by the Cambridge School (Raffaelli 2003). Only Frank Knight appeared to consider the entrepreneur from the perspective of supply and demand.

5. Frank Knight: Supply and demand for entrepreneurs

Frank Knight's *Risk, Uncertainty and Profit* was published in 1921 as a rewriting of his 1916 doctorate thesis in which his Marshallian influence can be observed (Emmett 2009). As is known, Knight began with economic analysis in perfect competition, with three productive factors (land, labour and capital), to finally focus his study on a more realistic economy of imperfect competition. In these situations, uncertainty requires an agent that is capable of stimulating future results to enable the appropriation of a profit that has come about as a result of the contracting of factors at set prices.¹⁷ In a society characterised by specialisation in functions, the entrepreneurial task consists of making responsible decisions in uncertain settings and of delegating the responsibility to undertake the business. Thus, the firm involves a particular organisation of a knowledge classed as imperfect and non-communicable.

If men, ignorant of other men's powers, know that these other men themselves know their own powers, the results of general knowledge of all men's powers may be secured; and this is true even if such knowledge is (as it is in fact) very imperfectly or not at all communicable. (Knight 1921, 286)

¹⁷ The similarity between Knight's entrepreneurial function and Cantillon's analysis, detailed above, is noteworthy, especially because Cantillon's work was not cited in that of Knight, even though in 1881 Jevons published his famous article in *Contemporary Review* and in 1892 the *Essai sur la nature du commerce* was published in a facsimile edition by *Harvard University Press*.

In view of the common awareness of the existence of uncertainty, the entrepreneur occupies a transcendental place by transmitting security about the knowledge available. Specialised at reducing uncertainty, the entrepreneur's income stems from the margin of error in the employer's decision.¹⁸ Knight considers that the income for this task can be analysed using the laws of supply and demand: "Let us now attempt to state the principles determining entrepreneur income more accurately and in the form of laws of demand and supply." (Knight 1921, 282).

In his cited book, Knight dedicates the last part of the chapter "Entreprise and Profit" to the supply and demand for entrepreneurs. In this market, the demand is key to determining its operation. The starting point is the relationship between productive factors based on the law of diminishing returns, following the marginalist tradition. The entrepreneur is another production factor with a limited ability – i.e. less effective the greater the amount of factors to be organised.¹⁹ Therefore, as occurs with any productive service, the demand depends on its diminishing returns caused by the increasing amounts of other factors used. Knight describes three elements that drive the demand for business skills and, therefore, profit.

Firstly, when the company buys new production factors, it also requires a greater amount of entrepreneurial services so that the performance of the resources does not decline. The demand for entrepreneurs is related to the use of other factors of production: "The demand for entrepreneurs, again, like that for any productive agency, depends directly upon the supply of other agencies" (Knight 1921, 282).

Secondly, Knight refers to the distinction between contractual income and uncertain profits. Although this aspect was considered by Say and Marshall, Knight presents the problem as an opportunity cost. The greater the diminishing returns of factors with a contractual payment, the more business skills are needed to break this trend and, since entrepreneurs are scarce, the more expensive it is for the company. The result is a greater proportion of profits in the final price. Adam Smith claimed that the profit rate reduced as enterprises made progress because competition between employers increased. Knight confirmed these results when an excellent business network prevents diminishing returns and, given its size, does not push profits upwards: "If entrepreneur ability is of such high quality that it practically is not subject to diminishing returns, the competition among even a very few such men will raise the rate of contractual returns and lower the residual share, if they know their own powers." (Knight 1921, 252).

¹⁸ "The presence of true profit, therefore, depends on an absolute uncertainty in the estimation of the value of judgment, or on the absence of the requisite organization for combining a sufficient number of instances to secure certainty through consolidation." (Knight 1921, 285).

¹⁹ Schumpeter rejects the application of diminishing returns to entrepreneurial activity on account of it presenting differences with any other factor of production. See Hébert & Link (1989, 17-18).

Lastly, Knight incorporates the effect of uncertainty. Rather than an amount of resources to organise, the entrepreneur's ability defines the uncertainty that can handle in a company. This is where the law of diminishing returns truly applies.

And the idea of scope must be extended to include the variety of situations to be dealt with. The question of diminishing returns from entrepreneurship is really a matter of the amount of uncertainty present. To imagine that one man could adequately manage a business enterprise of indefinite size and complexity is to imagine a situation in which effective uncertainty is entirely absent. (Knight 1921, 286-7)

As regards the demand for entrepreneurs, and without tackling one of the main problems of the market for entrepreneurs — i.e., who seeks entrepreneurial function —, Knight considers the case of the joint stock company and the appearance of the wage-earning director. The directive function consists of selecting staff to distribute the responsibilities and reduce the risk of the owner. For this reason, the director's payment is in the form of a salary, while the shareholders, as they assume the risk, receive the profits. The profit is separate to the interest and is justified by the assumption of risk, leaving the entrepreneurial activity — i.e. facing uncertainty and converting a situation of uncertainty (non-measurable risk) into a situation of measurable risk — to be paid by a set salary. As regards the situation created by the differentiation between property and control, in which the shareholders obtain the surplus resulting from the entrepreneur's activity, Knight stated on various occasions that it would be unlikely that the entrepreneur would not own the business or have a share in the company.

On the other side of the determination of profits, Knight considered that the supply of entrepreneurs would be a key factor in the economic future of a company (Knight 1921, 282). The lack of entrepreneurs leads to a problem of efficiency within the organisation because the company can only grow in an inefficient manner. Moreover, a problem of economic stagnation appears when the continuous incorporation of factors into production reduces the return rates of the entrepreneurial activity in the event of an insufficient number of entrepreneurs.

The supply of entrepreneur qualities in society is one of the chief factors in determining the number and size of its productive units. It is a common and perhaps justifiable opinion that most of the other factors tend toward greater economy with increasing size in the establishment, and that the chief limitation on size is the capacity of the leadership. (Knight 1921, 252)

As regards the factors affecting the supply of entrepreneurs, he believed that it depends on four aspects: the ability of the entrepreneur — consisting of exercising responsible management and of guaranteeing the owner of the productive services against uncertainty and fluctuations in their income —, willingness, the ability to give good guarantees, and all of these factors coinciding (Knight 1921, 282-3). Profit would be the result of the action between supply and demand. For Knight, these four factors coinciding is essential for the economic development of society: "To find men capable of managing business efficiently and secure to them the positions of responsible control is perhaps the most important single problem of economic organization on the efficiency side." (Knight 1921, 283). And this

supply of productive skills becomes the key factor to determine the number and volume of enterprises in an economy.

Entrepreneurial profits are determined by the interaction between the supply and demand for entrepreneurs and are linked to the optimism of the entrepreneur himself or to the assessment of his ability. Skills, the entrepreneur's good luck and the ability to give effective guarantees increase entrepreneurial income. Knight concluded: "The condition for large profits is a narrowly limited supply of high-grade ability with a low general level of initiative as well as ability." (Knight 1921, 284). As we can observe, Knight uses the theoretical tool of the market to analyse the establishment of profit. Although the supply of entrepreneurs can be easily personalised, e.g., he talks about "the rashness or timidity of entrepreneurs (actual and potential) as a class" (Knight 1921, 283) —, specifying who makes the demand and how becomes a more arduous task. Although it is clear in the case of the manager, in other scenarios the demand for entrepreneurs would be made by the entrepreneurs themselves: "demand is a matter of the self-confidence of entrepreneurs as a class, rather than upon a demand for entrepreneur services in a direct sense" (Knight 1921, 283). In his attempt to personify the agents involved, Knight comes up against the authentic obstacle for the market for entrepreneurs to be accepted.

Undoubtedly, Knight's attempt to approach the study of the market for entrepreneurs has some weak points. Unlike Say or Marshall, Knight started with the classic tripartite division of production factors without including the entrepreneur in an individualised way. In situations of imperfect competition and when there is a residual profit, Knight resorted to the entrepreneurial function of facing uncertainty so that the owners assume the risk and obtain the profits, with this entrepreneurial function receiving a set income. This is especially evident when the author differentiates between property and control in the sphere of the firm, in the form of joint stock company, and the contracting of a manager. Furthermore, to determine the amount of profit, as is performed with any other "productive service", — a generic term to determine a factor of production since the entrepreneur has not been considered as such—, he used the idea of the market for entrepreneurs. Following the marginalist tradition, he even considered the decreasing supply to be subject to the law of diminishing returns and, therefore, put supply on the same level as the value of marginal productivity. But when personifying who demands entrepreneur services a dichotomy appears, which has meant an insurmountable burden for subsequent literature when generalising this approach: in the market for individual entrepreneurs the demand is made by themselves, perhaps in their role as owners, and in the case of the company, by the shareholders.

6. Conclusions

We have seen different approaches of influential authors but, in what appears to be a cyclical process, they are long time trapped in their works until someone considers entrepreneurial activity as a factor or, at least, a condition needed to for production. In this shared place, the differences are limited to placing entrepreneurial function closer to the labour factor or the capital factor. While Cantillon considered that work can be told apart according to the

nature of the pay between employees and entrepreneurs, J.-B. Say understood that human activity in production always involves three operations: the generation of knowledge, the entrepreneurial function and the execution of tasks. Unlike both authors, Marshall considered that capital accumulates the stored wealth, knowledge and organisation, and he claimed that organisation should be considered as a fourth factor, added to the three classic factors, and more linked to the capital than to the labour factor. In this same vein, Knight introduced the entrepreneur as a need for capital to manage the uncertainty that the ownership of the company cannot ignore.

From the perspective of the entrepreneurial factor the initiative appears to determine the entrepreneur's payment with the same theoretical equipment used for the other productive factors: the market, supply and demand. In particular for Say, the entrepreneur's residual salary is regulated like any merchandise by the supply and demand of the entrepreneurial service, although there is no attempt at developing its functioning. This is not the case of Marshall, who sought to explain that the profit of entrepreneurs is determined by the adaptation of the supply of entrepreneurs to the demand for their business abilities. Moreover, he established those cases in the short term, in which these profits can exceed the normal or fair profit that is obtained in the long term, due to the characteristics of exceptional entrepreneurs, differences between sectors or limitations in the supply of entrepreneurs. In this same vein, Knight defined the elements of the market for entrepreneurs with greater precision as regards demand. The general problem of these contributions stems from using a common theoretical framework to determine a business payment that is different in each of the authors. Pushed to a certain degree by the classical theory of value, they all need to justify the payment of a contribution to production that differs in each author. Thus for Cantillon, entrepreneur remuneration will be a surplus to face uncertainty, while the assumption of risks will be the function of the owner of the financial resources. J.-B. Say also considered that the entrepreneur's payment is uncertain, compared to the income of the owners who refuse to assume the uncertainty generated by the market process, but not residual. Furthermore, Marshall uses the principle of substitution to maintain that, by organising and supervising production, the entrepreneur improves productive efficiency and, therefore, receives a salary for said task. This line was followed in Knight's work when entrepreneur remuneration comes from making responsible decisions in uncertain settings because carrying out production takes time. But the entrepreneurial salary is invariable and uncertain profit belongs to the owner.

In view of the difficulties defining entrepreneur remuneration, the most attractive element of the proposal of a market for entrepreneurs, for literature and for the authors themselves, is the supply of entrepreneurs – identified by productive figures who bring together, in one single form, different agents such as entrepreneurs, executives, employers and managers. Say specified that the supply of entrepreneur services depended on the access to capital, to the skills needed to develop this function such as judgement, perseverance and knowledge, and the risk of production. For him, the scarcity of these services was an obstacle to growth and the main cause for the economic underdevelopment of nations. Institutional, religious and cultural factors influenced the lack of supply and it was not easy in the short term to overcome this deficiency, which could only be overcome with specific training that applied to

the productive task. In fact, the rare talent and skills of entrepreneurs would lead to high earnings, considering the limitation of the supply of existing entrepreneurial services. In the case of Marshall, the supply of entrepreneurs is made up of those agents who have natural qualities that are difficult to reproduce, such as judgment, promptness, resource, caution and firmness; rare qualities, which require costly training and generate opportunities of profits which the owners of the capital will want to exploit. For Knight, the lack of entrepreneurs leads to a problem of both efficiency in companies and of economic stagnation. Being an entrepreneur requires an ability to exercise responsible management that secures the resources of the owner, but additionally it entails having the characteristics of entrepreneurs, good will, the ability to give guarantees; moreover, all of these factors must coincide in one same person. As we can see, a common line can be observed in the authors considered regarding the relevance of entrepreneurial activity in economic growth, its scarcity and difficulty when increasing the supply and the set of personal characteristics making up the profile of the entrepreneurial agent.

The demand for entrepreneurs, however, appears as the real impediment to the development of a theory on the market for entrepreneurs. Cantillon did not ask the question of who demands the entrepreneur services. He understood that the opportunities of profits, due ultimately to the level of demand of total expenses of an economy, lead to the appearance of entrepreneurs; and the abundance of these, which makes production rise and prices reduce, limits the supply by reducing the opportunities of profits. To a certain extent it is the market in general that regulates the allocation of the business activity and the payment of this productive service. In the case of Say, the only reference to the demand for entrepreneurs is limited but subtle and appears in *Cours Complet d'économie politique*, where he understood that capitalists will require entrepreneur services so that their funds are used. However, in Marshall, the demand for entrepreneurs takes on very different nuances. From the perspective of the individual entrepreneur, he differentiated according to the way in which the firm increases in size, between the business-man, the executive who delegates part of his activity, and the manager, hired by the executive, who personalises the demand for this typology of entrepreneurial services. In parallel, by introducing a joint stock company, shareholders demand business skills on account of their need for a task of management; with the two elements of the market for entrepreneurs and its functioning remaining perfectly conceptualised. Knight developed this line, questioning who would demand the services of entrepreneurs, and also what supports this demand. In the case of joint stock companies, the shareholders demand the work of an executive who makes responsible decisions, and he is paid with a set salary, while in the case of an individual entrepreneur it is the entrepreneur himself, who in his role of owner of the capital, demands his own business services and makes up the demand. Moreover, Knight, using the marginalist approach, defined a demand for entrepreneurs based on the diminishing returns of the entrepreneurial activity, since the effectiveness of the production factors reduces as an entrepreneur organises production with an increasing number of factors. This is without a doubt a curious perspective, since it considers the entrepreneur as a fixed factor and the other factors as variables, and considers the diminishing returns of the fixed factor and not of the variables. It is perhaps this last approach that should have opened up subsequent development, analysing the value of the

marginal productivity of entrepreneurial function and basing the demand for entrepreneurs on this. This would probably have opened the way for new developments, if possible define an entrepreneurial factor unit that could continuously vary and understand that the demand for entrepreneurs is made by the owner of the capital, regardless of whether we are dealing with an individual entrepreneur or a joint stock company. But this was not the case. The economic analysis had been approaching a theory on entrepreneurial function with the same tools as with the other productive factors – i.e. the market, supply and demand – but when it was close to outlining a theory on the market for entrepreneurs, the attempt came to a halt and this approach failed. Perhaps with this disappointment it condemned the entrepreneur to be a secondary agent in economic theory despite his unquestionable relevance in economic activity.

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