NELSON MANDELA UNIVERSITY

INAUGURAL LECTURE

PROF R NCWADI

23 OCTOBER 2018

Faculty of Business and Economic Sciences

Title

The Entrepreneur as a Disequilibrating Factor in Economic process

NELSON MANDELA
UNIVERSITY

THE ENTREPRENEUR AS A DISEQUILIBRATING FACTOR IN ECONOMIC PROCESSES

INAUGURAL LECTURE

BY

PROFESSOR MCEBISI RONNEY NCWADI

23 OCTOBER 2018

NELSON MANDELA UNIVERSITY

DEDICATION

I dedicate this Inaugural Lecture to my late parents
Mr Mlamli George & Mrs Nontombi Elizabeth Ncwadi

Abstract:

The evidence of entrepreneurship's significant contribution to economic growth and development, challenges the dominance of general equilibrium theory in microeconomics. The assumptions of the neoclassical economic model which underlies general equilibrium theory has long time been criticised; yet its consideration in policy formulation has not been dismissed despite the fact that general equilibrium theory does not incorporate entrepreneurship.

The assumptions embedded in neoclassical economic theory exclude entrepreneurship as an economic variable. However, as microeconomic research finds more and more evidence confirming the importance of new business formation and growth, general equilibrium theory remains incapable of adapting to this reality. To this end general equilibrium theory produces policy prescriptions which favour mainly large, established firms over new, small firms. It is therefore no wonder that a large number of small businesses in South Africa are failing.

This lecture presents the theory of the firm and also defines an entrepreneur within the context of the theory of the firm. In doing so, this lecture exposes the shortcomings of the general equilibrium theory which is used to explain entrepreneurship. Based on Schumpeter's description of an entrepreneur, namely, a Disequilibrating factor of economic processes; this lecture demonstrates how entrepreneurship should be understood and developed within a broader scope of microeconomics discourse.

Keywords: Entrepreneurship, Equilibrium, Creative Destruction

1. Introduction and Background

The theme of this lecture is about the entrepreneur and in particular his/her unique functions. The search for these have taken many pathways with some adding to the body of entrepreneurial theory.

Understanding and also defining the entrepreneurial phenomenon has proven to be one of the major headaches in the development of entrepreneurship theory. This compels one to question the reason for the search of that elusive phenomenon. Arthur Cole (1946) states that a study of the entrepreneur is a study of the central figure in economics. The entrepreneur is of pivotal significance to economic activity and perhaps even more so to the existence and fostering of economic growth. To succeed in analyzing and capturing the fundamental essentials of entrepreneurial activity is to discover the key to identify the attributes of an entrepreneur. Failure to properly describe the entrepreneur and his/her functions will lead to incorrect policies being formulated in order to develop small businesses in South Africa.

The search for a clear-cut definition of entrepreneurship, however, dates back to the origin of economics as an independent science. From the risk-bearing function of Cantillon's entrepreneur up to Kirzner's concept of alertness; many definitions have come to the fore. Yet, the entrepreneur has remained a shadowy figure and his/her function has never come into sharp focus. The problem regarding a suitable definition of the entrepreneur seems to be insurmountable. Great intellectual minds have been at work, vying for the ultimate definition, but to no avail. Surely after two centuries of concentrated attention, the entrepreneurial debate, must have rendered some concrete objective and acceptable theories.

In order to devise appropriate policies for improving the performance of the small business sector in South Africa and more particularly the township small businesses, an understanding of the theory of the firm is essential in explaining the internal organisation, the boundaries as well as the existence of the firm (GEM, 2002). The theory of the firm examines how a firm determines its optimal combination of resources or assets.

Economists have been thinking and writing about entrepreneurship since, at least the 18th century. Within the last few decades, the theory of the firm has become one of the fastest growing areas in applied microeconomics. The economic theory of the firm ignores entrepreneurship, while the literature on entrepreneurship in economics and strategic management has a limited use for the economic theory of the firm.

The economic theory of the firm emerged and took shape as the entrepreneur was being banished from microeconomic analysis, first in the 1930s when the firm was subsumed into neoclassical price theory (O'Brien, 1984), and then in the 1980s as the theory of the firm was reformulated in the language of game theory and the economics of information. The gradual "hardening" of the neoclassical approach in economics, including the mainstream approach to the theory of the firm, left little room for the entrepreneurship. Baumol (1993:17) calls this "*the danger which haunts economic models*." This lecture begins by discussing the various theories of the firm.

2. The Neoclassical theory of the firm.

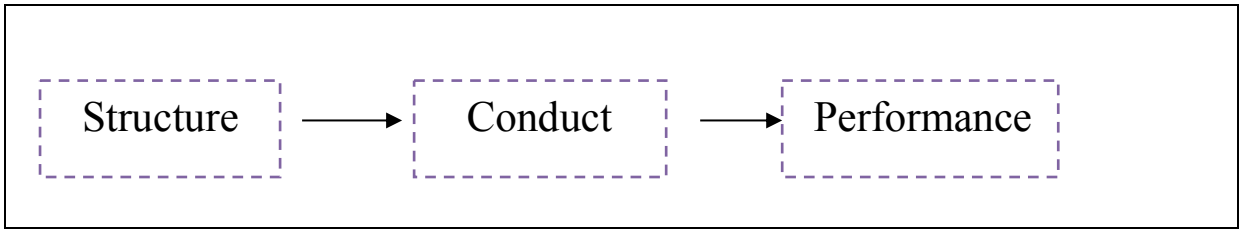
The neoclassical theory of the firm excludes the role of the entrepreneur. In accordance with the neoclassical approach, the firm is a production function or a 'black box' that transforms inputs into outputs. The firm is modelled as a single actor, facing a series of decisions that are portrayed as uncomplicated. For example, the level of output to be produced as well as the quantity of each factor to be hired is portrayed as an uncomplicated process. These decisions, of course, are not really decisions at all, but they are trivial mathematical calculations, implicit in the underlying data. In the long-run, the firm may choose an optimal size and output mix, but even these are determined by the characteristics of the production function, namely, economies of scale, scope, and sequence. In short, the firm is a set of cost curves, and the theory of the firm is a mere calculus problem. There is little or nothing for an entrepreneur to do (Andreosso & Jacobson, 2005).

Central to the neoclassical view of the firm is that the objective of the firm maximisation of profits (Andreosso & Jacobson, 2005:44). Generally, profit is generated through satisfying wants by producing a good or a service on a given market and at a given price. The firm's legal or organizational characteristics are insignificant in so far as the neoclassical theory

of the firm is concerned. The only objective guiding its operations is the desire to maximise profit. The neoclassical firm is thus a profit-maximising entity operating in an exogenously given environment which lies beyond its control.

Until recently the analysis of industries were conducted according to the linear relationship prevailing in the well known paradigm of structure conduct performance (SCP) (Andreosso & Jacobson, 2005:13). In the SCP paradigm the market structure of the industry determines the conduct of the firm, which in turn determines the firm's performance. In this instance the SCP paradigm postulates the causal relationships between the structure of the market and the performance of the firm (Ferguson & Ferguson, 1988: 13). The SCP paradigm is illustrated in Figure 1.1 below:

Fig 1.1: **The traditional SCP approach**



Source: Ferguson and Ferguson (1988:13)

The SCP approach assumes that performance of the firms can be improved by actions designed to influence the structure of the particular market (Fig 2.1). Mason (1939) refers to the SCP approach as a process which matches the structural characteristics of the market against the models of perfect competition, monopoly, monopolistic competition and oligopoly. Based on the characteristics of the market structure, deductions and assumptions can be made about the performance of the firm. In this model the entrepreneur simply does not exist.

An important issue addressed by the SCP paradigm is the impact of the market structure on output and pricing policies of the profit maximising firm and industry (William & Shughart, 1990:17; Andreosso & Jacobson, 2005:44-45). Market structure refers to the way markets are organised. In general markets are a result of actions and interactions of individuals and institutions including firms, other business organisations

and public bodies. The structure of the market is defined in terms of the number and size distribution of competing firms. In the traditional model there are three main elements of the market structure, namely:

- The degree of seller (and buyer) concentration
- The degree of product differentiation within individual markets
- The condition of entry and exit (Andreosso & Jacobson, 2005: 96).

In essence the structure of the industry is the primary cause of the conduct by the participants in the industry and the conduct explains the market performance. Thus the markets are analysed by the way in which their attributes fit into the SCP framework (Burgess, 1989).

A summary of the various market structures is given in table 1.1 below:

Criterion	Perfect competition	Monopolistic competition	Oligopoly	Monopoly
Number of firms	Many firms- no firm can influence the market price	So many firms that each firm thinks others will not detect its actions	So few that each firm must consider the others' actions and reactions	One firm
Nature of the product	Homogeneous	Hetero-geneous	Homogeneous/ hetero-geneous	Unique product with no close substitutes
Entry	Completely free	Free	Varies from free to restricted	Completely blocked
Information	Complete	Incomplete	Incomplete	Complete
Collusion	Impossible	Impossible	Possible	Irrelevant
Firm's control over the price of the product	None	Some	Considerable but less than in monopoly	Considerable but limited by market demand and the goal of profit maximisation
Long-run economic profit	Zero (normal profit)	Zero (normal profit)	Can be positive	Can be positive

Source: Mohr and Fourie (2008:243).

Table 1.1 contrasts the structures of four different types of markets. From table 2.1 deductions can be made about the conduct. The large number of competitors under the perfect competitive market structure leaves the firms with no choice but to act independently in determining given output levels. The firms under a perfect

competition scenario are unable to influence the price determined by the market structure.

Under the monopolistic competition scenario, a large number of firms are engaged in vigorous price competition. The major difference between perfect competition and monopolistic competition is that consumers perceive important differences among the products offered. This gives the monopolistically competitive firm at least some discretion in setting the price. However the availability of many close substitutes limits this price setting ability and drives profits down to a normal risk-adjusted rate of return in the long-run (Hirschey, 2003:404).

Under the scenario of oligopoly, there is a small number of equal sized firms. In the case of oligopoly price, advertising and other aspects of firm behaviour are likely to be decided collusively. An oligopolistic behaviour produces a higher price and lower level of output compared with the perfectly competitive market. Nevertheless the structure of the oligopolistic market does not guarantee collusive behaviour. Oligopolists may compete for increased market share with the result that the price is kept close to the perfectly competitive level to give an acceptable level of economic performance. In an oligopolistic market structure, an analysis of conduct is an essential element of the SCP approach (Ferguson & Ferguson, 1988:17).

In a monopoly there is only one firm in the market with no close substitutes for its product. Therefore the demand curve facing a monopolist is a market demand curve. A monopolist has complete freedom from fear of competitor reaction in setting the price. This is not to say that a monopolist can charge whatever price a monopolist wishes. The monopolist's pricing decision is governed by the strengths and weaknesses of market demand (Ferguson & Ferguson, 1988:17).

The above discussion on various market structures gives the impression that in order for the policy makers to improve performance of the firms, the policy makers must design actions to influence the structure of the markets rather than the entrepreneur. This approach lies in the straightforwardness of the chain of reasoning and the relative

ease with which structural characteristics can be identified. It is against this background that the SCP approach has been widely attacked.

2.1 **A critique of neoclassical theory of the firm**

The SCP approach faces a number of practical problems. The causal relationships posited by the SCP approach have been widely tested. Many of the results of these empirical tests were contradictory (Andreosso & Jacobson, 2005: 14). The issue of a relationship between the size of the firm and its profitability was a contentious issue. Relying on the simple correlation between firm size (a measure of the market structure) and profits (a measure of performance), Haines (1970) found that the firms that appear to be most profitable were small firms rather than large firms. This finding was against the findings of Baumol (1967) and Hall and Weiss (1967) which suggested that profitability is directly related to firm size. Somewhere between these two extremes, Marcus (1969) found that the size of a firm influences profitability in some but not in all firms. Flowing from these controversies, it is contended that the SCP approach to the study of the firm is appropriate only if the structure of the market is stable. If firms are in disequilibrium, it creates difficulties in tracing the causal linkages between structure, conduct and performance (Ferguson & Ferguson, 1988:27). In practice, market stability is unlikely. Barriers to entry and extent of product differentiation alter over time. Furthermore the number and size distributions of firms in a market also change.

The Chicago school criticised the SCP paradigm model for being non-theoretical and for having diverged too far from the basic neoclassical price theory (Stigler, 1968; Davis & Lyons, 1988). The school argued that the SCP paradigm came up with nothing more powerful in predictive ability than the traditional perfect competition model. Further, within the SCP paradigm the high concentration of firms in the market was believed to lead to collusion, and hence to higher profits. Demsetz (1974) argued that where concentration was high, firms tended to be large; larger firms tended to be more efficient and it was this efficiency that led to higher profits. It therefore follows that if improved profitability was as the result of collusion, intervention may be desirable, but

if the reason of higher profits was greater efficiency, intervention would be counter-productive.

Even amongst those who work within the SCP paradigm the linearity of the structuralist approach came into question. The possibility was identified, for example of the behaviour and performance affecting the market structure (Andreasso & Jacobson, 2005:15). Product differentiation may alter the market structure by excluding some of the firms. Advertising may be used to raise entry barriers (Comanor & Wilson, 1967). This anti-structuralist approach considered the elements of the SCP paradigm as being interdependent. Auerbach (1989:46) takes this argument further by stating that the behaviour of participants in the market can never be determined exclusively by a set of parameters which are exogenous to this behaviour. Flowing from these arguments it is clear that the problems of causality as proposed by the SCP paradigm are damaging to the SCP framework.

The neoclassical approach is also criticised for its profit maximisation assumption. Since the early 1930s, research has cast doubts on the profit maximisation principle. One of the first challenges to the neoclassical theory of the firm as a profit-maximising centre was presented by Hall and Hitch (1939). Hall & Hitch criticised the "obscurity" surrounding the precise content of the terms "marginal and average revenue", and raise questions about the nature of the demand curve assumed to be facing the firm. A major criticism focused on that tenet of neoclassical theory according to which entrepreneurial behaviour will result in the equating of marginal cost with marginal revenue. Hall and Hitch's objection to this principle stems from the results of a questionnaire submitted to a small sample of manufacturing firms on price and output decisions (Hall & Hitch, 1939). The most striking finding was that the firms interviewed appeared not to aim at profit maximisation by equating MC and MR. They applied what Hall and Hitch called a "full-cost" principle. The "right" price, or the price that "ought" to be charged is "based on full average cost (including a conventional allowance for profit)" (Hall & Hitch, 1939:19). If maximum profits were reached as a result of the application of this "full-cost" principle, it was only ‘accidental’ (Hall & Hitch, 1939:19).

The neoclassical theory of the firm provides no rationale for the existence of the firm (Foss, 1994). Some important questions are left unanswered by neoclassical theory of the firm (William & Shughart, 1990). Some economic activities of the firm are co-ordinated by the price system while others are administered explicitly within business organisations. Some economic activities are carried out in small businesses with one or two employees and some take place within large enterprises. Others are carried out by non-profit enterprises, partnerships and corporations. The question is what type of organisational form will the firm adopt? (William & Shughart, 1990:44). The modern theory of the firm seeks to provide answers to these questions.

3. **The modern theories of the firm**

This section begins by reviewing Ronald Coase's fundamental insights into the existence of the firm. Other modern theories of the firm explored in this section are Williamson's transaction cost of a firm, the property rights approach and the nexus-of-contracts approach.

3.1 **The Coasian theory of the firm**

Ronald Coase realised in 1937 that not only had the firm been neglected in economics, but more importantly that it was in fact possible to use economic theory to provide a rationale for why there would be firms in the market economy. The theory of the firm traces its existence back to Coase's landmark 1937 article, "The Nature of the Firm," with its key conjecture that the main explanation of the theory of the firm (existence, boundaries, and internal organisation) can be explained by incorporating the "costs of using the price mechanism" into standard economic analysis (Foss & Klein, 2005:3).

According to Coase (1937), if all transactions are efficient then firms must exist because there are costs to using the market (or price mechanism). Coase identified several of these "transaction costs" including the costs of discovering prices; and searching, negotiating and concluding contracts. Coase believed a firm could avoid these costs by negotiating long term contracts with its employees. The fewer contracts signed over a given period of time the lower the transaction costs.

As contract periods lengthened so did the likelihood that business conditions would change in unforeseeable ways. To counter this effect, Coase predicted that employers would want to leave details of employment contracts unspecified so that employers could be free to direct employees to take different actions as conditions dictated. This ability for owners to (re)direct the work of their employees was the distinguishing characteristic of the firm for Coase. Coase defended this argument by pointing out that the legal definition of a master-servant relationship (versus a principal-agent agreement) turned on the ability of the employer to direct the work of the employee whereas such a power did not exist in a principal-agent agreement.

Coase went on to provide several reasons why all transactions did not occur in one large firm. He argued that the number, dispersion and dissimilarity of transactions would negatively impact the ability of management to effectively allocate resources thus increasing the costs of integration. Cheung (1983) extended Coase's analysis by discussing several additional costs to using the price system. Coase had always discussed transaction costs between firms, not between firms and consumers. Cheung reasoned that in a world without firms, consumers (or households) would be forced to co-ordinate the assembly of complex products themselves by buying the individual components from specialists. This would raise several problems for consumers due to increased information costs (Cheung, 1983:9). In a world of perfect information these difficulties would not arise. Cheung also argued that firms did not supersede markets. Rather, one form of contract was replaced with another.

Like Cheung (1983), Williamson (1975; 1985) and Klein, Crawford and Alchian (1978), made major contributions to Coase's transaction cost framework by introducing new elements and significantly expanding the explanatory power of the theory. Whereas Coase had emphasised the *ex ante* costs of search and contract negotiation, Williamson (1975; 1985) and Klein et al. (1978) focused on ex post transaction costs arising from an inability to enforce contracts. Williamson (1975) assumed that economic agents were bounded rationally. This ensured that any contracts written between agents were incomplete (i.e. agents could not contract for every

contingency). Williamson also introduced the notion of asset specificity. A contract between two parties invariably created assets specific to the relationship that could not be easily deployed to alternative uses (i.e. sunk costs). The difference in value between an initial investment and its salvage value (or its value in its next best use) was termed quasi-rent (Klein et al., 1978).

By acting opportunistically to renegotiate an (incomplete) contract in the light of unforeseen contingencies, an unscrupulous party could potentially hold up its partner and appropriate the quasi-rents. If the partner firm could foresee this risk, the deal would not proceed in the first place. The alternative for a firm with substantial quasi-rents was to vertically integrate into the activity of its partner, thus holding all specific assets itself and removing the threat of hold up. The extent of a firm's integration was limited at the margin by the trade-off between governance costs and transaction costs.

3.2 **Property Rights Approach**

The property rights approach (Barzel, 1989; Hart, 1995; Hart & Moore, 1990) further extended the transaction cost approach. The focus is on the distinction between specific and residual rights. In a world of incomplete contracts, it is impossible to define specific rights for all contingencies. Firms will thus spend resources trying to acquire valuable unspecified rights (Barzel, 1989).

Ownership of physical assets becomes important because ownership grants residual rights of income and control (Grossman & Hart, 1986; Hart & Moore, 1990). When contracts are incomplete, it is the owner that ultimately has the right to decide on the final disposition of assets. If changing the deployment of an asset increases the value of the firm then the asset owner is also entitled to any surplus received. This has prompted Hart (1995) to recommend that the firm with the greatest potential surplus from an asset should own that asset.

Alchian and Demsetz (1972) claimed that a firm has no right of fiat (or authority) over its employees. Initially, the property rights approach would seem to support this

position as human capital cannot be owned (i.e. slavery is illegal). This conclusion has been disputed in the property rights literature. One of the rights of ownership is the right to exclude others from access to a particular asset. Many employees are in their highest valued use only when working for a particular company. The human capital is relationship specific. Presumably, these employees will be amenable to directions because the firm has the power to:

a) Appropriate their quasi-rents and
b) Remove access to the corporate assets altogether (i.e. fire them).

A commercial pilot, for example, is in his or her highest valued use when working for a commercial airline. During the Australian pilots' strike of 1989, 85%-90% of scheduled air services were cancelled for several weeks as pilots pushed for a 30% wage rise. Buoyed by Federal government support, the commercial airlines simply fired all of their pilots and hired new pilots from overseas at lower rates than before the strike. Some of the ringleaders of the strike have never flown in Australia again and have suffered a considerable loss of income and prestige (Phelan & Lewin, 1999).

This power inherent in controlling access to physical assets has led property rights theorists to define the firm in terms of the ownership of physical assets (where ownership denotes residual rights of control and income). Unlike the nexus of contracts view (discussed in the next paragraph), this definition makes the boundaries of the firm relatively easy to determine (Foss, 1997). For example, if firm X owns, or has residual rights over, asset x then asset x lies within the boundaries of firm X.

Mahnke (1997) argued that the power to control access to corporate assets may also extend to non-physical or intangible assets, such as reputation, information and brand names. This may explain why top accounting and consulting firms are able to hire the best students from prestigious colleges at salaries considerably below market rates. From the students' perspective, they are enhancing their human capital through exposure to a leading firm's reputation, techniques and client base. Thus, recognition

of the ability to appropriate quasi-rents by controlling access to corporate assets may be important in developing a comprehensive theory of the firm.

3.3 **The Nexus-of-Contracts Approach**

Alchian and Demsetz (1972) explicitly rejected the notion that authority provided a justification for the firm. Either side of an employment contract could terminate an agreement just as either side of a market contract could terminate an agreement. The employees did not have to follow orders which the employees did not like, so the firm had no special authority over its employees. Like Cheung (1983), Alchian and Demsetz believed that the term 'firm' was simply shorthand for a particularly dense nexus of contracts between economic agents.

Alchian and Demsetz's started with the observation that much of the production in a firm could be characterised as "team production" in that the services of several specialists were required to produce an end product. The existence of a firm is explained in terms of the incentive problems that arise when team production is combined with asymmetric information and moral hazard. While Alchian and Demsetz viewed the co-ordination of production as relatively unproblematic, they felt it was difficult to monitor the effort of individual workers in a team. Individual team members had an incentive to shirk by reducing their effort. Shirkers do not bear the full consequences (costs) of their actions, and viable shirking is the result. The way the market system copes with such shirking is through contracts.

The classical capitalist firm is characterised by the existence of one central agent who is both a monitor who meters the performances of other agents and a residual claimant and with whom other agents enter into contracts. Market forces then guarantee efficient monitoring of team production via the incentive structure confronting the monitor-residual claimant. Viable firms are those that succeed in minimising the costs involved in monitoring team production.

The nexus-of-contracts approach did not come without costs because it became clear that within this tradition the very concept of the firm as a planned order was difficult to uphold. In this instance, a firm was simply a complex set of market contracts only distinguished from ordinary spot market contracts by the continuity of association among input owners (Cheung, 1983). Flowing from this, nexus-of-contracts theorists such as Fama (1980) and Cheung (1983) call for an abandonment of the concepts of the 'entrepreneur' and 'the firm', respectively. Since all allocation of resources – including those inside the firm are ultimately governed by relative price movements, there can be little or no room for planned direction of resources as embodied in entrepreneurial plans (Foss, 1994).

A major shortcoming with modern economic theories of the firm is that they ignore the entrepreneur (Furubotn 2002; Foss & Klein 2005). Thus, Furubotn (2002: 72) points out that profit is always in the background of transaction cost economics (TCE) analysis because it is impossible to say whether a particular action (and contractual arrangement) undertaken by the firm is desirable or not purely on the basis of the costs of transacting. There is reason, then, to give greater consideration to the question of how profits are generated. This leads to the theory of entrepreneurship.

4. **Early development of entrepreneurship**

The term entrepreneur has been derived from the French word "entreprendre". John Burch (1988:13) states that entrepreneur means "to undertake". The entrepreneur undertakes, organizes and raises capital for a venture. He also assumes most of the risk involved. One could also analyze the French word "entrepreneur" from a more refined grammatical perspective and find an alternative interpretation which is more likely to have been the purpose of the concept, looking at the historical background against which it originated. Splitting the concept into two sections "entre" and "preneur" and adding interpretation to it one finds the two words "between" and "taker". From this it follows that the tern entrepreneur was conferred upon those individuals who appropriated for themselves something which was to be found between two alternative ends.

Reekie (1978:105) states that the entrepreneur can be regarded as a middleman who facilitates trade between buyers and sellers. Buyers and sellers do not normally know each other and to search and find out about each other involves high transaction costs. This is where the entrepreneur as a specialist third party comes into the picture. He collects and makes available this required information, about buyers and sellers, for a fee. This fee, after the deduction of entrepreneurial expenses, is entrepreneurial profit.

This brings us back to the problem of a correct and acceptable interpretation of the French word "entrepreneur. To classify the entrepreneur as a specialist middleman who takes “profit” for making mutually beneficial exchange opportunities known to parties, might provide an alternative to that of undertaker. This classification could prove to be too narrow if one starts digging into the annals of economic history. But even there, as Baumol (1968:64) has noted the term has not always had clear theoretical content. In recent years the term entrepreneur has regularly been used as a synonym for the firm or for management, pushing aside any notion of special entrepreneurial qualities. Entrepreneurship is regularly listed in economic textbooks as the fourth factor of production thereby ignoring the fact that no known supply curve exists for entrepreneurship whereby its price can be determined.

Since there exists no agreed definition for the term entrepreneur. Shand (1984:77) points out that the existence of large joint-stock companies has complicated the task of identifying exactly where the entrepreneurial function is to be found. A survey of the history of the term might throw some light on the various points of disagreement which has made an agreed-upon definition highly unlikely.

Gurzynki (1976:17) states that in medieval times entrepreneurship could hardly develop, as the institutional framework was strongly hierarchical. Entrepreneurs were those who stepped outside the law or those who perverted it to their advantage. It stands to reason that the term entrepreneur did not appear regularly in economic prehistorical literature. The term made its first noticeable appearance in the writings of Richard Cantillon. Hebert and Link (1982:12) state however, that the term was in common, though imprecise, usage prior to Cantillon. In Savary's "*Dictionaire Universel*

de Commerce" (Paris, 1723), the entrepreneur was defined as one who undertakes a project; a manufacturer; a master builder. An earlier form of the term, "entreprendeur", was in use during the fourteenth century (Hoselitz, 1960). During the sixteenth and seventeenth centuries the term referred to a government contractor of military fortifications or public works.

Hoselitz (1960) states that the typical entrepreneur of the Middle Ages, usually a Cleric, was in charge of great architectural work such as castles and cathedrals. His function included inventor, planner, architect, builder, manager, employer and supervisor. However, risk-bearing and financing only became part of the entrepreneurial function when capitalism replaced feudalism. The commercial aspect of the task became separated from the artistic and technical functions. Risk-bearing in its turn, started losing significance as an entrepreneurial function with the advent of limited liability through corporate ownership. Innovation and its impact on economic growth then took center stage in entrepreneurial theory. This was followed more recently by the emphasis placed on perception of and adjustment to hitherto unperceived opportunities.

According to Schumpeter (1954:555), Richard Cantillon (1680-1734), a Paris banker of Irish extraction, was the first to use the term entrepreneur and to distinguish the entrepreneurial function from the other factors of production. Cantillon stressed the risk-bearing function of the entrepreneur when he stated that the entrepreneur buys the means of production at certain prices in order to combine them into a product that he is going to sell at prices that are uncertain at the moment at which he commits himself to his costs (Aitken, 1965:46). Cantillon gave the entrepreneur center stage in trade in his *"Essai sur la nature du commerce en general*" published in 1755 (Hebert & Link, 1982:14). To Cantillon the market was a self-regulating network of reciprocal exchange arrangements which produced prices and where the entrepreneur played a central part in bringing this about. In performing this function the entrepreneur was driven by self-interest. Cantillon (1931:55) admitted that even beggars and robbers could be entrepreneurs, as long as they take chances and thereby face uncertainty. Being an entrepreneur does not exclude one from being something else. The entire

population can be divided into two groups, entrepreneurs and others. The income of the former is uncertain, that of the latter is known and contractually fixed. Cantillon believed that entrepreneurial profit was necessary if the entrepreneur was to perform the function of risk-bearing in an uncertain environment.

The physiocrat, Nicolas Baudeau (1730-1792), added a significant element to Cantillon's theory of entrepreneurship. To Bandeau, entrepreneurship involved more than mere risk-bearing. It involved risk-bearing in a dynamic economy. Besides being faced with decision making and the risk which it involves, the entrepreneur had to invent and innovate in order to reduce his costs and raise his profits. The entrepreneur needed the ability to recognize and employ the right knowledge and information when it became available and the ability to perceive new opportunities for profit. Only then would the entrepreneur be spurred on to action and adopt innovations (Hebert and Link, 1982:25-27).

Jean-Baptiste Say (1767-1832), the first professor of economics in Europe attempted to isolate the central function of the entrepreneur. In this regard he broke sharply away from Cantillon's risk-bearing function and the innovating function of the physiocrats. To Say the entrepreneur was the principal agent of production; meaning the one responsible for the application of sound knowledge to a useful purpose (Hebert and Link,1982: 30). This application of knowledge was not made at mere random but required sound judgment and had to pass the "market test", that is, it had to lead to the creation of value. This sound judgment principle was one of the key characteristics of Say's entrepreneur. To Say the entrepreneur must possess the art of superintendence and administration. Shand (1984:77) points out that Say described the entrepreneur as the one who combines the factors of production, thus assigning him the function of organiser. Aitken (1965:46) also points out that, besides placing the entrepreneur at the center of productive theory, he also placed him at the center of distributive theory. Atkinson and Hoselitz (1955:107) follow up on this point and state that Say implied that the entrepreneur brings together the suppliers of productive factors as well as the buyers of finished products. The entrepreneur is at the center of different relationships.

Say, thus, made entrepreneurial activity synonymous with management, thereby separating the entrepreneurial function from the capitalist function. Risk-bearing was an optional entrepreneurial function since Say assumed no necessary relationship between entrepreneurial activity and capital accumulation. The entrepreneur is more than a mere capitalist. Entrepreneurial reward is not profit but wages paid for a highly skilled type of scarce labour. Say's entrepreneur was a guardian of equilibrium, a kind of superior labourer in a static environment whose wages were determined by supply and demand considerations. Say's theory was a step backwards on the theories of Cantillon and the physiocrats. By picturing the entrepreneur as a manager or special type of labour; Say transformed entrepreneur into a mere factor of production obtainable at a price predetermined by the market.

5. **Placing an entrepreneur within a firm**

Because entrepreneurs in many ways personify market forces, it might be expected that entrepreneurs are the central figures in economics. Similarly, because most entrepreneurial ventures somehow involve a firm, entrepreneurship in the context of firm organisation would seem to be a central subject in the theory of markets. While some classical economists, particularly Jean-Baptiste Say and Jeremy Bentham, reasoned this way, it is hardly characteristic of modern economics (Machovec, 1995:109). As the historian of economic thought Paul McNulty (1984: 240) puts it:

> ***"The perfection of the concept of competition . . . which was at the heart of the development of economics as a science during the nineteenth and early twentieth centuries, led on the one hand to an increasingly rigorous analytical treatment of market processes and on the other hand to an increasingly passive role for the firm***".

The "increasingly rigorous analytical treatment" of markets, notably in the form of general equilibrium theory, not only made firms increasingly "passive," it also made the model of the firm increasingly stylized and anonymous, doing away with those

dynamic aspects of markets that are most closely related to entrepreneurship (O'Brien, 1984). If any firm can do what any other firm does (Demsetz, 1991), if all firms are always on their production possibility frontiers, and if firms always make optimal choices of input combinations and output levels, then there is no room for entrepreneurship.

As this has been the dominant view of the firm in economics at least since the 1930s, it is not surprising that much of the important work on the economics of entrepreneurship was done prior to this period (e.g., Schumpeter), and that more recent work by economists on entrepreneurship has been done largely outside of the confines of mainstream economics (e.g., Kirzner). However, advances in economics over the last two to three decades have left economics somewhat better equipped to deal with entrepreneurship and to incorporate it into models of firm organisation.

In the entrepreneurship curriculum of many business schools, the phenomenon of entrepreneurship has often been 'small-business management'. Entrepreneurs are pictured as the managers of small, family-owned businesses or start-up companies. Entrepreneurship consists of routine management tasks, relationships with venture capitalists and other sources of external finance, product development and marketing (Elkjaer, 1991); (Ibrahim & Vyakarnam , 2003). In this sense, entrepreneurship and the theory of the firm are inextricably linked. The theory of entrepreneurship in this approach is the theory of how small business owners organise and manage their assets.

It is common, particularly within management literature, to associate entrepreneurship with boldness, daring, imagination, or creativity (Begley & Boyd, 1987; Chandler & Jansen, 1992; Aldrich & Wiedenmayer, 1993; Hood & Young, 1993; Lumpkin & Dess, 1996). These accounts emphasise the personal, psychological characteristics of the entrepreneur. Entrepreneurship, in this conception, is not a necessary component of all human decision-making, but a specialised activity that some individuals are particularly well equipped to perform. If these characteristics are the essence of entrepreneurship, then entrepreneurship has no obvious link to the theory of the firm

(at least not without further arguments). The relevant personal characteristics can presumably be acquired by contract on the market by purchasing consulting services, project management, and the like. A 'non-entrepreneurial' owner or manager, in other words, can manage the day-to-day operations of the firm, purchasing entrepreneurial services on the market as needed. The literature does not explain clearly whether imagination and creativity are necessary, sufficient, or incidental conditions for entrepreneurship. Clearly the founders of many firms are imaginative and creative. If not the question that needs to be addressed is; are these founders not entrepreneurs?

5.1 **Entrepreneurship as alertness or discovery**.

Entrepreneurship can also be conceived as alertness to profit opportunities (Kirzner, 1973, 1979, 1992). Kirzner follows Hayek (1968) in describing competition as a discovery process: the source of entrepreneurial profit is superior foresight — the discovery of something (new products, cost-saving technology) unknown to other market participants. The simplest case is that of the arbitrageur, who discovers a discrepancy in present prices that can be exploited for financial gain. In a more typical case, the entrepreneur is alert to a new product or a superior production process and steps in to fill this market gap before others. Success, in this view, comes not from following a well-specified maximisation problem, but from having some knowledge or insight that no one else has — that is, from something beyond the given optimisation framework.

Kirzner's entrepreneurs do not own capital; entreprenuers need only be alert to profit opportunities. Because entrepreneurs own no assets, entrepreneurs bear no uncertainty. Critics have seized on this as a defect in Kirzner's conception. According to this criticism, mere alertness to a profit opportunity is not sufficient for earning profit. To reap financial gain, the entrepreneur must invest resources to realise the discovered profit opportunity. "Entrepreneurial ideas without money are mere parlor games until the money is obtained and committed to the projects" (Rothbard, 1985: 283).

Furthermore, except for the few cases where buying low and selling high are nearly instantaneous (say, electronic trading of currencies or commodity futures), even arbitrage transactions require some time to complete. The selling price may fall before the arbitrageur has made his sale, and thus even the pure arbitrageur faces some probability of loss. In Kirzner's formulation, the worst that can happen to an entrepreneur is the failure to discover an existing profit opportunity.

For these reasons, the link between Kirznerian entrepreneurship and the theory of the firm is weak. Owners, managers, employees, and independent contractors can all be alert to new profit opportunities; Kirzner's entrepreneur does not need a firm to exercise entrepreneur' s function in the economy.

5.2 **Entrepreneurship as charismatic leadership**.

Another strand of literature, incorporating insights from economics, psychology, and sociology and leaning heavily on Max Weber, associates entrepreneurship with charismatic leadership. Entrepreneurs, in this view, specialize in communication — the ability to articulate a plan, a set of rules, or a broader vision, and impose it on others. Casson (2000) calls these plans "mental models" of reality. The successful entrepreneur excels at communicating these models to others, who come to share the entrepreneur's vision (and become his followers). Such entrepreneurs are also typically optimistic, self-confident, and enthusiastic (though it is not clear whether these are necessary conditions).

Witt (1998a, 1998b) describes entrepreneurship as "cognitive leadership." Witt outlines an entrepreneurial theory of the firm that combines recent literature on cognitive psychology with Kirzner's concept of alertness. Entrepreneurs require complementary factors of production which are co-ordinated within the firm. For the firm to be successful, the entrepreneur must establish a tacit, shared framework of goals, which govern the relationships among members of the entrepreneur's team. As Langlois (1998) points out, it is often easier (less costly) for individuals to commit to a specific individual, the leader, rather than an abstract set of complex rules governing

the firm's operations. The appropriate exercise of charismatic authority, then, reduces coordination costs within organisations.

A possible weakness of this approach is its emphasis on human assets, rather than the inalienable physical assets the entrepreneur controls. Issues such as whether or not the charismatic leader necessarily owns physical capital, is an employee or independent contractor are unclear in this approach. Formulating a business plan, communicating a "corporate culture," and the like are clearly important dimensions of business leadership. But it must be clarified as to whether these are attributes of the successful manager or the successful entrepreneur. Even if top level managerial skill were the same as entrepreneurship, it is unclear why charismatic leadership should be regarded as more "entrepreneurial" than other, comparatively mundane managerial tasks such as structuring incentives, limiting opportunism, administering rewards, and so on.

5.3 Entrepreneurship as judgment

An alternative to the foregoing accounts is that entrepreneurship consists of judgmental decision-making under conditions of uncertainty. Judgment refers primarily to business decision-making when the range of possible future outcomes, let alone the likelihood of individual outcomes, is generally unknown (what Knight [1921] terms uncertainty, rather than mere probabilistic risk). This view finds expression in the earliest known discussion of entrepreneurship that is found in Richard Cantillon's Essai sur la nature de commerce en géneral (1755).

Cantillon argued that all market participants, with the exception of landowners and the nobility, can be classified as either entrepreneurs or wage earners. Entrepreneurs work for uncertain wages, so to speak, and all others for certain wages until they have them, although their functions and their rank are very disproportionate. The General who has a salary, the Noble who has a pension, and the Domestic who has wages, are in the latter class. All the others are entrepreneurs, whether they establish themselves with capital to carry on their enterprise, or are entrepreneurs of their own

work without any capital, and they may be considered as living subject to uncertainty; even beggars and robbers are entrepreneurs of this class (Cantillon, 1755: 54).

Bearing risk, that is, making decisions under conditions of uncertainty—is the entrepreneur's trait. Judgment is distinct from boldness, innovation, alertness, and leadership. Judgment must be exercised in mundane circumstances, for ongoing operations as well as new ventures. While alertness tends to be passive (perhaps even hard to distinguish from luck [Demsetz, 1983]), judgment is active. Entrepreneurs "are those who seek to profit by actively promoting adjustment to change. They are not content to passively adjust their activities to readily foreseeable changes or changes that have already occurred in their circumstances; rather, they regard change itself as an opportunity to meliorate their own conditions and aggressively attempt to anticipate and exploit it" (Salerno, 1993: 123). Those who specialise in judgmental decision-making may be dynamic, charismatic leaders, but they need not possess these traits. Decision making under uncertainty is entrepreneurial, whether it involves imagination, creativity, leadership, and related factors or not.

5.4 **Entrepreneurial Judgment as a natural complement to the theory of the firm**

While the view of entrepreneurship as judgment appears in many writings, it is most often associated with Knight (1921). For Knight, firm organization, profit, and the entrepreneur are closely related. In Knight's view, these arise as an embodiment, a result, and a cause, respectively, of commercial experimentation (Demsetz, 1988). Knight introduces the notion of judgment to link profit and the firm to the existence of uncertainty. Judgment primarily refers to the process of businessmen forming estimates of future events in situations in which there is no agreement or idea at all on probabilities of occurrence. Judgment is learned and tends to have a large tacit component.

Entrepreneurship represents judgment that cannot be assessed in terms of its marginal product and which cannot, accordingly, be paid a wage. This is particularly so because entrepreneurship is judgment about the most uncertain events, such as

starting a new firm, defining a new market, and the like. In other words, there is no market for the judgment that entrepreneurs rely on. Therefore exercising judgment requires the person with judgment to start a firm. Judgment thus implies asset ownership; for judgmental decision-making is ultimately decision-making about the employment of resources.

An entrepreneur without capital goods is, in Knight's sense, no entrepreneur. This implies an obvious link with the theory of the firm, particularly those (transaction cost and property rights theories) that define asset ownership as a crucial ingredient of firm organisation (Williamson, 1996; Hart, 1995). The firm, in this sense, is the entrepreneur and the alienable assets owned and controlled by the entrepreneur. The theory of the firm is essentially a theory of how the entrepreneur exercises his judgmental decision-making. In this instance the entrepreneur has to decide on the combinations of assets, delegation to subordinates and monitoring to see that the assets are used consistently with the entrepreneur's judgments.

6. **General equilibrium and its shortcomings**

The neoclassical view of the market system is one of general equilibrium where all markets and economic agents are in simultaneous equilibrium. This situation requires that all quantities supplied and demanded are brought into equality hence the existence of only one set of equilibrium prices and quantities. It also requires stability over time, thus, that the relationship between the slopes of the supply and demand curves remain constant. General equilibrium theory assumes perfect competition, coherent plans of economic agents and instantaneous adjustments to change (Shand, 1984:38).

In equilibrium there is no place for entrepreneurial activity since there are no changes in the given data of endowments, technologies or preferences. All activities are faultlessly repeated since all knowledge remain the same. There is no uncertainty, even human choice remains the same (Reekie, 1978:108). Littlechild (1977) points

out that "The agents are equipped with forecasting functions and decision functions to enable them to cope with uncertainty. Indeed the agents are these functions. But, though their specific forecasts and decisions may change over time in response to changes in economic conditions, the functions themselves remain the same. The agents never learn to predict any better as a result of their experiences. Nothing can occur for which they are not prepared, nor can they ever initiate anything which is not preordained" (Littlechild,1977:7). General equilibrium theory requires the presence of a disembodied entrepreneur in a stationary environment who is willing to neither gain nor lose, and who has perfect knowledge of all opportunity costs, perfect foresight and no subjective expectations (Gorzynski, 1976:4).

General equilibrium theory views the entrepreneur as an automaton, mechanically reacting to market conditions and reaping pre-determined profits as reward. These market conditions systematically requisition entrepreneurship when the need arises. The entrepreneur provides a service when he reallocates resources in order to maintain equilibrium. Schultz(1975:827) states that this service is valuable and therefore has a demand curve representing it. But this service is scarce and therefore has a supply curve representing it. The quantity of and profit offered for these entrepreneurial services is therefore determined by the given supply and demand conditions. In the neoclassical world of general equilibrium, the market generates the correct amount of services needed to correct incorrect decisions (Kirzner, 1985:8). General and continuous equilibrium makes of the entrepreneur a mere maximizing manager with no scope for innovation.

In neoclassical economics the concept of equilibrium assumes the central role. Less attention is given to the process whereby this equilibrium is attained. The Austrian school of economics, in contrast, concentrate on the market process and what it brings about. Kirzner (1985), an Austrian writer, believes he has discovered the perfect synthesis between the neoclassical view and that of Shackle (1967).

Shackle (1967) refuses to shackle entrepreneurial behaviour to the demands of general equilibrium theory. Equilibrium theory constrains entrepreneurial choice to

determinate, mechanical calculations based on given objective conditions and preferences (Kirzner, 1985, p.9). Addleson (1979:186) points out that rational conduct is not predetermined objectively but is based on expected and subjective magnitudes. Individuals act upon their own value judgments after appraisal of the alternatives which confront them. These value judgments represent a culmination of a process of planning in the course of which alternative imagined action-schemes were evaluated.

Shackle (1967) rejects the assumption of constancy of data over time on which equilibrium theory is based. Knowledge and expectations are, by their ever-shifting nature, unpredictable in a real world (Shand, 1984:40). Economic theory cannot make over confident predictions. Shackle (1967) believes that the absence of the passage of time in equilibrium theory relegates it to an oversimplified economic model. This theory applies to isolated moments with no bonds to the future but not to real world circumstances which are constantly changing.

Shackle (1967) stresses the originative and imaginative components of choice (Kirzner, 1985, p8-10). These features of human decision making, although not predeterminable, cannot be excluded from economic theory. Human choice is originative, entrepreneurially injecting new knowledge, expectations, imaginings and dreams into an existing situation. Entrepreneurship does not react to exogenous market conditions but independently and spontaneously injects new elements into these conditions in an unpredictable manner and independent of existing circumstances. These originative aspects of entrepreneurship rebel against the theoretical equilibrium construction. Shackle's view, thus, is one where entrepreneurial behavior consisting of pure novelty, spontaneity and unpredictability.

For Shackle (1967), imagination is the creation of something new and original. Imagination generates a beginning where we imply two states of affairs, one in which the originated thing is not present, and one, later in time, in which it is present" (Shackle, 1967:19). Kirzner. (1985) states that "Shackle wishes to see history as having injected into it at each instant of decision-making, a novel element not predictable from and not determined by previous history". Existing opportunities are

unlimited. The set of available actions is incomplete and incompletable, and therefore infinite. There is no limit to the extent of coordination of plans. General equilibrium as the end of all decision making is unattainable. Shackle (1967) believes in a kaleidic market process, at all times heading in new directions with no potential for full coordinated equilibrium and generating itself a perpetual motion regardless of exogenous changes. Shackle sees the market process as developing into a void of time, to be filled by the exercise of entrepreneurial imagination and choice (Littlechild, 1979).

The real economy cannot be depicted by using a general equilibrium framework. General equilibrium abstracts from time and money and would only prevail in the special case where complete integration of the structure of production has taken place. Rejecting the general equilibrium framework does not imply that there is no existing tendency towards the complete integration of the structure of production and order. The principle of "spontaneous order" as developed by Hayek (1968: 83) can be used to allow for the fact that "a tendency towards the integration of the [capital] structure does exist" (Lachmann, 1976: 159). Allowing for a tendency towards the integration of the structure of production is to allow for an ordering process in the economy which is never really in equilibrium. This order is spontaneous since it is based on the exploitation of profits evolving from disequilibrium situations in the market without "any formal machinery for enforcing them" (Hayek, 1968: 86). This ordering process is characterised by the creativity of entrepreneurship, complexity flowing from the further division of labour and the coordinating influence of money (Hayek, 1968). Debates on the merits of stabilisation policies will then be concerned with whether these tendencies towards the integration of the capital structure are strengthened or weakened by such policies. Any policy weakening this process will lead to greater dis-coordination in the economy.

7. **Entrepreneur as a Disequilibrating factor in economic processes**

Since the 1970's, with the economics of general equilibrium fully developed, attention has been turned to facts not easily fitting into the equilibrium mould (Kirzner, 1985: 5).

This has led to attempts to resurrect the entrepreneur in order to explain disequilibrium. It is argued below that entrepreneurship can be accommodated in macroeconomics only by incorporating capital theory.

Given the foregoing discussion on the theory of the firm and the entrepreneur, it is clear that there is no single or agreed upon definition of entrepreneur. Schumpeter's (1883-1950) predecessors all viewed the entrepreneur as the one responsible for the correction of disruptive exogenous forces on the market system. Schumpeter turned this assumption on its head and made the entrepreneur the endogenous factor responsible for the disruptions from market equilibrium. In this process the views of the Austrian school of economics are greatly utilised.

7.1 Schumpeter's innovation theory

Probably the best known concept of entrepreneurship in economics is Joseph Schumpeter's idea of the entrepreneur as innovator. Schumpeter's entrepreneur introduces 'new combinations'— new products, production methods, markets, sources of supply, or industrial combinations — shaking the economy out of its previous equilibrium through a process that Schumpeter termed ***creative destruction***. Realizing that the entrepreneur has no place in the general-equilibrium system of Walras, whom Schumpeter greatly admired, Schumpeter gave the entrepreneur a role as the source of economic change.

> ***"[I]n capitalist reality as distinguished from its textbook picture, it is not [price] competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (competition) which commands a decisive cost or quality advantage and which strikes not at the margins of profits and the outputs of existing firms but at their foundations and their very lives" (Schumpeter, 1942: 84).***

Schumpeter carefully distinguished the entrepreneur from the capitalist (and strongly criticised the neoclassical economists for confusing the two). Schumpeter's entrepreneur need not own capital, or even work within the confines of a business firm at all. While the entrepreneur could be a manager or owner of a firm, the entrepreneur is more likely to be an independent contractor or craftsman. In Schumpeter's conception, ***"people act as entrepreneurs only when they actually carry out new combinations, and lose the character of entrepreneurs as soon as they have built up their business, after which they settle down to running it as other people run their businesses"*** (Ekelund & Hébert, 1990: 569).

This suggests a rather tenuous relationship between the entrepreneur and the firm being owned, worked for, or contracted with. Entrepreneurship is exercised within the firm when new products, processes, or strategies are introduced, but not otherwise. **The day-to-day operations of the firm need not involve entrepreneurship at all**. Furthermore, because Schumpeterian entrepreneurship is independent of its environment, **the nature and structure of the firm does not affect the level of entrepreneurship.** Corporate Research and Development budgets, along with organisational structures that encourage managerial commitment to innovation (Hoskisson & Hitt, 1994), have little to do with Schumpeterian entrepreneurship per se.

Schumpeter makes use of a closed economy system to explain the concept of circular flow, that is, an unchanging economic process which flows on at constant rates in time and merely reproduces itself. The managerial function in this system involves resource allocation and other ordinary routine work. In reality, however, revolutionary changes do occur and appear as new combinations of the factors of production. The latter represents creativity in that knowledge not yet in current use gets employed. The adoption of these new combinations represent innovation insofar as it brings new commodities into existence. **Schumpeter assigned a single highly refined role to the entrepreneur when he labelled him as an innovator**. By stressing the innovative function of the entrepreneur, Schumpeter placed the human agent at the center of the process of economic development (Kilby,1971:2). "Development….. is a distinct

phenomenon, entirely foreign to what may be observed in the circular flow or in the tendency towards equilibrium. It is a spontaneous and discontinuous change in the channels of the flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing (Schumpeter, 1961:64). Schumpeter, thus, saw the entrepreneur as the endogenous factor who disrupts the market equilibrium from within thereby enforcing economic development.

Schumpeter excluded risk as a function of the entrepreneur. He disposes the conception of the entrepreneur as risk bearer. **Risk obviously always falls on the owner of the means of production or of the money-capital which was loaned to them; hence never on the entrepreneur as such** (Schumpeter, 1961:75). However, this point of view excludes the possibility that the entrepreneur is an owner himself and thereby being subjected to capital risk. It also disregards the fact that an entrepreneur possesses human capital, including elements such as effort and time, which is subject to uninsurable risk. One must however, keep in mind that the activity of risk-bearing in itself is not unique to the entrepreneur. Any decision, whether taken by the entrepreneur or manager, involves an element of risk insofar no one can predict what the future entails.

In a dynamic economic system, the forces making for equilibrium are those making for the complete integration of the complementary factors of production into the structure of production. The forces making for disequilibrium are those which disrupt this process towards complete integration. The forces of equilibrium and disequilibrium are closely linked to entrepreneurship. It is entrepreneurs who shape and mould the structure of production. In this process they accumulate capital, coordinate various stages of production and create new production structures. With the rise of Walrasian modes of thinking, theorists came to see entrepreneurship as something to be abstracted from since "they constitute phenomena that obstruct theoretical vision of that underlying equilibrium set of potential activities that is alone fully consistent with the basic data, consumer tastes, resource constraints, and available technology" (Kirzner, 1985: 4). It became fashionable to view the real world as being close to equilibrium, and so fully coordinated that entrepreneurs made neither profits nor

losses. Any discrepancies between the real world and equilibrium were not due to disequilibrium but rather reflected "complete adjustment to some overlooked real circumstances" (Kirzner, 1985: 4).

Although since the late 1880s there have been reports of the use of the term “innovation” to mean something unusual, none of first precursors of innovation have been as influential as the Schumpeter. According to him, consumer preferences are already given and do not undergo spontaneously. It means that they cannot be cause of the economic change. Moreover, consumers in the process of economic development play a passive role. Schumpeter described development as historical process of structural changes, substantially driven by innovation which was divided by him into five types:

- Launch of a new product or a new species of already known product;
- Application of new methods of production or sales of a product (not yet proven in the
  industry);
- Opening of a new market (the market for which a branch of the industry was not yet
  represented);
- Acquiring of new sources of supply of raw material or semi-finished goods;
- New industry structure such as the creation or destruction of a monopoly position.

Schumpeter argued that anyone seeking profits must innovate. That will cause the different employment of economic system’s existing supplies of productive means. Schumpeter believed that innovation is considered as an essential driver of competitiveness and economic dynamics. He also believed that innovation is the centre of economic change causing gales of “*creative destruction*”, which is a term created by Schumpeter in Capitalism, Socialism and Democracy. According to Schumpeter innovation is a "***process of industrial mutation, that incessantly revolutionizes the economic structure from within, persistently destroying the***

old one, incessantly creating a new one". Schumpeter described development as historical process of structural changes, substantially driven by innovation.

Schumpeter divided the innovation process into four dimensions: *invention, innovation, diffusion and imitation.* Then he puts the dynamic entrepreneur in the middle of his analysis. In Schumpeter's theory, the possibility and activity of the entrepreneurs, drawing upon the discoveries of scientists and inventors, create completely new opportunities for investment, growth and employment. In Schumpeter's analysis, the invention phase or the basic innovation have less of an impact, while the diffusion and imitation process have a much greater influence on the state of an economy. The macroeconomic effects of any basic innovation are hardly noticeable in the first few years (and often even longer). What matters in terms of economic growth, investment and employment, is not the discovery of basic innovation, but rather the diffusion of basic innovation, which is the period when imitators begin to realize the profitable potential of the new product or process and start to invest heavily in that technology.

It is worth noting that according to Schumpeter invention is not the cause: discovery and execution are "*two entirely different things*" . "The pure new idea is not adequate by itself to lead to implementation ... . It must be taken up by a strong character (*entrepreneur*) and implemented through his influence". It is not the power of ideas but the power that gets things done. Schumpeter says that "*creative destruction*" is "the essence of capitalism". A stationary economy, reactive, repetitive and routine, is a circular flow that admits no surprises or shocks. It is an unchanging economic process which flows on at constant rates in time and merely reproduces itself . Whereas a stationary feudal economy would still be a feudal economy, and a stationary socialist economy would still be a socialist economy, stationary capitalism is a contradiction. Schumpeter writes that: "… *capitalist reality is first and last a process of change*" where change is the essence. ***Absence of creative destruction, would be perpetual imitation and thus not the essence of capitalism at all***. According to Schumpeter, innovations are essential to explaining economic growth, and the "*entrepreneur*" is the central innovator. As Schumpeter describes….."***the entrepreneur's main function is***

to allocate existing resources to new uses and new combinations". One of Schumpeter's most lasting contributions was his insistence that entrepreneurship is at once a unique factor of production and the rare social input that makes economic history evolve.

In other words innovation is the "*creative destruction*" that develops the economy while the entrepreneur performs the function of the change creator. In Schumpeter's work entrepreneur's function is carrying out innovations which is fundamental in economic history. Typical characteristics of entrepreneurs are: intelligence, alertness, energy and determination. Entrepreneurship is innovation and the actualization of innovation. In this point it has to be clearly marked that entrepreneurship cannot be confused with the four complementary functions of invention: risk-taking, error-correction and administration (which in Schumpeter's economics of evolution are separate), distinctive and non-entrepreneurial in nature.

8. **Conclusion**

No single theory of the entrepreneurial function provides an explanation for the entire spectrum of entrepreneurial activities. A theory which approaches a particular aspect of entrepreneurship often throws other aspects into the shadows. The multifaceted character of the entrepreneurial function would not seem so problematic were it not for the stubborn and determined attempts of theorists to peg it to a singular concept. The underlying motive beyond these attempts have never been made clear though. The entrepreneurial debate could move on to more productive contributions if the insignificance of such a definition was generally accepted.

The real economy cannot be depicted by using a general equilibrium framework. General equilibrium abstracts from time and money and would only prevail in the special case where complete integration of the structure of production has taken place. Rejecting the general equilibrium framework does not imply that there is no existing tendency towards the complete integration of the structure of production and order.

The principle of "spontaneous order" as developed by Hayek (1968) can be used to allow for the fact that a tendency towards the integration of the [capital] structure does exist. Allowing for a tendency towards the integration of the structure of production is to allow for an ordering process in the economy which is never really in equilibrium.

This order is spontaneous since it is based on the exploitation of profits evolving from disequilibrium situations in the market without any formal machinery for enforcing them. This ordering process is characterised by the creativity of entrepreneurship, complexity flowing from the further division of labour and the coordinating influence of money. Debates on the merits of stabilisation policies will then be concerned with whether these tendencies towards the integration of the capital structure are strengthened or weakened by such policies. Any policy weakening this process will lead to greater dis-coordination in the economy.

The entrepreneur, as manipulator of the process of arbitrage, accumulation and innovation, is the driving force shaping and recreating the productive structure of the market. The factors of production are heterogeneous with regard to their use, their values being subjectively determined by entrepreneurs given their different expectations of the future. These values are continually changing as conditions in the economy change. The existence of a spontaneous order depends on the nature of institutional arrangements. As long as these arrangements are such that expectations and actions of entrepreneurs are rewarded, consistent with underlying economic realities, and inconsistencies penalised, a tendency towards a spontaneous order can be expected to prevail.

Disequilibrium, in an intertemporal setting where existing plans are not compatible, means that opportunities exist for entrepreneurial profits. If the institutional arrangements allow for the grasping of these profits arising from disequilibrium, a tendency towards equilibrium and a spontaneous order will occur. For example, if house building is being heavily subsidised so as to promote the building of more houses but the manufacturing of cement is severely regulated, builders' plans will not be compatible with those of cement manufacturers. The likely outcome will be a sharp

increase in the price of cement and house prices. The profit opportunities will continue as long as the regulations are in place, with entrepreneurs unable to remove the prevailing disequilibrium.

Institutions such as property rights and money, which are important for a spontaneous order in the market, have evolved from the market as the result of past human actions. They serve as behavioural guides that reduce the knowledge and cognitive skills necessary for successful action. These institutions are continuously being reshaped, due to the efforts of agents to coordinate their activities. The evolution of money, organised markets, specialised traders and producers, advertising and property rights are all due to efforts towards greater coordination of activities and the removal of uncertainty. These are the products of disequilibrium. Under general equilibrium a situation of complete certainty would prevail with the evolution of institutions to remove uncertainties being unnecessary.

Entrepreneurship, as such, refers to a role being fulfilled and not to a particular function in particular circumstances. Entrepreneurship entails performing many functions in a changing environment. If a single concept has to be allocated to entrepreneurship, then it should be the concept of adaptation. The individual adapts as he interacts with his environment, performing particular functions in answer to perceived cues.

Kirzner's view of the equilibrating role of the entrepreneur in the market is in stark contrast to Schumpeter's vision of the innovating activity of the entrepreneur as disturbing the equilibrium. Schumpeter pointed out that entrepreneurial activity, that is, innovation, must always be evaluated in terms of its effect upon the previous or existing equilibrium. Innovation brings change, implying thereby that a past or present equilibrium is disturbed. To Schumpeter the entrepreneur performs a disequilibrating function. With each innovating disequilibrating act, a movement begins towards a new equilibrium. Kirzner, on the other hand, views the entrepreneur as the one who springs into action when a disequilibrium is recognized. Entrepreneurs are continuously on the lookout for opportunities arising out of disequilibrium

situations. Once these opportunities are perceived, they are acted upon and this brings about a movement from disequilibrium to equilibrium.

The entrepreneur, acting upon and creating disequilibrium prices, serves to bring about a spontaneous order and intertemporal coordination. The role of the entrepreneur is to move markets, including labour markets, in the direction of perfect coordination. It is the entrepreneur who establishes and continuously reshapes the production structure on which macroeconomics is founded.

Schumpeter, have presented us with a relevant and suitable role of the entrepreneur in the market process. His theory has contributed abundantly towards entrepreneurial theory, and as such have received widespread recognition. One should accept the fact that these great thinkers have done much to expand the common pool of knowledge on entrepreneurial theory, rather than to search for conflicting point of views among them. The principle of subjectivism, so unique to the Austrian school of economics, should serve as a guide when attempting to analyse the entrepreneur. One should keep in mind that the entrepreneur himself is a human being and subjected to value judgments, making it difficult to identify him with a specific and unique function.

References

Addleson, M.S. 1979. Determinant Equilibrium: or Choice and Market Process. University of Natal: unpublished M.A. dissertation.

Aitken, H.G.J. Ed. 1965. Explorations in Enterprise. Cambridge, Massachusetts: Harvard University Press.

Alchian, A. A. and Demsetz, H. 1972. Production, Information Costs, and Economic Organization. *American Economic Review, 62, pp. 772-795.*

Aldrich, H. E., and Wiedenmayer, G. 1993. From Traits to Rates: An Ecological Perspective on Organizational Foundings. In Jerome Katz and Robert Brockhaus, eds., Advances in Entrepreneurship, Firm Emergence, and Growth. Greenwich, Conn.: JAI Press, pp. 145–95.

Andreosso, B. and Jacobson, D. 2005. Industrial Economics & Organisation – A European perspective. 2nd ed. McGraw-Hill: United Kingdom

Andreosso, B. and Jacobson, D. 2005. Industrial Economics & Organisation – A European perspective. 2nd ed. McGraw-Hill: United Kingdom

Atkinson, J.W. and Hoselitz,B.F. 1955. Explorations in Entrepreneurial History. Boston: Harvard University Research Center in Entrepreneurial History.

Auerbach, P. 1989. Competition: The economics of industrial change. Basil Blackwell, Oxford.

Barzel, Y. 1989. Economic Analysis of Property Rights. Cambridge: Cambridge University Press.

Baumol, S.J. 1968. On the social rate of discount. *American Economic Review, Vol 58, 788-802.*

Baumol, S.J. 1968. On the social rate of discount. *American Economic Review, Vol 58, 788-802.*

Baumol, W. 1967. Business Behaviour, Value and Growth. Harcourt Brace Jovanovich: New York.

Baumol, W. 1968. Journal of Economic Literature. vol. XVII, March, pp.46-64.

Begley, T. and Boyd, D. 1987. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. Journal of Business Venturing 2(1) : 79–93.

Bellante, D. (1990). Labor Markets and the Welfare State. In: Groeneveld, K., Maks, J.A.H. & Muysken, J. (eds.) New York: North Holland, 151-164. Economic Policy and the Market Process: Austrian and mainstream economics.

Burch, J.G.1988. Profiling the Entrepreneur. Business Horizons, vol.29, no.5, pp.13-16.

Burgess, G.H. (Jr). 1989. Industrial Organisation. Prentice-Hall Inc: USA.

Cantillon, R*. 1755. Essai sur la nature de commerce en géneral. Henry Higgs, ed. London: Macmillan, 1931.*

Cantillon, R. 1931, in Hebert F.R. and Link A.N. 1982. The Entrepreneur. New York: Praeger Publishers.

Casson, M. C. 2000. An Entrepreneurial Theory of the Firm, in Foss, N.J. and Mahnke, V. (eds.) Competence, Governance and Entrepreneurship: Advances in Economic Strategy Research. New York: Oxford University Press.

Chandler, G.N. and Jansen, E. 1992. The Founder's Self-Assessed Competence and Venture Performance. *Journal of Business Venturing 7: 223–36.*

Cheung, S.N.S. 1983. The contractual nature of the firm. *Journal of Law & Economics, 26: 1-21.*

Coase, R. H. 1937. The nature of the firm. Economica, Vol. 4: 386-405.

Cole, A. 1949, in Hebert F.R. and Link A.N. 198 2. The Entrepreneur. New York: Praeger Publishers.

Comanor, W.S. and Wilson, T.A. 1967. Advertising, market structure and performance. Review of Economics and Statistics, vol. 49, pp.423-40.

Davis, S. and Lyons, S. 1988. 'Introduction' in Davis, S. et al (eds), Economics of industrial Organisation, Longman, London.

Demsets, H. 1974. 'Two systems of belief about monopoly'. In Goldschild, H., Mann, H.M. & Weston, J.F. (eds), Industrial Concentration: The New Learning. Little, Brown, Boston.

Demsetz, H. 1983. The Neglect of the Entrepreneur. In Joshua Ronen, ed. Entrepreneurship. Lexington: Lexington Press.

Demsetz, H. 1988. Profit as a Functional Return: Reconsidering Knight's Views. In idem. 1988. Ownership, Control and the Firm. The Organization of Economic Activity, vol. 1. Oxford and New York: Blackwell.

Demsetz, H. 1991. The Theory of the Firm Revisited. In Oliver E. Williamson and Sidney G. Winter, eds. 1993. The Nature of the Firm, Oxford: Blackwell. Disequilibrium. Lexington: Lexington Books.

Ekelund, R. B., Jr., and Hébert, R.F. 1990. A History of Economic Thought and Method. 3rd edition. New York: McGraw-Hill.

Elkjaer, J. R. 1991. The Entrepreneur in Economic Theory: An Example of the Development and Influence of a Concept, History of European Ideas 13: 805–15.

Fama, E. F. 1980. Agency problems and the theory of the firm. Journal of Political Economy, vol. 88, April, pp. 288-307.

Ferguson, P.R. and Ferguson, G.J. 1988. Industrial Economics. 2nd ed. The Macmillan Press: London.

Foss, N. J. 1994. The Theory of the Firm: The Austrians as Precursors and Critics of Contemporary Theory. *Review of Austrian Economics 7: 31–64.*

Foss, N. J. and Klein, P. G. 2005. The Theory of the Firm and Its Critics: A Stocktaking and Assessment. Jean-Michel Glachant and Eric Brousseau (eds). New Institutional Economics: A Textbook, Cambridge: Cambridge University Press

Foss, N. J. 1997. The resource-based perspective: An assessment and diagnosis of knowledge-intensive firms. Working Paper. Copenhagen: Copenhagen Business

Furubotn, E. 2002. Entrepreneurship, Transaction-Cost Economics, and the Design of Contracts. In The Economics of Contracts. Eric Brousseau and Jean-Michel Glachant, eds. Cambridge: Cambridge, University Press, pp. 72-97.

GEM, 2002. South African Executive Report. Cape Town: The graduate school of business: University of Cape Town.

Grossman, S. and Hart, O. 1986. The Costs and Benefits of Ownership: A Theory of Vertical Integration. Journal of Political Economy, 94, pp. 691-719.

Gurzynski, Z.S.A. 1976. Entrepreneurship - the true spring of human action. South *African Journal of Economics, vol.44,no.l, pp.l-26.*

Haines, W.W. 1970. The profitability of large-size firms. *Rivista Internazionale di Science Economiche e Commerciali, vol 17, no.4, pp,.321-351.*

Hall, M. and Weiss, L.W. 1967. Firm size and profitability. *Review of Economics & Statistics, vol. 49, August, pp.12-45.*

Hall, R. L. and Hitch, C. J. 1939. Price theory and business behaviour. Oxford Economic papers, vol.2 May, pp. 12-45.

Hart, O. and Moore, J. 1990. Property Rights and the Nature of the Firm. *Journal of Political Economy, 98, pp. 1119-1158.*

Hart, O. 1995. Firms, Contracts, and Financial Structure. Oxford: Oxford University Press.

Hayek, F. A. 1968. Competition as a Discovery Procedure. Translated by Marcellus S. Snow. *Quarterly Journal of Austrian Economics 5 (3): 9–23.*

Hayek, F.A. 1990. The Fatal conceit. In: Bartley, W.W. (ed.) The Fatal Conceit: The Errors of Socialism. London: Routledge, 66-88.

Hebert, R.F. and LINK, A.N.1982. The Entrepreneur. New York: Praeger

High, J. 1986. Equilibrium and Disequilibrium in the Market Process. In: Kirzner, I.M. (ed.) Subjectivism, Intelligibility and Economic Understanding. New York: New York University Press, 111-121.

Hirschey, M. 2003. Fundamentals of Managerial Economics. 7th ed. Thomson South Western: USA.

Hood, J. N., and Young, J. E. 1993. Entrepreneurship's Area's of Development: A Survey of Top Executives in Successful Firms. *Journal of Business Venturing 8: 115–35.*

Hoselitz, B.1960. The Entrepreneur. New York: Praeger Publishers.

Hoskisson, R. E., and Hitt, M. A. 1994. Downscoping: How to Tame the Diversified Firm. New York: Oxford University Press.

Ibrahim, G. and Vyakarnam, S. 2003. Defining the Role of the Entrepreneur in Economic Thought: Limitations of Mainstream Economics. Working paper, Nottingham Business School.

Karol Śledzik, 2013. Schumpeter's view on innovation and entrepreneurship. [Online]. Available at https://www.researchgate.net/publication/256060978 [accessed Oct 19 2018].

Kilby, P. Ed.1971. Entrepreneurship and Economic Development. New York: The Free Press. 384p.

Kirzner, I. M. 1973. Competition and Entrepreneurship. Chicago: University of Chicago Press.

Kirzner, I. M. 1979. Perception, Opportunity and Profit: Studies in the Theory of Entrepreneurship. Chicago and London: University of Chicago Press, 1983 (reprint edition).

Kirzner, I. M. 1992. The Meaning of Market Process. London: Routledge.

Kirzner, I.M. 1985. Discovery and the Capitalist Process. Chicago and London: University of Chicago Press. 183p.

Kirzner, I.M. 1985. Discovery and the Capitalist Process. Chicago and London: University of Chicago Press. 183p.

Klein, B., Crawford, R. G. and Alchian, A. 1978. Vertical integration, appropriable rents and the competitive contracting process. *Journal of Law and Economics, vol. 21, no.2,pp. 297-326.*

Knight, F. H. 1921. Risk, Uncertainty, and Profit. New York: August M. Kelley.

Lachman, L.M. 1976, in TORR, C.S.W. 1981. The role of the entrepreneur (review note). South African Journal of Economics, vol. 49, no.3, pp.283-288.

Langlois, R. N. 1998. Personal Capitalism as Charismatic Authority: the Organizational Economics of a Weberian Concept. *Industrial and Corporate Change 7: 195-214.*

Littlechild, S.C. 1979, in *Rizzo* M.J. Ed. 1970. Time, Uncertainty, and Disequilibrium. Lexington: Lexington Books.

Littlechild, S.C.1977, in Reekie W.D.1978. Industry, Prices and Markets. Edinburgh: Philip Allan.

Lumpkin, G. T. and Dess, G. G. 1996. Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance. *Academy of Management Review 21: 135–72.*

Machovec, F. M. 1995. Perfect Competition and the Transformation of Economics. London: Routledge.

Mahnke, V. 1997. Can contractual theories of the firm explain the existence of organization?. *American Economic Review, 62: 772-795.*

Marcus, M. 1969. Profitability and the size of the firm. Review of Economics and Statistics, vol.51, pp. 104-107.

Mason, C.M. 1989. Explaining recent trends in new firm formation in UK: some evidence from South Hampshire : Regional Studies, Vol. 23, No.4: 331-46.

McNulty, P. 1984. On the Nature and Theory of Economic Organization: The Role of the Firm Reconsidered. History of Political Economy 16: 223–53.

Mohr, P., Fourie, L. and Associates. 2008. Economics for South African students, 4th ed. Van Schaik: Pretoria.

O'Brien, D. 1984. The Evolution of the Theory of the Firm. In idem. 1994. Methodology, Money and the Theory of the Firm, Vol. 1. Aldershot.

Phelan, E. and Lewin, P. 1999. Arriving at strategic theory of the firm. Working paper. School of Management University of Texas, Dallas: USA.Publishers.

.

Reekie, W.D. 1978. Industry. Prices and Markets. Edinburgh: Philip Allan.

Rothbard, Murray N. 1985. Professor Hébert on Entrepreneurship, In idem., The Logic of Action Two: Applications and Criticism from the Austrian School. Aldershott, U.K.: Edward Elgar, 1997, pp. 245–53.

Salerno, J. T. 1993. Mises and Hayek Dehomogenized. *Review of Austrian Economics 6: 113–46.*

Schultz, T.W. 1975. in Kirzner I.R. 1985. Discovery and the Capitalist Process. Chicago and London: University of Chicago Press.

Schumpeter, J. A. 1942. Capitalism, Socialism, and Democracy. New York: Harper & Row.

Schumpeter, J.A. 1954, in Shand A.H. 1984. The Capitalist Alternative. Somerset: Harvester Press Publishing.

Schumpeter, J.A. 1961, in Hebert F.R. and Link A.N.1982. The Entrepreneur. New York: Praegen Publishers. l28p.

Shackle, G.L.S., 1967, in Rizzo M.J. Ed. 1970. Time, Uncertainty And Disequilibrium Lexington: Lexington Books.

Shand, A.H. 1984. The Capitalist Alternative. Somerset: Harvester Press Publishing.

Stigler, G. J. 1968. The organisation of industry. Irwin. Homewood: IL.

William, F. and Shughart, I.I. 1990. The organisation of industry. John R Black: USA.

Williamson, O. E. 1975. Markets and Hierarchies. New York: Free Press.

Williamson, O. E. 1985. The Economic Institutions of Capitalism. New York: Free Press.

Williamson, O. E. 1996. The Mechanisms of Governance. Oxford: Oxford University Press.

Witt, U. 1998b. Do Entrepreneurs Need Firms? Review of Austrian Economics 11: 99-109.

Witt, U. 1998a. Imagination and Leadership: the Neglected Dimension of an Evolutionary Theory of the Firm, Journal of Economic Behaviour and Organization 35: 161–77.