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### The entrepreneurial decision-making : a complex choice where taste, risk, endowments, necessity, opportunity, personals traits and behaviour matter

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# The Entrepreneurial decision-making: a complex choice where taste, risk, endowments, necessity, opportunity, personals traits and behaviour matter.

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In economic theory, decision-making is supposed to result from an optimization calculation that any economic agent performs under the essential hypotheses of rationality. It means that agents seek to maximize their utility function (if households) or to maximize their profit (if businesses) using efficiently the available resources to achieve these objectives within the constraints they face (budget constraint for households, costs constraints for businesses<sup>1</sup>). There is therefore no waste of resources. Tastes and preferences are the first elements of choice in economics. In daily life it enables us to understand the specialization of some economies since in their research of the maximal satisfaction consumers adapt their budget to their hierarchy of taste. For instance the history and culture of French emphasis on the quality of life have developed a taste for "eating well" and "good drinking" in the French population. French consumers then have a share of spending on food which remains higher than the American (also due to the fact that the level of life is higher in the US). Nevertheless the smaller share of the American is more devoted to eating out (Jany-Catrice, 2004)<sup>2</sup> and includes mainly franchisees restaurants. Because of the French culinary tradition, one finds, however, that the catering branch of activity in France is more than in the US the result of

<sup>1</sup> For each possible level of production, the company will seek the optimal amount of each factor to be used, that is to say the quantities that can minimize the total cost.

<sup>&</sup>lt;sup>2</sup> About 50% of total spending on food against 28% in the case of France in 1997.

individual independent small entrepreneurs. However, the choice of becoming an entrepreneur in the catering sector is not such a simple choice. We can identify the steps which will constitute an illustration of decision-making in economics. One must have a taste for this job compared to salaried jobs. For example, one needs to accept to manage a team. It is also necessary to identify for which kind of restaurants and in which area opportunities for profit for this type of activity exist. This is a problem of information (identification of needs, unmet demand), which requires according to Kirzner (1973) a particular key ability, alertness... Becoming an entrepreneur also requires committing individual resources like specific managerial abilities (Lucas, 1978) or financial resources. Each individual is not similarly endowed with these resources which could explain that some are prevented from the entrepreneurial venture. Entrepreneurial decision-making always involves individuals and their resources in a risky process, since one anticipates on the basis of current information the future development of the activity while a large number of uncertainties can intervene (economic conjuncture, attractiveness of the restaurant etc...). Then the choice to be an entrepreneur also depends on the risk attitude of the individual. Moreover the optimizing calculation refers to complex methods that only few people are able to carry out (Simon, 1950). Profit opportunities are thus partly built by entrepreneurs according to their perceptions. For example it is often argued that entrepreneurs show an excessive confidence in the success of their businesses due to patterns of simplified decision-making. In this way non-economic factors such as personal characteristics of the new entrepreneur have an influence both on the propensity and the success of the new firm. The "need of achievement" and the "locus of control" are the psychological characteristics that resulted in a large number of studies in the population of managers or entrepreneurs (Hansemark, 2003). Because setting up a firm is also creating his own job, one can argue that the decision to set up a new firm can be viewed as a self employment choice. In such a case, it is necessary to link entrepreneurship with some individual characteristics (such as human capital level or psychological traits) but also with some characteristics on the labor market (nature of rigidities, level of unemployment) and more globally on the structure of rewards of the economy (Baumol, 1990).

Overall it appears that the choice to become an entrepreneur is complex and takes into account tastes of individuals, imperfect information on both opportunities for profit but also on the skills of individuals, different access to a certain initial resources, risk' attitudes, patterns of simplified decision-making, change in the situation of individuals and search for personal achievement.

### 1) The standard model of choice (choice in a model of competition with perfect information and without uncertainty)

The entrepreneurial choice in a competitive economy without uncertainty and with perfect information may be interpreted as any economic choice, for example a consumer choice. In the standard model each individual is supposed to express coherent choices and so to rank all the considered baskets of goods. His preferences are then represented by a utility function that depends on the quantity of each consumed good and that expresses the ranking by the consumer of different options. The rational consumer chooses, among all the baskets that he is able to buy taking into account his budget constraint, his preferred basket of foods, the one that maximizes his utility. A set of properties about demand of goods may then be deduced from this analysis.

This reasoning can be applied in the entrepreneurial choice without uncertainty. Suppose that in society there are only two job's situations, being employed or being an entrepreneur and that these situations can be distinguished by four characteristics (management, accountability, independence, sociability etc...). The job of the entrepreneur is characterized by high levels of management, accountability, independence and sociability and vice versa for the employee. In this case, the agents must make a discrete choice between both options depending on their preferences i.e. how they value characteristics of each of these options. If the occupational choice (being self-employed or employee) was along a continuum, then individuals would have to reason at the margin. An optimal decision would be such as a small variation would not add anything more. Typically each status presents an opportunity cost which depends on the preferences of agents i.e. how they value each of these attributes. A person who values the four characteristics of the entrepreneur prefers the situation of the entrepreneur because he will get more utility from the entrepreneur status than from the employee status. In this case, the choice is easily done but it is nevertheless extraordinary that such situations arise because there are actually many more features that in our simplified example. One can imagine people who dislike the task of management, but who appreciate the sense of responsibility and independence. Some will choose to become entrepreneurs because, consistent with their preferences, the cost for them (to bear the management's responsibilities) is less than the benefits they obtain from responsibility and independence. Another way to express it is to say that the opportunity cost of giving up independence and responsibility is greater than the benefit of employee status that does not have to bear the responsibilities of management. Other people with different tastes will prefer the opposite employee status. For them the benefits of non-management will more than offset the disadvantages of the loss of independence and responsibility.

It is necessary to signal that among different type of firms, it is possible to choose between different baskets of characteristics.

For example, being a franchisee gives to the entrepreneur the possibility to relax the characteristics of independence and responsibility. To have a partner in the firm is also a way to share out responsibility.

Being on piecework relaxes the characteristic of sociability and accounting; some individuals like independence but dislike the relationships with the clients and also some accounting work.

Evans and Leighton (1989) show that individuals that prefer autonomy are more likely to become self-employed. Lazear (2005) shows that students that will become entrepreneurs have chosen to acquire a diversity of skills in their education program because it is the minimum level of the required skills that determines the earnings of the entrepreneur. For instance Lazear (2005) shows that the creation of a restaurant requires mobilization of numerous different skills; the entrepreneur must certainly do good cooking, but also must have taste for decoration, must like to welcome guests, must be able to keep accounts ... At least if the entrepreneur cannot perform all these skills he needs to know to hire the right people in the labor market.

Yet the choice of setting-up a firm does not come down to the choice of the characteristics of a certain status, but also deals with having a project and achieving it in a complex and risky world where information is not perfect. One of the first problems is to identify a project that is to say, to seize market opportunities.

## 2) The entrepreneur and the market: foremost a problem of information and adjustment

Schumpeter in his seminal work (1911) has noted the predominant role of the innovative entrepreneur that drives the growth and that breaks the economic circuit otherwise indefinitely reproducible. For that purpose bank loans are necessary to divert intermediate and investment goods in order to realize the innovation (at the end added value by innovation overcome prices' increase due to bank loans). Yet the role of the entrepreneur is so linked with growth that he appears to be more driven by personal traits (cf. below) and that all the explanation is embedded in the innovation characteristic without any more explanation about the functioning of the market. A great deal of debates around market equilibrium and planned versus market functioning of economies arose in the twenties/thirties (Mises/Lange). According to the market hypothesis of pure and perfect competition, which constitutes the general framework of analysis in economics, all information is available at no cost nor any delay for every firm or consumer so that:

"For a society, then, we **can** speak of a **state** of equilibrium at a point of time-but it means only that the different plans which the individuals composing it have made for action in time are mutually compatible".

(Hayek, [1937],1948, p.41).

But the view of the market is obviously more complex. According to Hayek's notable works on the role of information and the discovery process in the market (1937, 1945, 1948, 1968), the market is a process in perpetual adjustment where the building of the needs, preferences and production plans are themselves inseparable from interaction, demonstration and learning's effects (Heertje, 1979).

For example businesses adjust over time the features of their products according to the information that they can get on the satisfaction of their customers (restaurants and cafes fill their slack periods thanks to happy hours, usually they renew their menu in order to adapt themselves to fashion and also to stimulate a new interest among their clients). The entrepreneur has therefore an important place, but his role does not predominate over the customer's one.

Kirzner (1979, 1985) retains the ability of alertness for defining the entrepreneurial function. It is the ability to perceive opportunities for profit for new needs or to offer products best suited to the tastes of consumers<sup>3</sup>. These opportunities are seized by entrepreneurs because:

"If one has become sufficiently **alerted** to the existence of an opportunity –that is, one has become sufficiently convinced regarding the facts of a situation- it becomes virtually impossible to imagine **not** taking advantage of the opportunity so discovered"

(Kirzner, [1985], p.22).

The alertness acts thus positively on the coordination of plans of supply and demand in the market.

<sup>&</sup>lt;sup>3</sup> It can also be the implementation of new more efficient production techniques.

"In the course of this entrepreneurial process, new products may be introduced, new qualities of existing products may be developed, new methods of production may be ventured, new forms of industrial organization, financing, marketing or tackling risk may be developed".

#### (Kirzner, [1985], p.30).

As a result the entrepreneur generates knowledge shared by economics agents and therefore reduces their ignorance. Entrepreneurial profit is a pure profit that is not to be related to the use of any factor of production whatsoever. It follows a simultaneous decision to buy and sell in the wake of discoveries of price differences advantageous whose existence is based on the ignorance of agents about accurate supply and demand. According to Kirzner, discovering profit opportunities hitherto ignored by economic agents would therefore require no specific investment.

This is an extreme position on the entrepreneurial function theorization which will be taken over by Casson (1982) in a more applied way. Individuals differ not only in their tastes, but also in access to information for various reasons related to their characteristics (social environment, education, occupation, etc...). The entrepreneur believes that the totality of the information available to him is unique; then he builds his decision alone and expects a profit by taking positions vis-à-vis others. It is only because he is the only one to start the project that he can expect a profit. His dilemma is to convince finance providers that he is right while revealing partial information because the others are also potential competitors and thus profits reducers'.

Recent researches (Fairlie, Robb, 2006) show that the capture of market opportunities is not independent of a kind of « entrepreneurial human capital ». This latter, linked to relatives' environment may explain a larger propensity of entrepreneurship in families of business owners. Yet successful entrepreneurship is nevertheless insured only if these new entrepreneurs have acquired a management experience in the enterprise of their parents. This management's experience allows them probably to move easily in a risky environment.

This leads us to consider the initial endowments that an entrepreneur must have, the managerial and financial endowments he must have if he wants to launch a project with great chances of success.

#### 3) Entrepreneurial abilities and resources access

Decision-making in economics commits resources in order to achieve a single goal (maximizing the usefulness of the consumer, profit maximization of the company). In some cases the non-availability of certain resources even prevents the project from happening. The firm has theoretically no entrepreneur, as it makes choices among alternative values for a small number of well-defined variables: price, production, advertising expenses ... according to repetitive codified mathematical processes of maximization. Nevertheless Baumol (1968) noted that there is room for clever ruses, ingenious schemes, brilliant innovations, charisma that differentiate the entrepreneurs...

There is therefore some skills to entrepreneurs. In this regard Lucas (1978) challenges the standard theory for which the U-shape of the curve production costs determines both the size, the number of companies and entry and exit of the firms on the market<sup>4</sup>. It is more appropriate to postulate that there are individuals with various managerial capacities and that the distribution of managerial capacity is explanatory of the various sizes of companies. A few individuals have then a high level of managerial leadership that allows them to launch and conduct large companies (recent examples: Bill Gates and Microsoft, Richard Branson and Virgin...). With the development, many small individual entrepreneurs will find most interesting to take a job in an existing business than to engage them in an entrepreneurial venture. As real wages have increased, a number of low endowed managerial abilities entrepreneurs will prefer to work as employees. The fact remains that this relationship is not linear, as we find that the development of the *economy of innovation* has created new opportunities for enhancing entrepreneurship (Audretsch, 2006). That's what demonstrates the high level of entrepreneurial activity observed on the North American continent.

Some authors put forward access to financial capital as a prerequisite for any entrepreneurial commitment. A set of theoretical articles show that new entrepreneurs are financially constrained (Jaffee and Russell (1976), Stiglitz and Weiss (1981)). The empirical results do not, however, lead to a clear conclusion.

For instance, Evans and Jovanovic (1989), Evans and Leighton (1989), Holtz-Eakin, Joulfaian and Rosen (1994) show that start-ups suffer from capital gap: they show a positive relationship between individuals' wealth and their probability to become self-employed. Nevertheless financial capital could be correlated with unobservable factors such as managerial skills, or more generally human capital of the entrepreneur. Hence the introduction in some work (Lindh and Ohlsson (1996), Blanchflower and Oswald (1998)) of exogenous events such as inheritances, gifts, income from the lottery confirms the positive influence of wealth on the entrepreneurial commitment. Financial constraints would exist and would tend to exclude those who have insufficient funds.

According to Parker (2004) this leads to the endogeinity problem:

"Whereby the self-employed are wealthy because of previous success in selfemployment".

<sup>&</sup>lt;sup>4</sup> The motivations of his work is based on the fact that companies are often multi-products and that external growth strategies are complex and not only axed on the pursuit of the optimum size.

S.C. Parker shed a light on several alternative explanations also consistent with the previous results on financial constraints.

Berger and Udell (1992) adopt an intermediate position: they argue that while the macro effects of credit rationing may be small, there is evidence to suggest that when credit is rationed to some firms it may be more readily available to others.

In French survey Sine (information system on new firms) we have found that a majority of new firms is not facing credit rationing, but also that a non-negligible share is "self-constrained" (Bonnet, Cieply, Dejardin, 2005). Yet the study refers to entrepreneurial projects that are concretized in new firms. General entrepreneurial intentions in the French population that are aborted due to financial constraints are not reported.

We confirm on the French case the result given by Cressy (1996) concerning British new firms:

"We conclude that firms self-select for finance (rather than being selected by the banks), those with greater human capital being more likely to take up the bank's offer. Thus, there is no credit rationing of startups"

(Cressy, 1996, 1254).

In a recent research (Hurst and Luzardi, 2004) show in the USA that there is no relationship between wealth and entrepreneurship for much of the distribution of wealth. The rate of entry is almost constant between the 1st and 9th decile and significantly increases for individuals only at the 95th percentile or below the 5th percentile because of a low opportunity cost.

Of course these results, especially the French results, shed a light on the lack of entrepreneurship spirit and opportunities (see below) that have more to do with the functioning of a "wage society" than with the availability of financing. Specifically this accounts for the low development of venture capital in France<sup>5</sup>.

The choice to become an entrepreneur can also be analyzed as an arbitrage between a wage occupation and a risky firm's project. The project is risky because the future earnings that can be negative or positive are not known in advance.

<sup>&</sup>lt;sup>5</sup> However we can notice than in the third world the financial constraints are often binding. For instance it has been noticed that it is often too risky in these countries to change ones' way of life. One cannot transfer the minimum financial provision in order to engage in a production detour. This effect is counterbalanced thanks to microfinance and small business lending which allow people to get into entrepreneurship.

#### 4) Entrepreneurship: decision-making in uncertainty

Indeed, the economy is continually affected by shocks that play a role on the enterprise's performance. For example our individual that opens his restaurant engages his personal assets in the goal to obtain in the future a profit that is uncertain and depends on different probabilities on the states of the world (economic conjuncture, attractiveness of the restaurant, new law about the VAT, new rules about smoking/no smoking areas etc...).

F. Knight (1921) is considered one of the first to justify the existence of the firm by uncertainty. It distinguishes the risk that is measurable from the uncertainty that is not measurable by probabilities. The entrepreneur is then the one who endorses this uncertainty, makes decisions (hierarchical position) and control (he assumes the role of responsibility in particular in giving a fixed return to the factors of production). The entrepreneur earns profit as a counterpart of his management of uncertainty. Yet according to Knight the risk is not the source of profit because the firm can avoid it by an insurance mechanism. It represents only a cost.

Nowadays the choice entrepreneur/wage earner is often analyzed in the frame of the standard analysis of choice in uncertainty. This analysis considers the preferences of individuals represented by a function of expected utility, known as the Von-Neumann and Morgenstern function (1944), based on objectives probabilities. L. Savage (1954) also showed that under a number of assumptions, preferences can be represented by a function of expected utility based on subjective probabilities. As a result, the distinction between risk and uncertainty then presents little interest.

Khilstrom and Laffont (1979) apply this analysis to the choice of individuals between working as an employee in a competitive job market or becoming an entrepreneur. The second choice is viewed as more risky. While an employee may lose his job, his salary is at least partly independent of the results of the firm in which he is working.

The gain of entrepreneurship can be measured by the certain equivalent income that the individuals assigned to this activity. This is the monetary valuation of possible future gains. It depends on their risk's attitude and decreases when individuals show risk aversion. It is sufficient then to compare this equivalent to the salary that some people perceive to understand their decision assuming that wage is perceived without uncertainty. The authors show that, at the equilibrium, the individuals demonstrating the greatest risk aversion become employed while those who are less averse become entrepreneurs. In addition, among the entrepreneurs, those who have the least amount of risk aversion lead larger companies<sup>6</sup>.

Stewart and Roth (2001) in a meta-analysis show that entrepreneurs have a greater level of risk-propensity. Yet this result is challenge by Miner and Raju (2004) that claim that the result is not so clear because some relevant studies have not been taken into account. Moreover these last authors think that it is necessary to control for some variables as

<sup>&</sup>lt;sup>6</sup> Some also define the risk premium of entrepreneurship (entrepreneurship premium). This is the difference between the evaluation of future profits (certain equivalent) by a given individual and an individual neutral with respect to the risk.

Brockhaus (1987) in a previous study has already recognized like gender, cultural background, stage of business development and type of business owned.

Liles (1974) has identified four main negative occurrences of risk-taking in case of failure. The financial difficulties that could lead to a significant reduction in living standards, the psychological well-being of the person who committed himself to the creation, the professional career which can be compromised and the familial risk that could also exist if the firm survives because being an entrepreneur requires investing a lot of time.

It was also observed that in most cases a greater propensity for risk (for entrepreneurs) is tempered by a deep judgment that prevents them from taking extreme risks (Mueller, Thomas, 2001).

The representation of the behavior of individuals with an expected utility function is nevertheless contested, partly as a result of the complexity of the environment in which decisions must be taken or because experience shows that individuals do not always act rationally but by relying on their intuition.

#### 5) The limit of rationality in the decision-making

The complexity refers to situations in which the decision-maker is not sure what the probability distribution of a future event will be because of too complex interactions. In fact the decision is often taken with the help of simplified mechanisms (with deformation of probabilities by the agents). Herbert Simon (1955, 1956) highlighted the bounded rationality of decision makers who are limited in both knowledge and the capacity to calculate. The implementation of means to achieve the ends and its consequences are poorly known. Compared to the optimal decision, alternatives choices are found. The opportunities for profit are partly built by entrepreneurs based on their perceptions (mental constructs in a repetitive non optimizing cognitive process). Entrepreneurs have a strong tendency to consider the opportunity as unique and that the situation decision could not be replicated.

They resort to heuristics simplifying assumptions (Kahneman, 2003) and are subject to bias decision because:

"People rely on a limited number of heuristics principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations"

(Tversky and Kahneman, [1974], p.1124).

For instance two individuals will attribute a different success's probability to a typical restaurant (restaurant with Cuban food and Cuban musical entertainment) according to their perception of the reality. One of them will attribute a higher probability than another one because such an establishment is opened and works close to his home. His estimation does not rely on a rational calculus but more on a subjective perception.

Kahneman and Tversky have also shown that economic agents do not have a constant behavior with regard to risk. More precisely, a same individual manifests less risk-aversion when he has to choose between losses than when he has to choose between gains (reflection effect). This lower risk-aversion in the field of losses may then conduct some long term unemployed people to entrepreneurship (self-employment). In effect unemployment that lasts may be analyzed as a situation of a certain loss of wealth and then decreases the degree of risk-aversion of individuals.

Moreover in the standard analysis, the entrepreneur is considered as a passive game player that considers the success or failure's probabilities as exogenous. Yet the entrepreneur plays a more important role. The essential difference is that the game player cannot exercise any control on the gain while the entrepreneur may influence by his acts the becoming of his decision. According to Byers, Kist, and Sutton (1998) the entrepreneurs often estimate that their decisions are based on facts and that their returns rely more on their perspicacity and their judgment than on their luck. They have a tendency to overestimate the influence of their competences. Then another bias that is documented in some studies is the entrepreneurial overconfidence (the fact that in participating himself to the action the entrepreneur overestimate his chance of success).

According to Cooper, Dunkelberg and Woo (1988), 68% of the entrepreneurs estimate their own probabilities of success to be more important than for similar enterprises directed by others. 33% of them think even that their probability of success is of 100%. For De Meza and

Southey (1996), the population of new entrepreneurs has a tendency to overestimate the occurrence of future favorable events. Then the entrepreneurial overconfidence intervenes in the level of indebtedness if the wealth of the entrepreneur is insufficient to cover the initial investment project. Camerer and Lovallo (1999) have built an experiment where subjects have choice to entry on the market. In the case of subjects that self select themselves (the returns of their risky decisions depend on their competencies) they have observed more entrants on the market. Self-selection reinforces overconfidence because participants think they can beat the bets. This optimism behavior tends to persist even in case of bad results (Ross and Anderson, 1982), because individuals show some difficulties in accepting they have made errors. Carrillo and Mariotti (2000) show that this behavior leads to a preference for ignorance. At best the revision process of the probabilities is incomplete according to Bénabou and Tirole (2002).

This capability to shoulder the true uncertainty needs a high degree of self-confidence, the belief in his effective power of control, in his good fortune that rely on some personality traits.

## 6) The inclusion of non-economic factors: the example of the entrepreneur personality

The classic utility function does not include a number of psychological characteristics or personal enjoyment that drives the economic agent in his decision-making. The importance of psychological variables has been for a long time sustained by numerous research works (McClelland, 1961, Shapero, 1975, Koh, 1996).

Among psychological variables the locus of control (Mueller and Thomas, 2000) and the need of achievement (Johnson 1990) are key variables.

The *locus of control* (Rotter 1971) reflects the disposition to act for an individual, that is to say the degree with which he thinks that he can have an influence on his environment. Some individuals are then said *external* because they are inclined to think that the awards they received in their life are outside their own control and they rely on luck, on the benevolence of a mentor, or the control of a powerful person. Others think that they can modify for good or bad the course of these events. This latter psychological characteristic, qualified as *internal locus of control*, has been found in the entrepreneurial involvement and in the opportunity to exploit some effective abilities of leadership (Shapero 1975). It expresses one thing we often find in the surveys on the motives to set up or to take over a new firm as the notion of « willingness to control his destiny ». Praag, Sluis and Witteloostuijn, 2004 have then demonstrated that a positive link exists between this characteristic and the earnings of two populations (employees and entrepreneurs) of the National Longitudinal Survey of Youth (NLSY). They find that the coefficient is stronger for entrepreneurs (in comparison with salaried people).

Mac Clelland (1961) has resumed the concept of *Achievement Motivation* defined in Murray (1938) in his personality system. Along this latter a need is "strength in the spirit region which organizes the perception, the intellectual activity and the action"; the specific *need of achievement* is then defined as the accomplishment of something difficult in fields as large as to manage, operate or organize the physical objects but also human behaviors and ideas. An individual responding to a need of achievement motive is going to try to achieve his goal as quickly and independently as possible. He is going to try to excel in the clearing of obstacles and especially he is going to try to go into competition with other individuals to try to outdo them and this with the goal to increase his satisfaction in the setting up of his successful talent, the entrepreneur field is then a field of excellence of the exercise of the need of achievement. Collins, Hanges and Locke (2004) in the frame of a meta-analysis show the link between the Need of Achievement and the choice to follow an entrepreneurial orientation but also the level of performance of the entrepreneur.

Lee and Tsang (2001) have then demonstrated that a positive link exists between the need of achievement and the venture growth. Like the need of achievement, the internal locus of control shows the same result for larger firms of their sample.

These traits of personal characteristics and also moral attitudes have been historically recognized by the greatest economists as being favourable to entrepreneurial decision-making

and success of the new company. Van Praag (2006) provides an admirable summary of the findings from which we are indebted in the following paragraph.

To Say (1803) a successful entrepreneur must demonstrate prudence, probity and regularity. Marshall (1890) defines general ability for a successful entrepreneur as:

"To be able to bear in mind many things at a time, to have everything ready when wanted, to act promptly and show resource when anything goes wrong, to accommodate oneself quickly to changes, to be steady and trustworthy, to have always a reserve of force..." (Marshall [1890] 1930, p. 206-207).

According to Schumpeter, the entrepreneur should not feel reluctant to do something new (Van Praag, 2006).

*"This mental freedom ...is something peculiar and by nature rare"* (Schumpeter [1911] 1939, p. 86). The entrepreneur should *"be strong enough to swim against the tide of the society in which he is living"* (Heertje, 1982, p. 86). He must have leadership skills, a special interest in creativity "the joy of creation", "a taste for the competition", the will to win "and wants to achieve a certain social distinction".

For Knight (1921) the ability to deal with uncertainty requires a high degree of selfconfidence, a disposition to act on one's own opinion and belief in his good fortune. Kirzner (1973) puts forward the concept of alertness which is the only character trait that the entrepreneur needs.

"The kind of knowledge required for entrepreneurship is knowing where to look for knowledge. ... The word, which captures most closely this kind of "knowledge", seems to be alertness".

Baumol (1968) thinks it is not possible to integrate all these qualities in a formalized theory. It may, however be possible to examine what can be done to encourage this activity which is essential for economic development, (Leibenstein, 1968). And to do that requires putting more interest in the pay off of the activity of entrepreneurs ... ie looking for occupational choices.

## 7) Entrepreneurial decision-making: also a decision to create his own job

The decision to become an entrepreneur is to a large extent a microeconomic decision about the proper allocation of one's human capital, balancing an opportunity cost of entrepreneurship with a reward expectation (monetary, symbolic, social reward, psychological reward). According to Moskowitz and Vissing-Jorgensen (2002), the returns of the financial initial investment of the entrepreneur are not higher than the one he would obtain on the financial markets while the risk (due to the non-diversification) is important:

"About 75 percent of all private equity is owned by households for whom it constitutes at least half of their total net worth. Furthermore, households with entrepreneurial equity invest on average more than 70 percent of their private holdings in a single private company in which they have an active management interest"

(Moskowitz and Vissing-Jorgensen, 2002, p.745)

The decision to start a business is most of the time associated with a decision to become self-employed. Two main individual motives drive the decision to set up a firm:

- A constrained motive (or push motive): new entrepreneurs are motivated by a low opportunity cost of entrepreneurship. This may be due to an individual situation of failure in the labor market (unemployment or employed with a bad match) or to perceived dissatisfactions in a salaried position (insufficient independence, not satisfying his need of achievement, partial control of his own fate)<sup>7</sup>.

- An opportunity motive (or pull motive): new entrepreneurs are positively drawn to entrepreneurship. It corresponds to a strategy for an individual to obtain better rewards on his human capital, which may be undervalued by the labor market due to information asymmetries or work incentive considerations<sup>8</sup>. It can also result from the individual capability to perceive and to seize market opportunities, to transform an idea in an innovative project.

Both reasons are not independent. An economy that creates a lack of jobs (low growth rate) and that suffers from the malfunctioning of the labor market - for example a high average duration of unemployment - strengthens entrepreneurship for reasons rather negative and especially discourage entrepreneurial venture for positive reasons. In France the share of unemployed new entrepreneurs is high because the propensity to set up a firm when employed or being a student is low.

At the European level, Wennekers (2006) shows that there is a negative relationship between the unemployment rate and the propensity to set-up a firm. This result confirms the fact that labor market considerations have an influence on the total entrepreneurial activity.

Many macroeconomic and institutional causes can explain the differences in entrepreneurial intensity between countries and areas. They include the economic growth, the rate of unemployment, the development and the operation of the financial system, the intensity of the administrative barriers, specificities of the labor market, legal consequences of the failure of the firm, the entrepreneurship's spirit and the collective perception of the failure of the firm ... This set of causes refer to what William J. Baumol names in a notable 1990 article<sup>9</sup> *the rules of the game* - i.e. the structure of reward in the economy-. He notes that certain societies historically favored rather unfavorable structures of reward to the development of entrepreneurship. These structures divert the national or local elites from the exercise of the entrepreneurial function and prove indirectly harmful to the diffusion of technical progress (ancient Rome with the valorization of the political office, medieval China with the mandarin system...). Over the recent period, they enable us to understand the "unhooking" of certain European countries in reference to the difference which exists between an entrepreneurial society which develop the private initiative and a wage society

<sup>&</sup>lt;sup>7</sup> Professional dissatisfaction of the entrepreneur in respect of the jobs held prior to the establishment of his company are wider than simple wage claims. They cover such considerations as more autonomy (Cromie, 1987) problems with co-workers or the hierarchy (Brockhaus, 1980, Greenbank, 2006), career prospects (Dyer 1994).

<sup>&</sup>lt;sup>8</sup> This imperfect valuation of human capital in the labor market can result from an insufficient functioning of the internal labour market in the enterprise for different reasons (small size of firms, imperfect observability of the individual productivity, or firm's strategy to restrict the scope of wages in the goal of preserving the social cohesion).

<sup>&</sup>lt;sup>9</sup> Baumol William J., 1990, « Entrepreneurship, Productive, Unproductive and Destructive», *Journal of Political Economy*, Vol. 98, October, pp. 893-921.

which increases the opportunity cost to undertake. In an entrepreneurial society, being a wage earner does not give the insurance of a stable situation because of the greatest latitude for the employers to lay off. On the other hand the flexibility of the labor market can more easily encourage the individuals to undertake insofar as this action constitutes a positive signal for the future employers even if the company fails.

#### Conclusion

The entrepreneurial commitment can be considered as decision-making by excellence in economics. Indeed, it implies uncertainty and risk-taking because the entrepreneur is fully responsible for the development of the new company, and in general he has committed a significant part of his personal savings to the firm. Also from a microeconomic point of view, entrepreneurial involvement is complex. It refers to the desire of a better recognition (valuation of his human capital) but also to some personal aspirations to address professional dissatisfaction or in search of better met some characteristics of the work of entrepreneur.

From a macroeconomic point of view, labor market rigidities combined with institutional inefficiencies may lead in some European countries to a strong entrepreneurship for depreciation or opportunity costs motives (push motives) but globally to a weak propensity of setting-up a firm for innovative motives –valuation of a new idea- (pull motives). Too strong a rigidity of the labor market and the stigmatization of the entrepreneurial failure discourage a certain number of qualified and experienced employees to value their human capital in the entrepreneurial option. In most European countries, the unemployed population is very much overrepresented in the population of new entrepreneurs.

Some cultural aspects may also be put forward. For example Hostede (2001) notices that *uncertainty-avoidance* is not equally distributed among the cultures. It is in countries where the *uncertainty-avoidance* is higher that we find the lower levels of self-employment. In these countries individuals like to follow rules and procedures, have a taste for the administrated organization. A recent study from Noorderhaven, Thurik, Wennekers and Stel (2004) show that the level of self-employment in 15 European countries is partly explained by dissatisfactions with life and the way democracy works. These two dissatisfactions according to the authors are close to professional dissatisfaction.

The insufficient pull motives for entrepreneurship in Europe refer to what Audretsch calls the *European paradox* (Audretsch, 2007). The lack of *entrepreneurship capital* in Europe leads to a high level of knowledge investments for a poor result in terms of growth and reduction of unemployment.

"Barriers to entrepreneurship can impede knowledge spillover entrepreneurship. Such barriers range from legal restrictions and impediments to the existence and availability of early stage finance, or to social and institutional tradition discouraging entrepreneurship and a stigma associated with failed attempts as entrepreneurship. The capacity of an economy to generate entrepreneurial behaviour is shaped by the extent of its underlying entrepreneurship capital",

(Audretsch, 2007, p.69)

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