



Pre Entry Motives into Entrepreneurship and
Post Entry Entrepreneurial Orientation

JEAN BONNET, NICOLAS LE PAPE

www.tepp.eu

TEPP - Institute for Labor Studies and Public Policies
TEPP - Travail, Emploi et Politiques Publiques - FR CNRS 3126

ISSN 2110-5472

« *Pre Entry Motives into Entrepreneurship and Post Entry Entrepreneurial Orientation*
»

Jean BONNET¹,
University of Caen,
CREM,
jean.bonnet@unicaen.fr

Nicolas LE PAPE²,
University of Le Mans,
GAINS-TEPP and CREM,
nicolas.lepape@univ-lemans.fr

May 2010

ABSTRACT:

This paper examines empirically the link between the post-entry strategies of new entrepreneurs and the duration of the firm. We use a sample of French entrepreneurs that have set up or taken over a firm during the first six months of 1994. For firms that are still alive at least four years later we have information both on the individual pre-entry motives of the entrepreneurs and on the post entry Entrepreneurial Orientation. We also know if the firm is still running or closed down two years after having implemented the post entry strategies, i.e. during 1998-1999. Using a Cox model (proportional hazard model), we show that “push” entrepreneurs (unemployed more than one year) who adopt an entrepreneurial behaviour are globally more likely to survive. A possible explanation of this result would be that in this category of constrained entrepreneurs, the minimum efficient scale (MES) is not reached. The Entrepreneurial Orientation is then a way to outreach the MES and consequently product market strategies to capture customers are efficient. “Pull” entrepreneurs (salaried who have acquired an experience in the same branch of activity) have more information a priori about the desired product and its characteristics, the tastes of customers, the rules of the competition on the product market. For them the Entrepreneurial Orientation does not constitute an efficient strategy in order to reduce information asymmetries between clients and product or service supplied.

Keywords : post-entry strategy, firm survival, Cox model.

JEL Code : C₁₄, C₄₁, G₃₃, L₂₀

¹ UFR de Sciences Economiques et de Gestion, campus 4, 19 rue Claude Bloch, 14000 Caen, France.

² Faculté de Droit, Economie, Gestion, Avenue Olivier Messiaen, 72085 Le Mans, cedex 9, France.

Introduction

Entrepreneurship is an important source for economic growth and employment creation -see Carree and Thurik (2010) for a survey of the positive effects of entrepreneurship on economic growth-. The economic contributions of new ventures could refer to the reasons entrepreneurs give for starting businesses since entrepreneurial motives influence both the post-entry strategies and the survival of the new firm. One of these reasons is related to a low opportunity cost; in that case the new entrepreneur exits unemployment in setting-up his own firm. According to the “refugee” effect, higher rates of unemployment translate into higher rates of self-employment (Thurik et al., 2008, Acs et al., 1994) but the impact of this kind of entrepreneurship on economic growth is limited because on average the size of these new firms is small, they suffer from financial constraints and their life span is short. Conversely entrepreneurs in a Schumpeterian sense seize business opportunities. The “Schumpeter” effect then plays an important role in innovation and growth.

From an individual point of view, these two kinds of entrepreneurs aggregate “push” and “pull” motives (Shinnar and Young, 2008 for the motivations of immigrants entrepreneurs). The “push” (necessity) motives mainly gathers individuals excluded from the job market³. Unemployment is a strong determinant to increase the likelihood of an individual becoming an entrepreneur in different European countries (Foti, Vivarelli, 1994, for Italy, Ritsilä and Tervo, 2002, for Finland and Abdesselam et al, 2004 for France).

The “pull” (opportunity) motives refer to a set of positive motives such as economic opportunity, valuation of a new idea, self-realization and so on... The “pull” motives correspond to the case where new entrepreneurs are positively drawn to entrepreneurship. More precisely *“Pull entrepreneurs are those who are lured by their new venture idea and initiative venture activity because of the attractiveness of the business idea and its personal implication”* (Amit and Muller, 1995, p. 65).

One implication from this distinction concerning entrepreneurial motivations is that one should expect that entrepreneurs sensitive to opportunity motives compared to the necessity motives are more prone to implement successful entrepreneurially oriented firms since the decision to set up a firm can be viewed as an unconstrained decision.

On the contrary since the “push” motive is associated with a lack of alternatives in a salaried or unemployed position, one can infer that the new entrepreneur was suffering from a depreciation of his/her own human capital in his/her previous occupation (Bhattacharjee et al., 2009). In that case, the entrepreneurial choice does not necessarily reveal some endowment in entrepreneurial abilities. Then we can infer that a new firm with Entrepreneurial Orientation is more prone to be successful if the founder is motivated by “pull” motives rather than “push” motives. Notwithstanding we can suspect that for push entrepreneurs the Minimum Efficient

³ In a broader sense Liles (1974) showed that job dissatisfaction, or deterioration of satisfaction in the preentrepreneurial job is a fundamental factor that motivates an individual to become an entrepreneur. A recent study from Noorderhaven, Thurik, Wennekers and Stel (2004) underlines 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.

Size is not reached so the Entrepreneurial Orientation could be a way to quicker depreciate fixed assets and then to avoid premature exit.

We will consider that the previous occupation of the entrepreneur in the labour market gives us information about the probability to be endowed with such entrepreneurial abilities. Then we can infer that setting up a firm by an individual sensitive to “pull” motives can reveal the willingness to launch innovative projects (for which the staff may be too cautious), to exploit a new opportunity, to seize markets shares in some market segments.

Few studies have been conducted at the individual level on the product market behavior of the new entrepreneur and his relationship to the success of the firm. In fact, when dealing with new firms, qualitative information on firms’ strategies is rare and difficult to collect: *“the analysis of post-entry strategies by start-ups is rather rare in the literature”* (Fosfuri and Giarrantana, 2004, p. 2).

Firm performance results in various combinations of individual characteristics of the entrepreneur and organizational or environmental factors (Lumpkin and Dess, 1996, 2001). Then the behavior of the entrepreneur may be just as important as the founding conditions when regarding the survival of the firm (Covin and Slevin, 1991). Recent studies focus on entrepreneurial orientation (pro-activeness, innovativeness, risk taking propensity) and show that this behaviour increases the financial performance (Keh and al. 2007, Stam and Elfring, 2008; Wiklund and Shepherd, 2005) or the growth of the firm (Moreno and Casillas, 2008). Morris et al. (2006) showed that women entrepreneurs who are pulled are significantly more growth-oriented than those who are pushed into entrepreneurship. Nevertheless they do not take into account the behavior of the new firm in the product market. Then it is interesting to examine if “push” and “pull” entrepreneurs are able to implement successful product market strategies.

We use a sample of French entrepreneurs that have set up or taken over a firm during the first six months of 1994 (SINE 94-1). The data base encompasses 36337 firms created in 1994 and still alive in 1997 (SINE 94-2). A third survey conducted in 1999 (SINE 94-3) identifies the firms which are still running and those that closed down over the period 1997-1999. For these firms we have information both on the individual pre-entry motives of the entrepreneurs and on the post entry Entrepreneurial Orientation that allows us to build a score that measures the proactiveness and the competitive aggressiveness of the firm. We also know if the firm is still running or closed down two years after having implemented the post entry strategies, i.e. during 1998-1999. The push motives are identified by unemployed over one year, the pull motives by salaried who set up or over take a firm in the same branch of activity of their experience. We retain two variables as proxies of a proactive behavior: the willingness of an entrepreneur to increase his activity and the subcontracting work given to other firms. Subcontracting is a way to either alleviate capacity constraints or outsource procedures that cannot be accomplished by the firm itself (specialty subcontracting). Three variables in the data are used as proxies of an aggressive posture. The aggressiveness of a firm in its market is expressed by a decrease in price (price competition) but also by the willingness to attract new clients and the advertising efforts (non price competition). Using a

Cox model (proportional hazard model), we show that “push” entrepreneurs who adopt an entrepreneurial behaviour are globally more likely to survive. A possible explanation of this result would be that in this category of constrained entrepreneurs, the minimum efficient scale (MES) is not reached. Then these new firms have to grow fast in order to be sustainable and prospect efforts to attract new clients or subcontracting work given are a way to better survive. “Pull” entrepreneurs who have *a priori* more information about the desired product and its characteristics, the tastes of customers, the rules of the competition on the product market are able to reduce their prices without decreasing the quality of the product perceived by customers. This is why these entrepreneurs who base their entrepreneurial orientation on price competition survive better.

Our paper is organized as follows. Section 1 presents the “pull” and “push” motives to get into entrepreneurship and the Entrepreneurial Orientation of the new entrepreneurs. Section 2 examines the performance of the product market orientation of the new firm according to pre-entry motives and section 3 concludes.

1. Pre-entry motives into Entrepreneurship: do they influence market strategies?

1-1) “Push” and “Pull” effects: a reappraisal based on the previous occupation of the entrepreneur.

The human capital observed by employers is itself made up of an educational human capital measured by the level of diploma and of a professional and cultural human capital which comprises the professional and social trajectory of the individual. To be creative, having an innovative idea, can be considered as to be endowed with an unobservable human capital that only the entrepreneurial commitment may value. Unobserved human capital then reflects entrepreneurial abilities that the individual is able to value by choosing entrepreneurship. When new entrepreneurs are previously well matched as employees in the labor market, they had *a priori* good rewards on their human capital (perceived wages reflect their productivity). In such a case self-employment mainly corresponds to “pull” motives (new idea, innovation...). The individual does not implement his innovative project as a salaried due to information asymmetries concerning the actual quality of the project (Audrestch, 1995).

Conversely self-employment may also respond to an individual situation of failure in the labor market (for instance the individual is unemployed or employed with a bad match). These individuals are sensitive to “push” motives.

Figure 1 describes these mechanisms and explain the various motivations to entrepreneurship in connection with the previous position of the entrepreneur.

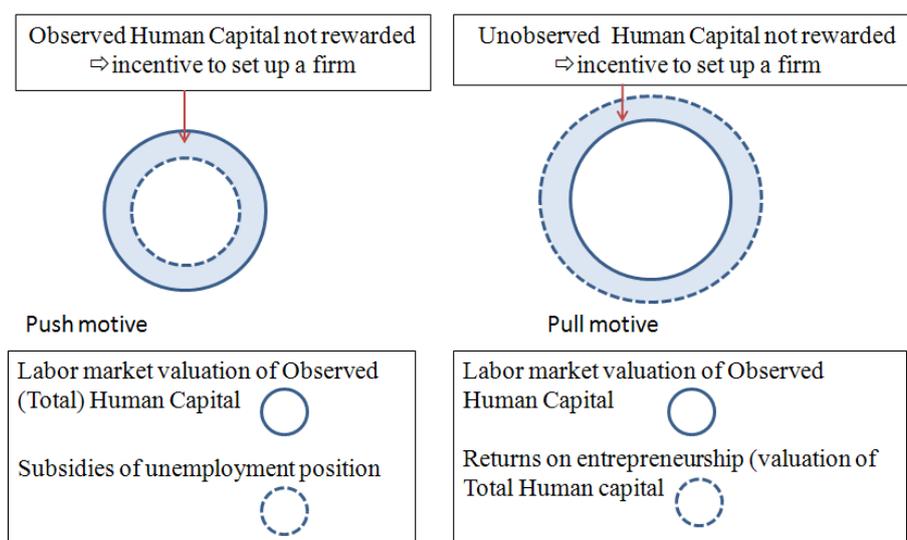


Figure 1: Entrepreneurial motives and labor market position

For the same given level of the observed human capital (the full circle area) there can be the same incentive to entrepreneurship (ratio of grey parts of the rings to white parts of the circles). Nevertheless there is a different informative content about the total level of the human capital of the individual according the entrepreneurial motives. When the decision to set up a new firm results from “push” motive, we consider that the unemployed position of the individual implies that his observed human capital is undervalued such that entrepreneurship does not reveal some unobserved human capital.

Conversely when the labour market is functioning well, the observed human capital of the individual gets paid on average to its just value. Consequently the setting up of a company by a salaried employee responds to “pull” motives (new idea to develop or a market niche to make the most of). Why go for a risky situation, unless there is a profit expectation higher than one’s wage?

Kirzner’s concept of alertness (1979, 1985) that allows an individual to seize business opportunities is another way to understand the “pull” motives. All individuals are not equally endowed with alertness; for those who are, the appropriation of innovation gains thus constitutes a powerful incentive to entrepreneurship (Lazear, Mc Nabb, 2004). The wage earner goes into entrepreneurship only if the global environment is favorable, that is to say that the labor market is fluid, that he perceives that the potential failure of his project will not penalize him and that he easily finds the needed financial supports and advices.

Individuals sensitive to “pull” motives do not suffer from a depreciation of their own human capital in their previous occupation (Bhattacharjee et al., 2009). Consequently, when they decide to set up a firm, their opportunity cost of entrepreneurship is high and we can infer the new entrepreneur will be pro-active in its post-entry strategy. Conversely, “push” entrepreneurs bear a low opportunity cost and are less incited to implement a strategy aiming at outreach rivals. Notwithstanding for “push” entrepreneurs the Minimum Efficient Size is not reached. In our data base, 82.8% [63.8%] of “push” [“pull”] entrepreneurs set up their

firms with no salaried people⁴[1]. The total amount of money invested in the firm at the beginning is lower than 7623 euros for 51.4% [39%] of “push” [“pull”] entrepreneurs. So if the Entrepreneurial Orientation is a way to quicker depreciate fixed assets, “push” entrepreneurs could be more inclined to adopt a proactive strategy.

Within the set of different post-entry strategies, we focus on the firm’s competitive behavior or its willingness to overcome competitors to gain market shares. This competitive Entrepreneurial behavior includes all activities or attitudes aimed at overcoming rivals: willingness to increase activity, willingness to sub-contract and commercial aggressiveness (concerning prices, new customers and advertising strategy).

1-2) Entrepreneurial Orientation

Part of literature in management has shed a light on what has been named the Entrepreneurial Orientation (EO) of entrepreneurs: “*An entrepreneurial firm is ones that engage in product market innovation, undertakes somewhat risky ventures and is first to come up with proactive innovations, beating competitors to the punch*” (Miller, 1983, p.771). Lumpkin and Dess (1996) have identified five variables to specify the definition of the concept of Entrepreneurial Orientation (Proactiveness, Competitive Aggressiveness⁵, Willingness to take risk, Autonomy and Innovativeness).

In this paper we focus on the two first variables proactiveness and competitive aggressiveness because we are interested in explaining the rivalry behavior and the product market’s strategy of the new firms.

“Proactiveness refers to how firms relate to market opportunities by seizing initiative in the market place; competitive aggressiveness refers to how firms react to competitive trends and demands that already exist in the market place”, (Lumpkin and Dess, 2001, p. 429).

Proactiveness is characterized by the anticipation of opportunities, the detection of future trends in the market and a high responsiveness to market signals that allows the firm to benefit from first mover advantages. The firm acts in advance to less responsive rivals thus enabling it to be in a good position to seize market shares and to show superior performance over *rivals*. A proactive firm tends to shape its environment in its favor (Frese and al., 1996). It acts in anticipating future problems, needs or changes.

Competitive aggressiveness requires adopting towards competitors tactics in order to weaken them or to benefit from their weaknesses. It also has to do with a reactive behavior. In the case of new firms the aggressiveness posture is a mean to establish a position, a kind of legitimacy.

In the empirical analysis of the impact of aggressiveness/proactiveness on survival, we must take into account the competitive environment because the proactive attitude of the

⁴ For a definition of push and pull entrepreneurs, see section 2.

⁵ Lumpkin and Dess (1997) noticed that Covin and Slevin (1989, 1991) do not distinguish clearly the two concepts because they suggested that “*proactive firms compete aggressively with other firms*”.

entrepreneur is recognized as a key determinant of firm performance in hostile environments (Covin and Covin, 1990). Moreover Smith et al. (2001) have shown that in hostile environments, competitive aggressiveness is beneficial.

2. Entrepreneurial motives, post-entry strategies and longevity of new firms

2-1) Data and measurement issues

In order to highlight the post entry strategies on the survival of the new firm we have used a French data base on new entrepreneurs. The data is extracted from the SINE 94 "Système d'informations sur les nouvelles entreprises" (Information system on new firms) survey, which was conducted by the French National Institute of Statistical and Economic Studies, Insee (Institut National des Statistiques et des Etudes Economiques). It provides qualitative data on entrepreneurship and, more specifically, variables pertaining to the entrepreneur and the circumstances in which entrepreneurship occurred (SINE 94-1). Among new firms created in 1994 and still alive in 1997, a second survey (SINE 94-2) gives information about the strategies of entrepreneurs performed two years before (i.e. during 1996 and 1997). This survey explores the real behavior of the firm on its product market and its strategy against competitors between 1996-1997. The data base encompasses 36337 firms created in 1994 and still alive in 1997. A third survey conducted in 1999 (SINE 94-3) identifies the firms which are still running and those that closed down over the period 1998-1999. In our data, we retain two variables as proxies of a proactive behavior: the willingness of an entrepreneur to increase his activity and the subcontracting work given to other firms. Subcontracting is a way to either alleviate capacity constraints or outsource procedures that cannot be accomplished by the firm itself (specialty subcontracting). Three variables in the data are used as proxies of an aggressive posture. The aggressiveness of a firm in its market is expressed by a decrease in price (price competition) but also by the willingness to attract new clients and the advertising efforts (non price competition). Information displayed in the data base allows us to construct an index representing the level of entrepreneurial behavior of the firm. We then build a score and an index of E.O. -Annex 1-. Both the index and the score will be used in survival models.

The score gives information about the nature of the Entrepreneurial Orientation (the specific policy conducted in the product market).

The index aims to approach the global Entrepreneurial Orientation of the new firm. In survival analysis this index is used in order to measure if a high degree of Entrepreneurial Orientation conveys a better survival scheme in the sense that leading several policies together is the way to be more efficient.

We restrict our sample to entrepreneurs evolving into a hostile environment. This restriction is done in order to avoid any criticism regarding the fact that our definition of proactiveness and aggressiveness does not exactly include behavior of the entrepreneur but rather the growth or growth potential that differ according to the branch of industry. Considering that firms mainly sell homogenous products, how difficult it is to sell its products

could be a measure of the nature of environment (hostile *versus* non hostile). Then we will identify a hostile environment for the firm by the answer: “*Difficulties to sell products*” to the question “*What has been your main problem during the last two years?*” in the survey. So we will measure if proactiveness/aggressiveness is a good way for a firm to overcome a difficult position on its market for the two categories “push” and “pull” entrepreneurs.

2-2) Empirical results

We use a Cox model (proportional hazard model) in order to examine the impact of post-entry strategy on survival. The basic hazard function is not specified here, since the results of the non-parametric estimation (Kaplan-Meier) of the duration show that none of the known statistical laws can be adapted to our data. Therefore we calculate the life span of the firm in months and the duration model measures the impact of the variables representing of the nature and the level of entrepreneurial behavior on the life span of the firm. We also control with other variables which are commonly included in survival analysis of new firms. Seven variables representing the firm and the context of its foundation and five variables characterizing the entrepreneur are included in the model (annex 2). The results of Cox models are gathered in table 1.

Intensity of Entrepreneurial Orientation			Proactiveness and Competitive aggressiveness		
Variables	coefficients	(Pr> χ^2)	Variables	Risk ratio: exp(β)	(Pr> χ^2)
E.O.5	-0,809*	(0,0797)	GL.APPR.	-0,299***	(<0,01)
E.O.4	-0,347***	(<0,01)	SUBGIVEN	-0,336***	(<0,01)
E.O.3	-0,343***	(<0,01)			
E.O.2	-0,439***	(<0,01)	ADV.EFF.	0,107*	(0,0839)
E.O.1	-0,051	(0,6436)	PROS.EFF.	-0,044	(0,4714)
E.O.0	Ref.		PRICE EFF.	-0,084	(0,1622)
-2LogL	22441		-2LogL	22427	
LR statistic	501,38***		LR statistic	515,42***	
Number of firms	9927		Number of firms	9927	
Percent Censored	87,36		Percent Censored	87,36	

Table 1: Entrepreneurial Orientation and new firms’ survival in a hostile environment.

Survival analysis -Cox's model-

Lecturer of the table: ones reasons according the referential class of each variable. If $\beta < 0$ and if Pr> χ^2 is inferior to 10% the variable contributes significantly to increase the life span of the firm.

***, ** and * indicate significant at the 1%, 5% and 10% level, respectively.

Results concerning control variables are available from the authors upon request.

The global index of E.O. measures the intensity of E.O. regarding our definition about the measure of proactiveness and aggressiveness. Globally E.O. improves significantly the duration of new firms in a hostile environment. This result is in line with in Keh Nguyen and Ng (2007) who found a positive relationship between E.O. and firm performance. Concerning the impact of the nature of E.O., we find that a proactive behavior significantly improves the survival of the firm. Conversely the competitive aggressiveness in the population of young

firms does not translate into a longer life span. Moreover the advertising effort reduces the life span. A possible explanation could be related with the inefficiency of advertising in an environment where initially firms suffer from difficulties to sell their products.

We consider that pre entry motives could be related with the individual ability to implement a successful pro-active/aggressive strategy towards competitors. New entrepreneurs who were previously salaried in the same branch of industry have rather a “pull” motive when they set up their firm. Individuals who were previously unemployed are sensitive to “push” motives. In such a case, to get into entrepreneurship responds to a self-employment choice that probably conveys less growth oriented strategies.

Table 2 identifies to which extent new entrepreneurs are more prone to implement successful proactive and aggressive policies according to their pre entry motives. A dominant “push” motive is expected to be associated with the category of individuals unemployed for more than one year. A dominant “pull” motive is expected to correspond with the category of people who do not change their branch of activity when they set-up a firm.

“Pull” entrepreneurs (Previously salaried in the same branch of industry (opportunity motives))					
Variables	coefficients	(Pr> χ^2)	Variables	coefficients	(Pr> χ^2)
E.O.5	0,599	(0,349)	GL.APPR.	-0,636***	(<0,01)
E.O.4	-0,306	(0,313)	SUBGIVEN	0,299*	(0,0680)
E.O.3	-0,174	(0,507)	ADV.EFF.	0,228*	(0,0840)
E.O.2	-0,640**	(0,016)	PROS.EFF.	0,495***	(<0,01)
E.O.1	-0,024	(0,922)	PRICE EFF.	-0,449***	(<0,01)
E.O.0	Ref.				
-2LogL	4241		-2LogL	4241	
LR statistic	295,42***		LR statistic	295,42***	
Number of firms	2915		Number of firms	2915	
Percent Censored	90,19		Percent Censored	90,19	
Push entrepreneurs (Unemployed more than one year (necessity motives))					
Variables	coefficients	(Pr> χ^2)	Variables	coefficients	(Pr> χ^2)
E.O.5	-0,507	(0,513)	GL.APPR.	-0,29	(0,1045)
E.O.4	-1,043***	(<0,01)	SUBGIVEN	-0,427*	(0,06)
E.O.3	-1,138***	(<0,01)	ADV.EFF.	0,074	(0,673)
E.O.2	-1,197***	(<0,01)	PROS.EFF.	-0,569***	(<0,01)
E.O.1	-0,791***	(<0,01)	PRICE EFF.	0,018	(0,913)
E.O.0	Ref.				
-2LogL	2518		-2LogL	2515.86	
LR statistic	177,54***		LR statistic	180.15***	
Number of firms	1668		Number of firms	1668	
Percent Censored	89,03		Percent Censored	89,03	

Table 2: Post entry strategies and the longevity of new firms: “pull” and “push” entrepreneurs

In a hostile environment when entrepreneurs were previously employed in the same branch of activity, the intensity of Entrepreneurial behavior does not improve globally the duration of the new firm (except for E.O.2). This results from the existence of two opposite effects. On the one hand, “pull” entrepreneurs are a priori endowed by unobserved human

capital (see section I). Probably these entrepreneurs have some personal abilities to adopt offensive positioning towards competitors or to be responsive to market signals. As a consequence they are more prone to adopt aggressive strategies that do not generate the exit of the firm. On the other hand, “pull” entrepreneurs have more information about the desired product and its characteristics, the tastes of customers, the rules of the competition on the product market. For them Entrepreneurial Orientation does not always constitute an efficient strategy in order to reduce information asymmetries between clients and product or service supplied and, if the costs of the entrepreneurial posture is high, it could be detrimental for the survival of the firm. The non significance of the intensity of Entrepreneurial Orientation also comes from the fact that Entrepreneurial orientation driven by “price efforts” or “global approach” significantly improves the firm duration while the other kinds of Entrepreneurial Orientation reduce it. One interpretation could be that the reputation is more easily acquired by attracting ancient clients they had in the firm where they worked. Moreover for this category of entrepreneurs the subcontracting work given is mainly a subcontracting of speciality that denotes insufficient skills adapted to the needs of the contractor.

The positive impact of the Entrepreneurial Orientation on survival is surprisingly more important in the population of pushed entrepreneurs compared to the population of pulled entrepreneurs. This result comes from the fact that none of the different kinds of Entrepreneurial Orientation has a negative impact on the survival of the firm. We could have inferred that when individuals are motivated by the depreciation of their human capital they have not specific managerial abilities and so it could be difficult for them to adopt offensive strategies to outperform their industry rivals. Nevertheless since they are more constrained (previously unemployed people are financially constrained -Crepon and Duguet, 2002-), they create in the lowest sizes and so under the minimum efficient size. The survival probability of a firm is positively related to its initial size (Mata and Portugal, 1994, Audretsch and Mahmood, 1995) and this effect persists some years after entry (Geroski et al., 2007). Proactive strategies might be more efficient because more crucial to overcome the initial drawback of a low initial size for this category of entrepreneurs. “Subcontracting work given” and “prospection efforts of new clients” improve the survival while the combination with the other kinds of entrepreneurial orientation is also beneficial for the survival.

3. Conclusion

In this paper, we investigated the complex relationships between the entrepreneur’s motives when he sets-up a firm, the entrepreneurial orientation of the young firm and his survival chances. The empirical results are obtained from a sample of new French firms created in 1994 and for which survival is examined during 1997-1999 after implementation of market policies during 1996-1997. The previous situation of the entrepreneur on the labor market is suspected to be related with a main motive (“pull” or “push”) when he sets-up a firm. We have shown that the entrepreneurial orientation of the entrepreneurs draws some

interesting results that can go beyond the usual explanations of survival based on the initial conditions under which new firms are founded. More precisely, the positive impact of the entrepreneurial orientation of the firm on its survival is closely related to the “push” motives.

Further research needs to be undertaken concerning firm’s entrepreneurial orientation in connection with an estimation of an “entrepreneurial human capital” which is (all things equal) a determining factor in the survival of new firm. This “entrepreneurial human capital” has to do both with behavioral attitudes (translated into proactive and aggressive firm’s strategies) and probably with psychological traits.

Bibliography:

- ABDESSELAM, R., BONNET, J., N., LE PAPE, 2004, “An Explanation of the Life Span of New French Firms”, *Small Business Economics*, 23: 237-254.
- ACS Z.J., MUELLER P., 2008, “Employment effects of business dynamics: Mices, Gazelles and Elephants”, *Small Business Economics*, 30, p.85-100.
- AMIT R., MULLER E., 1995, “Push” and “Pull” entrepreneurship”, *Journal of Small Business and Entrepreneurship*, Vol. 12, n° 14, October-december, p. 64-80.
- AUDRESTCH, D., and T. MAHMOOD, 1995, “New firm survival: new results using a hazard function”, *Review of Economics and Statistics*, 77: 97-103.
- BHATTACHARJEE A., BONNET J., LE PAPE N., RENAULT R., 2009, "Entrepreneurial motives and performance: Why might better educated entrepreneurs be less successful?", *working paper*, 49 pages.
- CARREE M.A., THURIK A.R., 2010, “The impact of entrepreneurship on economic growth”, in *Handbook of Entrepreneurship Research*, D.B. Audretsch and Z.J. Acs (eds), (Springer Verlag, Berlin, Heidelberg), forthcoming.
- COVIN J.G., SLEVIN D.P., 1991, “A Conceptual Model of Entrepreneurship as Firm Behaviour. Entrepreneurship”, *Theory and Practice*, Fall, 7-25.
- COVIN, J.G. and COVIN, T.J., 1990, “Competitive Aggressiveness, Environmental Context and Small firm Performance”, *Entrepreneurship, Theory and Practice*, 14, 35-50
- CREPON B. and DUGUET E., 2002, "Prêt bancaire, aides publiques et survie des nouvelles entreprises : une analyse économétrique à partir des méthodes d'appariement sélectif sur données d'entrepreneurs", *Eurequa, cahiers de recherches*, n°48.
- FOTI, A., VIVARELLI, M., 1994, “An Econometric Test of the Self-Employment Model: The Case of Italy,” *Small Business Economics*, 6(2), April, 81-94.
- FRESE M., KRING W., SOOSE A., ZEMPEL J., 1996, “Personal initiative at work: differences between East and West Germany”, *Academy of Management Journal*, 39(1), 37-63.
- GEROSKI, P.A., J. MATA and P. PORTUGAL, 2002, “Founding conditions and the survival of new firms”, DRUID Working Paper, 0711, 38 pages.
- KEH, H. T., NGUYEN, T. T. M., and NG, H. P., 2007, “The effects of entrepreneurial orientation and marketing information on the performance of SMEs”, *Journal of Business Venturing*, 22, 592–611.
- KIRZNER, I. M., 1985, *Discovery and the capitalist process*. Chicago: the University of Chicago Press.

- KIRZNER, I. M., 1979, *Perception, opportunity and profit*. Chicago: the University of Chicago Press.
- LUMPKIN, G.T. and DESS, G.G., 2001 “Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle”, *Journal of Business Venturing*, 16, page 429-451.
- LUMPKIN, G.T. and DESS, G.G., 1996, “Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance”. *The Academy of Management Review*, Vol. 21, pp. 135-172.
- MATA, J. and P. PORTUGAL, 1994, “Life duration of new firms”, *Journal of Industrial Economics*, 42, 227-245.
- MILLER, 1983, “The correlates of entrepreneurship in three types of firms”, *Management Science*, 29, pp.770-791.
- MORENO, A. M., CASILLAS, J. C., 2008, “Entrepreneurial orientation and growth of SMEs: A causal model”, *Entrepreneurship Theory and Practice*, 32, 507–528.
- MORRIS, M.H. MIYASAKI N.N., CRAIG E., WATTERS E. And S.M. COOMBES, 2006, “The Dilemma of Growth: Understanding Venture Size Choices of Women Entrepreneurs”, *Journal of Small Business Management*, 2006 44(2), pp. 221–244
- RITSILÄ, J., TERVO, H., 2002, “Effects of Unemployment on New Firm Formation: Micro-Level Panel Data Evidence from Finland,” *Small Business Economics*, 9(1), August, 31-40.
- SHINNAR R. and YOUNG C., 2008, “Hispanic Immigrant Entrepreneurs in the Las Vegas Metropolitan Area: Motivations for Entry into and Outcomes of Self-Employment”, *Journal of Small Business Management*, [Vol. 46, Issue 2, pp. 242-262, April 2008](#)
- SMITH K.G., FERRIER W.J. and GRIMM C.M. (2001), “King of the hill: dethroning the industry leader”, *The Academy of Management Executive*, Vol.15, n°2, p. 59-70.
- STAM, W. and ELFRING, T, 2008, “Entrepreneurial orientation and new venture performance: The moderating role of intra- and extraindustry social capital”, *Academy of Management Journal*, 51, 97–111
- THURIK, A.R., CARREE, M.A., STEL A.J. and AUDRETSCH D.B., 2008, “Does Self-Employment Reduce Unemployment?”, *Journal of Business Venturing*, 23 (6), pp. 673-686.
- WIKLUND, J. and SHEPHERD, D, 2005, “Entrepreneurial orientation and small business performance: A configurational approach”, *Journal of Business Venturing*, 20, 71–91.

Annexes

Annex 1

Table 1. The construction of a score and an index of the Entrepreneurial Orientation (E.O.)

Questions	Modalities of reply	E.O. score	
What has been your global approach towards your firm over the last two years (1995-1997)?	Increasing the activity	1	Proactiveness
	Maintaining the activity at its level	0	
	Attempting to safeguard the activity	0	
Have you been subcontracting work (to other firms) over the last two years?	Yes	1	
	No	0	
Have you made advertising efforts over the last two years?	Yes	1	Aggressiveness
	No	0	
Have you made efforts to prospect new clients over the last two years?	Yes	1	
	No	0	
Have you made any effort on your prices over the last two years?	Yes	1	
	No	0	

An E.O. score is assigned to each criterion according to the answer given. By summing up these scores, we construct a global index of E.O. on a scale of [0; 5] –the higher the global index, the higher the E.O. index ascribed to the firm-.

E.O.5 very high E.O.

E.O.4 high E.O.

E.O.3 medium E.O.

E.O.2 weak E.O.

E.O.1 very weak E.O.

E.O.0 no E.O.

Table 2. Explanatory and control variables

Explanatory variables		
Variable	Modalities	Abbreviation
Intensity of Entrepreneurial behavior	<i>No Entrepreneurial behavior</i>	E.O.0
	<i>Very low</i>	E.O.1
	<i>Low</i>	E.O.2
	<i>Medium</i>	E.O.3
	<i>High</i>	E.O.4
	<i>Very High</i>	E.O.5
Type of Entrepreneurial behavior	<i>Global Approach</i>	GL. APPR.
	<i>Advertising effort</i>	ADV. EFF.
	<i>Prospection effort</i>	PROS. EFF.
	<i>Price Effort</i>	PRICE EFF.
	<i>Subcontracting Work Given</i>	SUB. GIVEN
Control variables		
Legal status	<i>Limited liability</i>	
	<i>Unlimited liability</i>	
Origin of the firm	<i>Start up</i>	
	<i>Take over</i>	
Branch of industry	<i>Food industry</i>	
	<i>Industry</i>	
	<i>Transports</i>	
	<i>Construction</i>	
	<i>Catering</i>	
	<i>Household services</i>	
	<i>Services enterprises</i>	
Initial size of the enterprise	<i>One salaried and more</i>	
	<i>No salaried</i>	
Amount of money invested to set-up the firm	<i>Less than 7623 Euros</i>	
	<i>Between 7623 Euros and 15245 Euros</i>	
	<i>Between 15245 Euros and 38112 Euros</i>	
	<i>More than 38112 Euros</i>	
Obtaining a public financial aid in 1994	<i>Public financial aid obtained</i>	
	<i>Public financial aid none obtained</i>	
Asking for bank loans and obtained them in 1994	<i>Demand and refusal</i>	
	<i>Demand and obtained</i>	
	<i>No demand</i>	
Gender	<i>Man</i>	
	<i>Woman</i>	
Age of the entrepreneur	<i>Less than 25 years old</i>	
	<i>Between 25 and 35 years old</i>	
	<i>Between 35 and 45 years old</i>	
	<i>More than 45 years old</i>	
Human Capital of the entrepreneur	<i>Skills acquired in a different branch of activity and no diploma</i>	
	<i>Skills acquired in a different branch of activity and diploma</i>	
	<i>Skills acquired in the same branch of activity and no diploma</i>	
	<i>Skills acquired in the same branch of activity and diploma</i>	
Occupation before the setting-up of	<i>Unemployed</i>	
	<i>None working population</i>	

the new firm	<i>Working population</i>
Main motivation when the entrepreneur sets-up its firm	<i>New idea</i>
	<i>Opportunity</i>
	<i>Without employ</i>
	<i>Entourage example</i>
	<i>Taste for entrepreneurship</i>

10-1. Are young French jobseekers of ethnic immigrant origin discriminated against? A controlled experiment in the Paris area

Emmanuel Duguet, Noam Leandri, Yannick L'Horty, Pascale Petit

10-2. Couple's Work Hours, Satisfaction and reconciling Work and family Life

Nathalie Georges, Dominique Méda, Danièle Trancart

10-3. Housing ownership, social housing and unemployment: an econometric analysis of the Paris area

Emmanuel Duguet, Yannick L'Horty, Florent Sari

10-4. Do Public Subsidies Have an Impact on New Firm Survival? An Empirical Study with French Data

Lionel Désiage, Richard Duhautois, Dominique Redor

10-5. The effect of social security payroll tax reductions on employment and wages: an evaluation of the 2003 French reform

Matthieu Bunel, Fabrice Gilles, Yannick L'Horty

10-6. What are Entrepreneurs' Objectives When Starting a New Business?

Lionel Désiage

10-7. Health and Early Retirement: Evidence from French Data for individuals

Thomas Barnay, Karine Briard

10-8. Ageing, chronic conditions and the evolution of future drugs expenditures

Thomas Barnay, Sophie Thiébaud, Bruno Ventelou

10-9. Entrepreneurial motives and performance: Why might better educated entrepreneurs be less successful?

Arnab Bhattacharjee, Jean Bonnet, Nicolas Le Pape, Régis Renault

10-10. Returns to firm-provided training in France: Evidence on mobility and wages

Arnaud Chéron, Bénédicte Rouland, François-Charles Wolff

10-11. Taxation of early retirement windows and delaying retirement: the French experience

Pierre-Jean Messe

10-12. Pre Entry Motives into Entrepreneurship and Post Entry Entrepreneurial Orientation

Jean Bonnet, Nicolas Le Pape

10-13. Hiring Practices, Employment Protection and Temporary Jobs

Anne Bucher

10-14. Young-in Old-out: a new evaluation

Michela Bia, Pierre-Jean Messe, Roberto Leombruni

10-15. On the impact of the TFP growth on the employment rate: does training on-the-job matter?

Eva Moreno-Galbis

10-16. The dynamics of youth labor market integration

Anne Bucher

10-17. Fostering the potential endogenous development of European regions: a spatial dynamic panel data analysis of the Cohesion Policy on regional convergence over the period 1980-2005

Salima Bouayad-Agha, Nadine Turpin, Lionel Védrine

10-18. Cost-saving or Cost-enhancing Mergers: the Impact of the Distribution of Roles in Oligopoly

Nicolas Le Pape, Kai Zhao

10-19. Bankruptcy Risk, Product Market Competition and Horizontal Mergers

Bernard Franck, Nicolas Le Pape

10-20. Endogenous Job Destructions and the Distribution of Wages

Arnaud Chéron, Bénédicte Rouland

10-21. Employment Protection Legislation and Adverse Selection at the Labor Market Entry

Anne Bucher, Sébastien Ménard

The TEPP Institute

The CNRS **Institute for Labor Studies and Public Policies** (the TEPP Institute, FR n°3126 CNRS) gathers together research centres specializing in economics and sociology:

- the **Centre d'Etudes de l'Emploi** (Centre for Employment Studies), **CEE**, Public Administrative Organization, under the leadership of the Ministers of Work and Research
- **l'Equipe de Recherche sur les Marchés, l'Emploi et la Simulation** (Research Team on Markets, Employment and Simulation), **ERMES**, University of Paris II Panthéon-Assas
- the **Centre d'Etudes des Politiques Economiques de l'université d'Evry** (Research Centre focused on the analysis of economic policy and its foundations and implications), **EPEE**, University of Evry Val d'Essonne
- the **Centre Pierre Naville** (Research on Work and Urban Policies), **CPN**, University of Evry Val d'Essonne
- **l'Equipe de Recherche sur l'Utilisation des Données Temporelles en Economie** (Research Team on Use of Time Data in Economics), **ERUDITE**, University of Paris-Est Créteil and University of Paris-Est Marne-la-Vallée
- the **Groupe d'Analyse des Itinéraires et des Niveaux Salariaux** (The Group on Analysis of Wage Levels and Trajectories), **GAINS**, University of the Maine

The TEPP Institute brings together 115 researchers and research professors, 140 PhD students and 40 associate researchers who study changes in work and employment in relation to the choices made by firms and analyse public policies using new evaluation methods.