The impact of entrepreneurs’ planning profiles on firm growth: an empirical analysis

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Abstract

The convenience of writing a business plan for new firms is still an open debate among entrepreneurs. Actually, a good planning does not only give to entrepreneurs the possibility to make a deeper reflexion about the general business path, but also it can be used as firm legitimacy tool. In this paper, we define four different entrepreneurs’ planning profiles influenced by some institutional pressures factors (education and public support) as well as the economic environment (start-up problems) in order to analyse their characteristics and their differential effect on new venture growth. Our analyses are performed on a representative sample of small new ventures in Navarra (Spain). Results indicate that education and experience play a key role in determining the entrepreneurs planning profile and that planning activities relate positively with new venture growth.

Keywords: planning, institutional theory, entrepreneurs’ profiles, firm growth.
1. INTRODUCTION

In the literature, an entrepreneur is considered an innovator and visionary person who has to be careful with his acts while managing opportunities in order to be able to launch his idea successfully to the market (Schumpeter, 1934; Shane 2003). In this regard, there has been a long debate concerning the effects of planning on the performance of new small firms. Big beginnings contributions to the science in the side of strategic management come from authors like Ansoff (1979) and Porter (1980) whose arguments accentuate the importance of planning and soundness in the systematic analysis (Wiltbank et al., 2006).

Hence, a good planning may allow us to anticipate the future as well as to predict new situations that could happen depending on the environment and the scenario where the firm is established. Another benefit of planning is related with the possibility to get information (i.e. industry situation, needs of the potential buyers, and so on) that we can consider in order to run the business in the right path. So, business plans could be particularly helpful at increasing growth (Smith, 1998; Burke, Fraser and Greene, 2010).

Opposite to these previous arguments, we should also consider that a business plan may carry a lack of flexibility. The convenience to follow a very structured schedule once an entrepreneur runs a new venture inhibits the capacity to make changes in the development of the business (i.e. reduces flexibility). Sometimes a business plan is not more than a simple procedure with the aim to legitimize the new venture (Honig and Karlsson, 2004) that can generate some interference with the efforts of firm founders (Bhide, 2000) and it may take time away for another more valuable procedures in firms’ organising actions.

In this regard, legitimacy is an intangible concept that in many occasions’ new organizations tries to justify to the world as a way of measuring the new venture feasibility before starting the economic activity itself. This reason is because of having institutional pressures behind asking for the design of written business plans (Honig and
Karlsson, 2004) which in mostly cases it is simply a requirement which would enable the entrepreneur getting debt or legal permissions.

So, it is visible in some economies that there are high levels of formalism which are associated with less fairness and impartiality, less honesty, less consistency, and less confidence in the legal system (Djankov et al., 2003).

The results of the empirical analyses about the effect of planning are not conclusive. Some studies suggest that although formal business planning is rarely undertaken by small firms (Perry, 2001); if it is implemented properly it would increase their performance (Brinckmann, Grichnik and Kapsa, 2008). Therefore, using a formal strategic planning would tend to perform better than following a visionary or reactive approach to running the business (Smith, 1998). Brinckmann, Grichnik and Kapsa (2008) provide a quantitative synthesis of the empirical studies analysing the business planning-performance relationship in new and established small businesses so far. They show that the empirical findings have been fragmented and contradicted with respect to the existence and direction of business planning-performance relationship.

However, the lack of a clear relation between plan and performance has been explained in the literature through moderating variables. As a consequence, the planning benefits have appeared stronger with the presence of some conditionals; mainly uncertainty and cultural factors. The uncertainty level at start-up processes as well as the starting problems that this idea may lead, it seems to be a relevant variable to understand when business plans may be effective to boost firm performance. So, when levels of uncertainty are low, markets tend to be more stable and less turbulent.

Here, the effectiveness of a business plan might increase. In addition, the influence of cultural factors moderates the business planning-performance relationship and, consequently, reduces the benefits from business planning on the performance of firms (Brinckmann, Grichnik and Kapsa, 2008).

Besides the moderating factors solution to the planning-performance debate, in this paper we suggest the relevance of looking at the entrepreneurs planning behaviour over time. Most of the research conducted on the effect of business planning on performance
compares the performance of those who plan with the performance of a controlling group of entrepreneurs who do not plan. By looking at the planning behaviour at a given point in time, these studies do not take into account that some entrepreneurs may show inconsistent behaviour over time. In this vein, the group of planners in those studies may be composed by both consistent planners and eventual planners. We argue that some new insights on the benefits of planning can be gained by paying attention to the planning behaviour shown by the entrepreneur over time.

It is therefore the aim of this paper to analyze the firm growth effects of different entrepreneurs’ planning profiles. Putting in a nutshell the planning profiles concept, what we understand of this idea of planning profile it is to know at what moment of time and what reason leads the entrepreneurs to design a written business plan. Considering the time of creation of that business plan, the entrepreneurs will be characterised according to four different profiles. The aim of this analysis is to study how the planning behaviour of the entrepreneurs influences on business growth. We consider that not all entrepreneurs are the same, or do the same when it comes to develop a business plan. In this regard, we consider entrepreneurs who have never made a plan, those who have sometimes planned and, finally, those who have consistently engaged in planning activities over time.

The remainder of the paper is structured as follows. In the next section, we present the different entrepreneur’s profiles categorisation. We then move on to discuss the theoretical background and the hypotheses. After that, we examine the data set, the variable measurement, and the methodological approach. Finally, the results are then presented, followed by the discussion and the conclusions.

2. DEFINING ENTREPRENEURS’ PROFILES

There are significant differences in the characteristics and behaviour of entrepreneurs based on the nature of their business ownership experience (Westhead, Ucbasaran, Wright and Binks, 2005). Therefore, a classification of them becomes necessary in order to be able to study the different profiles and as a result understand their business choices.
In line with Carter, Gartner and Reynolds who in 1996 suggested that daily entrepreneur’ activities matter in what had to be with the influence of creating new ventures. Actually, they found that nascent entrepreneurs who had successfully started a new venture could be identified and differentiated from the behaviours of nascent entrepreneurs who failed.

Furthermore, in this framework of study, one of the most recent classifications in the literature done so far is offered by Westhead, Ucbasaran, Wright and Binks who in their 2005 study classified entrepreneurs into three different categories: novice, serial and portfolio entrepreneurs. Novice entrepreneurs are those who did not have prior minority or majority business ownership experience either as a business founder, an inheritor or a purchaser of independent business, but who currently own a minority or majority equity stake in an independent business. Serial entrepreneurs are viewed as individuals who have sold or closed a business in which they had a minority or majority ownership stake, and they currently have a minority or majority ownership stake in a single independent business. Finally, the portfolio entrepreneurs are characterised like those who currently have a minority or majority ownership stakes in two or more independent business (Westhead et al., 2005).

Before to introduce the time effect in the classification that we present next, as in the introduction is discussed, authors like Karlsson and Honig in 2009 found that entrepreneurs were subjected to a significant normative pressure to write business plans. In this regard and with the aim to explain better the way we categorise the entrepreneurs’ profiles, we can see in the figure 1 the motivation that lead entrepreneurs to be defined as each one. The factors are on the one hand the institutional pressure measured in this case with what we consider three key factors: higher education, business related education and public external support and on the other hand, economic environment defined with the start-up problems that entrepreneurs have while launching a new business.

Coming back to the time perspective analysis, to the best of our knowledge, there is not a single typology of entrepreneurs in terms of their planning behaviour over time. As
noted in the introduction we contend that in order to reach a better understanding of the planning – performance relationship, it is necessary to consider the planning behaviour of entrepreneurs and business owners not at a single point in time (as most of the existing literature did) but rather through time. In what follows, we propose a typology of planning profiles for entrepreneurs that considers their planning behaviour over time.

The classification has two axes: whether the entrepreneur planned at inception or not, and whether s/he plans at the present time or not. Hence the typology contains a time dimension. In order to be parsimonious we have only considered inception and the present time. This time component is the differential attribute of our classification and the one that later will allow us to run a more fine grained analysis on the effects of planning on new venture’s growth.

According to the table above we do find four different entrepreneur profiles. They are characterised by temporal business plan decisions and the willingness to develop a written plan or not. The sorting of the entrepreneurs is given by the following classification: non-planner, systematic-planner, early-planner and late-planner.

Non-Planner entrepreneurs are viewed as those individuals who do not believe in the planning approach. They do not think that a business plan will give them advantages in order to run a successful business. They do not trust in written business plan as a necessary condition to start-up processes either at inception or once the firm has survived the initial few years. On the contrary, systematic-planner entrepreneurs are those who believe and trust in the planning system as a lifestyle. They are really convinced that without a good plan it is not possible to survive the process of creating a new firm or to lead any business, whereas they have prior experience or not. The early-planners are viewed as those entrepreneurs who develop a business plan at inception but who decide not to continue with such an effort in subsequent periods.

Finally, the late-planners are those entrepreneurs who at inception thought that a business plan was not really useful or the entrepreneurs were not fully aware of the benefits of planning, but lately decided to plan. This latter decision may be motivated
because the entrepreneur either considers that planning could be useful to grow in a firm’s expansion period –after surviving the very uncertain initial period – or believes that planning is the key to face a problematic situation –losses – that emerges once the firm has survived the initial period. Furthermore, their experience running the business may lead entrepreneurs to perceive lower uncertainty in the environment. Due to this lower uncertainty, entrepreneurs may consider useful to plan and to organise their strategy in a more systematic way.

Do these planning profiles depend on individual characteristics? Are some individuals more likely to show a planning behaviour than others? Alternatively, who are the ones who decide not to plan? In the next section, we develop several hypotheses on the personal characteristics that may define those entrepreneurs who make a business plan as well as on the influence of each of these planning profiles in new venture growth.

3. HYPOTHESES DEVELOPMENT

This section is organised as follows. We study the influence of some key factors that we define as institutional pressures (higher education, business related education and public external support) and the economic environment defined in our study with the start-up problems variable to planning and how this influence affects at the same time at entrepreneurs planning profiles level. In order to do so, we delimit the concept of institutional pressure and therefore we analyse what we consider three key factors to study: education, business education at inception and public external support. Concerning the economic environment we decide to use the start-up problems. Taking into account this brief introduction, we are interested in examine entrepreneurs planning profiles. Firstly, we are interested in analysing the indifference planning profile (Hypothesis 1); secondly the adaptative planning profile (Hypothesis 2) and thirdly, the seeker planning profile (Hypothesis 3). Finally, we argue that not all types of planners have the same influence in the company’s positive growth (Hypothesis 4). In the following figure, we outline our conceptual model.
3.1 Institutional pressures and economic environment perspective: a way of delimiting planning profiles

In countries where the high levels of bureaucracy do not allow easily the entrepreneurial activity development, entrepreneurs use work experience as an ability to become self-employed and to start new firms (Bates, 1990) apparently without too much problems. Nevertheless, in many countries the difference between the lower entrepreneurship rates is given by the minimum capital requirement (Stel, Storey and Thurik, 2007) leaving experience skill as a second worry.

Opportunity entrepreneurship is influenced by higher education, while necessity entrepreneurship is not, so that in developing countries, many necessity entrepreneurs avoid business regulations by starting and operating a business in the informal sector (Stel, Storey and Thurik, 2007). This lead to a problem related with personal survival and therefore entrepreneurs become to worry about start-up problems as well as trying to be more aware and think in a possible planification not sure but at least to try to reduce uncertainty and consequently problems.

Depending on the industry where we are involved as well as the size of the business that we are launching to the market, the indifference to not planning increase highly. This is why the fact of designing written business plans is in many cases a kind of effort to gain legitimacy (Karlsson and Honig, 2009). Putting in a nutshell, those entrepreneurs who are not influenced by apparently institutional pressures and either with the economic environment are not willing to design any kind of written business plan. Hypothesis 1 summarises our expectation.

**Hypothesis 1.** Entrepreneurs who are not influenced by institutional pressures and the economic environment either, they will be not willing to design any written business plan.

In view of the fact that entrepreneurs contribute to managerial and organizational skills (Kihlstrom and Laffont, 1979), the responsibility to manage and control the institutional pressures appearances may be a key feature that may influence different entrepreneurs’ planning profiles. From an institutional perspective point of view, entrepreneurial
education is regarded as surrogate measure of general human capital in the entrepreneurship literature (Ucbasaran, Wright and Westhead, 2008) and the business education at inception of entrepreneurs makes them recognise that new organizations require different practices (Honig and Karlsson, 2004). The aforementioned ideas highlight the necessity to consider the general framework of education as a key factor in the institutional theory literature.

On the other hand, start-up problems that jointly with institutional pressures are designed to see how they both influence to planning profiles, play a key role in what concerns with the environment of all nascent entrepreneurs. So, there are differences between risk and uncertainty (McKelvie et al., 2009) but in any case all start-up situations are involved in a kind of unsteady situation that’s why this issue is interested to be analysed in the entrepreneurs’ profiles. Therefore,

**Hypothesis 2.** Entrepreneurs who are not influenced by institutional pressures but yes they are by the economic environment, they will be willing to design at least once in time a written business plan.

Entrepreneurs’ education may be another key factor to understand his/her planning behaviour. Entrepreneurs reporting higher levels of education showed a higher probability of identifying more opportunities (Davidsson and Honig, 2003; Ucbasaran, Westhead and Wright, 2008). Education is also a source of knowledge, skills, discipline, motivation and self-confidence (Cooper, Gimeno-Gascon and Woo, 1994), and as a consequence some studies suggest that highly educated individuals are more likely to establish new firms (Bates, 1990).

Adding more in the institutional theory that we are delimiting in this study, there is a sufficient influence in public external support that lead to think in the convenience of writing a business plan by entrepreneurs. While having parents involved in business may be helpful in resources acquisitions (Meccheri and Pelloni, 2006) and the need to write a business plan is an open question, as it is known, public external support has to be justified in terms of business plan accuracy in order to justify where the public investment will go taking longer to create due to regulatory approval (Carter, Gartner and Reynolds, 1996).
So, education jointly with public external support policies may play a relevant role in defining people's behaviour when managing firms. In particular, we think it may influence the planning behaviour with higher education positively influencing the likelihood to plan. Universities and business schools show students how to plan and the advantages of ex-ante planning. A look at the books written for entrepreneurs or at the textbooks used in entrepreneurship courses show that almost all of them are based in a planning conception of management. Their basic content shows which are the steps that need to be followed to have a business plan. Similarly, previous management courses are based on a rationalist view of the decision making process that stresses the need to plan and to gather information in advance in order to make decisions, particularly decisions of strategic nature. Finally from a public external support framework, it is almost mandatory that once entrepreneurs are subject to receive any kind of help from a public entity, the predisposition to design a business plan is inherent in order to enjoy that aforementioned help. For these reasons, we advance that education; particularly higher education and previous business formation at inception together with public external support positively influence the likelihood of having a kind of planning predisposition. Hypothesis 3 captures this idea.

**Hypothesis 3.** Entrepreneurs who are influenced by institutional pressures and the economic environment, they will be willing to design systematically with a written business plan over time.

### 3.2 The effect of a written business plan on firm growth successful

A business plan may be a more effective tool during the start-up processes. It allows entrepreneurs to speed venture development in order to anticipate problems and information needs and to manage the supply and demand in the product and venture development (Delmar and Shane, 2003). To plan at inception allows analyzing systematically all aspect of the new venture as to the need for modifications in the new product, the convenience to focus in a particular demand segment, and so on. This, in turn, would increase “the quality” of the new venture. The aim is to create positive growth for the firm (Ansoff, 1991).
In fact, to plan systematically, in particular in the case of small firms, rather than have a reactive behavior, which mean to leave things to chance and to deal with problems simply when they occur, seems to enhance firms performance (Smith, 1998). However, considering the concept of flexibility what fits perfectly with this reasoning, it has been found that it mediates the relationship between strategic planning and performance and therefore to able to anticipate environmental turbulences (Rudd et al., 2008).

Considering the previous reasons, nevertheless, if we analyse the speed of venture in those new firms following written business plans, we see that is quicker than in those without it. Furthermore, the entrepreneur who has in mind a clear goal or intuition about the new venture direction will be more aware about the use of written business plan as an essential first help to the venture (Burke, Fraser and Greene, 2010).

Therefore, plans help firms and managers to sort things out. This provides firms and entrepreneurs with an organized way of doing things. To have a method reduces the probability to forget key steps and pieces of information. This in turn will result in better firm performance in the long run. Hence,

**Hypothesis 4.** Planning profiles influenced by institutional pressures and the economic environment, they are going to influence to company’s growth.

4. METHODS

4.1. Data collection and sample

To analyze the impact of entrepreneurs’ planning profiles on firm growth, we draw on data from a survey of the founders of new microfirms (fewer than 10 employees at inception) in the manufacturing and service sectors in Navarra (one of the 52 provinces of Spain) carried out in 2005. Navarra’s economic development level (GDP, level of industrialization and unemployment rates) is at the European Union average. As in most countries and regions across the world, the vast majority of firms created in Navarra are

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1 This section draws heavily on the sample description made by Capelleras, J. L, Contín, I and Larraza, M; titled: *The determinants and growth effects of the use of pre-start public support by entrepreneurs*

2 Spanish provinces are classified as NUTS-3 in Eurostat. The Nomenclature of Territorial Units for Statistics, (NUTS, for the French nomenclature d'unités territoriales statistiques), is a geocode standard for referencing the administrative divisions of countries for statistical purposes within the European Union.
microfirms (Sanz, Contín and Larraza, 2009). Further, firms with fewer than 10 employees are the most common in the entire population of firms operating in Navarra and in Spain.

The data collection process was time consuming and organized in three main stages. First, in line with Karlsson and Honig in 2009 an initial list of the population of new ventures founded in 2000 and 2001 and still in business in 2005 was derived from official records of the Government of Navarra. In the absence of an official census specifically created to identify new firms created in Navarra, we had to combine official records created for different purposes to generate a comprehensive list of firms which met the criterion mentioned above. We combined the information contained in the Census of New Establishments and the Register for Tax on Economic Activities. As its name suggests, the former contains a list of all the establishments opened in Navarra in a given year. Firms have to specify whether or not the establishment is an existing firm or a new firm. Hence this group of firms comprises the population of establishments created in Navarra in a given year.

The Register for Tax on Economic Activities provides a list of the firms that have paid the required tax on economic activities in a certain year. Firms cannot be active if they do not pay this tax, which is payable for each of the activities they perform. Therefore, in order to identify new firms it was necessary to check whether or not each firm was already performing another activity or not; in other words, whether or not the firm was already active in business.

Combining both data sources we were able to obtain an initial list of firms founded in Navarra in 2000 and 2001. We observed that all the new firms derived from the Census of New Establishments were also present in the Register for Tax on Economic Activities. As common contractual agreements in the construction and transportation sectors might lead to entries in both data sources that are not really new firms, we removed those two sectors from our study. In particular, it is common for construction firms to create a new firm to take part in a specific construction project. In the transportation sector, self-employment is an alternative to the regular employment

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3 Their official names are respectively: Censo de Apertura de Centros de Trabajo and Altas del Impuesto de Actividades Económicas.
contract, being common in the case of self-employed workers who work entirely for a single firm. Our list was further refined by eliminating the firms that did not pay the tax on economic activities in 2005 or before. Because of the specific nature of this tax it is only paid by those firms that are or want to be active in business. Hence we ended up with an initial list of firms founded in Navarra in 2000 and 2001 that was still active in 2005.

Having compiled this list, in the second stage, telephone interviews were conducted with the firms’ founders. The interviews involved establishing whether they were effectively wholly new ventures started in 2000 and 2001, independent of outside control (not subsidiaries, franchises or part of larger enterprises) or just changes in their legal status, and were still in operation. A total of 485 firms were identified and constituted our target population for the third and final stage of our data collection process.

In the third stage face-to-face interviews were arranged with the firms’ founders. Respondents answered a structured interview questionnaire, administered at their normal place of work. A total of 224 of the entrepreneurs were successfully contacted and agreed to participate (46.2% response rate). Ten of the respondents had founded firms with more than 10 workers at inception; these observations were removed from the sample. As will be shown next, the rate of firm creation in the agricultural sector is much smaller than in other sectors. This fact was correctly captured in our sample with only two firms belonging to the agricultural sector. Because of their low significance we decided to remove agricultural firms from our analyses, resulting in a final sample of 212 entrepreneurs and their firms operating in the industry and service sectors. Its inclusion does not affect our results and conclusions. Sample size for multivariate analyses reduces to 192 new ventures (39.6% of our target population) as the information provided by 20 entrepreneurs did not allow us to measure at least one of the variables included in our multivariate models.
4.2. Variable measurement

Firm growth. We use this measure as a dependent variable in the growth equation. Growth is measured through the numbers of employees. We choose employment growth because it is an indicator of the likely resources available to the venture (Brüderl and Preisendörfer, 2000). Specifically we compute the natural logarithm of the ratio of the number of employees in the year 2005 to the number of employees at inception.

Type of entrepreneur. With the aim to create the four variables that define the entrepreneurs’ planning profile that we have created in the second section of the paper, we start by generating a specific variable called type of planner. This variable takes values: 1, 2, 3 or 4 depending on the type of entrepreneur we are referring to: non-planner, early-planners, late-planners or systematic planners respectively. In order to better identify the four types, and therefore, divide this variable into the four profiles, each type of entrepreneur is captured by a dummy variable, taking the value of 1 if the individual belongs to that particular type of entrepreneur and 0 otherwise. Entrepreneurs are identified as one category or another following the explanation from the section 2: Type 1 (non-planners) are those individuals who never develop a business plan. Type 2 (early-planners) makes a plan at inception but later never main. Type 3 (Late-planners) are characterised to not planning at inception but yes at established period. Types 4 (Systematic-planners) are viewed as those individuals who always develop a business plan.

Institutional pressures. We use two concepts to capture the institutional pressures behind to the entrepreneurs: education and public external support. Education is measured through two variables: higher education and the business related education at inception. The first one is a dummy variable that take value 1 if the founder has a university degree or higher and 0 otherwise. The second one is also a dummy variable what indicated whether the entrepreneur has received any other prior management education to create the firm (1) or not (0). Concerning to the second concept, we

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4 This variable measurement is almost the same explanation in terms of variable description to the paper of Capelleras, J. L, Contín, I and Larraza, M; titled: The determinants and growth effects of the use of pre-start public support by entrepreneurs due to it has been used the same database.
consider the public external support which is a dummy variable that takes the value 1 if the firm received public external support of any kind at inception and 0 otherwise.

**Economic environment.** In order to analyse the environment we use the start-up problems variable. It is a dummy variable which take value 1 if the new business suffered any problem at inception and 0 otherwise.

**Control variables.** The control variables used in the empirical analyses performed in the present study can be divided into individual and firm level control variables. As to the determinants at individual level, we first control for the founder’s age. We also include a dummy variable gender, which takes the value 1 if the founder was male and 0 female. Next, experience is measured by two independent but related variables which are years of experience in the sector (industrial experience) and the number of firms he or she had previously owned (entrepreneurial experience). Then, we identify whether or not the founder is a necessity entrepreneur through a dummy variable which takes the value 1 if the interviewee reports that being unemployed was one of the reasons for creating the firm and 0 otherwise. Finally, we analyze the prior family business exposure. Having entrepreneurs in the family may facilitate access to resources and provide experience and role models that may influence the individual’s planning behavior and even firm growth. Prior family business exposure is captured through a dummy variable that takes the value 1 when the founder has had an entrepreneur in the family, and 0 otherwise (Carr and Sequeira, 2007).

In the case of determinants at firm level, we consider the following variables. Firm size at inception indicates the number of employees when the firm was created. Manufacturing is a dummy variable that takes the value 1 if the firm belongs to the manufacturing sector and 0 otherwise. We also measure the firm’s legal status both at inception and currently. In particular, we distinguish, at inception and currently, between limited liability (value 1) and non-limited liability forms (value 0). Financial structure is a dummy variable that takes the value 1 if the main source of funds at inception was the entrepreneur’s personal savings and 0 otherwise. Family in the firm measures the proportion of family members in the firm’s workforce. We finally seek to capture the strategic activities of the firm. Following earlier research on the determinants of small business growth (Davidsson, Achtenhagen and Naldi, 2006 and
Gilbert, McDougall and Audretsch, 2006), we create another dummy variable to identify whether (value 1) or not (value 0) the firm has introduced new products (introduction of new products).

4.3. Methodological approach

This paper investigates the impact of entrepreneurs planning profile on firm growth. Given the categorical nature of the dependent variable used to test Hypotheses 1 and 2 we use a multinomial logit analysis which enables us to study and compare these four profiles and how each one is characterised. To avoid heteroskedasticity concerns, we use robust standard errors in all our multivariate estimations.

In order to better compare the differences on institutional pressures (higher education, business education at inception and public external support) and economic environment (start-up problems) across the planning profiles suggested in Hypotheses 1 and 2, we run our multinomial logit models two times, changing the reference categories. First we take the systematic-planner as a reference and then the non-planner entrepreneur. Since we have four planning profiles in total, in each run we estimate three equations. When we consider the systematic planner as the reference category we estimate a model for the early-planner, another for the late-planner and a third one for the non-planner. Likewise, when the non-planner becomes the reference category an equation corresponds to the late-planner, another one to the early-planner and another one to the systematic-planner. Each equation estimates whether or not institutional pressures and the economic environment are significant determinants of planning behaviour under consideration as compared with the reference category. Control variables in the multinomial logit models include: gender, age, education, years of experience, number of firms, necessity to be entrepreneur, family business exposure, manufacturing, introduction of new products, firm size at inception, legal status at inception, start-up problems and external support.

After this first categorisation of entrepreneurs’ profiles, our aim is to analyze the impact of the entrepreneurs’ planning profile on firm growth. In order to do so we run an OLS equation using firm growth as a dependent variable, and the different planning profiles as independent variables. Besides type of planners the model specification includes a
series of individual level control variables (like age, gender, experience, prior family business exposure, education and number of firms) that, according to previous literature, may influence firm growth. Further, this model includes firm level variables which also affect business growth like manufacturing, legal status, introduction of new products, financial structure, firm size and family in the firm.

5. RESULTS

Table 1 shows the mean and the standard deviations of each one of the variables described above, as well as the corresponding Pearson’s correlations.

The entrepreneur profile in our sample was a non-graduate 41 years old male, with 9.1 years of experience in the sector when the firm was started, and with family members who were also entrepreneurs. On the one hand when we analyse institutional pressures, we found that the 35.9% of the entrepreneurs had higher education (university degree) while the 21.8% had business related education at inception. In relation with the public external support, we found that 40.6% of entrepreneurs had the challenge to enjoy of that kind of public help to launch the new firm. On the other hand, considering the economic environment that we took in consideration in this study, it means start-up probems, we found that 67.3% of entrepreneurs had problems when they launched the new venture.

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The correlation coefficient between the three measures of institutional pressures (higher education, business related education at inception and public external support) is the following: between higher education and business related education is 0.354 (p<0.01). This result could mean that individuals who have had previous business formation seem to focus on company management before launching a company of their own. The correlation between higher education and public external support is 0.127 (p<0.05), so we can suggest that once there is a higher education formation the use of public support increase in 12.7%. Finally, the correlation between business related education and public external support is 0.013 (p<0.01) we do find that this correlation is really low and therefore we would not say that there is a strong cause effect force between having
business education and the propensity to need public external support to be able to launch the business.

As in the case of start-up problems we are going to correlate this single factor with each one of the institutional pressure in order to see how this important issue in all business creation play. Correlations are the following: start-up problems with higher education, start-up problems with business related education and finally start-up problems with public external support. Respectively the correlations are the following: 0.116, 0.040 and 0.022 all these three correlation coefficients lower to the significance level of p<0.05. Consequently, we would say that with these results we can consider perfectly as a two key factors of study institutional pressure and the economic environment as we design due to start-up problems are not correlated with institutional pressure factors and therefore we can analyse separately their influence.

The mean test suggest that the profile of our entrepreneur is not related with those who engage in business creation due to a necessity. Necessity entrepreneurs are the 6.4% of our sample. Related with the number of business founded, we can see that new product launching represents a 60.55% and the number of firms created in the past represents the 65.5% of entrepreneurs of the sample.

As noted above we now move to estimate multinomial logit models to determine characteristics of the different entrepreneur planning profiles. Firstly, we take as a reference the systematic-planner entrepreneur and secondly, the non-planner one. The idea is to compare the characteristics of those who plan and to be able to see if there are differences between the different planner profiles.

5.1 Systematic-planner as a reference

Taking the systematic-planner profile as a reference category, table 2 enables us to test our first two hypotheses. It allows us to check the differences between systematic-planners and the other three profiles. According to Hypothesis 1 entrepreneurs who are

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5 As a recall, entrepreneurs are classified as follow: type one are those who never plans, type two are those who plan at inception but not at established, type three are those who do not plan at inception but yes at established and finally type 4 are those who always plan.
not influenced by institutional pressures and the economic environment either, they will be not willing to design any written business plan. This hypothesis does not receive support. Higher education, business education at inception and public external support are a significant predictor of anyone of the profiles, so the results would encourage entrepreneurs to make a written business plan even they do not feel being influenced. So, Hypothesis 1 is not consistent due to entrepreneurs are influenced by all institutional pressures. Concerning Hypothesis 2, that proposed that entrepreneurs who are not influenced by institutional pressures but yes they are by the economic environment, they will willing to design at least once in time a written business plan. This hypothesis receive partial support due to actually early-planner entrepreneurs receive all support but contrary late-planner receives partial due to they are not influenced by the economic environment. However considering what we defined in the conceptual model, the adaptative planning profile (early-planner and late-planner), Hypothesis 2 in general receives partial support.

5.2 Non-planner as a reference

Table 3 summarizes the results of the multinomial logit and enables us to test our two last hypotheses using the non-planner profile as a reference category. It allows us to check differences between non-planners and the other three profiles. Consistent with the table 2, Hypothesis 2 receives partial support due to actually entrepreneurs are influenced by start-up problems but also by two of the three institutional pressures factors. We also have partial support concerning the Hypothesis 3 due to the systematic-planner profile receives support for two of the key factors of institutional pressures but it does not receive support for the economic environment.
5.3 The effect of planning profile on firm growth

In order to test the fourth and last hypothesis, we analyse if the entrepreneurs’ planning profiles positively influenced by institutional pressures and the economic environment, they are going to influence to company’s growth. In Table 4 it can be seen that the estimated coefficients for the late planner and systematic planner categories are both positive and significant. The coefficient for early planners is non-significant. This result provides partial support in favour of Hypothesis 4. It can be also observed that the coefficient for late planners is bigger than for systematic planners. Does it mean that planning only now is better for firm growth than planning consistently over time? To answer this question we run a Fischer test to study whether those two coefficients are significantly different from each other. The results of the test indicate that they are not significantly different from each other. Hence, we conclude that firm growth is positively influenced by systematic planning over time and current planning activities. Nevertheless, our results are in line with Burke, Fraser and Greene (2010) who argued that ventures using written business plans grow faster than those without it. As noted this evidence is consistent with the idea stated in our Hypothesis 4: Planning profiles influenced by institutional pressures and the economic environment, they are going to influence to company’s growth.

In the next section we discuss the implication of these results for the academia, the practitioner and the policymakers.

6. DISCUSSION AND CONCLUSIONS

This paper has characterised different entrepreneurs’ planning profiles based on their different approaches to planning over time. Then it has researched the relationship between such entrepreneurs’ planning profiles and firm’s growth. It was our contention that institutional pressures and economic environment will positively influence the likelihood to show a systematic planning behaviour, and that firms created and run by systematic-planners will show better growth rates.
6.1 Implications for the academia

In our analysis, we consider as a key factors of planning; institutional pressure factors (higher education, business related education and public external support). In this vein, we would like to clarify that a written business plan not necessarily means always planning conviction. There exist in the real life many situations that leads the entrepreneurs make a business plan. Growth expectations, the willingness to launch a new firm for those entrepreneurs apparently less able to do it, or simply, in order to enhance the creation of a new product (Burke, Fraser and Greene, 2010) are some of those reasons jointly with legitimacy and the obtaining of financial capital what perhaps weight more in the motivation of designing a business plan (Honig and Karlson, 2004)

Considering the aforementioned comments we do find three main findings emerge from our analyses. Firstly, we have documented a positive influence of institutional pressures like education and external public support on planning behaviour. The results suggest that education is the key human capital factor in terms of business plans development; it has influence in all kind of entrepreneurs’ planning profiles.

Secondly and related with prior work experience, even not considering this issue as a basis of the study, in line with the results that Carter, Gartner and Reynolds found in 1996, we have found that a previous history of entrepreneurship (number of firms created), and not necessarily experience in the sector, is what ultimately seems to determine the planning profile.

So, we are able to figure out that having prior experience in the industry (years of experience) does not mean that the entrepreneur has all the required information to carry out a business plan successfully. In harmony with this finding, Dew et al. (2009) found that entrepreneurs with more experience had less willingness to follow predictive strategies and therefore less interested in following a business plan. Commonly, the entrepreneur is going to plan if he or she finds the advantage of it. Taking as a reference the concepts like rigour, well development and environment analysis, we can see that education is in fact the biggest influence, not only for those who always plan but also for those who plan only sometimes. Therefore, since education seems to be the most important element, it is crucial that highly-educated people are also hired, since trusting
only a business plan, without the proper talent to guide it, is not a guarantee of success in many real-world enterprises.

Moreover, another concept from an institutional theory point of view is public external support. It is well known that once an entrepreneur receives a help from the state there is a list of requirement to enjoy it. Many times that requirement is based in designing a written business plan in order to justify that the business apparently has some future. So, we see that even if we consider institutional pressures from an education point of view or otherwise we take from a public external support one, institutional theory does affect directly and strongly to the entrepreneurs’ planning profiles development.

As a third and final main finding, we see that systematic and late planners influence positively firm growth while non-planners do not. Therefore, we can conclude that planning is highly beneficial. The reason why late-planners can be excellent in terms of growth may be related with the business growth potential. Sometimes there is a good firm with a very good potential growth and once the company gets the optimum level of business, then the entrepreneur decides to design a plan in order to control the operations and put the enterprise in the right track to growth. In addition the bigger effect of late planners observed in our analyses, while not significantly different from the one obtained for systematic planners, suggests that sometimes it may be beneficial not to tie to the courses of action plans develop. As noted by Perry (2001) planning can lead to a lack of flexibility. Therefore at some points in time, within a general approach towards systematic planning, firms may gain walking outside the predetermined track. It will be worth exploring in greater detail under which circumstances and how often firms should leave plans aside.

6.2 Implications for practitioners

According to the results of firm growth, we can conclude that the two profiles that affect firm growth positively are those who plan always and those who plan only now. The effects of those two planning profiles on growth are statistically similar and as a consequence we can conclude that planning is always a good alternative of success.
This suggests to entrepreneurs that there may be an optimal level of planning. Therefore they should take into account when to make a business plan and how much time and resources invest on it. The key would be spending the appropriate amount of resources and being as much efficient as possible.

6.3 Implications for policymakers

This study provides policymakers the impact of the different entrepreneurs’ profiles to firm growth over time. One possible implication may work in the way of clarifying whether business plan design affects directly in terms of business growth and how it is possible to predict the entrepreneur’s acts.

Concerning the results provided above, policymakers should take into account that systematic and late planning influences positively to firm growth. So, they should give an incentive to encourage entrepreneurs to get involve in increasing education as the way to be able to design good business plans systematically.

6.4 Limitations and future entrepreneurship research

The main limitation is related with the sample we have. Because the cultural environment of the country is constantly changing in terms of performance and entrepreneurs’ profiles, the representative sample will probably give us some biased results, which might not be validly extrapolated into the future. Some future studies should emphasise this issue because our universal explanation can be limited due to our research context. Another limitation of our analysis is that the nature of our data set has leaded us to analyze firm growth. Interesting insights could be gained studying the impact of planning and different planning profiles in business survival.

We should also consider those entrepreneurs who only plan at inception because they are obligated to do so by an institutional or banking requirement. Also an interesting further research line would emphasise the regional and contextual differences in terms of business behaviour.
In conclusion, business plans can change over time and we can observe a significant variation in the way entrepreneurs approach planning activities over time. Rather than being the result of a random process this behaviour seems to be determined by institutional theory point of view, being education level an external public support a significant determinant of it with a happy ending relating positively planning with growth.
REFERENCES


Figure 1
Defining profiles

<table>
<thead>
<tr>
<th></th>
<th>Institutional pressures</th>
<th>Economic environment</th>
</tr>
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<tbody>
<tr>
<td><strong>Non-planner</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Early-planner and Late-planner</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Systematic-planner</strong></td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>
### Figure 2
Planning profiles

#### Planned at inception? (2000-01)

<table>
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<tr>
<th>Plans now? (2005)</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Yes</td>
<td>Systematic-Planner</td>
<td>Late-planner</td>
</tr>
<tr>
<td>No</td>
<td>Early-planner</td>
<td>Non-planner</td>
</tr>
</tbody>
</table>
Figure 3

Conceptual model and hypotheses

**KEY FACTORS**

Institutional pressures:
- Higher Education
- Business education at inception
- Public external support

Economic environment:
- Start-up problems

Planning

Indifference planning profile
- H1
  - Non-planner

Adaptative planning profile
- H2
  - Early-planner
  - Late-planner

Seeker planning profile
- H3
  - Systematic-planner

Company’s growth
- H4
Table 1

Mean, Standard Deviation and Pearson’s Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std Dev</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tr>
<td>1. Gender</td>
<td>0.704</td>
<td>0.457</td>
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<td></td>
<td></td>
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<td>2. Age</td>
<td>41.327</td>
<td>9.014</td>
<td>0.128</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Higher education</td>
<td>0.359</td>
<td>0.480</td>
<td>0.041</td>
<td>-0.050</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Business related education at inception</td>
<td>0.218</td>
<td>0.414</td>
<td>0.086</td>
<td>0.058</td>
<td>-0.354</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. Years of experience</td>
<td>1.415</td>
<td>9.319</td>
<td>0.225</td>
<td>0.442</td>
<td>-0.074</td>
<td>0.011</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
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<td>6. Number of firms</td>
<td>0.655</td>
<td>1.255</td>
<td>0.162</td>
<td>0.317</td>
<td>-0.016</td>
<td>0.058</td>
<td>0.243</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Necessity entrepreneur</td>
<td>0.064</td>
<td>0.245</td>
<td>-0.117</td>
<td>-0.021</td>
<td>-0.026</td>
<td>-0.020</td>
<td>-0.107</td>
<td>-0.059</td>
<td>1.000</td>
<td></td>
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</tr>
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<td>8. Family business exposure</td>
<td>0.585</td>
<td>0.493</td>
<td>-0.079</td>
<td>-0.056</td>
<td>0.141</td>
<td>0.160</td>
<td>-0.010</td>
<td>0.010</td>
<td>-0.114</td>
<td>1.000</td>
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<tr>
<td>9. Manufacturing</td>
<td>0.227</td>
<td>0.419</td>
<td>0.117</td>
<td>0.136</td>
<td>-0.015</td>
<td>-0.005</td>
<td>0.055</td>
<td>-0.021</td>
<td>0.013</td>
<td>-0.003</td>
<td>1.000</td>
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<tr>
<td>10. Introduction of new products</td>
<td>0.605</td>
<td>0.489</td>
<td>0.115</td>
<td>-0.091</td>
<td>0.252</td>
<td>0.128</td>
<td>-0.043</td>
<td>-0.055</td>
<td>-0.089</td>
<td>0.039</td>
<td>-0.029</td>
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<td>11. Firm size at inception</td>
<td>0.954</td>
<td>0.778</td>
<td>0.098</td>
<td>0.117</td>
<td>0.046</td>
<td>0.052</td>
<td>0.178</td>
<td>0.224</td>
<td>-0.006</td>
<td>0.056</td>
<td>0.190</td>
</tr>
<tr>
<td>12. Legal status at inception</td>
<td>0.357</td>
<td>0.480</td>
<td>-0.276</td>
<td>-0.098</td>
<td>-0.247</td>
<td>-0.135</td>
<td>-0.021</td>
<td>-0.154</td>
<td>-0.025</td>
<td>-0.043</td>
<td>-0.246</td>
</tr>
<tr>
<td>13. Public external support</td>
<td>0.406</td>
<td>0.492</td>
<td>-0.195</td>
<td>-0.183</td>
<td>0.127</td>
<td>0.013</td>
<td>-0.246</td>
<td>-0.163</td>
<td>0.148</td>
<td>-0.136</td>
<td>0.093</td>
</tr>
<tr>
<td>14. Start-up problems</td>
<td>0.673</td>
<td>0.469</td>
<td>0.033</td>
<td>-0.017</td>
<td>0.116</td>
<td>0.040</td>
<td>-0.031</td>
<td>0.067</td>
<td>0.008</td>
<td>0.105</td>
<td>0.154</td>
</tr>
<tr>
<td>15. Early-planner</td>
<td>0.157</td>
<td>0.365</td>
<td>-0.043</td>
<td>0.053</td>
<td>0.043</td>
<td>0.042</td>
<td>0.036</td>
<td>0.115</td>
<td>0.028</td>
<td>-0.036</td>
<td>-0.044</td>
</tr>
<tr>
<td>16. Late-planner</td>
<td>0.133</td>
<td>0.340</td>
<td>0.113</td>
<td>-0.034</td>
<td>0.153</td>
<td>0.026</td>
<td>0.038</td>
<td>-0.044</td>
<td>-0.100</td>
<td>0.182</td>
<td>0.075</td>
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<tr>
<td>17. Systematic-planner</td>
<td>0.186</td>
<td>0.390</td>
<td>0.129</td>
<td>0.148</td>
<td>0.265</td>
<td>0.229</td>
<td>0.013</td>
<td>0.229</td>
<td>0.008</td>
<td>0.016</td>
<td>-0.031</td>
</tr>
<tr>
<td>18. Non-planner</td>
<td>0.522</td>
<td>0.500</td>
<td>-0.145</td>
<td>-0.133</td>
<td>-0.341</td>
<td>-0.226</td>
<td>-0.063</td>
<td>-0.234</td>
<td>0.040</td>
<td>-0.110</td>
<td>0.005</td>
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<tr>
<td>19. Firm growth</td>
<td>0.455</td>
<td>0.625</td>
<td>0.105</td>
<td>-0.081</td>
<td>0.208</td>
<td>0.028</td>
<td>-0.005</td>
<td>-0.014</td>
<td>-0.068</td>
<td>-0.013</td>
<td>0.211</td>
</tr>
</tbody>
</table>

*Significance levels are based on a two-tailed test. For correlations equal or above 0.140 in absolute value, p<0.05. For correlations equal or above 0.175 in absolute value, p<0.01*
## Table 2
Multinomial Logit models for the determinants of entrepreneur’s planning profile (systematic-planner as reference category) a

<table>
<thead>
<tr>
<th>ENTREPRENEUR’S PROFILES</th>
<th>Non-planner</th>
<th>Early-planner</th>
<th>Late-planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.293 (.601)</td>
<td>-0.643 (.672)</td>
<td>1.394 (.852)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.085 (.039) **</td>
<td>-0.034 (.04)</td>
<td>-0.095 (.04) **</td>
</tr>
<tr>
<td>Higher education</td>
<td>-1.413 (.544) **</td>
<td>-0.381 (.642)</td>
<td>-0.105 (.641)</td>
</tr>
<tr>
<td>Business related education at inception</td>
<td>-0.592 (.634) *</td>
<td>-0.588 (.738)</td>
<td>-0.7 (.818)</td>
</tr>
<tr>
<td>Years of experience</td>
<td>0.035 (.029)</td>
<td>0.049 (.031)</td>
<td>0.065 (.036) *</td>
</tr>
<tr>
<td>Number of firms</td>
<td>-0.551 (.286) *</td>
<td>-0.047 (.244)</td>
<td>-0.425 (.264)</td>
</tr>
<tr>
<td>Necessity to be entrepreneur</td>
<td>0.463 (.752)</td>
<td>0.084 (.1.149)</td>
<td>-32.893 (.767) ***</td>
</tr>
<tr>
<td>Family business exposure</td>
<td>-0.404 (.555)</td>
<td>-0.152 (.638)</td>
<td>1.02 (.683)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.334 (.578) **</td>
<td>0.227 (.791)</td>
<td>1.547 (.669) **</td>
</tr>
<tr>
<td>Introduction of new products</td>
<td>-1.195 (.699) *</td>
<td>-1.018 (.716)</td>
<td>-0.368 (.808)</td>
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<tr>
<td>Firm size at inception</td>
<td>-1.032 (.441) **</td>
<td>-0.851 (.486) *</td>
<td>-0.337 (.52)</td>
</tr>
<tr>
<td>Legal status at inception</td>
<td>1.857 (.686) **</td>
<td>1.171 (.759)</td>
<td>0.991 (.767)</td>
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<td>Start-up problems</td>
<td>-0.759 (.541)</td>
<td>-1.19 (.623) *</td>
<td>0.875 (.766)</td>
</tr>
<tr>
<td>Public external support</td>
<td>-1.204 (.637) *</td>
<td>1.06 (.742)</td>
<td>-0.628 (.656)</td>
</tr>
</tbody>
</table>

a Table reports non-standardised β coefficients. Robust standard errors are in parentheses. Significance levels are based on a two-tailed test for all tests and coefficients. * p< 0.10, ** p< 0.05, *** p< 0.001
Table 3
Multinomial Logit models for the determinants of entrepreneur’s planning profile (non-planner as reference category) a

<table>
<thead>
<tr>
<th>ENTREPRENEUR’S PROFILES</th>
<th>Early-planner</th>
<th>Late-planner</th>
<th>Systematic-planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.35 (0.529)</td>
<td>1.687 (0.784) **</td>
<td>0.293 (0.601)</td>
</tr>
<tr>
<td>Age</td>
<td>0.051 (0.029) *</td>
<td>-0.01 (0.034)</td>
<td>0.085 (0.039) **</td>
</tr>
<tr>
<td>Higher education</td>
<td>1.03 (0.505) **</td>
<td>1.308 (0.552) **</td>
<td>1.413 (0.544) **</td>
</tr>
<tr>
<td>Business related education at inception</td>
<td>0.004 (0.591)</td>
<td>-0.107 (0.777)</td>
<td>0.592 (0.634)</td>
</tr>
<tr>
<td>Years of experience</td>
<td>0.013 (0.023)</td>
<td>0.029 (0.326)</td>
<td>-0.035 (0.029)</td>
</tr>
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<td>Number of firms</td>
<td>0.503 (0.24) **</td>
<td>0.126 (0.283)</td>
<td>0.551 (0.286) *</td>
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<tr>
<td>Necessity to be entrepreneur</td>
<td>-0.379 (0.928)</td>
<td>-32.357 (0.746) ***</td>
<td>-0.463 (0.752)</td>
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<tr>
<td>Family business exposure</td>
<td>0.251 (0.516)</td>
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<td>0.404 (0.555)</td>
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<td>Manufacturing</td>
<td>-1.107 (0.68)</td>
<td>0.212 (0.52)</td>
<td>-1.334 (0.578) **</td>
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<td>Introduction of new products</td>
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<tr>
<td>Firm size at inception</td>
<td>0.181 (0.39)</td>
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<td>1.032 (0.441) **</td>
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<td>Legal status at inception</td>
<td>-0.686 (0.53)</td>
<td>-0.866 (0.568)</td>
<td>-1.857 (0.686) **</td>
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<tr>
<td>Start-up problems</td>
<td>-0.43 (0.486)</td>
<td>1.634 (0.704) **</td>
<td>0.759 (0.541)</td>
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<tr>
<td>Public external support</td>
<td>2.265 (0.613) ***</td>
<td>0.576 (0.526)</td>
<td>1.204 (0.637) *</td>
</tr>
</tbody>
</table>

a Table reports non-standardised β coefficients. Robust standard errors are in parentheses. Significance levels are based on a two-tailed test for all tests and coefficients. * p< 0.10, ** p< 0.05, *** p< 0.001
Table 4

OLS model for the effect of entrepreneurs’ planning profiles on firm growth

<table>
<thead>
<tr>
<th></th>
<th>FIRM GROWTH</th>
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<tbody>
<tr>
<td>Gender</td>
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</tr>
<tr>
<td>Age</td>
<td>-0.011 (0.005) **</td>
</tr>
<tr>
<td>Higher education</td>
<td>0.069 (0.098)</td>
</tr>
<tr>
<td>Business related education at inception</td>
<td>-0.099 (0.115)</td>
</tr>
<tr>
<td>Years of experience</td>
<td>0.004 (0.005)</td>
</tr>
<tr>
<td>Number of firms</td>
<td>-0.005 (0.039)</td>
</tr>
<tr>
<td>Family business exposure</td>
<td>-0.090 (0.088)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.233 (0.108) **</td>
</tr>
<tr>
<td>Legal status now</td>
<td>-0.267 (0.105) **</td>
</tr>
<tr>
<td>Introduction of new products</td>
<td>0.134 (0.089)</td>
</tr>
<tr>
<td>Financial structure</td>
<td>-0.045 (0.091)</td>
</tr>
<tr>
<td>Family in the firm</td>
<td>-0.275 (0.219)</td>
</tr>
<tr>
<td>Firm size at inception</td>
<td>-0.191 (0.072) **</td>
</tr>
<tr>
<td>Early-planner</td>
<td>0.089 (0.127)</td>
</tr>
<tr>
<td>Late-planner</td>
<td>0.327 (0.136) **</td>
</tr>
<tr>
<td>Systematic planner</td>
<td>0.252 (0.133) *</td>
</tr>
</tbody>
</table>

* Table reports non-standardised β coefficients. Robust standard errors are in parentheses. Significance levels are based on a two-tailed test for all tests and coefficients. * p< 0.10, ** p< 0.05