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Entrepreneurial intention in the time of crisis: a field study

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Abstract

Does a macro-economic outlook of protracted economic recession affect the entrepreneurial intention of university students? If so, how? Does this effect relate more to the view of self-employment as a possible carrier option, or to the expected likelihood of succeeding as an entrepreneur? Is this effect differentiated depending on the entrepreneurial motivation of students (i.e. necessity-based vs. opportunity-based orientation)? Are there institutional and contextual factors that may help sustaining entrepreneurial intention in these situations? To answer these questions we interview 3684 students enrolled in 12 different faculties at the University of Parma. We find that the crisis impacts negatively on student? entrepreneurial intention. While for opportunity-based potential entrepreneurs this effect concerns both the propensity towards entrepreneurship and the expected likelihood of succeeding as an entrepreneur, for necessity-based entrepreneurs it is limited to the latter. Moreover, we find that for Italian university students neither family support nor economic institutions are relevant in explaining entrepreneurial intentions. On the contrary, the university is perceived as

a key supporting institution. The implications of these results for the future supply of entrepreneurial talents are discussed.

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Abstract

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Key Words: entrepreneurial intention; university students; Italy; economic crisis.

JEL Code: M13; J24

1. Introduction

Entrepreneurship is an important source of economic growth (Audretsch et al., 2006; Mitra, 2008; Liñán *et al.*, 2011) and social change (Baumol, 1968; Acs *et al.*, 1999). Entrepreneurial activities not only boost technological innovation, but they also provide employment opportunities and increase competitiveness (Zahra, 1999; Thurik and Wennekers, 2004). According to Romer (1994), entrepreneurial activities are important determinants of economic development in the long term. Especially during periods of protracted economic recession, the creation of new businesses generates new jobs, spreads innovation and helps to support the local economy (Dana, 2004; Engle *et al.*, 2010; Ahmed *et al.*, 2010).

Nevertheless, the current supply of entrepreneurial activities is relatively modest (Liñán *et al.*, 2011). The available evidence for OECD countries suggests that in the early 2000s, less than 10% of the adult population was engaged in launching a new business (Nolan, 2003). In addition, during the recent economic crisis the rate of entrepreneurial supply has decreased in the European countries that were most severely hit by the downturn. According to GEM's estimate (Amorós and Bosma, 2014), for instance, the rate of nascent entrepreneurship in Italy, Greece and Spain has decreased on average by 20% during the period 2008-2010, while it has remained positive (or at least constant) in France, Germany and UK. This result suggests that the lack of entrepreneurial supply could be an obstacle to the full recovery of European economies.

Based on this evidence, this paper investigates the impact of the economic crisis on the entrepreneurial intentions of university students. The choice to focus on young and highly educated potential entrepreneurs stems from two reasons. The first one is the observation that entrepreneurs' education is generally associated with higher levels of entrepreneurial skills (Lucas, 1978; Van Praag and Cramer, 2001), higher rates of firms' hiring (Galloway and Brown, 2002) and better firm performance (Van der Sluis *et al.*, 2008). In this sense university students represent the most promising segment of the future entrepreneurial supply and their reaction to the current crisis may have interesting policy implications. Secondly, while extensive research has been conducted on

entrepreneurship and economic development on one hand (Wennekers et al., 2005; Acs, 2006) and the determinants of entrepreneurial intentions on the other (Autio et al., 2001; Ahmed et al., 2010; Engle et al., 2010; Franco et al., 2010; Giacomini et al., 2011; Liñán et al., 2011; Ismail et al., 2009; Lee et al., 2005; Li, 2007; Wang and Wong, 2004; Nyock Ilouga et al., 2014), relatively little (to the best of our knowledge) has been written on the relationship between economic crisis and entrepreneurial intentions of university students. The present paper aims at filling such gap.

In particular, the questions that we ask are the following: does a macro-economic outlook of prolonged economic recession affect the entrepreneurial intentions of university students? If so, how? Does this effect relate more to the view of self-employment as a possible career option, or to the expected likelihood of succeeding as an entrepreneur? Are there institutional and contextual factors that may help sustaining entrepreneurial intentions in these situations?

To answer these questions we interviewed a sample of 3684 students at the University of Parma (Italy). We choose to run this study in Parma because it is located in Italy, which has been severely hit by the recent economic crisis (Pianta, 2012). Moreover, Parma belongs to the Emilia-Romagna region, which is one of Italian regions with the highest number of active firms per inhabitants (ISTAT, 2015a, 2015b). Finally, the University of Parma attracts students coming from a relatively large number of Italian provinces (in our sample 102 out of 110), which ensures high degree of heterogeneity in geographic origins.

For each participant in our study, we collect information on individual entrepreneurial intentions. Differently from previous studies, we distinguish between two dimensions of intentions: on one hand we consider the extent to which a person perceives self-employment as a possible career option, which we call the *propensity* to start a new business; on the other hand we measure the person's perceived probability of starting an entrepreneurial venture in the future, which we call the *perceived likelihood* to become an entrepreneur. We keep these two dimensions distinguished because we believe they capture distinct dimensions of entrepreneurial intentions. In addition, we gather information on the psychological and demographic factors that usually correlate with

entrepreneurial intention, as well as data on both the perceived entrepreneurial support offered by economic and social institutions (e.g., family, university, business associations) and the perceived strength of the economic crisis.

On the basis of the collected data, we pursue three main research objectives. First of all, we want to study the impact of the economic crisis on the entrepreneurial intentions of university students, distinguishing between *propensity* to start a new business (i.e. degree of interest in entrepreneurship) and *perceived likelihood* of becoming an entrepreneur (i.e. probability to succeed). The distinction between these two dimensions will help us to better characterize the impact of the economic crisis, offering useful insights for policy design.

The second research objective that we pursue is to study the contribution offered by economic and social institutions, such as family, university and business associations, in facilitating and supporting the entrepreneurial intention of university students. An extensive literature (Piore and Sabel, 1984; Aldrich and Cliff, 2003; Guerrieri and Petrobelli, 2004; Bianco et al., 2012) suggests that economic and social institutions are important drivers of entrepreneurship, in that they facilitate the identification and exploitation of economic opportunities. During an economic depression this role is even strengthened, because of the paucity of business opportunities. Therefore, we intend to check if and how, during periods of economic recession, economic and social institutions affect the entrepreneurial intentions of young and highly educated adults.

Finally, our third and last research objective consists of verifying whether the role played by the crisis and by economic and social institutions varies depending on the entrepreneurial motives that drive students. On this respect the literature usually distinguishes between two main types of potential entrepreneurs: opportunity-based and necessity-based. The former associates the creation of a new venture with the exploitation of a business opportunity. The latter sees entrepreneurship as the last resort. These two types of potential entrepreneurs can react very differently to protracted periods of economic recession and rising unemployment, with important consequences for the

supply of future entrepreneurial talents. On this basis, our third and last objective is to investigate whether this different reaction effectively exists and what implications it could possibly have.

We obtain three main results. Firstly, while for opportunity-based entrepreneurs the perception of the current economic crisis reduces both the *propensity* to start a new business and the *perceived likelihood* to succeed, in general the crisis reduces only the *perceived likelihood* of succeeding as an entrepreneur. Such a result suggests that Italy's ongoing economic recession may induce a significant change in the composition of entrepreneurial supply, with opportunity-based entrepreneurs reducing in relative number. Secondly, for Italian university students the support of family and business associations is perceived as weak and irrelevant in explaining both the propensity and the perceived likelihood to start a new venture. Finally, the university is perceived as an institution that plays a key role in supporting entrepreneurial intentions. This is true in terms of both propensity to start a new business and perceived likelihood to succeed. The combination of these results has far reaching implications for design of education policy to favor entrepreneurship.

The remaining parts of the paper are organized as follows. Section 2 discusses the literature and defines our research hypotheses. Section 3 describes the research methodology. Section 4 presents the results. Section 5 discusses our main findings and concludes.

2. Literature review and hypotheses

2.1 Entrepreneurial intention

The attitude towards entrepreneurship of university students is not an easy construct to study. Entrepreneurial intention refers to a choice that an individual is not called to make in the present, but possibly in the non-immediate future, often after many years and, in most cases, at the end of his or her studies. Nevertheless, research on entrepreneurship has developed models linking the intention to implement a specific course of action in the present with its actual realization in the future. In the majority of contributions, the key reference is the concept of *entrepreneurial intention*, namely the 'self-acknowledged conviction by a person that they intend to set up a new

business venture and consciously plan to do so at some point in the future' (Thompson, 2009:676). As a background theory, this literature refers to two highly complementary models of individual behavior: Ajzen's (1991) theory of planned behavior and Shapero and Sokol's (1982) model of the entrepreneurial event. The first model is useful to explain how a particular orientation or a specific intention can be seen as the antecedent of an action. The second model was developed as an application of Ajzen's model to entrepreneurial behavior.

According to Lans et al. (2010), the most interesting aspect of Ajzen's theory is that intentions are seen as effective predictors of individual behavior in a specific context. The analysis of intentions tells us something about how strongly individuals will pursue certain goals and how hard they will adapt their conduct in order to achieve a defined objective. The basic assumption of this model is that the stronger the intention to implement a given action the higher the probability that such action will be fully implemented (Ajzen, 1991). Autio et al. (1997), Krueger et al. (2000) and Schwarz et al. (2009) (among others) believe that entrepreneurship is the typical example of *planned behavior* to which the intentional model can be properly applied. This model proved relatively robust also in empirical terms (Schwarz et al., 2009): entrepreneurial intention tends in fact to be an adequate proxy for the effective choice of starting a new business (Krueger et al., 2000; Katz, 1988; Reynolds, 1997).

The predictive power of entrepreneurial intention has attracted the attention of several scholars and policy makers. If intention, as opposed to beliefs, personality or demographics, is the single best predictor of entrepreneurial behavior, the analysis of its determinants can indeed provide interesting insights on the nature and composition of entrepreneurial supply. On this ground a growing number of studies have recently investigated the sources of entrepreneurial intention at both the individual and contextual level. In the following sections we briefly review some of these studies.

2.2 Demographic, psychological and experiential factors

The first set of variables that has been traditionally associated with the decision to start a new business consists of individual-level factors such as demographic and psychological traits. Several contributions, in particular, show entrepreneurial intention to be stronger for male than for female (e.g., Díaz-García and Jiménez-Moreno, 2010). At the psychological level, entrepreneurial intention tends to be influenced by factors such as self-efficacy, the quest for autonomy, and the orientation toward leadership and risk (Raijman , 2001; Schwarz et al., 2009; Tung et al., 2011). Douglas and Shepherd (2002) show that individuals with a strong inclination in favor of autonomy and risk-taking are particularly oriented towards entrepreneurial choices. Autio et al. (1997) find a strong and positive relationship between the search for autonomy and entrepreneurial intention. In that study, the search for autonomy is considered to be in conjunction with self-fulfillment and achievement motivations. Along these lines, several studies suggest that individuals with strong confidence in their abilities (Krueger et al., 2000; Zhao et al., 2005; Peterman and Kennedy, 2003; Segal et al., 2002; Pruett et al., 2009; Turker and Selcuk, 2009; Lee et al., 2011) and high self-efficacy (Krueger et al., 2000; Markman et al., 2002; Zhao et al., 2005; Lans et al., 2010) have a high propensity to become entrepreneurs.

In addition to purely psychological factors, other individual-level variables associated with work experience, competence acquisition and role models can be important sources of entrepreneurial intention. In some contributions, work experience is found to be an important antecedent for the creation of a new business (Carter and Collinson, 1999; Galloway and Brown, 2002). This effect seems to be particularly strong for highly educated young adults (Lans et al, 2010; Scott and Twomey, 1988).¹

These results, however should be taken with caution. The mechanism through which work experience shapes entrepreneurial intention remains indeed uncertain, especially in young adults (Davidsson, 2006. Lans et al, 2010). While previous work experience may result in the acquisition of knowledge that can facilitate the decision to create one's own business, other interpretations

¹ An exception, however, is Sandhu et al. (2011), according to whom there would be no significant relationship between work experience and self-employment.

cannot be excluded. Accumulating work experience before completing undergraduate studies may also be associated with particular individual characteristics, such as proactivity, curiosity, and pragmatism. These factors, instead of the accumulated knowledge, could be the true antecedents of high entrepreneurial intention.

Similar to work experience, individual skills and competences can also significantly influence the intention to form a new firm (Dickson et al., 2008). Skills and competences (both technical and organizational) are seen as resources that stimulate creativity and ability to identify opportunities (Kor et al., 2007; Park, 2005) and, therefore, as factors that can encourage the creation of (or at least increase the chances of starting) a new business (Liñán et al., 2011). Aldrich and Martinez (2001) state that the foundation of a new firm requires a certain amount of competences that can be obtained by formal education, previous experience, or informal training. With specific reference to entrepreneurial intention Autio et al. (2001) show that the perceived and actual competencies of the individual are indeed significant predictors of the students' propensity towards entrepreneurship. Fini et al. (2009) and Izquierdo and Buelens (2011) find similar results.

Finally, entrepreneurial intention is also related to the type of exchanges that develop within the family and network of friends. In this sense, entrepreneurial intention is strongly influenced by the exposure to the business experiences of family members or persons with stable relations to the household of origin (Ahmed et al., 2010). Having a family member (or close friend) who is an entrepreneur may reassure a young adult about the feasibility of self-employment and facilitate the identification with 'role models' (Aizzat et al., 2009; Van Auken et al., 2006; Tung et al., 2011). A significant number of empirical studies, in fact, show that having a parent or family member who is an entrepreneur significantly increases the propensity of individuals to pursue the same career (Ahmed et al., 2010; Scherer et al., 1989; Raijman, 2001).

2.3 Perceived contextual support

In addition to psychological and experiential factors the entrepreneurial intention of university students is affected also by contextual factors. Prospective entrepreneurs, in fact, do not take decision in a vacuum, but instead they are influenced by the context in which they operate (Shane, 2003). Several studies have therefore investigated the role that contextual variables play in shaping entrepreneurial intentions, placing particular emphasis on the support offered by social and economic institutions (Dohse and Walter, 2012). In particular, three main types of institution have received the widest attention, such as: family, university, and economic institutions including banks and business associations.

The perceived support provided by family and friends seems to markedly affect entrepreneurial intention (Taormina and Lao, 2007; Sandhu et al., 2011). Alongside role models, in fact, the network of family members and friends can supply active economic and emotional backing to the new entrepreneur. Pruett et al. (2009) report that the decision to start a new business can induce different reactions from family members and friends. The intensity of their support can positively influence the students' propensity to create a new business. The family can also be a source of information on economic opportunities and support in terms of financial resources and work (Aldrich and Cliff, 2003; Tung et al., 2011). Altogether, the available evidence suggests that the expectation of family support positively affects the intention to start a business.²

In addition, the literature on institutional barriers is also particularly rich. Institutional barriers refer to both informal and formal mechanisms that hinder the creation of new business (Krueger and Brazeal, 1994). Informal mechanisms consist of norms and rules prevailing within a population of potential entrepreneurs, while formal mechanisms include regulation tools, codes and lack of explicit support on the side of public and private organizations (Sandhu et al., 2011). Furthermore, one of the main institutional barriers is often associated with limited access to credit. There is broad evidence concerning the difficulties faced by firms during the startup phase to

² Different findings are obtained, instead, by Turker and Selcuk (2009): in a study on university students in Turkey, they came to the conclusion that the support provided by family and friends is not sufficient to significantly change the entrepreneurial intention of individuals.

collect funds and relate with lenders (Shapero and Sokol, 1982, David and June, 2001). The literature that studies the behavior of potential entrepreneurs has reported that the collection of financial resources is perceived as the most serious general obstacle to the launching of a new business (Blanchflower and Oswald, 1998). Similar results have been found also with specific reference to students' entrepreneurial intention (Henderson and Robertson, 2000, Robertson et al., 2003; Li, 2007).

Similarly to financial support, many studies (e.g., Veciana et al., 2005; Shapero and Sokol, 1982) emphasize the importance of other forms of institutional support, such as specialist advice and training. Sandhu et al. (2011) conclude that these types of economic institutions affect the entrepreneurial intention of young adults and that the lower entrepreneurial intention recorded in some developing countries could be attributed to lack of adequate institutional support. In Turker and Selcuk (2009), the analysis is further extended to consider direct and indirect forms of structural support. The support provided by public and private organizations as well as corporate law was examined. The authors show that the factors capable of synthesizing the 'perceived structural support' have a significant influence on the propensity towards entrepreneurship.

In addition to family and economic institutions, universities can also be an important source of support for young entrepreneurs. As we discussed above, skills, education and work experience strengthen entrepreneurial competencies and increase the likelihood that new firms show a positive performance (Van der Sluis et al., 2008). Not surprisingly, many studies find a positive relationship between the quality of training opportunities (both inside and outside university) and the entrepreneurial intention of young adults (Peterman and Kennedy, 2003). According to Dyer (1994), the provision of courses on entrepreneurship raises the confidence of potential entrepreneurs about the feasibility of their project. Krueger and Brazeal (1994) share the same view and emphasize the importance of entrepreneurial education to foster self-efficacy. Franke and Lüthje (2004) suggest that the university environment significantly contributes to the view that students have of an entrepreneurial career and affects their orientation towards launching a new

business. Schwarz et al. (2009), Autio et al. (1997), Chen et al. (1998), Turker and Selcuk (2009) and Tung et al. (2011) provide further evidence on the role played by the university context in sustaining entrepreneurial intentions. In all these contributions the university is seen as a social environment that not only contribute to the acquisition of formal competences, but it also affects individual creativity, spirit of independence and autonomy.

2.4 The economic crisis

In this paper we wish to make a step further with respect to the previous literature and study the impact of the economic crisis on entrepreneurial intention. Several studies suggest that the decision to start a new business is not independent from the conditions of the economic environment in which the new organization will operate (Franke and Lüthje, 2003, Turker and Selcuk, 2009). Schwarz et al. (2009) notice that the relevance of such conditions may actually explain why the relationship between variables attributed to the individual and entrepreneurial intention is not a direct one. From this perspective, the attitude toward entrepreneurship cannot be assessed without taking into consideration the type and quality of opportunities supplied by the markets and the economy. Faced with these opportunities, the potential entrepreneur collects and processes a set of information that translates into advantages and obstacles to the realization of his project (Shapero and Sokol, 1982; Shepherd and De Tienne, 2005). Information, for instance, concerns the expected return on the investment, the average profitability of existing businesses and the level of barriers to entry. Depending on such information, then, an environment can be perceived as more or less favorable to starting a new venture.

During a crisis the features of the economic environment inevitably worsen and so does the quality of business opportunities. As a result one should expect the existence of a negative impact on the actual rate of new firms creation. Klapper and Love (2011), for instance, show that with the onset of the current financial crisis, new business creation slowed down, first in developed countries and then in the rest of the world, paralleling the spread of the crisis. They also find that

more developed countries as well as countries that were more severely affected by the crisis have experienced sharper declines in new business registrations during the crisis. The main explanation of the authors is related to the financial constraints imposed by the credit crunch, and the related shrinking of business opportunities. Paulson and Townsend (2005) provide a similar interpretation for the reduced rate of firm creation during the Thai financial crisis of the mid-1990s.

In addition to negative effects, however, periods of economic crisis can also boost entrepreneurial energies. When unemployment is high and rising, in fact, the choice to become an entrepreneur depends also on the extent to which self-employment is perceived as a viable second-best alternative to unemployment. On this issue a relatively rich literature discusses the notions of “opportunity-based” and “necessity-based” entrepreneur and suggests that in contexts of greater economic difficulties the latter tends to be predominant with respect to the former (Reynolds et al., 2005; Acs, 2006). To support this view Wennekers et al. (2005) find the existence of a U-shaped relationship between a country’s rate of entrepreneurial dynamics and its level of economic development and that in less developed countries many nascent entrepreneurs engage in entrepreneurial activity out of necessity. Using a similar framework Paniagua and Sapena (2015) argue that during an economic recession two main counteractive factors affect entrepreneurship: on one hand the lack of demand coupled with low credit availability reduces the prospects for new businesses; on the other, job losses and the prospect of unemployment may lead many entrepreneurs to undertake new projects. Using data on the recent financial crisis the authors provide a test of these two counteractive effects and show that the former tends to be predominant with respect to the latter.

By applying the above arguments to the specific case of students’ entrepreneurial intention we derive a twofold prediction. At the general level we expect the current economic crisis to have a negative impact on entrepreneurial intention. The reason is that the economic crisis worsens students’ expectations concerning the rate of new business opportunities, the level of entry barrier and the profitability of existing businesses. All these effects combined should make the opening of

a new business venture less attractive as career option. At the same, once we distinguish between different types of potential entrepreneurs, we expect this effect to be stronger for opportunity-based than for necessity-based potential entrepreneurs, as the former are much more likely than the latter to suffer of the reduced prospects for new businesses. In sum, our first hypothesis is that:

Hypothesis 1: *During periods of economic crisis: the greater the perceived strength of the economic downturn, the weaker the students' entrepreneurial intention; such an effect is stronger for opportunity-based than for necessity-based potential entrepreneurs.*

In addition to the perception of the crisis per se, perceived contextual support can surely play an important role in affecting entrepreneurial intentions during periods of economic recession. As discussed above, in fact, these variables may facilitate the identification and exploitation of economic opportunities, which in turn improve the attractiveness of entrepreneurship as a viable career option. If this is true in general, this effect should be even stronger during periods of economic crisis, when the rate of new business opportunities markedly reduces.

In Section 2.3 we saw that most of the previous literature on entrepreneurial intention focuses on three main types of contextual variables, such as: family, university, and economic institutions including banks and business associations. In this paper we follow the same approach and emphasize the support that these variables offer in periods of economic downturn. In particular, the second hypothesis that we test is the following:

Hypothesis 2: *During periods of economic crisis: the greater the perceived support of family, university and economic institutions, the stronger the students' entrepreneurial intention.*

3. Method

3.1 Participants and procedure

Our reference population consists of all the students enrolled at the University of Parma (Italy). During May and June 2012 we distributed questionnaire in both electronic and paper-and-pencil form. For the electronic version, participants were contacted by mail and invited to complete an online questionnaire. For the paper-and-pencil version, students were recruited in the classroom before the lesson and asked to complete the questionnaire. Participation was voluntary. Response rate was about 10%. After data cleaning we remained with a sample of 3684 students, which is fairly large compared to previous studies on similar topics.

3.2 Entrepreneurial intention: propensity and perceived likelihood

Entrepreneurial intention can be generally defined as the intention of an individual to set up a new business venture sometime in the future (Thompson, 2009). Previous studies have used different measures of entrepreneurial intent. Usually, these measures are associated with items that capture both the feeling of attraction to becoming an entrepreneurs and the perceived likelihood of starting a business (Davidsson, 1995; Kennedy et al., 2003; Thandi and Sharma 2003; De Pillis and Reardon, 2007; Lanero et al., 2011). In this study, we follow a similar approach and define two distinct variables: the first is the *propensity* to start a new venture, which is measured with a single item asking participants to indicate the extent to which they were willing to create their own business. The choices are: 1 = no, I have no interest; 2 = no, I never think about it; 3 = yes, vaguely; 4 = yes, I do and this may be a future possibility; 5 = yes, I want to build an enterprise. The second variable is the *perceived likelihood* of being an entrepreneur in the future, which is measured with a single item asking participants to indicate the probability of starting a business in the next ten years. The scale is a 5-point Likert scale in which 1 = 0%; 2 = less than 25%; 3 = more than 25% and less than 50%; 4 = more than 50% and less than 75%; and 5 = more than 75%. Instead of combining these two measures into a single dependent variable, we chose to keep them separate. In our view,

in fact, they capture distinct aspects of entrepreneurial intention and we want to test whether our predictors impacted them differently.

3.3 *Economic crisis and contextual support*

Given these different measures of entrepreneurial intent, our main group of predictors consists of four variables (for an outline of the questions used to compute predictors see the Appendix). The first one is the perceived strength of the *economic crisis*, which is measured with a single item asking participants to indicate the extent to which they consider that the existing economic situation can be an obstacle for the creation of new businesses on a 4-point Likert scale (1 = very important and 4 = very unimportant). The second variable is *family support*, which is measured with two items asking participants to indicate whether they would be supported by family or friends when starting a new business (e.g., “If I started a company, I would be supported by my family”) on a 4-point Likert scale (1 = strongly agree, 4 = strongly disagree). The third variable is “*poor*” *institutions*, which is measured with five items on a 4-point Likert scale. Participants indicated the extent to which they believed that some institutional aspects could hinder the starting of a new business (e.g., “The lack of business association supporting entrepreneurs,” “The bureaucracy required to start a business”). Finally, the fourth variable is *university support*, which is measured by asking participants to indicate their agreement with four statements about the role of the university’s support in entrepreneurship (e.g., “The university developed my entrepreneurial competence and skills”) on a 4-point Likert scale (1 = strongly agree; 4 = strongly disagree).

3.3 *Opportunity vs. necessity*

To classify respondents as opportunity-based or necessity-based potential entrepreneurs we proceed as follows. First of all, we create two variables that measure the *opportunity vs. necessity* orientation of respondents. In particular, the *opportunity* orientation is measured through eight items asking participants to indicate the extent to which each item was a motive for creating a new

enterprise (e.g., “To develop my own idea/project,” “To be autonomous and independent”) on a 4-point Likert scale (1 = strongly agree; 4 = strongly disagree). The *necessity* orientation is instead measured by the mean of four items asking participants to indicate the extent to which necessity-related factors could be a motive for creating a new enterprise (e.g., “Difficulty to find a job”) on a 4-point Likert scale (1 = strongly agree; 4 = strongly disagree). To maintain the juxtaposition between opportunity and necessity, we then classify a respondent as opportunity-based (necessity-based) if two conditions hold: a) the score in opportunity orientation (necessity orientation) is higher than the average opportunity orientation (necessity orientation) and b) the score in necessity orientation (opportunity orientation) is lower than the average necessity orientation (opportunity orientation). This procedure leads us to identify 763 opportunity-based and 658 necessity-based potential entrepreneurs.

3.4 Control variables

In addition to the above predictors and orientation variables we include in our analysis a set of control variables. The latter, in particular, refers to individual-level characteristics that are usually associated with entrepreneurial intention. For the sake of exposition we divide control variables in three main groups: psychological factors, experiential factors and demographic factors.

Psychological factors are captured by three distinct variables. The first is *self-efficacy*, which is measured with four items asking participants to indicate the extent to which they believe they are able to face problematic situations (e.g., “I think I am able to solve unexpected events”) on a 4-point Likert scale (1 = strongly agree; 4 = strongly disagree). The second is propensity towards *leadership*, which is measured with two items asking participants to indicate the extent to which being the leader of an organization and having the possibility to organize the work of others are valid motivations for the launching of a new venture on a 4-point Likert scale (1 = very important, 4 = very unimportant). The third is *risk perception*, which is measured with a single item asking

participants to indicate the extent to which excessive risk would be an obstacle to starting a new business on a 4-point Likert scale (1 = very important, 4 = very unimportant).

The second group of control variables consists of experiential factors, including previous work experience, presence of role models and lack of entrepreneurial competences. *Work experience* is measured with a single dichotomous item asking participants to indicate whether they had some past work experience, in which 1 = yes and 0 = no. Presence of *role models* is measured with five dichotomous items asking participants to indicate whether their a) parents, b) brothers, c) other relatives, d) friends or e) other people they knew were entrepreneurs. For each cue, participants could indicate 1 = yes or 0 = no. The final score is computed as the sum of the five items, implying that it could range from 0 to 5. *Lack of competences* is measured with three items asking participants to indicate the extent to which they perceive each item (e.g., “The lack of entrepreneurial skills,” “The lack of managerial and administrative experience”) as an obstacle to creating a new business, recording each answer on a 4-point Likert scale (1 = very important and 4 = very unimportant).

Finally, we include in our analysis a set of demographic controls including age and sex as well as dummies for field of study and regional origin.

3.5 Confirmatory factor analysis

We assessed the convergent and discriminant validity of some of our predictors through confirmatory factor analysis in which we tested an eight-factor structure (self-efficacy, leadership, lack of competencies, family support, “poor” institutions, university support, opportunity motivation, necessity motivation). According to Kline (2005), the model fit was assessed considering the comparative fit index (CFI), Tucker Lewis index (TLI), root mean square error of approximation (RMSEA) and standardized root mean square residual (SMSR). CFI and TLI values greater than 0.90 and an SMSR value lower than 0.08 indicate satisfactory model fit (Kline, 2005). For RMSEA, values lower than 0.05 indicate close fit, and values between 0.05 and 0.08 indicate

reasonable fit (Browne and Cudeck, 1992). Our eight-factor model showed a good fit ($\chi^2(429) = 3034.24, P < 0.001, CFI = 0.93; TLI = 0.91, RMSEA = 0.041, 90\% CI = 0.039-0.042, P = 0.99, SRMR = 0.041$) and all items were significantly represented by the intended dimension (all P s < 0.001). Thus, we retained the eight-factor solution and computed the score dimension as the mean of the intended items. Each dimension was calculated so that higher scores indicated higher levels of the measured construct. Table 1 shows factor determinacy for each dimension.

[Table 1 about here]

3.5 Empirical strategy

The model that we wish to estimate takes the following form:

$$INT_i = \alpha + \beta \cdot CRISIS_i + \gamma \cdot CONTEXT_i + \delta \cdot XC_i + \varepsilon_i, \quad \varepsilon_i \sim N(0, \sigma^2) \quad (1)$$

where INT_i is the *entrepreneurial intention* of respondent i , $CRISIS_i$ is i 's perception of the *crisis*, $CONTEXT_i$ is a vector of contextual variables including *family support*, "*poor*" *institutions* and *university support*, XC_i is a vector of control variables, α, β, γ and δ are the parameters to be estimated and ε_i is the error term.

To distinguish the impact of our dependent variables on the distinct aspects of entrepreneurial intention we estimate the same model by using alternatively the *propensity* to start a new venture and the *perceived likelihood* of being an entrepreneur as proxies for INT_i . Moreover, to differentiate the analysis across entrepreneurial types we proceed in two steps: first we estimate model (1) on the whole sample; then we estimated the same model taking as a reference the two sub-samples of opportunity-based and necessity-based potential entrepreneurs. By comparing

coefficients across these distinct estimates we can investigate whether the same regressors have different effects depending on the underlying entrepreneurial orientation.

Given the ordinal nature of our dependent variables, all models are estimated via ordered logit.

4. Results

4.1 Preliminary analysis

Table 1 reports descriptive statistics for the variables used in our analysis. Let us first consider the sample composition. As we can see 41.2% of the respondents in our sample are men. The mean age is 23.3 years. We enrolled both BA (71%) and MA students (29%). Most of the subjects (71%) completed the questionnaire online. The three most common faculties are Economics (24.1%), Engineering (16.1%) and Natural Science (13.1%). In terms of geographic origin the 29.2% of the students declares to be resident in Parma, whereas the 23.2% and 25.1% comes respectively from South and North East of Italy.³ Overall, the sample distribution across gender, faculties and geographic areas is in line with the underlying population.⁴

[Table 2 about here]

With respect to the other variables we notice that, on average, respondents are more pessimistic about the probability of starting a business in the future than interested in entrepreneurship. In fact, the average score of *propensity* (2.889) is higher than the one of *perceived likelihood* (2.415). At the same time, the economic crisis is perceived as an important obstacle to entrepreneurship. The average value of *crisis* is indeed higher than 3.5 (out of a scale that goes from

³ For the geographic origins we ask respondent to report their province of birth and then we aggregate provinces (except Parma) according to the standard division among Northeast, Northwest, Centre, South.

⁴ According to the university official statistics the fraction of enrolled students across faculties is as follows: 3% Agricultural Science, 5% Architecture, 17% Economics, 6% Pharmacy, 9% Law, 12% Engineering, 14% Humanities, 12% Medicines, 3% Veterinary, 6% Psychology, 11% Natural Science and 2% Political Science.

1 to 4). Other important perceived impediments are the *lack of competences* (mean value = 3.049) and the presence of “*poor*” *institutions* (mean value = 3.054).

For what concerns the psychological variables the highest average score is reported for perceived *risk* (mean value = 3.284), followed by *self-efficacy* (mean value = 2.800) and *leadership* (mean value = 2.522). The average value of *role model* is also particularly high (mean value = 2.701), which confirms that the personal knowledge of entrepreneurs (among family members, friends or others) is relatively common in our sample.

Prior to testing the research hypotheses we check for multicollinearity. Table 3 shows zero-order correlation among considered variables. As we can see multicollinearity is not a severe issue in our data as correlation coefficients are always smaller than 0.5 (rule of thumb suggests sample correlation greater than 0.8 as evidence of severe collinearity).

[Table 3 about here]

4.3 Regression analysis

Table 4 reports the results from the ordered logit estimations on the full sample. Column (1) refers to results using entrepreneurial *propensity* as dependent variable. Column (2) refers instead to results where the dependent variable is the *perceived likelihood* to become an entrepreneur. Quite interestingly we find that while the perception of the crisis is not associated with the propensity to become an entrepreneur, it is negatively related to the perceived likelihood of starting a new venture in the future. In this sense the crisis seems to impact more on the participants’ expectations on the possibility to succeed than on the actual interest in entrepreneurship as a possible career option.

[Table 4 about here]

For what concerns contextual support, neither family nor economic institutions are significant in explaining entrepreneurial intention. This is true for the propensity to start a new venture as well as the perceived likelihood of being an entrepreneur in the future (although in the latter case some weakly significant effects occur). On the contrary, the perceived university support is positively associated with both measures of entrepreneurial intention. This suggests that the university is indeed perceived as an institutional domain that is highly relevant when it comes to evaluating distinct forms of support in favor of entrepreneurship.

Among the control variables we find results that are highly in line with the previous literature. In particular, men are more oriented toward entrepreneurship (both propensity and perceived likelihood) than women. Similarly, the higher the participants' self-efficacy and leadership orientation and the lower their risk perception, the stronger entrepreneurial intention (once again, both propensity and perceived likelihood). Even experiential variables have an important role: participants with a role model within their family (or network of friends) are more oriented toward entrepreneurship, in terms of both propensity and perceived likelihood. Work experience and the perception of a lack of competencies, on the contrary, impact on entrepreneurial propensity only (positively and negatively, respectively). Finally, we find that while age is positively related to the propensity towards entrepreneurship, it is negatively associated with the perceived likelihood of actually creating a new firm. One possible interpretation for this result is that, on average, younger students have more optimistic views concerning their future career than older students and this helps in sustaining their entrepreneurial expectations.

When we move to the estimates on the subsamples of opportunity-based (Table 4, columns 3 and 4) and necessity-based potential entrepreneurs (Table 4, columns 5 and 6) we obtain some interesting results too. With respect to the crisis we find that its impact differs depending on the type of potential entrepreneur. In particular, while for opportunity-based entrepreneurs the perceived strength of the economic downturn is negatively related to both measures of entrepreneurial intention, for necessity-based entrepreneurs it negatively impacts only on the

perceived likelihood of becoming an entrepreneur. Everything else equal, this suggests that the crisis undermines the entrepreneurial intention of opportunity-based potential entrepreneur more severely than it does for necessity-based ones.

For contextual variables the results are quite in line with the estimates on the full sample. For both types of potential entrepreneur family is perceived as a very weak source of entrepreneurial support. At the same time, university support is positively associated with both measures of intention, although for necessity-based entrepreneurs the effect on entrepreneurial propensity is only weakly significant. An important difference with respect to the full sample estimates is that for necessity-based entrepreneurs the weakness of economic institutions is positively related to the propensity to start a new business. A possible interpretation is that for this type of potential entrepreneur the poor quality of institutions works more as a stimulus to consider entrepreneurship as a possible career option rather than an obstacle.

With reference to control variables the most relevant results hold also when the model is estimated on the sub-samples of necessity-based and opportunity-based entrepreneurs. In particular, the most robust effects across entrepreneurial types are the ones associated with self-efficacy, risk perception and role model.

Overall, the results of our estimates provide partial support for Hypothesis 1. In general, the perceived strength of the economic crisis negatively impacts on entrepreneurial intention, but only when the latter is measured as perceived likelihood of becoming an entrepreneur. For opportunity-based entrepreneurs this effect is even stronger as the crisis undermines both the propensity to start a new business and the expectation on the probability to succeed. For this type of potential entrepreneur the economic downturn induces not only a deterioration of entrepreneurial expectations but also a reduced interest in entrepreneurship as a career option. The same is not true for necessity-based potential entrepreneurs, for whom the negative impact is limited to expectations.

For what concerns Hypotheses 2 the evidence is mixed. While our results confirm that university plays a key role in sustaining the students' entrepreneurial intention, the same is not true

for the other contextual variables. In particular, we find that, contrary to our hypothesis, neither family support nor economic institutions turn out to be relevant variables in explaining entrepreneurial intention. Given that no previous study was conducted for Italy, these results suggest that some more research need to be carried out to test the role of these variables within the Italian context.

5. Discussion and conclusion

Focused on young Italian potential entrepreneurs, this paper aimed to better understand the factors that impact on young people's decisions to start a new business during periods of economic recession. These effects were tested considering two dimensions of entrepreneurial intent, namely the propensity and the likelihood to start a venture.

Some of our findings confirm previous empirical evidence, showing the same expected paths for both propensity and likelihood. As suggested by a large portion of the literature (Davidsson 2006; Lans *et al.*, 2010; Sandhu *et al.* 2011; Zhao *et al.*, 2005), male students are, on average, more oriented toward entrepreneurship and perceive a higher likelihood of starting a new venture than female students. Even our results concerning psychological and experiential variables confirm most of the previous findings. Self-efficacy, risk perception and leadership motivations are significant predictors of both entrepreneurial propensity and the perceived likelihood of starting a business. The same is true for the existence of an entrepreneurial role model, i.e. the personal knowledge of some entrepreneurs among family members, friends or other.

The results for contextual variables partially confirm and partially reject the previous literature. On the one hand, in line with our expectations, the more students perceive university support as salient, the more they are interested in starting a new business and the higher their perceived likelihood of succeeding. On the other, and contrary to our hypotheses, the lack of institutional support and perception of family support, affect neither the propensity nor the perceived likelihood when all the other variables are controlled for. The latter result is particularly

interesting for Italy, which is usually depicted as a country that is characterized by the widespread and relevant role of “strong ties” and where the family, and in general the local institutional context, is considered as crucial in feeding the entrepreneurial supply (Piore and Sabel, 1984; Colli and Rose 1999; Guerrieri and Petrobelli, 2004; Bianco et al., 2012).

However, the most significant results of this work concern the variable associated with the perception of the economic crisis. First of all, we found that while the perceived strength of the economic crisis does not impact on the propensity towards entrepreneurship, it has a negative and highly significant impact on the likelihood to start a business. Secondly, when we distinguished between opportunity-based and necessity-based potential entrepreneurs, we found that while for the latter the crisis impacts only on the perceived likelihood to become an entrepreneur, for the former it affects both dimensions of entrepreneurship, i.e. both propensity and perceived likelihood. On this basis we concluded that the protracted outline of economic recession could undermine the entrepreneurial intention of opportunity-based entrepreneurs more severely than it does for necessity-based entrepreneurs.

These results have a number of implications not only for academics but also for policy makers. Firstly, the important role of university support suggests that formative and development programs should be key policy instruments to promote the students’ entrepreneurial intention. In this sense universities, much more than families or business associations, should be the target institution for policies aimed at fostering a new generation of entrepreneurial talents. Secondly, the differentiated impact of the economic crisis on opportunity-based and necessity-based potential entrepreneurs suggests that a side effect of the current macro-economic difficulties could be to reduce the quality of the future entrepreneurial supply. As time goes by, in fact, opportunity-based potential entrepreneurs could decide to opt out from the entrepreneurial career and be replaced by low-quality necessity-based entrepreneurs. If this were to translate in actual choices in terms of new firms creation, the cost for the economy would be relevant

Like all research, this study also has several limitations. First, the use of cross-sectional questionnaires instead of an experimental design imposes caution about the causal relationships between predictors and entrepreneurial intention (both in terms of propensity and perceived likelihood). Moreover, this design may introduce distortion in results, given the common method variance and social desirability. These aspects should limit the generalizability of present results. However, the very large and heterogeneous (in terms of faculties) sample used in this research, as well as the consistency between these results and those obtained through experimental research, somewhat mitigate these shortcomings.

Appendix

[Table A.1 about here]

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Table 1. Factor determinacy of the eight factors

	Factor determinacy	Items
1 Self-efficacy	0.91	4
2 Leadership	0.88	2
3 Lack of competencies	0.92	3
4 Family support	0.75	2
5 “Poor” institutions	0.87	5
6 University support	0.91	4
7 Opportunity motivation	0.93	8
8 Necessity motivation	0.83	4

Table 2. Descriptive statistics

	Mean	SD	Min	Max	N
Propensity	2.889	1.162	1	5	3684
Perceived likelihood	2.415	0.944	1	5	3684
Male (d)	0.412	0.492	0	1	3684
Age	23.338	4.239	18	71	3684
Online (d)	0.710	0.454	0	1	3684
Bachelor (d)	0.828	0.378	0	1	3684
North-West (d)	0.188	0.390	0	1	3684
North-East (d)	0.251	0.434	0	1	3684
Centre (d)	0.038	0.191	0	1	3684
South (d)	0.232	0.422	0	1	3684
Parma (d)	0.292	0.455	0	1	3684
Agricultural Science (d)	0.034	0.182	0	1	3684
Architecture (d)	0.042	0.200	0	1	3684
Economics (d)	0.241	0.428	0	1	3684
Pharmacy (d)	0.049	0.215	0	1	3684
Law (d)	0.040	0.195	0	1	3684
Engineering (d)	0.161	0.368	0	1	3684
Humanities (d)	0.112	0.315	0	1	3684
Medicine (d)	0.094	0.293	0	1	3684
Veterinary medicine (d)	0.023	0.149	0	1	3684
Psychology (d)	0.055	0.228	0	1	3684
Natural science (d)	0.131	0.338	0	1	3684
Political science (d)	0.019	0.136	0	1	3684
Work experience (d)	0.692	0.462	0	1	3684
Risk	3.284	0.717	1	4	3684
Role model	2.701	1.403	0	6	3684
Crisis	3.513	0.719	1	4	3684
Self-efficacy (f)	2.8	0.514	1	4	3684
Leadership (f)	2.522	0.725	1	4	3684
Lack competences (f)	3.049	0.692	1	4	3684
Family support (f)	2.502	0.759	1	4	3684
“Poor” institutions (f)	3.054	0.576	1	4	3684
University support (f)	2.157	0.649	1	4	3684

Table 3. Zero-order correlations among regressors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Male (d)	1.000											
(2) Age	0.049*	1.000										
(3) Self-efficacy (f)	0.137*	0.071*	1.000									
(4) Leadership (f)	0.036*	0.013	0.288*	1.000								
(5) Risk	-0.143*	0.015	-0.222*	-0.024	1.000							
(6) Lack competences (f)	-0.261*	-0.052*	-0.373*	-0.084*	0.342*	1.000						
(7) Role model	0.096*	0.087*	0.194*	0.097*	-0.105*	-0.202*	1.000					
(8) Work experience (d)	0.038*	0.207*	0.095*	0.047*	-0.019	-0.109*	0.134*	1.000				
(9) Family support (f)	0.010	-0.110*	0.169*	0.070*	-0.100*	-0.052*	0.116*	-0.060*	1.000			
(10) "Poor" institutions (f)	-0.139*	0.055*	-0.150*	0.043*	0.301*	0.486*	-0.074*	-0.017	-0.075*	1.000		
(11) University support (f)	0.103*	-0.017	0.395*	0.316*	-0.118*	-0.247*	0.125*	0.009	0.160*	-0.112*	1.000	
(12) Crisis	-0.146*	0.004	-0.094*	-0.001	0.270*	0.296*	-0.039*	0.000	-0.092*	0.392*	-0.052*	1.000

NOTE: * $P < 0.05$.

Table 4. Results of the ordered logit estimations

	<u>Full sample</u>		<u>Opportunity-based</u>		<u>Necessity-based</u>	
	<u>Propensity</u>	<u>Likelihood</u>	<u>Propensity</u>	<u>Likelihood</u>	<u>Propensity</u>	<u>Likelihood</u>
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>
Crisis	-0.041 (0.05)	-0.200*** (0.05)	-0.311*** (0.12)	-0.271** (0.11)	-0.112 (0.12)	-0.285** (0.12)
Family support (f)	-0.047 (0.04)	0.073* (0.04)	-0.062 (0.09)	0.079 (0.09)	0.075 (0.11)	0.002 (0.11)
“Poor” institutions (f)	0.065 (0.07)	-0.117* (0.07)	0.11 (0.13)	-0.167 (0.13)	0.435** (0.18)	-0.113 (0.18)
University support (f)	0.523*** (0.06)	0.648*** (0.06)	0.713*** (0.13)	0.584*** (0.13)	0.274* (0.16)	0.831*** (0.16)
Male (d)	0.611*** (0.07)	0.322*** (0.07)	0.769*** (0.16)	0.418*** (0.16)	0.421*** (0.16)	0.154 (0.17)
Age	0.017** (0.01)	-0.025*** (0.01)	-0.007 (0.02)	-0.025 (0.02)	0.001 (0.02)	-0.032* (0.02)
Self-efficacy (f)	0.825*** (0.07)	0.641*** (0.08)	0.725*** (0.16)	0.783*** (0.17)	0.906*** (0.18)	0.443** (0.19)
Leadership (f)	0.291*** (0.05)	0.191*** (0.05)	0.303*** (0.10)	0.076 (0.11)	0.255* (0.13)	0.320** (0.14)
Risk	-0.393*** (0.05)	-0.320*** (0.05)	-0.442*** (0.11)	-0.430*** (0.11)	-0.354*** (0.12)	-0.224* (0.13)
Work experience (d)	0.248*** (0.07)	0.116 (0.07)	0.364** (0.16)	0.193 (0.16)	-0.015 (0.16)	0.047 (0.17)
Role model	0.276*** (0.02)	0.169*** (0.02)	0.287*** (0.05)	0.272*** (0.06)	0.277*** (0.05)	0.112** (0.05)
Lack competences (f)	-0.204*** (0.06)	-0.104* (0.06)	-0.172 (0.12)	-0.026 (0.12)	-0.436*** (0.15)	-0.109 (0.16)
<i>Fac. Dummies</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
<i>Geo. Dummies</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Costant, cut1	1.909*** (0.45)	-0.122 (0.47)	1.843* (1.10)	-0.915 (1.12)	2.079* (1.12)	-0.455 (1.16)
Costant, cut2	3.436*** (0.46)	2.429*** (0.47)	3.606*** (1.10)	1.874* (1.12)	3.593*** (1.13)	1.891 (1.16)
Costant, cut3	5.009*** (0.46)	4.268*** (0.47)	5.488*** (1.11)	3.905*** (1.13)	4.984*** (1.13)	3.722*** (1.16)
Costant, cut 4	7.356*** (0.47)	6.066*** (0.48)	7.804*** (1.13)	5.908*** (1.15)	7.337*** (1.16)	5.137*** (1.18)
Obs	3684	3684	763	763	658	658
LogL	-4882.187	-4401.309	-962.078	-882.56	-877.817	-792.154
Chi2	1405.262***	942.697***	299.237***	221.999***	237.709***	171.021***

NOTE: * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table A.1. Questions used to compute predictors (translated from Italian)

Factor name	Questions
<i>Family support</i>	<ol style="list-style-type: none"> 1) If I started a company, I would be supported by my family. 2) If I started a company, I would be supported by my friends.
<i>“Poor” institutions</i>	<ol style="list-style-type: none"> 1) What are the main obstacles to the creation of a new firm? Legal and fiscal duties. 2) What are the main obstacles to the creation of a new firm? The lack of legal and operative support services. 3) What are the main obstacles to the creation of a new firm? The bureaucracy required to start a business. 4) What are the main obstacles to the creation of a new firm? The lack of support and advice during the start-up phase. 5) What are the main obstacles to the creation of a new firm? The lack of business association supporting entrepreneurs.
<i>University support</i>	<ol style="list-style-type: none"> 1) To start a new firm would be the best way to exploit my university studies. 2) The university improved my entrepreneurial spirit. 3) The university provided me with the knowledge necessary to start a new business. 4) The university developed my entrepreneurial competence and skills.
<i>Opportunity motivation</i>	<ol style="list-style-type: none"> 1) What are the motivations that would push you to start a new firm? To improve the quality of my life. 2) What are the motivations that would push you to start a new firm? To improve my status. 3) What are the motivations that would push you to start a new firm? To be economically independent. 4) What are the motivations that would push you to start a new firm? To be autonomous and independent. 5) What are the motivations that would push you to start a new firm? To receive an adequate pay. 6) What are the motivations that would push you to start a new firm? To earn more than in a salaried job. 7) What are the motivations that would push you to start a new firm? To create personal wealth. 8) What are the motivations that would push you to start a new firm? To develop my own idea/project.
<i>Necessity motivation</i>	<ol style="list-style-type: none"> 1) What are the motivations that would push you to start a new firm? Lack of interest for other jobs. 2) What are the motivations that would push you to start a new firm? To have more free time. 3) What are the motivations that would push you to start a new firm? To follow a family tradition. 4) What are the motivations that would push you to start a new firm? Difficulty to find a job.
<i>Self-efficacy</i>	<ol style="list-style-type: none"> 1) I think I am able to solve difficult problems if I work hard. 2) I think I am able to solve unexpected events. 3) I think I am able to successfully manage a business. 4) I have the skills and competences necessary to be successful as an entrepreneur.
<i>Leadership</i>	<ol style="list-style-type: none"> 1) What are the motivations that would push you to start a new firm? To organize the work of others. 2) What are the motivations that would push you to start a new firm? To be the leader of an organization.
<i>Lack of competences</i>	<ol style="list-style-type: none"> 1) What are the main obstacles to the creation of a new firm? The lack of managerial and administrative experience. 2) What are the main obstacles to the creation of a new firm? The lack of entrepreneurial skills. 3) What are the main obstacles to the creation of a new firm? The lack of technical skills.