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**How does prosocial motivation influence the probability of an entrepreneur registering a new firm?  
An analysis of its interaction with business gestation activities**

**Abstract**

This study focuses on the prosocial motivation of entrepreneurs and its influence on the creation of a new firm, which is a novel approach with respect to other intrinsic and extrinsic motivations present in the entrepreneurial process that have been extensively studied by the academia. Using data from the Panel Study of Entrepreneurial Dynamics (PSED-Spain), we categorize the different types of activities that entrepreneurs carry out before registering the firm. We find out that prosocial motivation not only has a direct positive influence on the probability of creating a new firm, but also positively moderates the relationship between undertaken investment activities and the probability of registering the firm. On the contrary, prosocial motivation does not seem to interact with market and resource mobilisation activities, which are inversely related to firm registration. Within the framework of Self-Determination Theory, this paper extends the limited previous research on the role of prosocial motivation in the entrepreneurial process and opens up new lines of future research.

**Keywords:** Entrepreneurial process; New firm creation; Prosocial motivation; Business gestation activities; Self-determination theory, Legal registration

**1. Introduction**

Motivation plays a leading role in any explanation of entrepreneurship. This personal characteristic represents the attitudes adopted and actions taken to achieve a given objective, and underlies three fundamental psychological processes: the direction, intensity and persistence of effort (Grant & Berg, 2012; Kanfer, 1990; Mathias & Williams, 2017; Mitchell & Daniels, 2003; Ryan & Deci, 2001).

Although a new business may be started for various reasons, entrepreneurial intention, behaviour and action have traditionally been associated with economic motivations (Murnieks et al., 2020). Nevertheless, although economic motivation may be a necessary condition for starting a business, it is not sufficient (Davidsson & Gruenhagen, 2021; Patzelt & Shepherd, 2011; Townsend & Hart, 2008; Vik & McElwee, 2011; Weber et al., 2008). Other, non-economic, motivations are also present in company creation. Some are related to personal interest (such as achievement, autonomy and values) (Fayolle et al., 2014; Hayton et al., 2002) while others are oriented towards external concerns (e.g., empathy, social justice, cooperation

or changing the world) (Grant, 2008a; Grant & Berg, 2012; Ryan & Connell, 1989). This latter form of motivation, called prosocial motivation, can be defined as the impulse to direct one's efforts towards producing a beneficial impact on other persons or social groups (Grant & Berg, 2012).

The present study is based on Grant's (2008a) contingency perspective, according to which the role of prosocial motivation is conceptualised within the theory of self-determination (Ryan & Deci, 2000a). This perspective suggests that when individuals are prosocially motivated they will probably strive harder to achieve the tasks proposed, perceive these activities as a means to a specific end (e.g., resolving a social problem) and be focused on future outcomes (Grant et al., 2007; Yamini et al., 2020). Therefore, this work suggests that prosocial motivation could enhance the activities involved in creating a new business until legal registration. We focus on legal registration because it can be viewed as a gateway to the further development of the business project and a means of accessing new resources for this purpose, by sending a signal of commitment and trustworthiness to resource providers (Lent et al., 2019; Suchman, 1995).

Specifically, we consider the following questions: How does the prosocial motivation of an entrepreneur influence the probability of registering a new firm? How does this motivation influence the relationship between the activities involved in creating a new business and the likelihood of it occurring?

The present study contributes to the discussion on the role of prosocial motivation in the entrepreneurial process, by extending previous works such as that of Renko (2013), to illuminate this relationship at a different stage of the business creation. Second, this paper advances the study of prosocial motivation in the framework of self-determination theory applied to the entrepreneurial context, as opposed to the workplace context where it originates, as previous researchers have done (e.g., Kibler et al., 2019). Third, this study addresses the recent call for research on the new venture creation process (NVC) as a focus of entrepreneurship research (Davidsson & Gruenhagen, 2021, 2022). In particular, it responds to the process approach that these authors call the *temporal journey toward a goal*, analysing how prosocial motivation can help or hinder the relationship between the activities carried out during the process and the legal registration of the new firm.

Following this introduction, the paper is structured as follows. In the next section, firstly, the direct relationship between prosocial motivation and the legal registration of the company is discussed. Secondly, it is suggested that prosocial motivation influences the relationship between the intensity of different business gestation activities and the creation of the new firm. The methodology section describes the process followed to select the variables and data that constitute the sample obtained from the Panel Study

of Entrepreneurial Dynamics (PSED-Spain). This is followed by the results obtained from the analyses and concludes with a discussion of these results, conclusions and implications for theory and practice.

## **2. Theoretical background and hypotheses**

In recent entrepreneurship research, interest in prosocial motivation has increased considerably as a means of explaining the genesis, growth and possible abandonment of business initiatives (Branzei et al., 2018a; McCaffrey, 2018; Murnieks et al., 2020; Powell et al., 2018; Shepherd, 2015). Shepherd (2015) suggested that attention should be drawn to entrepreneurial activities, with particular focus on the effectiveness of compassionate and sustainable companies. However, the lessons to be drawn from this approach remain unclear, since little is known regarding the influence of prosocial motivation on the efforts made in the entrepreneurship process (Branzei et al., 2018b; Moroz et al., 2018; Renko, 2013). In the context of social firms, Renko (2013) concluded that prosocial motivation has detrimental effects on company creation. The underlying argument of these authors is that social entrepreneurs lack legitimacy in the eyes of resource holders due to the great difficulty inherent in combining social and business missions. This paper offers a new perspective on the role of prosocial motivation in the process of gestation and registration of a new venture. We propose that prosocially-driven entrepreneurs will be more prone to register the new venture than entrepreneurs that do not hold such motivations. We also expect that prosocial motivation will strengthen the relationship between gestation activities and new venture legal registration. This should be particularly true for activities that are more consistent with their prosocial values.

### **2.1 The impact of prosocial motivation during firm creation**

Legal registration is a crucial milestone in business creation (Kolvereid & Isaksen, 2006; Reynolds, 2017a; Reynolds et al., 2005). It legitimises the new organisation and sends a powerful signal to stakeholders, enabling the entrepreneur to access and mobilise resources from a more diverse set of sources (Gartner et al., 2012). In addition, the legitimization of the new company represents a socially formalized and accepted procedure that reflects appropriate behavior within some socially constructed system of values and beliefs (Suchman, 1995). In this study, we consider the hypothesis that prosocially-driven entrepreneurs are more likely to register a new venture than entrepreneurs lacking this motivation, for the following reasons.

First, different types of motivation seem to have different effects (Ryan & Deci, 2000a). Previous research has provided consistent evidence that prosocial motivation is a predictor of proactivity (Grant & Mayer, 2009; Grant & Sumanth, 2009; Morrison, 2011). This is particularly so in ambiguous and uncertain

situations such as new firm creation (Grant & Rothbard, 2013) and even in work contexts that discourage proactive initiatives (Lebel & Patil, 2018). The sense of meaning and importance that prosocially individuals derive from their activities encourages them to take more anticipatory actions in order to reach their goals (Fayolle et al., 2014; Grant & Mayer, 2009; Lebel & Patil, 2018). Second, prosocial motivation could distort the results of any cost-benefit analysis performed, because potential benefits for others may be internalised (Grant & Berry, 2011), and the entrepreneur might minimise or discount the consideration of personal risks associated with the venture, such as the possible loss of material and immaterial resources (Miller et al., 2012; Quiggin, 1997). Third, individuals with a prosocial motivation will often wish to legitimise the new firm in order to display appropriate behaviour, in accordance with their values and beliefs (Suchman, 1995). In view of these theoretical arguments and the empirical evidence that has been reported, we propose the following hypothesis:

**Hypothesis 1:** Prosocial motivation increases the probability of a new firm obtaining legal registration.

## **2.2 The moderating role of prosocial motivation between business gestation activities and new firm creation**

In accordance with the above arguments, we also suggest that prosocial motivation will **reinforce** the relationship between business gestation activities and new venture creation (legal registration). This would particularly be the case for activities that are more consistent with the entrepreneur's prosocial values and those that contribute most to achieving the goal of registering the firm that will be able to promote others' well-being (Fayolle et al., 2014; **Muñoz et al., 2018**). We focus on the intensity with which the entrepreneur performs these activities relative to all activities that could feasibly be performed during the gestation process (**Hjorth et al., 2015; Reynolds, 2017b**). In this respect, many studies of the entrepreneurial process have analysed the types of activities involved in the emergence of new companies (**Arenius et al., 2017; Baron & Markman, 2018; Davidsson & Gruenhagen, 2021, 2022; Dimov, 2020; Tornikoski & Newbert, 2007**). We consider four categories of gestation activities prior to firm creation: market activities, business planning, business investment, and resource mobilization.

**Firstly**, it has been shown that marketing and promotional activities are crucial to the successful emergence of a new firm (Venkataraman, 1997), facilitating access to capital and the launch of the new product or service, enabling the firm to contact and establish relationships with potential customers (**Lam & Harker, 2015**). Market activities thus play a key role in creating a new firm, since failure to identify customers'

needs can increase the risk of the new firm's dissolution in its first months of life (Delmar & Shane, 2004). Contact with the market also enables entrepreneurs to gather valuable information to reconfigure dysfunctional aspects of the opportunity initially identified and to make the adjustments necessary to create the new firm (Felin et al., 2019; Snihur et al., 2017). Consequently, when the prosocial motivation is present, entrepreneurs will be more concerned with providing products or services to satisfy community needs, based on conversions with consumers or potential customers.

Secondly, several studies have considered activities and attitudes related to the initial planning of an entrepreneurial venture. Planning enables identification of the abilities, resources, and information needed and guides behavior and human action toward achieving goals (Bandura, 1997; Locke & Latham, 1990). In addition, the entrepreneur would be able to benefit more from a higher quality of planning before entering the market (Chwolka & Raith, 2012). Prior studies show that activities such as preparation of a business plan and financial projections increase probability of founding new firms (Delmar & Shane, 2003, 2004; Hechavarria, et al., 2016; Liao & Gartner, 2006). For example, business plans enable entrepreneurs to demonstrate reliability to interest groups (Burns et al., 2016; Delmar & Shane, 2004) and entrepreneurs who are involved in the planning exercise are likely to have a better understanding of the whole process of launching a new business (Welter et al., 2021). In short, planning is an activity that involves goal setting and provides guidelines for goal achievement. Previous research indicates that prosocially motivated entrepreneurs focus on the future, seeking to achieve significant results through their activities (Batson, 1998; Grant, 2008). Thus, prosocially motivated entrepreneurs should have a higher intensity of planning activities that can positively impact on the decision to start a new venture.

Thirdly, prior research has also suggested that the greater the entrepreneur's own investment in the business, the more likely the success of the new firm (Löher et al., 2018; Yang & Aldrich, 2017; Gartner et al., 1999; Gatewood et al., 1995). An organization is more likely to be created when entrepreneurs show others through facts and deeds that their nascent business is "real" (Gartner et al., 1992). Activities such as purchasing equipment or raw materials, acquiring physical space, and dedicating oneself full-time to working for the business imply greater commitment of resources to the business project than do other start-up activities, such as preparing a business plan (where planning occurs primarily in mental form) (Carter, et al., 1996). Recent research by Koumbarakis & Volery (2023) suggests that team building (i.e. hiring employees) can be a critical incident in predicting the birth of a firm. We expect the relationship between business investment activities and probability of creating a new firm to be stronger in the presence of

prosocial motivation, because prosocially motivated individuals are more willing to make an effort and invest resources with the aim of advancing their prosocial goals, channeling these investments towards new firm creation (Carter et al., 1996; Delmar and Shane, 2004).

Finally, it has also been shown that entrepreneurs who improvise activities and combine resources may confer legitimacy on their new organisation by increasing external perceptions that this organisation is capable and credible, thus facilitating its emergence (Lent et al., 2019). Some resources that enable entrepreneurs to continue their efforts in creating the firm are financial support needed to begin operations, registering for a patent or any other type of intellectual property as a form of competitive advantage over established businesses and generation of contacts important for the business (Brüderl & Preisendörfer, 1998; Warhuus et al., 2021). Resource mobilisation thus represents the nascent entrepreneur's strategic flexibility in seeking key actors to support firm's emergence (Keating et al., 2014). For example, obtaining initial financing is a crucial task for the entrepreneur; an appropriate choice in this respect can be decisive in terms of maximising returns to stakeholders (Hechavarría et al., 2016) and in determining the time required to establish the new firm (Frid & Gartner, 2014; Liao & Welsch, 2003). We suggest that it is likely that entrepreneurs with a higher prosocial motivation will tend to establish contact with other external actors who are key to achieving their goals, for example, in the search for funding or advice for the start-up of the business. The entrepreneur's prosocial motivation would enhance the recombination of existing resources to promote the well-being of other people and, thus, make it more likely that the new enterprise will be established.

Despite advances in research on the type of activities involved (Müller et al., 2023), few have considered the influence of cognitive and motivational aspects on this process to create the firm (Al-Jubari et al., 2019; Koumbarakis et al., 2021; Lerner et al., 2018; Mahto & McDowell, 2018; Müller et al., 2023; Shane & Venkataraman, 2000; Vilanova & Vitanova, 2020; Wood et al., 2012). Within the framework of the Self-Determination Theory (Ryan & Deci, 2000a), Grant (2008a) suggested that prosocial motivation might have a significant impact on the activities carried out in the entrepreneurial process, since this motivation is commonly associated with a high level of proactivity, risk taking and willingness to persevere in projects that require long-term effort, despite uncertainties and obstacles (Grant & Berg, 2012; Grant & Berry, 2011; Grant & Rothbard, 2013). According to Grant (2008a), prosocial motivation, i.e. the focus on achieving a business goal that helps others, encourages persistence, spurs the entrepreneur to greater performance and increases productivity. Prosocially motivated entrepreneurs focus on the future and seek to achieve

significant results through their activities (Batson, 1998; Grant, 2008a). Some studies suggest that entrepreneurs who are prosocially motivated are more likely to invest time and effort to achieve their goals (Gagné & Deci, 2005; Grant, 2008b; Grant & Berg, 2012; Shamir et al., 1998; Thompson & Bunderson, 2003). Prosocial motivation, moreover, will encourage the entrepreneur to deploy available resources to promote the well-being of others, increasing the probability of the new firm becoming established (Van de Ven et al., 2007). **In addition**, entrepreneurs who are prosocially motivated will tend to focus on activities that enable them to materialise their ambitions and creativity via projects that contribute directly to society.

In view of these considerations, we propose the following hypotheses:

**Hypothesis 2:** Prosocial motivation positively moderates the relationship between the intensity of market activities and the probability of the new firm obtaining legal registration.

**Hypothesis 3:** Prosocial motivation positively moderates the relationship between the intensity of planning activities and the probability of the new firm obtaining legal registration.

**Hypothesis 4:** Prosocial motivation positively moderates the relationship between the intensity of business investment activities and the probability of the new firm obtaining legal registration.

**Hypothesis 5:** Prosocial motivation positively moderates the relationship between the intensity of resource mobilisation activities and the probability of the new firm obtaining legal registration.

### **3. Material and Methods**

#### **3.1 Design and sample**

For the purposes of this research, it was necessary to obtain and analyse data from individuals who had recently initiated the entrepreneurial process. Accordingly, we considered secondary data drawn from wave A of the PSED-Spain, which includes 510 observations from a representative national sample of 1464 nascent firms. The data were collected from detailed preliminary interviews performed from February to June 2015. This sample of Spanish entrepreneurs (234 women, 276 men) contains longitudinal information on the entrepreneur, type of opportunity and entrepreneurship activities performed at different stages of the process.

In order to ensure only active and recently-created firms were included in the sample, we excluded observations for entrepreneurs whose activities from conception of the idea to the time of the interview had spanned more than five years. Furthermore, the analysis included only the activities performed prior to the date of legal registration. Finally, the same sample was used to centre the mean values obtained for the



prosocial motivation variable and the intensity of gestation activities, before creating the interaction term.

After the necessary filtering for data processing, we obtained a final sample of 486 Spanish entrepreneurs, composed of 259 men and 227 women, with an average age of 39.5 years. This sample represented a broad range of economic activities, which we classified as primary sector, industry, commerce and services, in order to comfortably manage the large number of variables included in the analysis. Of the total initiatives composing the sample, 60.9% were oriented towards the service sector, 26.34% towards commerce, and only 3.70% towards industry; 3.29% of the enterprises involved the primary activity sector.

The Stata 14 statistical software package was used for all analyses.

### 3.2 Measures

#### 3.2.1 Dependent variable

In our analysis, the dependent variable, *firm creation*, is binary and takes the value “one” if legal registration of the firm took place and “zero” if it did not. The PSED suggests that the date the firm is registered should represent the entry moment of the new initiative (Reynolds, 2017a; Reynolds et al., 2005). In addition, previous studies point to the high correlation between legal registration and self-reports of business creation by nascent entrepreneurs (Kolvereid & Isaksen, 2006; Magnussen, 1997). Magnussen (1997) found that 89% of those who considered themselves as having started a business had registered it. Entrepreneurs who complete this task have formally created a new firm, obtained legitimacy with stakeholders and demonstrated their formal commitment to the entrepreneurial initiative (Delmar & Shane, 2004; Tian et al., 2019).

#### 3.2.2 Independent variables

*Prosocial motivation* is the desire to invest time and effort to benefit others (Batson, 1987; Grant, 2008a; Kibler et al., 2019; Lebel & Patil, 2018; Ryan & Connell, 1989; Tiwari et al., 2020; Yamini et al., 2020). This variable was measured using a question from wave A of PSED-Spain on the purpose of the entrepreneur's firm. The entrepreneurs were asked a question that required them to allocate a total of 100 points to two specific goals, based on how well these goals represented the reasons for which the firm was created: (A) to provide benefits for owners and investors (i.e., financial return on investment, but also personal happiness and satisfaction derived from managing the business); (B) to help others or the environment (i.e., social goals, owners' concern to make a positive impact on the lives of others, without direct benefit to themselves). The prosocial variable is expressed as the ratio of % B (benefit to others)

divided by % A (benefit to the owners).

In order to measure the *intensity of business gestation activities*, we used a section of 16 start-up activities that entrepreneurs may have performed. These activities were classified into the following categories, similarly to the study of Alsos & Kolvereid (2010):

1. Market activities (definition of market opportunities, conversations with potential customers, marketing efforts or promotion of the product or service, development of a model or prototype of the product or service, and gathering information on competitors).
2. Business planning (preparation of the business plan, opening a separate bank account for the business and developing financial projections).
3. Business investment (acquiring or renting a physical space for the business; buying or renting equipment, facilities, or major property for the business; hiring the first employee or an exclusive subcontractor; working full-time for the business; purchasing the first provisions, such as raw materials, supplies, materials, or stock).
4. Resource mobilisation (seeking formal financial support; registering a patent, brand, copyright or other type of intellectual property; and creating a list of telephone numbers and internet sites important for the business).

Each activity was coded as a dummy to designate whether or not the survey respondent had performed the activity (yes = 1, no = 0). The response scores for each activity category were then summed and the result divided by the total number of activities possible within each of the four categories, yielding a decimal fraction as the final result. For each of the four activity categories (market activities, business planning, business investment and resource mobilisation), the intensity of gestation activities is scored on a range from zero (meaning that the entrepreneur has not performed any activity listed in that category) to one (meaning that the entrepreneur has performed all the activities listed in that category).

### 3.2.3 Control variables

As in other studies on the topic of entrepreneurship, we controlled for *age* and *gender* of the entrepreneur, expecting women and young people to be less likely to create a firm, in line with consistent reports from GEM Spain.

In the view that new firms founded by the purchase of a pre-existing business are less likely to terminate their operations prematurely than completely new firms (Gimeno et al. 1997), we controlled for *nature of the business*, that is, whether it was founded as an independent new business or through the purchase or

acquisition of an existing business, as a franchise, or as a new business financed by an existing business. To do so, we created a dummy variable by assigning the value “one” to each independent new business and “zero” to the other cases.

Finally, we controlled for the sector of *economic activity*. As explained above, the economic activities performed were classified into four main categories: primary activities, industrial activities, commerce and services. Our regression models included three dummy variables for the final three economic activities listed above, leaving primary activities (agriculture, livestock, forestry and fishing) as the reference category for our analysis.

#### **4. Results**

The logistic regression technique (Hopp & Greene, 2018; Manolova et al., 2012; Tian et al., 2019; Van Gelderen et al., 2006) was used to test for the influence of prosocial motivation, the intensity of gestation activities and the interactions between them and prosocial motivation on the probability of the new firm obtaining legal registration. The study hypotheses were tested in accordance with the procedures described by Aiken et al. (1991), centring the mean values of the variables ‘prosocial motivation’ and ‘intensity of gestation activities’ and multiplying them to create the interaction term.

Table 1 presents the descriptive statistics obtained. Table 2 presents the logistic regression models used to infer the likelihood of legal registration, incorporating the influence of prosocial motivation and the intensity of business gestation activities. Model 1, which represents the base model, including only the control variables, shows that the new firm is less likely to be constituted if it is an independent new business than if it is a franchise or acquisition. This result supports prior contributions indicating that new firms founded by purchasing an existing business are less likely to terminate operations than are independent new firms (Gimeno et al., 1997). Model 2 introduces the effect of the intensity of business gestation activities on the likelihood of a new firm being registered. The model shows there is a significant inverse relation between the intensity of market activities and the creation of a new firm (legal registration). On the other hand, the intensity of business planning activities is not a significant factor. Our results also reveal a significant positive association between activities related to investing in the business and the probability of new firm creation; thus, an increase of one unit of intensity in business investment activities, while all other variables remain constant, increases the odds of registering a new firm by 2.71 times. Although the association for the intensity of resource mobilisation activities is significant ( $p < 0.05$ ), the coefficient is

negative. In other words, the greater the intensity of resource mobilisation activities, the lower the probability of a new firm being created. Our first hypothesis is supported by Model 3, which shows that prosocial motivation increases the probability of new firm creation by 5.41 times. Model 4 was designed to reflect the interactions between prosocial motivation, business gestation activities and firm creation. The results obtained show that prosocial motivation positively moderates the relationship between the intensity of business investment activities and the probability of a new firm being created, thus confirming Hypothesis 4. However, Hypothesis 2, on the possible moderating effect of prosocial motivation on the relationship between the intensity of market activities and the likelihood of a new firm being created, was not supported. Neither was there support for Hypotheses 3 or 5, that prosocial motivation moderates the relationship between new firm creation and the intensity of business planning activities, or resource mobilisation activities, respectively. The results obtained for all models were statistically significant, while those for the Hosmer-Lemeshow tests were non-significant in every case ( $p > 0.05$ ), indicating a good fit between the models and the study data.

[Tables 1 and 2 near here]

## **5. Discussion**

This research analyses the role of prosocial motivation in the creation of a new venture and how this motivation interacts with the activities carried out to achieve this goal. Although there are numerous papers that have studied the influence of various forms of motivation on the entrepreneurial process (Linder & Nippa, 2019; Rivero & Ubierna, 2021), there is little evidence on how prosocial motivation, especially outside the context of social entrepreneurship, impacts the activities of the entrepreneurial process. In particular, this study responds to calls for future research on prosocial motivation (Shepherd, 2015) and its effect on new venture creation (Tiwari et al., 2020) in the context of traditional entrepreneurship.

The results of this study show that prosocial motivation has a significant positive influence on the probability of new firm creation and positively moderates the relationship between business investment activities and the likelihood of a new firm being created (via legal registration). These findings indicate that prosocial motivation has a positive interaction with investment, i.e. the business gestation activity that is most visible, signals commitment to the venture and contributes most directly to benefiting others (Grant et al., 2007; Yamini et al., 2020).

We also find that the intensity of market-focused and resource mobilisation activities is inversely related to

new firm registration, possibly due to the nature of the activities within each of these categories. Thus, the development of market activities might delay new firm registration until the definition of the product/service has been finalised. This would confirm the results of previous research indicating a negative relationship between market activities and the successful continuation of the new venture. For instance, initiating market activities increases the risk of the firm's dissolution by 86% in its first 30 months of life (Delmar & Shane, 2004). Another major activity associated with the market is design of a model or prototype of the product or service. Carter et al. (1996) find that entrepreneurs who desisted from creating the new firm are more likely to have developed models or prototypes. It is possible that individuals who develop a model or prototype and then test it obtain results that do not match their expectations (Carter et al., 1996), making it less likely that they will establish the new firm. Furthermore, prosocially-driven entrepreneurs might pay less attention to market activities, preferring to focus on the social mission of the venture (Austin et al., 2006). As concerns resource mobilisation, it is quite possible that seeking formal financial support is not a practical option until the firm has been legally registered, as commented above. Moreover, legal registration could be delayed by the formalities of intellectual property registration, a process that is often prolonged and resource intensive.

Our research extends the scarce previous results on the impact of prosocial motivation on the entrepreneurial process. Previous studies have reported that prosocially-motivated nascent entrepreneurs often face barriers regarding the mobilisation of resources, which hinders the emergence of the new firm (Renko, 2013). In her study, Renko (2013) observed that prosocial motivation reduced the probability of firm creation, but this analysis focused on a multidimensional dependent variable (hiring staff, acquiring external financing and achieving initial sales). On the contrary, our research takes the legal registration of the firm as the main outcome variable (Reynolds, 2017a; Reynolds et al., 2005).

In the entrepreneurial process legal registration constitutes thus a gateway to mobilizing more resources such as applying to more sources of funding and formally hiring employees (Gartner et al., 2012). For this reason, achieving legal registration continues to be a milestone in the process of creating a new firm, a factor that should be considered in any analysis of resource mobilisation. This question is important because legal registration of the new firm enables the entrepreneur to undertake a broader range of activities to consolidate the venture, especially as concerns access to sources of funding. Moreover, our results confirm that prosocially-driven entrepreneurs are more likely to register their company than those with no such motivations because company registration provides the firm with more opportunities to put its proactivity

into practice. This mechanism is consistent with Self-Determination Theory, according to which entrepreneurs with a prosocial motivation are more outcome-focused and more likely to commit the resources needed to achieve their social mission (Gagné & Deci, 2005; Grant, 2007, 2008a; Ryan & Deci, 2000a). In consequence, they will behave in a way consistent with their values and beliefs (Suchman, 1995). From this perspective, our results complement those of Renko (2013) and show that although the presence of prosocial motivation might complicate the outcomes of resource mobilisation, the latter effort is sustained by the necessary steps taken to access additional sources of funding. The fact that our results differ from those of Renko might also be explained by the inclusion in our model of the role played by resource mobilisation before registration, as a separate element, which isolates its potential negative effect on the probability of firm creation (the main argument put forward by Renko to justify her study hypothesis and the reason given for the conclusion that prosocial motivation has a negative influence on the probability of a new firm being created).

## **6. Conclusions and implications for research and practice**

The present study advances our understanding of how the nature of an entrepreneur's motivation may influence the likelihood and timing of the legal registration of a new firm, and of how this motivation interacts with different types of business gestation activities.

This study shows that the role of gestation activities and prosocial motivation is crucial for understanding how entrepreneurs focus their efforts to create new firms. Reflecting on the intensity with which these gestation activities are performed, the entrepreneur's motivation, and its impact on the decision to create a new firm enables us to better understand the microfoundations of entrepreneurial action (Mahto & McDowell 2018; Müller et al., 2023). Our study ultimately contributes to the literature on the entrepreneurial process by providing evidence of the impact produced by prosocial motivation on legal registration, an event that is of paramount importance for subsequent development of the venture.

These study findings are useful to practitioners and stakeholders, highlighting areas of activity requiring particular effort and attention, including the acquisition of funding or other support necessary for successful firm creation. The stronger the prosocial motivation, the more likely the entrepreneur will focus on the investment activities needed to achieve the goal of benefiting others through the creation of a new firm. In turn, fostering and supporting these types of activities will increase the chances of business success for entrepreneurs with prosocial motivations.

### **6.1 Limitations of the empirical study**

Our study does possess certain limitations that we explain in the following. One of them is related to variable measurement. While other studies measure prosocial motivation using an established four-item, scale (Grant, 2008a; Kibler et al., 2019; Lebel & Patil, 2018; Tiwari et al., 2020; Yamini et al., 2020), in our study prosocial motivation was measured based on a question in the PSED questionnaire. In addition, our work would have also benefited from the inclusion in the model of other types of motivations that may be present at the time of entry into the entrepreneurial process, such as intrinsic or extrinsic motivations associated with persistence or abandonment of activities (Murnieks et al., 2020; Ryan & Deci, 2022).

Finally, our results are based on a sample of nascent Spanish entrepreneurs that is relatively small compared to samples used in some US entrepreneurship studies (Reynolds, 2016; Reynolds et al., 2004), but comparable to samples from other countries such as Norway (Alsos & Kolvereid, 2010). Since it is difficult to find individuals to participate in longitudinal studies such as the PSED, this sample is consistent with the data collection instrument used (Davidsson & Gordon, 2012). On the other hand, by considering only individuals involved in the entrepreneurial process in Spain, we excluded cultural factors that might influence business creation. Therefore, it might be interesting to replicate our study in other cultural contexts (Brieger & De Clercq, 2019; Hechavarría et al., 2017).

### **6.2 Future lines of research**

In this study, we examine various theoretical implications concerning the entrepreneurial process and prosocial motivation. Our findings suggest that prosocial motivation has a positive effect on the most visible business activities and on those which contribute to achieving a specific goal – in other words, the use of resources (investing in the business) with the ultimate aim of benefiting others (Grant et al., 2007; Yamini et al., 2020). Furthermore, the mechanism by which prosocial motivation influences specific entrepreneurial activities such as legal registration is based on the willingness of individuals to invest time and energy to such tasks, to be proactive and to align their actions with their self-imputed moral standing, in order to gain legitimacy for the new firm. This research follows solid conceptual and empirical studies which have provided consistent evidence that prosocial motivation enhances individual proactivity and performance, and reduces perceived personal risks (Grant, 2007, 2008a; Miller et al., 2012; Quiggin, 1997; Van de Ven et al., 2007). However, future studies should specifically test this mechanism in the context of the

entrepreneurial process.

It may also be relevant to analyse in future research whether the results obtained in Kibler et al. (2019) on intrinsic motivation and entrepreneurial autonomy help to explain the different impact of prosocial motivation depending on the type of activities undertaken to create the firm. These authors show that socially motivated business entrepreneurs experience a negative impact on their life satisfaction due to a higher level of stress. However, the negative effect of prosocial motivation dissipates when perceived autonomy at work is high compared to when it is low. New research could analyse whether autonomy in the performance of activities influences the positive or negative effect of prosocial motivation.

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