

Work experience from paid employment and entry mode to entrepreneurship: business takeover versus new venture start-up

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ur paper investigates how the type of work experience from prior paid employment influences the entrepreneurship entry mode. We distinguish between two distinct entry modes: business takeover and new venture start-up. Using a large and rich French data set, we find that small firm experience increases the likelihood for business takeovers, whereas management and same sector experience both increase the likelihood for new ventures. Our findings are relevant for policymakers aiming to improve the business transfer process.

 Keywords: entrepreneurship entry mode, business takeover, new venture start-up, work experience

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Introduction

There are several ways to become an entrepreneur; a well-known distinction is that between starting a new venture and taking over an existing business. Due to uncertainties related to newness and smallness, the new venture path is more risky than business takeover (Block, Thurik, van der Zwan and Walter, 2013; Parker and van Praag, 2012). The latter, however, requires more financial capital (Bastié, Cieply and Cussy, 2013). Prior research shows that several individual and country-specific characteristics influence the business takeover versus new venture decision (Bastié, Cieply and Cussy, 2013; Block, Thurik, van der Zwan and Walter, 2013; Kay and Schlömer-Laufen, 2016; Parker and van Praag, 2012; Rocha, Carneiro and Varum, 2015). So far, however, we know little about how the type of work experience from one's previous paid employment influences one's entrepreneurship entry mode. Our study aims at filling this important research gap and focuses on three types of work experience, namely small firm experience, management experience, and same sector experience. Knowledge about how work experience from prior paid employment influences entrepreneurship entry modes and business transfer is important to understand individual's career paths and their determinants (Rauch and Rijsdijk, 2013). Moreover, it helps policymakers and small firm owners to understand and predict inefficiencies in the business transfer process.

Using a rich French firm-level data set including 28,895 firms that were either started as new ventures or were taken over, we find that small firm experience from previous paid employment increases the likelihood for business takeovers, whereas management and same sector experience both increase the likelihood for new ventures.

With these findings, our paper contributes to the literature about the determinants of the entrepreneurship entry mode (Bastié, Cieply and Cussy, 2013; Block, Thurik, van der Zwan and Walter, 2013; Cooper and Dunkelberg, 1986; Fujii and Hawley, 1991; Parker and van Praag, 2012). We are among the first to study how the type of work experience from previous paid employment influences whether new venture start-up or business takeover is preferred as entrepreneurship entry mode. In addition, our study contributes to research on how small firm experience influences entrepreneurship. Prior studies about this so-called "small firm



effect" have shown that small firm experience is positively linked to entrepreneurial choice and performance (Elfenbein, Hamilton and Zenger, 2010; Gompers, Lerner and Scharfstein, 2005; Parker, 2009). However, to date, this literature does not distinguish between different modes of entry into entrepreneurship. Our paper makes this distinction by analysing whether small firm employees favour the business takeover or the new venture entry mode. Finally, our paper contributes to the literature about how management and leadership experience influence entrepreneurship (Boyer and Blazy, 2014; Colombo and Grilli, 2005; Ganotakis, 2012; Rauch and Rijsdijk, 2013). Contrary to what we have hypothesized, we find that management experience favours new venture start-ups and not business takeovers. We explain this surprising finding by arguing that individuals with management experience probably care about the non-financial aspects of entrepreneurship, which are typically more prominent for new venture start-ups than for business takeovers.

Our finding that small firm experience leads to business takeover has practical implications for policymakers and small firm owners. Policymakers aiming to improve the business transfer process and firm owners looking for outside successors should target their efforts towards employees from small firms. Our results indicate that such employees have a higher interest than other employees in taking over established firms rather than starting new ventures. Another practical implication concerns the finding that management and same sector experience reduce the likelihood for business takeover versus new venture start-up. Firms seeking outside successors may have a particularly big problem finding successors with relevant industry and management experience, which can put the jobs in these firms at stake. Prior research shows that both management and same sector experience are important drivers of firm survival and firm development (Boyer and Blazy, 2014; Colombo and Grilli, 2005; Ganotakis, 2012; Gimeno, Folta, Cooper and Woo, 1997; Lasch, Le Roy and Yami, 2005; Rauch and Rijsdijk, 2013).

1. Theory and hypotheses

1.1. Human capital and entry into entrepreneurship

The concept of human capital emerged in the 1960s (Becker, 1964; Mincer, 1958; Schultz, 1961). It refers to an individual's knowledge, abilities, and skills. At the individual level, human capital has been linked to differences in productivity and earnings (e.g., Black and Lynch, 1996; Mincer, 1958; Schultz, 1961), whereas at the aggregated firm level, it has been linked to differences in firm's profitability, growth, and survival (e.g., Hitt, Biermann, Shimizu and Kochhar, 2001; Pennings, Lee and van Witteloostujin, 1998; Skaggs and Youndt, 2004).

The concept of human capital has been widely used in entrepreneurship research (e.g., Davidsson and Honig, 2003; Ganotakis, 2012; Gimeno, Folta, Cooper and Woo, 1997; Marvel, Davis and Sproul, 2016). In a meta-analytic study, Unger, Rauch, Frese and Rosenbusch (2011) identify a small but positive relationship between the extent of human capital and entrepreneurial success. They also find that this positive relationship is moderated by the degree of relatedness between the entrepreneur's previous tasks and his or her present tasks. A stronger relatedness facilitates knowledge transfer and allows the entrepreneur to benefit from his or her previously obtained skills. In line with this, Unger, Rauch, Frese and Rosenbusch (2011) suggest that entrepreneurs benefit more from their prior work experience if their current work environment is comparable.

Human capital is not static, but accumulated in a dynamic process through school education, apprenticeship, training and employment (Becker, 1994; Mincer, 1958). Widely used



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measurements or dimensions of human capital are educational attainment, training, work or employment experience, start-up experience, and age as a proxy for life experience (Blaug, 1976; Marvel, Davis and Sproul, 2016; Unger, Rauch, Frese and Rosenbusch, 2011). With regard to work experience, entrepreneurship research distinguishes between industry and management experience (Marvel, Davis and Sproul, 2016), and more recently, small versus large firm experience (Elfenbein, Hamilton and Zenger, 2010; Parker, 2009). It has been shown that management, industry, and small firm experience are positively linked to entrepreneurship entry (e.g., Dimov, 2010; Kim, Aldrich and Keister, 2006; Elfenbein, Hamilton and Zenger, 2010), as such experience helps entrepreneurs to identify and exploit business opportunities (Dimov, 2010; Shane and Venkataraman, 2000). Most prior studies, however, see the entrepreneurship entry decision as a dichotomous choice between entry or no entry. Only few studies distinguish explicitly between different entry modes such as business takeover and new venture start-up.

1.2. Business takeover versus new venture start-up

Cooper and Dunkelberg (1986) pioneered research about entrepreneurship entry modes and the path to entrepreneurship. They distinguished between four modes of entry into entrepreneurship: starting a new firm, inheriting a (family) firm, acquiring an outside firm (e.g., via a management buy-in), and acquiring one's former employer (e.g., via a management or employee buy-out). This study was followed by several empirical studies on entrepreneurship entry mode distinguishing between business takeover and new venture start-up (Bastié, Cieply and Cussy, 2013; Block, Thurik, van der Zwan and Walter, 2013; Kay and Schlömer-Laufen, 2016; Parker and van Praag, 2012; Rocha, Carneiro and Varum, 2015).

Using a Dutch sample of entrepreneurs, Parker and van Praag (2012) analysed how formal and informal human capital affect someone's entrepreneurship entry mode. They found that a higher educational level promotes new venture start-up, whereas management experience is positively related to business takeover. Bastié, Cieply and Cussy (2013) focused on social and financial capital and their effect on entrepreneurship entry mode. They found a positive link between having an entrepreneurial or professional network and the new venture entry mode. Block, Thurik, van der Zwan and Walter (2013) conducted a multi-country analysis with a focus on the impact of individual- and country-level characteristics on someone's preferred mode of entry. They showed that country level differences exist and found that non-financial motivations play an important role in the mode of entry decision. The study of Rocha, Carneiro and Varum (2015) showed that nascent entrepreneur's socio-demographic factors such as educational attainment, gender and age influence the entry choices among new venture start-up, business takeover and employee buyout. A more recent study by Kay and Schlömer-Laufen (2016) found that women have a higher intention to start a new firm from scratch rather than to take over an existing firm. However, gender seems not to have an effect when it comes to actual mode of entry into entrepreneurship.

1.3. Hypotheses about the link between work experience and entrepreneurship entry mode

We develop three hypotheses about how work experience from prior paid employment influences entrepreneurship entry modes distinguishing between business takeover versus new venture start-up. Our hypotheses focus on the effects of small firm experience, management experience, and same sector experience.

Small firm experience and entrepreneurship entry mode:



It has been shown that small firms are more likely than large firms to generate entrepreneurs (Elfenbein, Hamilton and Zenger, 2010; Gompers, Lerner and Scharfstein, 2005; Kacperczyk and Marx, 2016; Sørensen, 2007). We argue that this so-called small firm effect not only influences an individual's likelihood to become an entrepreneur but also relates to the motivation behind the move to entrepreneurship. Large firms tend to be hierarchical and bureaucratic (Sørensen, 2007). Employees may have felt frustrated that their former (large) employer neglected their innovative ideas. A well-documented example is Xerox; many former employees have founded small independent firms because Xerox rejected their innovative projects (Audretsch, 2007). In moving from paid employment to entrepreneurship, employees from large firms seek to realize their own innovative ideas and become their own boss, giving them the possibility to create and shape their own organization and work environment (van Gelderen and Jansen, 2006). In line with Block, Thurik, van der Zwan and Walter (2013), we posit that the possibility to create and shape one's own organization and work environment is greater in a new venture than in a business takeover. Small firm employees, on the other hand, are less likely to be stressed by organizational bureaucracy and rigidity and do not need to start a new business to realize their own entrepreneurial ideas. Another argument is that small firm employees are in a good position to build a strong network with suppliers, customers, and even competitors, promoting the likelihood of business takeover. We shall argue that they are more adept and are in an advantageous position to spot potential high growth firms that are seeking outside successors, in particular micro and other small firms. Summarizing these two lines of arguments, we propose the following hypothesis:

H1: Small firm experience is more often associated with business takeovers than with new venture start-ups.

Management experience and entrepreneurship entry mode:

Working in a management position requires management skills such as communication, leadership, planning, and problem-solving skills. Business takeovers, which are usually of larger scale than new venture start-ups, have more complicated governance structures, larger numbers of employees, and greater transaction and sales amounts than new venture start-ups. Therefore, they require successors who can manage its employees and develop the business, in which the ability of managing teams, processes, and customer relationships is of great value. Accordingly, we argue that management experience is more valuable in business takeovers than in new venture start-ups (Parker and van Praag, 2012). In contrast, according to Lazear's (2005) jack-of-all-trades view of entrepreneurs, new venture start-up founders have more generic forms of human capital accumulated through multifaceted work experience, but they are less likely to be exceptional in a certain field. In line with Bastié, Cieply and Cussy (2013) as well as Parker and van Praag (2012), we thus hypothesize a positive relationship between management experience and business takeover:

H2: Management experience is more often associated with business takeovers than with new venture start-ups.

Same sector experience and entrepreneurship entry mode:

Industry-specific knowledge and industry know-how are typically difficult to transfer across sectors. This constitutes a strong market entry barrier and encourages employees to stay in the same sector. Employees with significant work experience in a particular sector often have a deep understanding of the market, the competitors, the products, and the customers' needs (Boyer and Blazy, 2014). Often, they have also established close business and social networks with colleagues, customers, and suppliers. These networks together with deep industry



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knowledge are helpful to identify and exploit attractive entrepreneurial opportunities (Ganotakis, 2012), making new venture start-up more likely than business takeover. Employees from other sectors are in an outsider position and do not have this profound sector-specific knowledge and intense networks which makes it more difficult to start one's own business. They have to rely more on established business structures and existing customers to become an entrepreneur in that sector, favouring business takeover over new venture start-up. This argument is in line with strategic management research about firm's market entry behaviours. Firms that do not have the knowledge and resources to enter a new market favour acquisitions over greenfield investments as market modes of entry (Helfat and Lieberman, 2002). The following hypothesis is proposed:

H3: Same sector experience is less often associated with business takeovers than with new venture start-ups.

2. Data set and method

2.1. Data set and sample

Our data set is called SINE (Système d'Information sur les Nouvelles Entreprises). It was created by INSEE (Institut National de la Statistique et des Etudes Economiques) which sent a questionnaire to all new ventures and business takeovers in France that were established in the first half of 2002. A total of 92,966 out of 100,731 firms responded to the questionnaire. This high response rate is due to SINE's mandatory nature and ensures that our data set is representative for the French population of new ventures and business takeovers.

We restricted our sample to new ventures founded by or taken over by paid employees as our research interest lies in the work experience from paid employment and how it effects entrepreneurship. We excluded former self-employed individuals, students, homemakers, retirees and long-term unemployed individuals (39,567 individuals in total). Finally, we also excluded 11,284 part-time entrepreneurs who have a job in paid employment while entering into entrepreneurship. Previous studies have pointed out the differences between full-time and part-time entrepreneurs in terms of time commitment, risk bearing, motivation, and performance (Burmeister-Lamp, Lévesque and Schade, 2012; Lévesque and Schade, 2005; Petrova, 2012; Raffiee and Feng, 2014). Moreover, by focusing on full-time entrepreneurs, our results can be compared to former studies regarding entrepreneurship entry mode (Block, Thurik, van der Zwan and Walter, 2013; Parker and van Praag, 2012).

The SINE data set includes three types of business takeovers: family firm takeovers, management buyouts, and outside takeovers. In line with prior research (Bastié, Cieply and Cussy, 2013; Parker and van Praag, 2012), we excluded 531 family firm takeovers and 803 management buyouts from our analysis, as these two types of takeovers constitute special cases that are not available for non-family members or external employees, respectively. Furthermore, we identified and excluded one new venture start-up with more than 200 employees as an outlier. Also, observations with missing values are excluded. Our final sample consists of 28,895 full-time entrepreneurs (25,474 started a new venture, and 3,421 took over an existing business).

^{1.} We keep, however, short-time unemployed individuals with work experience in our sample. Such individuals may have quitted their job in paid employment with the intention to become entrepreneurs.



2.2. Regression method and dependent variable

We used two regression models to analyse the effect of work experience on entrepreneurship entry mode. The first regression model is a Heckman probit model accounting for a potential selection bias that may occur as a result of restricting our sample to entrepreneurs with prior work experience from a full-time wage job. In the first stage of this model (the selection regression), the dependent variable equals one if the individual chose to work prior to entrepreneurship (Table A3). In the second stage of this model (the outcome regression), the dependent variable "business takeover" equals one if the individual chose business takeover as entrepreneurship entry mode, and zero if new venture start-up. The second regression model is a simple logistic regression using the reduced sample of entrepreneurs with prior work experience from paid employment. The dependent variable is the same as the one in the outcome regression of the Heckman model.

2.3. Independent and control variables

Our focal independent variables concern the entrepreneur's previous work experience during paid employment. First, we consider the type of work experience regarding firm size. "Small firm experience" is coded as one if the entrepreneur has gained his or her principal work experience from a firm with less than 49 employees and is coded as zero if the experience is attained from medium or large firms. Second, the variable "management experience" measures whether the entrepreneur has worked as a CEO or senior manager. Third, the variable "same sector experience" equals one if the entrepreneur has worked in the same sector, zero if in a different sector.

Furthermore, based on previous literature regarding entrepreneurship entry modes (Bastié, Cieply and Cussy, 2013; Block, Thurik, van der Zwan and Walter, 2013; Kay and Schlömer-Laufen, 2016; Parker and van Praag, 2012; Rocha, Carneiro and Varum, 2015), we add several individual-level control variables (educational level, entrepreneurs in close relational circle, entrepreneurial training, growth ambition, long-term orientation, age, nationality, motivation, and sole partnership). Additionally, we control for firm-level characteristics such as "innovation", the amount of "start-up capital received", "public aid", and "percentage of self-funding". We also include nine industry and 26 region dummies as controls. All variables are defined in Table A1 of the appendix.

3. Descriptive statistics and multivariate regression results

About 88% of the entrepreneurs in our sample started a new venture; 12% chose business takeover. Table 1 compares entrepreneurs who started a new venture with entrepreneurs who chose business takeover as entry mode. We find that "small firm experience" is higher for entrepreneurs who chose business takeover than for entrepreneurs who started a new venture, whereas "same sector experience" is higher for new ventures than for business takeovers. The proportion of entrepreneurs with "management experience" is also higher for new ventures than for business takeovers.

Table A2 of the appendix shows a correlation table and reports variance inflation factors (VIFs). The correlations between the independent variables are low and the VIFs fall within an acceptable range; hence multicollinearity is unlikely to be a concern, particularly since the sample is very large.



Tableau 1. Descriptive statistics (means and tests of mean differences)

	Mean	Mean	
	New venture start-up	Business takeover	t-values a of tests of mean diff.
Type of work experience from previous paid employmen	nt		
Small firm experience	0.73	0.79	-8.66***
Management experience	0.24	0.16	11.49***
Same sector experience	0.68	0.61	8.33***
Further characteristics of the entrepreneur			
No diploma	0.14	0.13	2.36*
Lower than A-level diploma	0.38	0.48	-10.58***
A-level diploma	0.17	0.19	-2.76**
A-level plus two years education	0.12	0.10	4.04***
A-level plus over two years education	0.19	0.11	13.59***
Received entrepreneurial training	0.41	0.38	2.55*
Entrepreneurs in close relational circle	0.68	0.67	1.85
Received social benefit	0.08	0.04	9.21***
Growth ambition	0.44	0.57	-13.43***
Long-term orientation	0.91	0.93	-3.41***
Age under 35	0.41	0.47	-6.81***
Age between 35 and 49	0.47	0.46	1.13
Age over 50	0.12	0.07	10.99***
Female	0.22	0.34	-14.41***
French	0.89	0.93	-10.07***
Entrepreneurial motivation: opportunity motivation	0.71	0.86	-22.39***
Entrepreneurial motivation: necessity motivation	0.03	0.01	11.58***
Entrepreneurial motivation: mixed motivation of opportunity and necessity	0.26	0.13	19.68***
Sole entrepreneur	0.54	0.32	25.91***
Firm-level variables			
Innovation	0.40	0.50	-10.88***
Start-up capital: <2k	0.19	0.02	50.66***
Start-up capital: 2-16k	0.56	0.20	48.39***
Start-up capital: 16-80k	0.20	0.40	-22.81***
Start-up capital: >80k	0.05	0.38	-39.88***
Received public aid	0.37	0.30	8.24***
Percentage of self-funding	0.57	0.28	53.45***
N entrepreneurs	25,474	3,421	

Notes: a Welch's t-test. Significance level: * p<0.05, ** p<0.01, *** p<0.001.



Table 2 shows the outcome regression results of the Heckman (probit) model and the logistic regression results with "business takeover" as the dependent variable. The two models yield similar results. The LR test of the Heckman model is insignificant (p=0.201), indicating that the unobserved factors influencing the likelihood of having work experience prior to entrepreneurship are not related to the likelihood of choosing business takeover. We do not find evidence for a selection bias.

Tableau 2. Heckman probit model and logistic regression model: Determinants of outside business takeover (dummy=1) versus new venture start-up (dummy=0)

	Model I	Model II
	Heckman probit model	Logistic regression
Type of work experience from previous paid employmer	t	
Small firm experience	0.09**	0.17**
	(2.67)	(2.76)
Management experience	-0.29***	-0.57***
	(-7.21)	(-7.49)
Same sector experience	-0.14***	-0.27***
	(-4.92)	(-4.92)
Control variables		
Individual-level variables		
No diploma	benchmark	benchmark
Lower than A-level diploma	-0.02	-0.02
	(-0.39)	(-0.26)
A-level diploma	-0.19***	-0.34***
	(-3.65)	(-3.67)
A-level plus two years education	-0.31***	-0.53***
	(-4.87)	(-4.85)
A-level plus over two years education	-0.23***	-0.36**
	(-3.76)	(-3.21)
Received entrepreneurial training	-0.13***	-0.22***
	(-4.30)	(-3.96)
Entrepreneurs in close relational circle	-0.16***	-0.30***
	(-5.23)	(-5.53)
Received social benefit	-0.18**	-0.38***
	(-3.14)	(-3.37)
Growth ambition	0.04	0.09
	(1.54)	(1.63)
Long-term entrepreneurship	-0.06	-0.12
	(-1.23)	(-1.26)
Age under 35	benchmark	benchmark
Age between 35 and 49	0.02	0.03
-	(0.57)	(0.57)
Age over 50	-0.06	-0.20
-	(-1.08)	(-1.96)
French	0.01	0.02
	(0.13)	(0.19)



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Entrepreneurial motivation: mixed motivation of opportunity and necessity	benchmark	benchmark
Entrepreneurial motivation: opportunity motivation	0.25***	0.47***
	(6.59)	(6.56)
Entrepreneurial motivation: necessity motivation	-0.19	-0.57*
	(-1.60)	(-2.30)
Sole entrepreneur	-0.18***	-0.32***
	(-6.52)	(-6.19)
Firm-level variables		
Innovation	-0.06*	-0.12*
	(-2.13)	(-2.26)
Start-up capital: <2k	benchmark	benchmark
Start-up capital: 2-16k	0.48***	1.12***
·	(7.33)	(7.90)
Start-up capital: 16-80k	1.14***	2.35***
	(17.02)	(16.63)
Start-up capital: >80k	1.80***	3.48***
	(24.34)	(23.46)
Received public aid	-0.32***	-0.59***
	(-10.07)	(-10.15)
Percentage of self-funding	-0.63***	-1.23***
	(-16.08)	(-16.37)
Constant	-2.21***	-4.47***
	(-7.56)	(-9.15)
N entrepreneurs	28,895	28,895
Log likelihood	-39,405.62	-5,498.90

Notes: Significance level: * p<0.05, ** p<0.01, *** p<0.001. T-statistics are in the parentheses. This is the outcome regression of the Heckman probit model. The selection regression is presented in Table A3. Industry and region dummies are included in the model.

With respect to our main independent variables, our results show that the firm size of the former employer has an effect on entrepreneurship entry mode. Compared to paid employees from medium or large firms, employees from small firms are more likely to choose business takeover versus new venture start-up (model I, "small firm experience": β =0.09, p<0.01). Hypothesis 1 is supported. In line with Bastié, Cieply and Cussy (2013), we find evidence supporting hypothesis 3: entrepreneurs with "same sector experience" are more likely to have entered entrepreneurship via new venture start-up versus business takeover (model I: β =-0.14, p<0.001). Surprisingly, "management experience" is positively related to new venture start-up (model I: β =-0.29, p<0.001). This finding differs from the results of Bastié, Cieply and Cussy (2013) and Parker and van Praag (2012). H2 is not supported.

Regarding individual-level control variables, we find that entrepreneurs with higher education are more likely to start a new venture, which corresponds to the results of Bastié, Cieply and Cussy (2013), Block, Thurik, van der Zwan and Walter (2013), and Parker and van Praag (2012). Furthermore, "entrepreneurial training", "having entrepreneurs in a close relational circle", "having received social benefit", and "sole entrepreneur" have positive associations with new venture start-ups. We did not find significant effects regarding "growth ambition", "long-term orientation", "age" and "nationality". The estimates of the motivation variables suggest that



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opportunity motivation is positively linked to taking over an existing business. With respect to firm level variables, new venture start-up is more likely to be innovative, which corroborates the finding of Block, Thurik, van der Zwan and Walter (2013). Also, in line with Bastié, Cieply and Cussy (2013), we find that the amount of start-up capital is positively associated with business take-over. Moreover, the regressions confirm the findings from the univariate analysis that new ventures are more likely to have received public aid and have a higher percentage of self-funding than business takeovers.

We performed a robustness check, in which we included 8,020 part-time entrepreneurs in the sample (Table A4). The results of the robustness check confirm our main findings regarding small firm experience, management experience, and same sector experience.²

4. Discussion and practical implications

4.1. Contribution to entrepreneurship research

Our study shows that the type of work experience from previous paid employment influences entrepreneurship entry mode. We distinguish between new venture start-up and business takeover as two important and common entrepreneurship entry modes.

We show that the profiles of those individuals starting new ventures versus those taking over existing businesses differ significantly in terms of work experience, education, entrepreneurial role model, personal financial status, motivation, and partnership. In particular, we find that small firm employees prefer to become entrepreneurs via business takeover. In this perspective, our paper connects the small literature regarding new venture start-up versus business takeover with the literature on how the type of work experience influences entrepreneurship entry mode (Elfenbein, Hamilton and Zenger, 2010; Gompers, Lerner and Scharfstein, 2005; Parker, 2009). The small firm effect in our findings can be explained by the employees' reasons for leaving their paid employment job to become entrepreneurs. For example, working in small firms offers employees higher entrepreneurial learning opportunities as compared to employees in large firms (O'Gorman, Bourke and Murray, 2005). Consequently, small firm employees accumulate operational knowledge of 'how to run a business' and take the decision to take over a (small) business rather than to set up a new one. Also, small firm employees are likely to network with suppliers, customers and competitors (Elfenbein, Hamilton and Zenger, 2010; Gompers, Lerner and Scharfstein, 2005). They may know of some small and micro firms that are looking for outside buyers, and may be better suited to use their networks to acquire such firms.

Moreover, we argue that the motivation to become an entrepreneur differs between paid employees from larger versus smaller firms. Because employees from larger firms are often well paid and the opportunity costs are thus higher, we argue that, particularly for employees from such firms, non-financial aspects of entrepreneurship must play an important role in the motivation to become an entrepreneur (Millán, Hessels, Thurik and Aguado, 2013). We argue that for large firm employees starting a new venture is more suitable than taking over an existing firm to fulfill their non-financial goals. By starting a new business from scratch, entrepreneurs can shape

^{2.} When we separate "medium firm experience" (50 to 249 employees) from "large firm experience" (more than 250 employees) and put "large firm experience" in the Heckman probit model (model I in Table 2), and use "medium firm experience" as a benchmark, the estimator of small firm experience is still positive and significant. However, when we use "large firm experience" as a benchmark, the coefficient of "small firm experience" becomes insignificant.



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the venture to be exactly as they envision it. This possibility exists to a lesser extent with business takeovers, where the organization is already in place, including its products, employees, suppliers, and customers.

Our finding regarding same sector experience is in line with Bastié, Cieply and Cussy (2013). As highlighted by Unger, Rauch, Frese and Rosenbusch (2011: 608), "the transfer of education and experience works best if old and new activities share common situation-response elements". We argue that individuals with same sector experience have a more profound knowledge of the market, including its products and customers, and are therefore in a better position than outsiders to start a business from scratch. Moreover, they can make use of their professional networks from previous employment to spot and develop attractive entrepreneurial opportunities. In contrast, people that do not have same sector or relevant industry experience may prefer an entry into entrepreneurship via business takeover, as this mode of entry compensates for their lack of relevant industry knowledge and networks. By taking over an existing firm, people without same sector experience can rely on the firm's established structures and customer relationships.

Furthermore, we find that management experience increases the likelihood for new venture start-ups, which is contradictory to what we have hypothesised and contrary to what Bastié, Cieply and Cussy (2013) and Parker and van Praag (2012) have found. We shall explain this finding through the high importance of non-financial aspects of entrepreneurship for entrepreneurs with management experience. Individuals in senior management positions may leave their former employer when they are frustrated with the firm's poor management and unclear promotion paths (Cooper, 1971). We argue that having management experience may encourage employees to start a new venture rather than taking over an existing business. The former enables them to apply their own management and governance philosophy and does not force them into existing structures.

Finally, higher educated individuals prefer to start a new business rather than to acquire an existing one (Bastié, Cieply and Cussy, 2013; Block, Thurik, van der Zwan and Walter, 2013; Parker and van Praag, 2012). This association between educational attainment and new venture entry mode supports the argument that higher educated people are less risk averse so that they are more willing to take the hazard to start brand new firms (Hartog, Ferrer-i-Carbonell and Jonker, 2002; Riley and Chow, 1992). Moreover, we show that exposing to an entrepreneurial network, i.e., having entrepreneurs in close relational circle, motivates one to become a new firm founder rather than a business acquirer. Entrepreneurial role models, especially parental role models, are considered an important factor in motivating people to become entrepreneurs (Bosma, Hessels, Schutjens, van Praag and Verheuil, 2012; Chlosta, Patzelt, Klein and Dormann, 2012; Fairlie and Robb, 2007). In our study, it appears that this effect is more favorable for new venture creation than for business takeover. Another interesting and surprising finding is about the relationship between opportunity-seeking motivation and takeover entry mode. One could make the argument that individuals, who have discovered and exploited a business opportunity do so via new venture creation rather than business takeover as the former entry mode is more novel and entrepreneurial than the latter entry mode. However, our results do not support this reasoning. This may be because of an unclear definition of what constitutes a business opportunity, as well as by constraints of the data set that do not allow us to disentangle different types of business opportunities. Another explanation is that (French) entrepreneurship policy may have pushed unemployed individuals to become entrepreneurs by starting a new venture. In most cases, these individuals qualify as necessity rather than opportunity entrepreneurs (Block and Wagner, 2010).



4.2. Implications for policy makers

Our findings are relevant for policymakers and firm owners aiming to improve the business transfer process. Across the EU and many other countries, several proposals have been made and initiatives have been launched designed to improve the business transfer process, including a reduction of (inheritance) taxes, measures to help prepare those who want to sell their business, as well as training and financial support for those who want to take over an existing business (European Commission, 2012). Our findings suggest that the likelihood of taking over an existing business is higher for small firm employees than for large firm employees. Hence, policymakers and firms looking for an outside successor should pay attention to employees in small firms who (intend to) quit their jobs to become entrepreneurs. Moreover, our study justifies the provision of tailored entrepreneurship training programs for entrepreneurs seeking new venture start versus business takeover. The two groups of entrepreneurs differ in many aspects, notably work experience, education and the type of entrepreneurial motivation. Entrepreneurship training programs should account for these differences to prepare entrepreneurs in an effective way for the challenges they are confronted with as entrepreneurs. So far, most training courses offered by either policymakers or business schools are for new venture starters. We shall argue that there is a need for more programs instructing potential entrepreneurs on how to identify and develop business takeovers. Our results suggest that these need to be different from the ones offered to entrepreneurs starting their own ventures not only because the requirements are different but also because the target groups show different profiles. Finally, our finding that management and same sector experience reduce the likelihood for business takeover points to a potential problem of identifying successors with relevant industry and management experience. Yet, prior research shows that both management and same sector experience are crucial for firm survival and firm development (Boyer and Blazy, 2014; Colombo and Grilli, 2005; Ganotakis, 2012; Gimeno, Folta, Cooper and Woo, 1997; Rauch and Rijsdijk, 2013).

Conclusion

The objective of the present study is to understand how work experience gained from prior paid employment influences entrepreneurship entry mode. We focus on specific types of work experience of employees, such as small firm, management, and same sector experience. Addressing a gap in the literature, we distinguish between and then compare two distinct entry modes to entrepreneurship: starting a new venture versus taking over an existing business. We contribute to the literature about the determinants of entrepreneurship entry modes and to the research on how small firm experience influences entrepreneurship. We find that small firm experience increases the likelihood for business takeovers, whereas management and same sector experience both increase the likelihood for new ventures. The first finding can be explained by higher facilities to identify firms seeking a successor in customer or supplier networks. Also, the literature points to higher entrepreneurial learning in small firm contexts that enables employees to understand how to run a business, facilitating in fine the takeover of a (small) business. Our second finding contributes to the literature about how management and leadership experience influence entrepreneurship. Contrary to our expectation, management experience favours new venture start-ups and not business takeovers. We may justify this finding pointing at non-financial aspects of entrepreneurship, which play a greater role in starting a firm from scratch versus business takeovers.

Our findings have several implications for policymakers and entrepreneurs. With a better understanding of specific work experience and its effect on entry choice, we provide fresh



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insights for entrepreneurship support policies to foster new firm creation. In particular, policy-makers aiming to improve the business transfer process could take into account the small firm effect for entrepreneurship entry choice to identify (small firm employees) and to train (industry and management experience) candidates for business takeover.

Our study is not without limitations, from which avenues for further research can be identified. In particular, the type of work experience from paid employment investigated in this study could be extended to include experience from specific types of organizations, such as international firms or non-profit organizations. The number of years of general work experience may also play a role in explaining entrepreneurship entry mode (Fujii and Hawley, 1991). In addition, work experience can be categorized according to its specialized areas, such as marketing experience and R&D experience (Stuetzer, Goethner and Canter, 2012). Another promising avenue of future research is to look at how a balanced set of skills and experiences (Åstebro and Thompson, 2011; Lazear, 2005) may affect entrepreneurship entry mode.

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Appendix

Table A1. Description of variables

firm(s) with less than 50 employees. Dummy =1 if the entrepreneur has worked as a CEO or a senior manage prior to entrepreneurshi Dummy =1 if the entrepreneur has worked in the same sector before. Control variables Individual-level variables No diploma Lower than A-level diploma A-level diploma Dummy =1 if the entrepreneur has no diploma. Dummy =1 if the entrepreneur has lower than A-level diploma. A-level plus two years education A-level plus over two years education Received entrepreneurial training Entrepreneurs in close relational circle Received social benefit Growth ambition Dummy =1 if the entrepreneur has A-level diploma plus two years education. Dummy =1 if the entrepreneur has A-level diploma plus two years education. Dummy =1 if the entrepreneur has A-level diploma plus more than two years education. Dummy =1 if the entrepreneur has eceived specific training for his or her business. Entrepreneurs in close relational circle Received social benefit Dummy =1 if the entrepreneur has business leaders or self-employed people in his or her close relational circle. Dummy =1 if the entrepreneur has business leaders or self-employed people in his or her close relational circle. Dummy =1 if the entrepreneur is business leaders or self-employed people in his or her close relational circle. Dummy =1 if the entrepreneur is long-term oriented to be an entrepreneur. Age under 35 Age between 35 and 49 Age over 50 Dummy =1 if the entrepreneur is less than 35years old. Dummy =1 if the entrepreneur is between 35 and 49 years old. Dummy =1 if the entrepreneur is female. Dummy =1 if the entrepreneur chose entrepreneurship because s/he had a new business idea or discovered a business opportunity. Dummy =1 if the entrepreneur felt constraint, but proactively chose entrepreneurship entrepreneurship opportunity and necessity	Variable	Description
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mixed motivation of entrepreneurshi opportunity and necessity		Dummy =1 if the entrepreneur reported to be forced into entrepreneurshi
	Entrepreneurial motivation: mixed motivation of	
	Sole entrepreneur	Dummy =1 if the entrepreneur has started the business by him or herself.



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Firm-level variables	
Innovation	Dummy =1 if the entrepreneur considers the firm as an innovative firm.
Start-up capital: <2k	Dummy =1 if the start-up capital is less than 2,000 €.
Start-up capital: 2-16k	Dummy =1 if the start-up capital is from 2,000 € to less than 16,000 €.
Start-up capital: 16-80k	Dummy =1 if the start-up capital is from 16,000 € to less than 80,000 €.
Start-up capital: >80k	Dummy =1 if the start-up capital is more than 80,000 €.
Received public aid	Dummy =1 if the entrepreneur has received public aid.
Percentage of self-funding	The percentage of self-funding or funding from family or associate in the total amount of start-up capital.
Other control variables	
Industry dummies	9 industries: Agricultural food, non-agricultural food, construction, commerce, transport, real estate, business services, personal services, education, health and social work. The definition is based on French Classification of Activities (NAF)
Region dummies	26 regions: Alsace, Aquitaine, Auvergne, Basse-Normandie, Bourgogne, Bretagne, Centre, Champagne-Ardenne, Corse, Franche-Comté, Guadeloupe, Guyane, Haute-Normandie, Île-de-France, Languedoc-Roussillon, La Réunion, Limousin, Lorraine, Martinique, Midi-Pyrénées, Nord-Pas-de-Calais, Pays de la Loire, Picardie, Poitou-Charentes, Provence-Alpes-Côte d'Azur, Rhône-Alpes

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Table A2. Correlation table

		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	25 VIF
_			1.33
N	_	3.05	1.17
	_		
က	Management	-0.06-0.24	1.45
_		0.05.018.20.03.	τ ο
-			2
2		0.06 0.16 -0.27 0.04 -	2.52
	diploma		
9	A-level diploma	0.02 0.02 -0.01 -0.04 -0.37 -	2.04
7		0.02-0.10 0.04 -0.05-0.29-0.17 -	1.82
(
∞	A-level plus over	-0.07-0.26 0.43 -0.03-0.38-0.21 -0.17 -	2.45
O	_	0.01 0.10 -0.03 0.09 0.91 0.00 -0.08 -0.90 -	τ τ
)			-
10		-0.01 0.01 0.01 -0.01 -0.01 0.04 0.01 0.01 0.03 -	1.03
Ξ	Received social	-0.04 0.03 -0.05 -0.09 0.05 0.00 -0.01 -0.05 0.05 0.01 -	1.10
7			1
7 .	_	Growth ambition 0.08 0.02 0.09 0.04 -0.01 0.02 0.03 -0.04 0.01 0.04 -0.04 -	7.16
<u>ς</u>		3.02 0.08 -0.10 0.04 0.05 0.00 0.00 -0.06 0.08 0.01 0.10	1.06
4		0.01-0.05 0.05 -0.03 0.07 -0.05-0.05-0.01-0.03-0.03 0.04 -0.03 0.05 -	1.20
7.		0.05-012 0.20 -0.04-0.05 0.01 -0.02 0.08 -0.11-0.06 0.03 -0.10-0.15-0.33 -	1 29
9 9		0.09 -0.01 -0.06 -0.11 -0.08 0.08 0.05 0.08 -0.03 0.01 0.02 -0.10 -0.03 0.00 -0.02 -	1.09
17		0.05 -0.08 0.07 -0.10 0.06 0.07 0.05 -0.01 0.06 0.00 -0.05 0.02 -0.02 0.02 0.10	1.13
0		0.11 -0.02 0.01 0.09 -0.01 0.02 0.00 0.01 -0.03 0.01 -0.24 0.15 0.02 -0.04-0.11 -0.03 0.01	1.29
-			
<u>ე</u>	Entrepreneurial motivation: necessity	-0.04 0.02 0.01 0.00 0.01 -0.03-0.01-0.03-0.03-0.04 0.05 -0.07-0.05 0.01 0.12 0.01 -0.01-0.27	1.10
	motivation		
20	Sole entrepreneur	-0.14-0.05 0.10 0.02 -0.04-0.02 0.00 0.08 -0.11-0.08 0.00 -0.12-0.07 0.02 0.07 -0.05-0.02 0.05	1.1
2	Innovation	0.03 0.03 0.03 0.05 0.00 0.06 0.05 0.22 0.05	1.10
22	Start-up capital:	3.24 0.04 -0.04 0.05 0.02 -0.02 0.00 -0.05 0.01 0.00 0.03 -0.05 0.02 0.01 0.01 -0.07 -0.07 -0.06 0.00 0.04 -0.06 -	2.07
23		0.15 -0.02 0.00 -0.05 0.02 0.04 0.00 -0.03 0.06 0.04 -0.03 0.13 0.05 0.00 -0.04 0.03 0.08 0.05 -0.03 -0.12 0.10 -0.56 -	2.17
24		0.39 -0.04 0.12 -0.04 -0.04 0.00 0.02 0.08 -0.03 0.02 -0.05 0.12 0.03 0.02 0.00 0.02 0.05 0.09 -0.03 -0.14 0.07 -0.32 -0.16	1.84
7.7	Beceived public aid	30 5 0 03 - 0 10-0 08 0 02 0 02 0 02 0 03 0 04 0 18 0 04 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 25
26		-0.23-0.10 0.15 -0.04-0.14-0.01 0.07 0.14 -0.13-0.01 -0.06 -0.03 0.03 0.09 -0.04 -0.06 -0.10 0.03 0.09 -0.04 0.14 -0.14 -0.14 -0.18 -0.16 -0.10 1.18	0.10 1.18
	5		

Notes: N entrepreneurs = 28,895. Correlation coefficients greater than or equal to 0.02 (in absolute value) are significant at 0.1% level. Mean VIF=1.43.



Table A3. Heckman probit model: selection regression

Determinants of having previous work experience (dummy=1) versus no previous work experience (dummy=0)

	Coefficient
No diploma	benchmark
Lower than A-level diploma	0.33***
	(19.44)
A-level diploma	0.23***
	(11.46)
A-level plus two years education	0.39***
	(17.12)
A-level plus over two years education	0.20***
	(10.44)
Entrepreneurs in close relational circle	0.15***
	(12.20)
Age under 35	benchmark
Age between 35 and 49	0.04**
	(2.97)
Age over 50	-0.24***
	(-13.56)
Female	-0.38***
	(-29.66)
French	-0.02
	(-0.96)
Constant	-0.03
	(-1.17)
N entrepreneurs	50,852
Log likelihood	-39,405.62

Note: this table reports estimation results of the selection regression of the Heckman model. We drop variable "female" in the second stage of the Heckman selection model (Block, Thurik, van der Zwan and Walter, 2013; Kay and Schlömer-Laufen, 2016; Parker and van Praag, 2012). LR test of independent equations (rho = 0): chi2(1) = 1.63, Prob > chi2 = 0.201. Thus, we cannot reject the null hypothesis. That is, the unobserved factors that affect the likelihood of getting employment experience prior to entrepreneurship is not related to the chance of choosing business takeover. Significance level: * p < 0.05, ** p < 0.01, *** p < 0.001. T-statistics are in the parentheses.



Table A4. Robustness check

	Logistic regression (Part-time entrepreneurs are included in the sample)
Type of work experience from previous paid employment	
Small firm experience	0.14* (2.54)
Management experience	-0.74*** (-11.89)
Same sector experience	-0.11* (-2.35)
Control variables	
Individual-level variables	
No diploma	benchmark
Lower than A-level diploma	-0.13
	(-1.79)
A-level diploma	-0.46***
	(-5.67)
A-level plus two years education	-0.62***
	(-6.61)
A-level plus over two years education	-0.52***
	(-5.49)
Received entrepreneurial training	-0.14**
	(-2.85)
Entrepreneurs in close relational circle	-0.31*** (-6.54)
Received social benefit	-0.26*
neceived Social Defletit	(-2.42)
Growth ambition	0.09
GIOWIT AMBILION	(1.80)
Long-term entrepreneurship	-0.09
Long torm ontropronoutship	(-1.09)
Age under 35	benchmark
Age between 35 and 49	0.05
9	(0.99)
Age over 50	-0.31***
	(-3.56)
French	-0.08 (-0.94)
Entrepreneurial motivation: mixed motivation of opportunity and necessity	benchmark
Entrepreneurial motivation: opportunity motivation	0.32***
	(4.72)
Entrepreneurial motivation: necessity motivation	-0.59*
	(-2.52)
Sole entrepreneur	-0.27***
	(-5.82)



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Firm-level variables	
Innovation	-0.17*** (-3.66)
Start-up capital: <2k	benchmark
Start-up capital: 2-16k	1.02*** (8.56)
Start-up capital: 16-80k	2.29*** (19.16)
Start-up capital: >80k	3.24*** (25.87)
Received public aid	-0.51*** (-9.45)
Percentage of self-funding	-1.18*** (-18.18)
Constant	-3.87*** (-9.22)
N entrepreneurs	36,915
Log likelihood	-6,999.02

Notes: significance level: * p<0.05, ** p<0.01, *** p<0.001; * -statistics are in the parentheses. The dependent variable equals 1 if the entrepreneur chose outside business takeover, and 0 if he or she chose new venture start-u Industry and region dummies are included in the regression.