THE CAUSES OF EARLY-STAGE ENTREPRENEURIAL DISCONTINUANCE

Martin Lukeš, Jan Zouhar[*]

Abstract

A high proportion of nascent entrepreneurs do not make it to an operational venture. Even though entrepreneurial exit decisions occur more frequently than many think, the literature on entrepreneurial discontinuance is not much developed. The paper first examines whether factors influencing early-stage discontinuance differ in the Czech Republic in comparison with Western countries. Second, it contributes to existing theories on nascent entrepreneurial activity of "modest majority" low-growth businesses by focusing on the role of expectations in discontinuance decisions. A sample of nascent entrepreneurs was interviewed in 2011 and then in two follow-up waves in 2012 and 2013. Building on hubris theory of entrepreneurship and theory of performance thresholds, the paper discusses subjective decision-making about entrepreneurial launch and exit. The results show that people with higher industry experience are more likely to discontinue from nascent entrepreneurship, a finding contrasting most research in Western countries. The paper also provides added value in relating growth aspirations to solo *vs*. team entrepreneurship. Solo entrepreneurs with high initial expectations were found more likely to discontinue from their efforts, whereas teams disbanded more often in case of low-ambition plans on new venture.

Keywords: nascent entrepreneurs, start-ups, longitudinal study, event history models, discontinuance, entrepreneurial exit, opportunity costs, Czech Republic
JEL Classification: M13, L26

1.   Introduction

A high proportion of nascent entrepreneurs do not make it to an operational venture and high proportion of new ventures survive just few years and are not successful in the long term (Parker, Belghitar, 2006; Brüderl, Preisendörfer, Ziegler, 1992). Entrepreneurial exit decisions occur more frequently than many think. Approximately 150,000 people discontinued in 2013 their involvement in entrepreneurial activity in the Czech Republic alone (Lukeš *et al*., 2013b).

The literature on entrepreneurial discontinuance is, however, not much developed and there is a gap in scientific knowledge concerning pre-start-up phase and the role of entrepreneurial discontinuance in it (Yusuf, 2012; Khan, Tang, Joshi, 2014). In their pioneering work, Gimeno *et al*. (1997) were the first who emphasized that factors influencing success and failure differ and that factors other than performance may play

a systematic role in the survival of organizations. The entrepreneurial process is initiated by individuals or by teams. Because these people have unique career options, aspirations and goals, a greater understanding of the entrepreneur's background will provide insight into the process of entrepreneurial discontinuance (DeTienne, 2010).

There is also a need for better theorizing and modelling of the factors influencing the establishment and discontinuance of imitative, low growth businesses (Davidsson, Gordon, 2012). Better understanding of factors that contribute to launching and exiting early entrepreneurial activity is important for researchers, would-be entrepreneurs, advisors, potential creditors and policymakers as well.

This paper aspires to make two contributions to the entrepreneurship literature. The first purpose is to examine whether factors influencing early-stage discontinuance differ in the Czech Republic in comparison with Western countries, in which research on nascent entrepreneurs has been made. The research in Central Europe on these topics is very rare and it can be expected that findings from Western countries cannot be universally applied. Because the Czech Republic underwent different historical development connected with transition from communism to capitalism, the factors leading to entrepreneurial discontinuance may systematically differ from those in Western countries. It can be expected that in the US, much higher percentage of population know how to write a business plan, whereas in the Czech Republic, such a percentage would be lower. Therefore also the influence of business planning on venture success or failure would be different. Similarly, population in the Czech Republic has different attitudes to entrepreneurship and lives in different labour market conditions, therefore experiencing different opportunity costs.

The second purpose is to contribute to existing theories on early-stage entrepreneurial activity of modest majority by providing more precise understanding of different factors influencing the decisions about discontinuance. As Cassar (2010) noticed, there is a lack of research that has investigated how *ex ante* expectations of nascent entrepreneurs translate into *ex post* realizations such as the creation of an operating business or entrepreneurial discontinuance. Therefore, and taking into account other important factors found to influence entrepreneurial exit, the paper will focus on the role of expectations in discontinuance decisions and provide added value in relating aspirations to solo *vs*. team entrepreneurship. As Davidsson and Gordon (2012) identified, there is clearly space for more contributions aimed at team issues.

2. Theory Background

2.1 Entrepreneurial discontinuance and failure

Economic theory explaining the deaths of new firms deals traditionally with liability of smallness and liability of newness (*e.g.* Gimeno *et al*., 1997). Liability of smallness relates to the lack of necessary human and financial resources utilized in start-ups that are on average very small. Liability of newness refers to the time organizations need to establish themselves, develop specific knowledge and contacts with customers. Some papers come up with more nuanced view and the term liability of adolescence. It illustrates that failure rate of firms rise steeply the first one and half to two years and then fall gradually, *i.e.* creating an inverted U-shape curve (Cressy, 2006).

Such consideration basically treats discontinuance and failure as equal. Firms die, because they are vulnerable and not able to utilize resources and develop needed contacts and

procedures. However, newer empirical studies (Yusuf, 2012; Khan, Tang, Joshi, 2014; Bates, 2005) and theoretical contributions (Hayward, Shepherd, Griffin, 2006; DeTienne, 2010) develop the idea that discontinuance may be very different from failure. They challenge the assumption that withdrawal from the start-up process represents a negative outcome.

Businesses may be closed for different reasons – preventing further losses, experiencing bankruptcy, failing to make it run, recognizing better options what to do, due to retirement or illness, or realizing a profit from sales (Everett, Watson, 1998). Headd (2003) indicated that about a third of closed businesses were successful at closure and many owners executed a planned exit strategy. Entrepreneurial discontinuance can be viewed both as a career choice and as liquidation of an investment (Wennberg *et al.*, 2010). Time and effort invested represent sunk costs, the more was invested, the more "costly" and unpleasant it is to discontinue.

2.2 Decision-making process about discontinuation

A successful closure may represent the owner's decision to use the knowledge gained in some other context (Bates, 2005). Decisions to discontinue operations of new firms are shaped by intertwined factors including opportunity costs, switching costs, and noneconomic considerations. Opportunity costs represent the income that can be earned from paid employment or alternative venturing activity rather than through following the current business opportunity (Cassar, 2006). Gimeno *et al.* (1997) built on human capital theory and theories of decision-making (Kahneman, Tversky, 1979) and operationalized the opportunity-cost concept, introducing the threshold model of firm-closure. The entrepreneur is expected to terminate the business if the expected utility of alternative job, minus the costs inherent in switching to other occupations, exceeds the revised expected utility, including economic and psychic income from entrepreneurship, of remaining in the new business.

This line of research focused on already running businesses where reasons for discontinuance are different than in case of nascent entrepreneurial activity. Yusuf (2012) focused on nascent entrepreneurs' exit strategies and distinguished the cases of intelligent and reactive exits. Intelligent exit relates to proactive disengagement caused by entrepreneurs' learning that the business opportunity would not be successful. Nascent entrepreneurs' confidence in an opportunity reflects two beliefs about the opportunity at hand – that it is feasible and that they will be able to establish a venture that exploits it (Dimov, 2010). Opportunity confidence decreases the likelihood of discontinuation and increases the likelihood of reaching operational status. In the study by Yusuf (2012), factors causing the intelligent exit were found to be more similar to cases of operating businesses than they were to cases of reactive exit.

Involvement in start-up activity and investment of limited amount of time and money can be perceived as a non-recoverable entry fee that enables entrepreneurs to receive more real information on costs incurred, possible revenues and incorporated risks related to the particular business opportunity (Caves, 1998). During the start-up process information becomes available about customer needs, customer willingness to pay, intensity of competition, resource availability, and even about own actual abilities to develop particular venture. Nascent entrepreneurs gain real-world experiences, learn and reevaluate opportunities they pursue and so can persist with those that remain attractive and abandon those that lack probability of success (Dimov, 2010; Brinckmann, Grichnik, Kapsa, 2010). And even the exit can be interpreted positively as the entrepreneur was able to fail cheap, learn something and test the opportunity with reasonable costs incurred.

2.3 The role of expectations in early-stage entrepreneurship

The central position in the explanation of nascent entrepreneurs' decisions regarding exit from the pursuit of particular opportunity is occupied by expectations. Ventures are not started by chance. Individuals, when deciding to invest their time and money in nascent entrepreneurial activity, do so with an expectation of success, such as the probability of achieving an operating business (Cassar, 2010). The decision to undertake venturing involves determining the type and nature of venturing activity to be pursued. Attitudes, subjective norms and perceived behavioural controls of the entrepreneur, such as growth aspiration or scale of intended venturing, underlie the venturing process (Cassar, 2006). Expectations for new ventures are generally overoptimistic in the early start-up stage, being formed under substantial uncertainty. In a classical research, Cooper, Woo and Dunkelberg (1988) asked early-stage entrepreneurs two questions: "What are the odds of your business succeeding?" and "What are the odds of any business like yours succeeding?" The average value of answer on 10-point scale was substantially higher for the first question when compared to second question (8.1 *versus* 5.9). Hayward, Shepherd and Griffin (2006) in their hubris theory of entrepreneurship identified several types of overconfidence, specifically overconfidence in own knowledge, overconfidence in quality of prediction, overconfidence in personal abilities and overconfidence in expectation of wealth generated from new business that was also confirmed in Cassar's (2010) study. He found that nascent entrepreneurs on average overestimated the likelihood of venture operation by 33.2 per cent.

Kahneman and Tversky (1979) used entrepreneurs as examples of individuals who code gains and losses relative to their aspiration level. In this line of reasoning Gimeno *et al*. (1997) argued that organizational survival is determined not only by firm performance, but also by entrepreneur's subjective threshold of performance. Their findings show that for entrepreneurs with high expectations and high opportunity costs this threshold will be rather high and lead to discontinuance even in case of medium performance. On the other hand, people with low expectations and low opportunity costs may continue with the activity and survive even in case of comparatively low performance.

To summarize, there are three possible forces behind entrepreneurial discontinuance in the nascent phase: (1) alternative opportunities that lure people to another job opportunity, educational opportunity or another new venture opportunity (DeTienne, 2010), (2) cal- culative forces related to the perceived decreasing chances of achieving goals in the current entrepreneurial activity, *e.g*. realization that the market demand is low or competition higher than expected, and also (3) normative concerns such as the negative perceptions of significant others regarding the opportunity (Yusuf, 2012).

2.4 Factors influencing discontinuance

A rough categorization distinguishes between personal, firm-specific and environmental determinants of early-stage entrepreneurial activity discontinuance and survival. Since the entrepreneur's skills and objectives play a dominant role in dictating the direction of early-stage entrepreneurial activity they dominate entrepreneurship literature in the field of entrepreneurial discontinuance (Brüderl, Preisendörfer, Ziegler, 1992).

Research findings suggest that task-related knowledge and specific entrepreneurial competencies are more important for business success than past experiences and general competencies (Unger *et al*., 2010; Laguna, Wiechetek, Talik, 2012). More specific

knowledge is then related more to previous industry experience and start-up experience than to education or general work or managerial experience. Similarly, investors focus their attention on founding team start-up and industry experience, which suggests their importance (Delmar, Shane, 2006).

Industry experience is one of the most discussed features of human capital. It has been found in multiple studies as supporting transition from nascent entrepreneurship to operating business (Davidsson, Gordon, 2012). Industry experience can make the nascent entrepreneur better equipped to perceive and evaluate opportunities within the industry and thus lead to higher survival chances (Brüderl, Preisendörfer, Ziegler, 1992; Dimov, 2012). On the other hand, especially in nascent stage, industry experience also broadens the opportunities and raises the expected income from alternative employment (Gimeno *et al*., 1997). In the study by Liao, Welsch and Moutray (2008/09), industry-specific experience contributed to discontinuance of nascent entrepreneurs, with the explanation that industry experience may result in lower innovation and more entrenched approach to existing ways of operations. Similarly, Lukeš and Zouhar (2013) found a negative relation between industry experience and achieving operating new venture.

Some studies found that new ventures whose founders have greater *start-up experience* are more likely to survive. Delmar and Shane (2006) emphasized that this effect is driven almost exclusively by the difference between any and no prior start-up experience. Dimov (2010) found that entrepreneurial experience have only indirect effects on venture emergence. In Lukeš and Zouhar (2013) study, start-up experience defined as some *vs*. no start-up experience, played no significant role in venture emergence, a similar finding with Gimeno *et al.* (1997) study.

Most research indicates that there are no significant differences in nascent entrepreneurship outcomes by *gender* (Parker, Belghitar, 2006; Davidsson, Gordon, 2012). However, males have on average higher human capital, broader alternatives on the labour market and, thus, higher opportunity costs of remaining self-employed (Bates, 2005; Boden, Nucci, 2000). On the other hand, parental responsibilities might be attractive option for many women when deciding on business closure (Bates, 2005). In Menzies *et al*. (2006) study, women were slightly more successful in creating operating business. Concerning businesses already in operation, Watson (2003) found higher failure rate by women-owned businesses, but effect was not significant when industry was controlled for. Retail sector has the highest failure rates, and as females are more prevalent in retail, it explains higher likelihood of failure (Watson, 2003).

Both general *self-efficacy* and entrepreneurial self-efficacy have been identified in previous research as key personality characteristics related to entrepreneurial activity (Lukeš, 2013; Lukeš *et al*., 2013a) and venture launch (Townsend, Busenitz, Arthurs, 2010). Entrepreneurial self-efficacy can be described as an individual belief in own capability to successfully perform entrepreneurial tasks. In Khan, Tang and Joshi (2014) research, self-efficacy had also a strong negative effect on discontinuation. On the other hand, people who *fear of failure* were less likely engaged in entrepreneurial activity (Lukeš *et al*., 2013a) and more probably terminated their start-up efforts (Lukeš, Zouhar, 2013).

Individuals with relative high levels of human capital have higher opportunity costs and, consequently, must have higher expected rewards associated with venturing in order to stay self-employed (Brüderl Preisendörfer, Ziegler, 1992). Therefore they have higher *growth expectations*. Entrepreneur's opportunity costs rather than financial capital are

a significant determinant of the intended scale of venturing activity (Cassar, 2006). When facing real world in the process of start-up development, the high initial expectations are harder to meet. Therefore, nascent entrepreneurs with very low and very high expectations are less probable to start up than the ones with medium expectations (Lukeš, Zouhar, 2013).

New ventures are developed by solo entrepreneurs or by *entrepreneurial team*. Parker and Belghitar (2006) found that nascent entrepreneurs are more likely to make a transition to actual venture if they start solo. Explanation may lie *e.g.* in potential conflicts between the founders and expectations of multiple owners that have to be fulfilled. In their data, nascent entrepreneurs who had more experience in their industry were more likely to start solo. This was different from Czech data, where entrepreneurial teams had more experience than solo ventures (Lukeš, Jakl, 2012). In relation to expectations, it is important to distinguish between solo entrepreneurs and entrepreneurial teams. Teams are more likely to pursue higher ambition start-ups (Davidsson, Gordon, 2012). Regarding the clash between initial expectations and real-world experience during start-up preparation, it can be expected that especially solo entrepreneurs with high growth expectations will, in many cases, face dissonance that may lead them to discontinuation.

Some researchers base their approach towards *business planning* in goal setting theory (Latham, Locke, 2007) and propose that business planning is crucial for the survival and development of new small firms (*e.g.* Delmar, Shane, 2003; Shane, Delmar, 2004). An opposing group criticizes planning fallacy that overestimates the importance of specific problem rather than outcomes of similar cases or base rate information (Kahneman, Tversky, 1979) and proposes to focus on learning, flexibility, and controlling resources, especially when facing high degrees of uncertainty. In the only longitudinal Czech study to date, Lukeš and Zouhar (2013) found that nascent entrepreneurs engaged in business planning were less likely to discontinue their entrepreneurial activity. This finding was also confirmed by meta-analysis done by Brinckmann, Grichnik and Kapsa (2010) concluding that planning is beneficial, however, contextual factors may significantly limit the relationship.

Less expectation based and more real-world focused is a specific activity of *competition mapping* that is often conducted as a part of business plan. The younger the entrepreneurial project, the more does each observation contribute to the knowledge of related risks (Caves, 1998). The results of van Gelderen, Thurik and Bosma (2006) study point to the importance of perceived market risk as a predictor of achieving operating venture *versus* terminating the start-up effort. Khan, Tang and Joshi (2014) found that high perceived competition intensity renders the otherwise strong negative main effect of goal commitment on discontinuance not significant. Lukeš and Zouhar (2013) identified a significant negative influence of competition mapping on getting operational, but no effect on venture termination.

As van Gelderen, Thurik and Bosma (2006) suggested, it may matter how intensively people work on the completion of start-up activities, whether full-time or not. Gimeno *et al.* (1997) did not find the influence of hours worked on entrepreneurial exit. On the other hand, Carter, Gartner and Reynolds (1996) reported that nascent entrepreneurs who get operational as well as those who discontinue undertake more activities than people who remain in the preparation phase. People spending less time on their start-up effort may retain other jobs or activities and are not forced to major decisions. Lukeš and Zouhar (2013) found higher *time involvement* to lead to either operational or discontinued ventures.

Despite the theories of liability of newness and liability of adolescence (*e.g.* Cressy, 2006) that relate to new businesses, not much is known about *duration dependence*

in the nascent phase, especially how current duration of the pre-launch phase influences discontinuance decisions. Parker and Belghitar (2006) identified that a large group of the so called "dilettante dreamers" stayed in pre-launch phase for a long time without making the decision to launch or exit. The longer it takes for individuals to act on the intention to become an entrepreneur, the less likely they are to decide to create a new venture (Townsend, Busenitz, Arthurs, 2010) and to discontinue (Lukeš, Zouhar, 2013).

To summarize, we assume that the eventual outcome of the nascent phase of a start-up effort can be expressed concisely as follows:

exit / launch = f (industry experience, start-up experience, gender, entrepreneurial self-efficacy, fear of failure, employee growth expectations, solo ownership, business planning, competition mapping, time involvement, entrepreneurial activity duration).

3. Data and Methods

3.1 Sample

Our empirical analysis is based on a longitudinal data set collected in the Czech Republic in years 2011–2013 as follows. In summer 2011 (wave 1), a representative sample of 915 entrepreneurs involved in a start-up effort were identified using a randomization procedure, (see Lukeš, Jakl, 2012 for details) and asked an extensive set of questions related to their ventures, overall entrepreneurial attitudes, and personal characteristics. Some of these questions were adapted from the PSED (Reynolds, Curtin, 2008) and GEM projects, while some others were newly created (see Lukeš, Jakl, 2012 for details).

Those respondents who agreed to be questioned again in a follow-up interview were contacted again in summer 2012 and 2013 (waves 2 and 3) and asked a narrower set of questions focused mainly on how their ventures progressed. Not all respondents willing to take part in the follow-up could be reached in 2012. In 2013, we made an attempt to contact both those who responded in 2012 and those who did not; the latter were asked questions about both the current period (summer 2012 – summer 2013) and the previous period (summer 2011 – summer 2012). We are aware that such a procedure is prone to inducing the so-called *retrospective bias* (Delmar, Shane, 2006). However, our retrospective questions were aimed at objective facts (such as revenues and employee counts) rather than subjective and attitudinal matters, so the potential bias is likely small.

Altogether, we obtained longitudinal data on 159 early entrepreneurs, 96 of which were classified as nascent entrepreneurs. For 18 of them, only data for waves 1 and 2 were available due to sample attrition.

3.2 Variables

Our main dependent variable (DV) was the *entrepreneurial state*, *i.e.* the classification into Nascent, New (=operational), and Discent businesses. Figure 1 shows possible transitions of states between successive waves (and their realised counts). In the initial 2011 interview with the broadest set of questions, we assigned the Nascent and New status using the same classification rules as those in (Lukeš, Jakl, 2012). In subsequent waves, the rules were as follows. A venture was labelled as Discent if the respondent admitted quitting the start-up effort; if, however, he/she reported that the start-up is continued by other members of the entrepreneurial team, the state was recoded as missing (Davidsson,

Gordon, 2012). The transition from Nascent state to New state was recognized if (i) the venture's revenue in past 12 months exceeded CZK 100,000 (roughly corresponding to the minimum yearly wage in the Czech Republic) *or* (ii) the respondent refused to disclose the revenue *and* at least one of the following conditions held: (a) the business had at least one full-time employee besides the owner, (b) the owner reported that her net personal income from the business in past 12 months was greater than or equal to "slightly less than CZK 250,000" (corresponding to the average yearly net wage in the Czech Republic). In the remaining cases, the *status quo* principle was applied, *i.e.* no state transition was assumed.

Technically, our independent variables (IVs) can be classified into two categories: time-varying and time-constant. The latter are variables obtained from a set of questions that were only part of the more extensive wave 1 interview, namely gender (included in the regressions as a *female* dummy), *industry experience* (logarithm of years involved in the particular industry by the most experienced team member), *start-up experience* (= 1 if any team member was actively involved in a past start-up effort), *solo ownership* (= 1 for solo owners), *employee growth expectations* (ascertained by the question "How many people will work for this business one year from now, not counting its owners, but counting exclusive subcontractors?"), and two personality characteristics, *fear of failure* and *entrepreneurial self-efficacy*, obtained from questions "Would fear of failure prevent you from starting a business?" and "Do you have the knowledge, skill and experience required to start a new business?" (yes = 1, no = 0). As we argued above, growth expectations likely have different effects on solo entrepreneurs and entrepreneurial teams. Therefore, we included an interaction of *solo ownership* and *employee growth expectations* among our IVs.

The remaining variables are all year specific. *Time involvement* was measured as logarithm of average hours *per* week worked on the particular venture by all members of the entrepreneurial team together. *Business planning* was captured by the question "Have you already begun preparation of a business plan for this new business?" in wave 1 and "Have you created or updated a business plan for this new business in last twelve months?" in subsequent waves. Similarly, c*ompetition mapping* was captured by the question "Has an effort been made to collect information about the competitors of this new business?" in wave 1 and "Has an effort been made to collect information about the competitors of this new business in last twelve months?" in subsequent waves.

In order to quantify the causal effect of covariates on state transitions and avoid the trap of reversed causality, we applied the method of time separation between the DV and the IVs (*e.g.* Davidsson, Gordon, 2012) throughout our study: we measure the effect of IVs on entrepreneurial state in the next wave, *i.e.* the 2012 state is explained by 2011 IVs *etc*. Thus, despite having a three-wave interview process, we effectively work with a two-period panel dataset.

3.3 Model specification

Our dependent variable captures the transitions between three alternative entrepreneurial states (Figure 1). These transitions represent notable *events* in venture creation (or disbandment, as the case may be). Therefore, our analysis naturally lends itself to the use of *event history models*, also known as *duration* or *survival analysis*. The scope

of analysis and the selection of a specific model were partly determined by the structure of our data, particularly the availability of information on transition times (and, where applicable, time stamps of the covariate changes as well).

Even though data were collected with annual frequency, information about the actual month of two important events was recorded: conception of start-up activities and venture disbandment. Thus, in principle, the hazard of venture disbandment can be studied on a monthly scale. Nevertheless, the Nascent → New transition times could only be ascertained on a year-to-year basis, because (as explained above) the assessment of the entrepreneurial status comprises several indicators that cannot be assigned to a particular month (such as the venture's yearly revenue). Analogously, time-varying variables were only collected on a yearly basis.

All in all, our data allowed for two related but distinct analyses. Firstly, with yearly data, it is possible to study covariate effects on the chances of both getting operational (New state) and quitting the business (Discent state), the two *competing risks* for a Nascent entrepreneur. However, the coarse yearly time scale renders the use of standard continuous-time models inappropriate; therefore, we decided to apply the discrete-time *multinomial logit model of competing risks* popularized by Allison (1982). Major advantages of this model are that (i) it can be estimated using any multinomial logit software after one performs the so-called *episode splitting* of the dataset (Jenkins, 2005) and (ii) time-varying IVs are easily incorporated in the model, unlike with some continuous-time models.

Secondly, the risk of venture disbandment alone can be studied using monthly data. In this case, the use of continuous-time event history models is justifiable. An especially appealing alternative is the *Cox proportional hazards model*, which has the merit that the baseline hazard function (which governs the way hazard evolves over time) is left unspecified, unlike in any other continuous- or discrete-time model. As noted, the time-varying IVs, namely *time involvement*, *business planning*, and *competition mapping*, were only available on a year-to-year basis; we decided to fix these variables at their initial (*i.e*. 2011) levels in our monthly-data analysis.

Additionally, as a metaphorical bridge between the two models, we also estimate the *logistic* (or *logit*) *hazard* model for monthly data. This is a discrete-time model with a similar functional form as our yearly-data model, which facilitates results comparison.

In both the multinomial logit competing risks model and the logit hazards model, we needed to specify the functional form of *duration dependence*, which determines the shape of the baseline hazard function. In order to allow for a flexible curvilinear relationship, we used a 2nd order polynomial of *entrepreneurial activity duration* (*i.e.* time elapsed since the conception of start-up efforts) in both models, following the recommendations in (Jenkins, 2005).

3.4 Sample attrition and missing values

We carried out formal checks to see if the sample selection due to attrition produced a non-representative sample. In particular, we ran a series of logistic regressions that explained the pattern of sample selection in each period with observable characteristics on both the covariates from the main model and the entrepreneurial state from the previous period. Invariably, none of the variables were significant in explaining the missing

value pattern and the McFadden pseudo-R^2 was lower than 0.10, implying there is no (or very little) selection on observable characteristics.

A related issue is that of missing values in individual covariates. In their methodological paper, Davidsson and Gordon (2012) advise new-venture researchers to consider data imputation techniques to avoid losing excessive number of observations due to item non-response. In fact, the underlying reason for data imputation goes far beyond the practical need to conserve a reasonably sized sample for efficient estimation. As explained by Rubin (1987), the conventional *listwise* (or *casewise*) *deletion*, applied as a default in all software packages, is not only inefficient, but also typically leads to biased parameter estimates (unless the data are "missing completely at random," a very stringent assumption). Two alternative approaches to data imputation are currently regarded as theoretically justified, maximum likelihood and multiple imputation (MI), but only the latter can be implemented in our non-linear setting, see (Allison, 2009).

Even though most variables contained some missing values in our sample, the overall rate of missing values was relatively low: out of the 153 person-period observations with known entrepreneurial status in the 2012 and 2013 period, 124 observations were complete, *i.e.* contained no missing values in any variables. There was, however, one variable that stood out in terms of the missing value pattern: *employee growth expectations*. It exhibited the highest missing rate, and out of the 29 incomplete observations, 10 were incomplete due to this variable only. Therefore, we decided to apply regression-based MI for this variable; we used the MI suite in Stata 11. In our specification of the conditional distribution of *employee growth expectations*, we included all IVs and the dependent variable from the main model, along with additional respondents' demographic characteristics, namely *age* (linear and quadratic terms included), *education* (three categories), and a *large city* dummy indicator. These variables are not commented on elsewhere in this text and are meant to fulfill the role of the so-called *auxiliary variables*, whose use in MI is recommended *e.g.* by Allison (2009).

4.   Results

Descriptive statistics and pairwise correlations for all variables used in the regressions are presented in Table 1. Overall, few of the IVs are significantly correlated, and even the significant correlations are rather low in magnitude, thus allowing estimation of separate effects of these variables. Some notable associations among the IVs indicated by pairwise correlations are as follows. High *employee growth expectations* are typically associated with more experienced (*start-up experience*, *industry experience*) and active (*time involvement*, *business planning*) nascent entrepreneurs, typically engaged in entrepreneurial teams (*solo ownership*). Moreover, solo owners are on average less experienced (*industry experience*) and less active (*competition mapping*, *business planning*) than entrepreneurial teams.

Regression results for yearly data are presented in Table 2. The base category of *entrepreneurial state* in the multinomial logit model is the Nascent state, *i.e.* the "no transition" situation. Therefore, the coefficients can be interpreted as the estimated effect of a unit change in the given IV on the log of either the odds ratio "Pr{exit} / Pr{no transition}" (Discent column) or the odds ratio "Pr{get operational} / Pr{no transition}" (New column).

Table 1 | Descriptive Statistics and Pairwise Correlations

	mean	SD	n	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. *state: Discent*	.2	.4	153	1.00												
2. *state: Nascent*	.37	.49	153	-.38**	1.00											
3. *state: New*	.43	.5	153	-.43**	-.67**	1.00										
4. *industry experience*	8.95	7.53	165				1.00									
5. *start-up experience*	.57	.5	164				.29**	1.00								
6. *female*	.35	.48	171				-.24*	-.20	1.00							
7. *entrepreneurial self-efficacy*	.85	.36	171	.17*						1.00						
8. *fear of failure*	.22	.42	171			-.18*	-.19				1.00					
9. *solo ownership*	.61	.49	171					-.23*				1.00				
10. *growth expectations*	4.86	5.8	155		-.20*	.20*	.42**	.24*				-.28**	1.00			
11. *business planning*	.43	.5	164					.15				-.21**	.17*	1.00		
12. *competition mapping*	.56	.5	167									-.14			1.00	
13. *time involvement*	34.35	32.49	158		-.29**	.37**				.15			.25**	.15		1.00
14. *ent. activity duration (months)*	25.7	10.84	170	-.24**		.17*		.14			-.13				.13	.21**

Notes: (i) The table shows descriptive statistics and correlations based on pooled observations from 2011 and 2012 (waves 1 and 2), with the exception of state variables, for which a one-wave lead is shown (*i.e.* 2012 and 2013 pooled data). The lower observation numbers for state variables are due to sample attrition between the second and the third wave. (ii) Only correlations with p < 0.1 are shown in the table, * *p* < 0.05, ** *p* < 0.01. Correlations are not reported between different state variables (*"–"*), as they are in a deterministic functional relationship (exclusive categories). (iii) For a pair of time-constant variables, only the 2011 data are used. (iv) *Industry experience* and *time involvement* entered the regressions in a logged form; statistics shown in the table are based on original (non-logged) data to enhance readability.

Source: Own calculations.

Figure 1 | Entrepreneurial States and Transitions
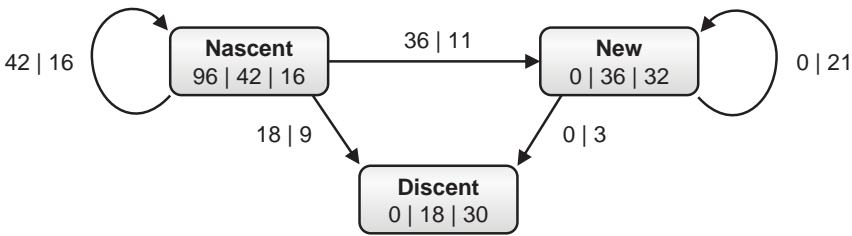
In each state (node), $x \mid y \mid z$ indicates the number of entrepreneurs of the given state in the 2011, 2012, and 2013 interview (wave 1, 2, and 3, respectively) in 2011, only nascent entrepreneurs that participated in the follow-up are accounted for. For each transition (arc), $x \mid y$ gives the number of transitions of the given type between waves 1–2 and 2–3, respectively.

Source: Own calculation

Table 2 | Multinomial Logit Model of Competing Risks, yearly data

Starting state	Nascent			
End state	**Discent**		**New**	
industry experience	0.104**	(0.0496)	0.00865	(0.0396)
start-up experience	0.268	(0.716)	−0.0283	(0.568)
female	1.223*	(0.701)	1.207**	(0.602)
entrepreneurial self-efficacy	−0.717	(0.857)	0.607	(1.021)
fear of failure	1.488**	(0.707)	−0.280	(0.683)
solo ownership	−1.954**	(0.942)	−1.084	(0.799)
employee growth expectations	−0.125	(0.0930)	0.00052	(0.0608)
solo ownership × emp. growth	0.333**	(0.158)	0.249*	(0.142)
business planning	−0.547	(0.732)	−0.600	(0.554)
competition mapping	−0.522	(0.638)	−0.104	(0.527)
time involvement	0.370	(0.346)	0.993***	(0.287)
ent. activity duration (years)	−2.896**	(1.246)	−0.426	(1.134)
ent. activity duration, quadratic	0.541**	(0.228)	0.0128	(0.235)
constant	1.006	(1.782)	−2.809	(1.738)
observations	113			

Notes: (i) Standard errors in parentheses. (ii) * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. (iii) 50 regression-based imputations of missing values on *employee growth expectations*, resulting in 12 new observations in each imputation, were used to obtain the results.

Source: Own calculations.

Table 3 presents the results for the two models using monthly data. The interpretation of the coefficients is analogous to those in the Discent column in Table 2. The only difference is that the odds are related to different time horizons: years for the multinomial

model, months for the logit hazard model, and an infinitesimal instant in the continuous Cox model; nevertheless, as the odds changes are measured on the log scale, results from all three models are comparable.

Table 3 | Cox Proportional Hazards Model and Logit Hazard Model of Venture Disbandment, monthly data

	Cox		logit	
industry experience	0.0797**	(0.0380)	0.0949***	(0.0352)
start-up experience	0.416	(0.522)	0.372	(0.517)
female	0.801	(0.534)	0.820	(0.543)
entrepreneurial self-efficacy	−0.361	(0.595)	−0.369	(0.605)
fear of failure	1.128**	(0.512)	1.291**	(0.520)
solo ownership	−1.228*	(0.658)	−1.259*	(0.665)
growth expectations	−0.0771	(0.0592)	−0.0791	(0.0557)
solo ownership × growth exp.	0.159*	(0.0900)	0.152*	(0.0839)
business planning	−0.787	(0.549)	−0.680	(0.554)
competition mapping	0.133	(0.464)	0.0292	(0.470)
time involvement	−0.403	(0.290)	−0.404	(0.292)
ent. activity duration (months)			−0.0844*	(0.0490)
ent. activity duration, quadratic			0.213**	(0.0843)
constant			−2.960**	(1.216)
observations	82		1452	

Notes: (i) Standard errors in parentheses. (ii) * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. (iii) 50 regression-based imputations of missing values on *employee growth expectations*, resulting in 7 new observations in each imputation (prior to episode splitting for the logit model), were used to obtain the results.

Source: Own calculation.

5. Discussion

Our results further developed findings presented in Lukeš and Zouhar (2013). In our previous study *industry experience* had a negative impact on getting operational. Newer results indicate positive influence on discontinuance and are neutral with regard to getting operational. Such a finding confirms previous results from Liao, Welsch and Moutray (2008/09) who found that industry experience increases the probability of discontinuance of the non-technology nascent entrepreneurs. Their possible explanation was that industry experience may result in lower innovation and more entrenched approach to existing ways of operating. This barrier may be further enhanced by economic crisis that was under way in the Czech Republic between 2011 and 2013. Additionally, based on the theoretical reasoning described above, industry experience increases the threshold the

opportunity must meet in order to be followed (Gimeno *et al*., 1997). The individual risks not only his/her current job that can be due to industry experience relatively stable, but also more probably perceives particular market risks that are higher in the time of crises (Boden, Nucci, 2000), *i.e*. the confidence in opportunity and own abilities goes down. In such a situation, the exit from opportunity with low chance of success by nascent entrepreneurs with strong human capital can be considered intelligent (Yusuf, 2012; Bates, 2005). In many cases making the informed decision to disengage from the start-up represents a more positive outcome than to continue with unattractive start-up efforts. Disengagement from a goal that is no longer appropriate is an adaptive strategy as it frees up resources that can be invested in attainable goals (Latham, Locke, 2007).

Start-up experience did not play a significant role in transition from nascent entrepreneurship. One explanation may lie in the fact that start-up experience does not necessarily equal venture creation competence. The role of serial entrepreneurs may be thus eliminated by a subsample of people who keep failing in their early-stage entrepreneurship. Given the Central Europe history and development, we can expect higher proportion of people who start with their personal long-term involvement on mind and less "professional" serial entrepreneurs who plan for early exit *via* sales. Therefore, the influence of start-up experience may be lower in Central Europe compared to western countries.

Women were more probable to launch a new venture, but, in one of the models, also to end up with the particular business activity. One possible explanation is that women more often start service and not manufacturing or construction firms, and service firms have higher both entry and exit rates (Caves, 1998). Another explanation may lie in lower job opportunities on the labour market that may translate to lower performance threshold.

Concerning personality characteristics, we have not been able to confirm negative influence of *entrepreneurial self-efficacy* on discontinuance and positive influence on getting operational. Despite the signs were in the expected direction, they did not reach significance. In line with previous findings (Lukeš, Zouhar, 2013), we confirmed that *fear of failure* increases the odds of discontinuance.

Interesting results have been obtained when analysing the interaction effect of solo entrepreneurship and employee expectation on discontinuance. High growth expectations of solo entrepreneurs made the event of giving up on start-up efforts more likely. For start-up teams, the effect was the opposite, *i.e*. high expectations reduced the risk of disbandment. For modest employee growth expectations, solo entrepreneurs were less likely to give up. These findings further develop Gimeno *et al.* (1997) theory of performance thresholds. For entrepreneurial teams the expectations must be higher in order to be attractive enough and keep multiple owners engaged in entrepreneurial activity. If they are low, it is less probable they fulfill threshold performance criteria of individual team members and the team will dissolve. On the other hand, for solo owners, high expectations function as a driver to make a decision. Most of them recognize during early steps of opportunity development that they are out of reality and discontinue. For some others, high expectations serve as a motivator to actually launch a business.

Business planning and *competition mapping* did not play a significant role in explaining transitions from nascent entrepreneurship. *Time involvement* was highly significant to getting operational, but not related to discontinuance. Carter, Gartner and Reynolds (1996) argued that nascent entrepreneurs who terminated or reached operational status undertook

more tangible activities than those who were still trying. However, research mostly found that the more activities have been undertaken, the less likely are the founders to terminate (*e.g.* Shane & Delmar, 2004). The link of effort to entrepreneurial discontinuance in our study has a positive sign, but was not found significant. Our results emphasize the importance of effort that leads to getting operational. There is though some risk involved. The individual may be motivated to justify previous decisions to spend time on new venture idea development or may try to stay consistent towards himself and others who discussed his idea (Staw, 1981) and thus, he/she can launch a business with low probability of success. DeTienne, Shepherd and DeCastro (2008) found higher perceived growth potential in the market, higher personal investment of time, energy and money, not so good personal options in the sense of low opportunity costs, and perceived collective efficacy of entrepreneurial team have the influence on the decision to persist with an under-performing firm.

This study also provided better understanding of *duration dependence* in the pre-launch phase. The lowest probability of exit from nascent entrepreneurship was after two years since the subjectively perceived start of idea development. It indicates that for some nascent entrepreneurs, the decision to exit comes relatively fast. On the other hand, if such decision is not made, there is a higher probability of prolongation in which they get stuck in the not much intensive process of trying to do something.

Finally, some cases of discontinuance may be ascribed to the difficult market conditions connected with the economic crisis (Boden, Nucci, 2000; Everett, Watson, 1998). As the environmental and industry-related factors have not been involved in the analysis, they may mitigate the influence of utilized variables. It can be expected that in times of crisis, it is, on average, objectively more difficult to launch a functional business, competition is more intensive and customers are less willing to buy. Therefore firms founded during times of economic crisis exhibit lower survival rates (Box, 2008). Where economic factors are primary contributors, the entrepreneur may have much less control of the issues leading to failure.

The present study has several limitations. These are mainly connected to a limited sample size that required us to use a limited number of variables in the analysis. We included only such variables that were supposed to play the biggest role in explaining nascent entrepreneurship outcomes and that promised to develop existing theories further. In particular, we excluded respondents' industry that could serve as useful control variable and money invested due to too many missing data. It must be also noted, that our sample represents modest majority of new ventures that are not high-growth high-tech businesses. Thus, the results may be less interesting for profit-driven investors. Teachers and advisors may, however, find results useful.

6. Conclusions

This paper provided several contributions to the entrepreneurship literature. Being based on the sample from a Central European country, it enables the discussion of international applicability of current theories and research findings related to transitions from nascent entrepreneurship either to venture launch or to discontinuance of entrepreneurial activity. The results suggest that common practice of applying negative connotations to discontinuance should be abandoned as they are not empirically justifiable (Bates, 2005; Yusuf, 2012). People with higher industry experience more probably exited from nascent

entrepreneurship. Compared to Western countries, human capital in the form of industry experience seems to have a rather hindering effect. The explanation may lie in high performance thresholds of experienced individuals, especially in a market situation with high unemployment and cultural scepticism towards entrepreneurship.

The paper also improved the understanding of the role of expectations in discontinuance decisions by differentiating between solo and team entrepreneurship. Solo entrepreneurs with high initial expectations more probably discontinued their efforts, whereas teams disbanded more probably in case of a low-ambition business. The rationale stems from the theories of opportunity costs and performance thresholds. Teams of Czech nascent entrepreneurs had higher industry experience and consequently higher thresholds. Thus, rather ambitious opportunities may lead them further in their entrepreneurial activity. On the other hand, originally ambitious solo entrepreneurs recognize after getting some real-market experience that their expectation is not achievable and decide to discontinue.

Finally, the results also suggest non-linear development of likelihood to discontinue in time. Some nascent entrepreneurs discontinue relatively fast, whereas the rest face higher probability of prolongation.

References

Allison, P. D. (1982). Discrete-Time Methods for the Analysis of Event Histories. *Sociological Methodology*, 13(1), 61–98. DOI: 10.2307/270718.

Allison, P. D. (2009). Missing Data. Chapter 4, in Maydeu-Olivares, A., Millsap, R. E., eds., *The SAGE Handbook of Quantitative Methods in Psychology*. London: Sage Publications Ltd, pp. 72–89. DOI: 10.4135/9780857020994.n4.

Bates, T. (2005). Analysis of Young, Small Firms that Have Closed: Delineating Successful from Unsuccessful Closures. *Journal of Business Venturing*, 20(3), 343–358. DOI: 10.1016/j.jbusvent.2004.01.003.

Boden, R. J., Nucci, A. R. (2000). On the Survival Prospects of Men's and Women's New Business Ventures. *Journal of Business Venturing*, 15(4), 347–362. DOI: 10.1016/s0883-9026(98)00004-4.

Brinckmann, J., Grichnik, D., Kapsa, D. (2010). Should Entrepreneurs Plan or Just Storm the Castle? A Meta-Analysis on Contextual Factors Impacting the Business Planning–Performance Relationship in Small Firms. *Journal of Business Venturing*, 25(1), 24–40. DOI: 10.1016/j.jbusvent.2008.10.007.

Brüderl, J., Preisendörfer, P., Ziegler, R. (1992). Survival Chances of Newly Founded Business Organizations. *American Sociological Review*, 57(2), 227–242. DOI: 10.2307/2096207.

Box, M. (2008). The Death of Firms: Exploring the Effects of Environment and Birth Cohort on Firm Survival in Sweden. *Small Business Economics*, 31(4), 379–393. DOI: 10.1007/s11187-007-9061-2.

Carter, N. M., Gartner, W. B., Reynolds, P. D. (1996). Exploring Start-up Event Sequences. *Journal of Business Venturing*, 11(3), 151–166. DOI: 10.1016/0883-9026(95)00129-8.

Cassar, G. (2006). Entrepreneur Opportunity Costs and Intended Venture Growth. *Journal of Business Venturing*, 21(5), 610–632. DOI: 10.1016/j.jbusvent.2005.02.011.

Cassar, G. (2010). Are Individuals Entering Self-Employment Overly Optimistic? An Empirical Test of Plans and Projections on Nascent Entrepreneur Expectations. *Strategic Management Journal*, 31(8), 822–840. DOI: 10.1002/smj.833.

Caves, R. (1998). Industrial Organization and New Findings on the Turnover and Mobility of Firms. *Journal of Economic Literature*, 36(4), 1947–1982.

Cooper, A. C., Woo, C., Dunkelberg, W. C. (1988). Entrepreneurs' Perceived Chances of Success. *Journal of Business Venturing*, 3(2), 97–108. DOI: 10.1016/0883-9026(88)90020-1.

Cressy, R. (2006). Why Do Most Firms Die Young? *Small Business Economics*, 26(2), 103–116. DOI: 10.1007/s11187-004-7813-9.

Davidsson, P., Gordon S. R. (2012). Panel Studies of New Venture Creation: A Methods- Focused Review and Suggestions for Future Research. *Small Business Economics*, 39(4), 853–876. DOI: 10.1007/s11187-011-9325-8.

Delmar, F., Shane, S. (2006). Does Experience Matter? The Effect of Founding Team Experience on the Survival and Sales of Newly Founded Ventures. *Strategic Organization*, 4(3), 215–247. DOI: 10.1177/1476127006066596.

Delmar, F., Shane, S. (2003). Does Business Planning Facilitate the Development of New Ventures? *Strategic Management Journal*, 24(12), 1165–1185. DOI: 10.1002/smj.349.

DeTienne, D., Shepherd, D., DeCastro, J. (2008). The Fallacy of 'Only the Strong Survive': The Effects of Extrinsic Motivation on the Persistence Decisions for Underperforming Firms. *Journal of Business Venturing*, 23(5), 528–546. DOI: 10.1016/j.jbusvent.2007.09.004.

DeTienne, D. R. (2010). Entrepreneurial Exit as a Critical Component of the Entrepreneurial Process: Theoretical Development. *Journal of Business Venturing*, 25(2), 203–215. DOI: 10.1016/j.jbusvent.2008.05.004.

Dimov, D. (2010). Nascent Entrepreneurs and Venture Emergence: Opportunity Confidence, Human Capital, and Early Planning. *Journal of Management Studies*, 47(6), 1123–1153. DOI: 10.1111/j.1467-6486.2009.00874.x.

Everett, J. E., Watson, J. (1998). Small Business Failure and External Risk Factors. *Small Business Economics*, 11(4), 371–390.

Gelderen van, M., Thurik, R., Bosma, N. (2006). Success and Risk Factors in the Pre-Startup Phase. *Small Business Economics*, 26(4), 319–335. DOI: 10.1007/s11187-004-6837-5.

Gimeno, J., Folta, T. B., Cooper, A. C., Woo, C. Y. (1997). Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming. *Administrative Science Quarterly*, 42(4), 750–783. DOI: 10.2307/2393656.

Hayward, M., Shepherd, D., Griffin, D. (2006). A Hubris Theory of Entrepreneurship. *Management Science*, 52(2), 160–172. DOI: 10.1287/mnsc.1050.0483.

Headd, B. (2003). Redefining Business Success: Distinguishing between Closure and Failure. *Small Business Economics*, 21(1), 51–61.

Jenkins, S. P. (2005). *Survival Analysis*. Institute for Social and Economic Research. University of Essex, Colchester, UK. Available at: https://www.iser.essex.ac.uk/resources/ survival-analysis-with-stata

Kahneman, D., Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263–291. DOI: 10.2307/1914185.

Khan, S. A., Tang, J., Joshi, K. (2014). Disengagement of Nascent Entrepreneurs from the Start-up Process. *Journal of Small Business Management*, 52(1), 39–58. DOI: 10.1111/jsbm.12032.

Laguna, M., Wiechetek, M., Talik, W. (2012). The Competencies of Managers and Their Business Success. *Central European Business Review*, 1(3), 7–13. DOI: 10.18267/j.cebr.25.

Latham, G. P., Locke, E. A. (2007). New Developments and Directions for Goal Setting Research. *European Psychologist*, 12(4), 290–300. DOI: 10.1027/1016-9040.12.4.290.

Liao, J., Welsch, H., Moutray, Ch. (2008/2009). Start-up Resources and Entrepreneurial Disconti-nuance: The Case of Nascent Entrepreneurs. *Journal of Small Business Strategy*, 19(2), 1–15.

Lukeš, M. (2013). Výzkum podnikatelské self-efficacy v České republice. *Psychologie pro praxi*, 48(3–4), 35–48.

Lukeš, M., Jakl, M. (2012). *Podnikání v České republice*. Prague: Oeconomica.

Lukeš, M., Zouhar, J. (2013). No Experience? No Problem – It's all about yourself: Factors Influencing Nascent Entrepreneurship Outcomes. *Ekonomický časopis*, 61(9), 934–950.

Lukeš, M., Jakl, M., Zouhar, J., Mareš, J. (2013b). *Global Entrepreneurship Monitor – Podnikatelská aktivita v ČR 2013*. University of Economics, Prague. Available at: http://fph.vse.cz/wp-content/uploads/2014/07/GEM-CR-2013.pdf

Lukeš, M., Zouhar, J., Jakl, M., Očko, P. (2013a). Faktory ovlivňující vstup do podnikání: začínající podnikatelé v České republice. *Politická ekonomie*, 61(2), 229–247. DOI: 10.18267/j.polek.896.

Menzies, T., Diochon, M., Gasse, Y., Elgie, S. (2006). A Longitudinal Study of the Characteristics, Business Creation Process and Outcome Differences of Canadian Female vs. Male Nascent Entrepreneurs. *The International Entrepreneurship and Management Journal*, 2(4), 441–453. DOI: 10.1007/s11365-006-0013-0.

Parker, S. C., Belghitar, Y. (2006). What Happens to Nascent Entrepreneurs? An Econometric Analysis of the PSED. *Small Business Economics*, 27(1), 81–101. DOI: 10.1007/s11187-006-9003-4.

Reynolds, P. D., Curtin, R. T. (2008). Business Creation in the United States: Panel Study of Entrepreneurial Dynamics II Initial Assessment. *Foundations and Trends in Entrepreneurship*, 4(3), 155–307. DOI: 10.1561/0300000022.

Rubin, D. B. (1987). *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley. DOI: 10.1002/9780470316696.

Shane, S., Delmar, F. (2004). Planning for the Market: Business Planning before Marketing and the Continuation of Organizing Eff orts. *Journal of Business Venturing*, 19(6), 767–785. DOI: 10.1016/j.jbusvent.2003.11.001.

Staw, B. M. (1981). The Escalation of Commitment to a Course of Action. *Academy of Management Review*, 6(4), 577–587. DOI: 10.5465/AMR.1981.4285694.

Townsend, D. M., Busenitz, L. W., Arthurs, J. D. (2010). To Start or Not to Start: Outcome and Ability Expectations in the Decision to Start a New Venture. *Journal of Business Venturing*, 25(2), 192–202. DOI: 10.1016/j.jbusvent.2008.05.003.

Unger, J., Rauch, A., Frese, M., Rosenbusch, N. (2011). Human Capital and Entrepreneurial Success: a Meta-Analytical Review. *Journal of Business Venturing*, 26(3), 341–358. DOI: 10.1016/j.jbusvent.2009.09.004.

Watson, J. (2003). Failure Rates for Female Controlled Businesses. Are They Any Different? *Journal of Small Business Management*, 41(3), 262–277. DOI: 10.1111/1540-627X.00081.

Wennberg, K., Wiklund, J., DeTienne, D. R., Cardon, M. S. (2010). Reconceptualizing Entrepreneurial Exit: Divergent Exit Routes and Their Drivers. *Journal of Business Venturing*, 25(4), 361–375. DOI: 10.1016/j.jbusvent.2009.01.001.

Yusuf, J. E. (2012). A Tale of Two Exits: Nascent Entrepreneur Learning Activities and Disengagement from Start-up. *Small Business Economics*, 39(3), 783–799. DOI: 10.1007/s11187-011-9361-4.