Abstract
Why should individuals that have closed their business consider re-entering into entrepreneurship, i.e. become renascent entrepreneurs? According to the theory of selection and passive learning (Jovanovic, 1982) there is no reason to re-enter into entrepreneurship following termination of a previous firm. In contrast, Ronstadt’s (1988) corridor principle proposes that ex-entrepreneurs are very likely to maintain entrepreneurial preferences. Based on the empirical evidence from a database consisting of ex-entrepreneurs, this study shows that renascent entrepreneurship is a pervasive phenomenon in current society. Especially entrepreneurial human and social capital induce renascent entrepreneurship. In addition, the nature of the firm exit also effects the probability of renascent entrepreneurship.

Keywords: entrepreneurial preferences, entrepreneurial skills, firm exit, serial entrepreneurship,
1. Introduction

Promoting entrepreneurship has become a key instrument of policies for economic growth and employment creation. A focal point of such entrepreneurship policies is to increase the share of the labor force that would be potentially interested in entering into entrepreneurship. This preference for entrepreneurship is said to be hampered, especially in Europe, by the stigma on failure. Many people may be uncertain about their entrepreneurial skills, and this uncertainty becomes more constraining when a failed start-up is highly stigmatized.

Many scholars have focused on the uncertainty involved in entrepreneurial activity that deters entrepreneurship. In the logic of the Jovanovic (1982) and Lippman and Rumelt (1982) models of firm dynamics, individuals are uncertain about their actual entrepreneurial abilities. They can only learn about their actual entrepreneurial abilities through the process of starting a new firm. Only by starting a new firm and observing the subsequent performance is a nascent entrepreneur able to learn about her endowment of entrepreneurial talent. Thus, an important implication of these models of entrepreneurship is that a positive entrepreneurial performance subsequent to startup will lead the entrepreneur to infer that she has a strong endowment of entrepreneurial skills, which will lead her to persist as an entrepreneur. By contrast, those startups with a poor performance will lead entrepreneurs to infer that they have only an impoverished endowment of entrepreneurial skills and will tend to exit out of entrepreneurship. Thus, the nascent entrepreneur can only learn about her true but unobservable underlying endowment of entrepreneurial skills by inferences gleamed from the actual entrepreneurial performance. Those entrepreneurs learning from actual entrepreneurial experience that they have only impoverished endowments of entrepreneurial skills select themselves out of entrepreneurship, while those learning that they have rich endowments of entrepreneurial skills remain in entrepreneurship.

A second important implication of these models of firm dynamics is that once an individual has learned that she has a paucity of entrepreneurial skills, there is no reason to subsequently (again) become a nascent entrepreneur. According to these models, the underlying entrepreneurial skills would already have been revealed through the entrepreneurial experience. Thus, there would be little incentive to (re-)enter into entrepreneurship, or what we term here as renascent entrepreneurship.

However, a number of studies have shown that, rather than abstaining from subsequent entrepreneurship, people who were entrepreneurs actually have a higher and not a lower propensity to re-enter into entrepreneurship (Caroll and Mosakowski, 1987; Henley, 2004). If such ex-entrepreneurs had already learned that they did not possess a strong endowment of entrepreneurial skills, why would they re-enter into entrepreneurship? The purpose of this paper is to resolve this empirical paradox and to challenge both the passive view of entrepreneurial learning (Lippman and Rumelt 1982; Jovanovic 1982, 1994) along with the high propensity for renascent entrepreneurship.

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1 In contrast, Ronstadt’s corridor principle proposes that the mere act of starting a venture enables entrepreneurs to see other venture opportunities they could neither see nor take advantage of until they had started their initial venture (Ronstadt 1988). This latter proposition favors renascent entrepreneurship.
In the second section of this paper we present a model of renascent entrepreneurship. Measurement of renascent entrepreneurship is explained in the third section. In the fourth section a binary logistic regression model is estimated to explain why some ex-entrepreneurs become renascent entrepreneurs, while others abstain from renascent entrepreneurship. In the final section a summary and conclusions are presented. In particular, we find that the propensity for ex-entrepreneurs to become renascent entrepreneurs is not homogenous, but rather systematically related to the capacity to absorb knowledge and learn from previous entrepreneurial experience. Thus, those characteristics that are conducive to renascent entrepreneurship are somewhat different than those that are typically associated with nascent entrepreneurship.

2. A model of renascent entrepreneurship

The links between nascent entrepreneurship and entrepreneurial performance are depicted in Figure 1. As the literature has documented (Parker, 2004, 2005), the average return accruing from starting a new firm, at point A, lies below the wage that could be earned working in an incumbent firm. However, the performance differential between the returns to entrepreneurship and wages earned working in an incumbent firm do not remain constant over time, but may increase or decrease. While the entrepreneurial decision occurs within a relatively narrow lapse of time, the entrepreneurial process involves the evolution of the new firm from birth towards maturity (Carter et al., 1996). The entrepreneurial process may result in a return far exceeding that expected from wages earned in an incumbent firm, as depicted by point D, or alternatively, in a return far below the benchmark wages, at point C. Thus, as Knight (1921) pointed out, the entrepreneurial process is shrouded in uncertainty and risk.
Figure 1 suggests that the entrepreneurial performance outcomes are inherently uncertain in that they result in alternative outcomes, as depicted by C or D (Audretsch et al., 2005). Once an individual has attained point C, she is confronted with the decision of re-entering into entrepreneurship, again at point A (i.e. renascent entrepreneurship).\(^2\)

Within the economics literature, the prevalent theoretical framework has been the general model of income choice, which has been at times referred to as the general model of entrepreneurial choice (Parker, 1996, 2003, 2004, 2005). The model of income or entrepreneurial choice dates back at least to Knight (1921), but was more recently extended and updated by Lucas (1978), Kihlstrom and Laffont (1979), Holmes and Schmitz (1990) and Jovanovic (1994). In its most basic rendition, individuals are confronted with a choice of earning their income either from wages earned through employment in an incumbent enterprise or else from profits accrued by starting a new firm. The essence of the model of entrepreneurial choice is made by comparing the wage an individual expects to earn through employment, \(W\), with the profits that are expected to accrue from a new-firm startup, \(P^*\). Thus, the probability of starting a new firm, \(P(s)\), can be represented as

\[
P(s) = f(P^*-W)
\]

Parker (1996, 1997) uses a data set consisting of workers in the U.K. to link risk to entrepreneurial choice. In particular, he finds that as the risk associated with entrepreneurial

\(^2\) The successful entrepreneur at point D may also choose to sell his firm and to start again at point A.
activity increases, the propensity to engage in entrepreneurship decreases. This would suggest that the degree of uncertainty about the outcomes accruing from entrepreneurship will increase the gap between nascent and actual entrepreneurship.

An implication of the Jovanovic (1982) and Ericson and Pakes (1995) theory of firm selection is that entrepreneurs may start a new firm at a small, even suboptimal, scale of output, and then, if merited by subsequent performance, expand as depicted by the evolution from point A to D. Those entrepreneurs that observe a positive performance, as reflected by P*, will grow, whereas those that are not successful will remain small and may ultimately be forced to exit out of entrepreneurship.

An entrepreneur must decide whether to maintain output (Q\textsubscript{it}), expand, contract, or exit. Two different strands of literature have identified several major influences shaping the decision to exit an industry. The first and most obvious strand of literature suggests that the probability of an entrepreneur exiting will tend to increase as the gap between its level of output and the minimum efficient scale (MES) level of output increases (Mansfield, 1962). The second strand of literature points to the role that the technological environment plays in shaping the decision to exit. As Arrow (1962) argues, an environment characterized by technological change may also be associated with a greater amount of uncertainty regarding not only the technical nature of the product but also the demand for that product. As uncertainty increases, particularly under the entrepreneurial regime, the likelihood decreases that the entrepreneurial startup will be able to produce a viable product and ultimately be able to survive.

These two forces combine to shape the probability of a new firm remaining in business in period t, or

\begin{equation}
P(Q_{it} > 0) = f(i_{it}, c(Q_{it}) - c(Q^*))
\end{equation}

where \(c(Q_{it})\) is the average cost of producing at a scale of output \(Q_{it}\), and \(c(Q^*)\) is the average cost of producing at the MES level of output, or the minimum level of production required to attain the minimum average cost, \(Q^*\). One of the main points to be emphasized is that, as firm size increases relative to the MES level of output, the more likely the firm is to decide to remain in the industry. This suggests that either an increase in the startup size of the firm or a decrease in the MES level of output should increase the likelihood of survival.\(^3\) It also implies that, given a level of MES output in an industry, the greater the size of the firm, the less it will need to grow in order to exhaust the potential scale economies.

The rather ambiguous role of innovative activity should also be emphasized. On the one hand, a greater perceived likelihood of innovating (\(i_{it}\)) will lead the entrepreneur to remain in an industry, even if other factors, such as the gap between the firm’s size and the MES level of output resulting in a cost differential of \(c(Q_{it})-c(Q^*)\) would otherwise have led the firm to exit out of the industry. Seen from this perspective, firms in a highly innovative environment will tend to have a lower propensity to exit, \textit{ceteris paribus}, as long as the perceived likelihood of innovative activity is relatively high (cf. Grebel et al. 2003).

\(^3\) Keeping the overall economic situation (and related market opportunities) constant.
On the other hand, the likelihood that the firm will actually end up producing a viable product for which there is sufficient demand will clearly be lower in more innovative environments. That is, the actual innovative activity of the firm, $I_t$, and not the likelihood of that innovative activity, $i_t$, will ultimately determine its actual level of output in period $t$, $Q_{it}$, so that

$$Q_{it} = Q_{it-1} + Q(I_t)$$

where $Q_0$ is a factor of the firm's output in the previous period,

$$Q_{it} = Q_{i0} + aQ_{it-1}$$

and $Q_0$ is an autonomous level of output and ‘a’ is a factor representing the portion of the previous period’s output that can be maintained in the market the next period (this could be zero in some cases). Factors such as market growth presumably influence the value of $a$. That is, if market growth is sufficiently high, a new firm may be able to grow enough so that $Q_{it} = Q^*_i$, even in the absence of innovative activity.

An important implication is that if an entrepreneur infers from a positive performance that she has an underlying high endowment of entrepreneurial skills, she will continue with entrepreneurship. By contrast, if she infers from a poor performance that she has an impoverished endowment of entrepreneurial skills, she is more likely to exit out of entrepreneurship. The main point is that the entrepreneur has a period of time from which to observe entrepreneurial performance based on which she can make an inference about her underlying endowment of entrepreneurial skills.

An implication of the Jovanovic (1982) model of learning is that, if the entrepreneur infers from the actual entrepreneurial performance that her endowment of entrepreneurial skills is impoverished, she would revise $P^*$ downward. Subsequent to exiting out of entrepreneurship and (re-) entering into employment to earn a wage, $W$, working for an incumbent enterprise, there would be no reason for $P^*$ to change in the Jovanovic (1982) theory of learning.

By contrast, we suggest that $P^*$ can actually increase as a result of entrepreneurial experience. If the entrepreneur learns not just about the original endowment of entrepreneurial skills, but also how to augment these original entrepreneurial skills, then $P^*$ will not remain invariant to the entrepreneurial experience, but will actually be higher as a result of the entrepreneurial experience. In contrast to the original Jovanovic (1982) theory, this second type of learning would suggest that ex-entrepreneurs would indeed contemplate re-entering into entrepreneurship, becoming renascent men.

3. Literature review on nascent entrepreneurship

Table I summarizes the main findings in the literature linking characteristics specific to individuals to nascent entrepreneurship. Similarly, the propensity for ex-

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4 This summary is based on: Van Gelderen (1999); Blanchflower et al. (2001); Diochon et al. (2002); Kim et al. (2003); Davidsson and Honig (2003); Reynolds et al. (2004); Wagner and Sternberg (2004); Arenius and
entrepreneurs to transform entrepreneurial experience into actual renascent entrepreneurship may not be universal but rather shaped by individual characteristics. In some cases, the relationship between a personal characteristic and renascent entrepreneurship may be similar to that with nascent entrepreneurship; in other cases it may be considerably different.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Nascent entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human capital</strong></td>
<td></td>
</tr>
<tr>
<td>Educational level</td>
<td>+</td>
</tr>
<tr>
<td>Prior industry experience</td>
<td>x</td>
</tr>
<tr>
<td>Prior entrepreneurial experience</td>
<td>+</td>
</tr>
<tr>
<td><strong>Financial capital</strong></td>
<td></td>
</tr>
<tr>
<td>Household wealth</td>
<td>0</td>
</tr>
<tr>
<td>(Household) income</td>
<td>(0) / +</td>
</tr>
<tr>
<td><strong>Social capital</strong></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial role models</td>
<td>+</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>+</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
</tr>
<tr>
<td>Urban location</td>
<td>+</td>
</tr>
</tbody>
</table>

+ = positive effect  
0 = no (statistically significant) effect  
- = negative effect  
x = not measured

**Human capital**

There is a long research tradition linking the role of human capital to entrepreneurship. Studies have typically found a positive relationship between general human capital and nascent entrepreneurship (Van Gelderen, 1999; Diochon et al., 2002; Kim et al., 2003; Reynolds et al., 2004; Wagner, 2005). Individuals with more education may be more willing to start a new firm because they can relatively easily find a job if the venture fails. Wagner (2005) also found evidence for Lazear’s (2004) “jack-of-all-trades” theory of entrepreneurship, with a positive effect of the number of fields of experience on nascent entrepreneurship.

Prior industry experience – a factor that has a clear negative effect on firm exit (cf. Klepper, 2002; Phillips 2002; Stam et al., 2006) – is not found to have an effect on nascent entrepreneurship. It is likely that prior industry experience will only have a positive effect.

De Clercq (2005); Arenius and Minnitti (2005); Grilo and Irigoyen (2005); Van Gelderen et al. (2005); Wagner (2005); Kolvereid and Isaksen (2006).
when the intended new business will be active in an industry that is related to this experience.

Perhaps the most relevant experience of individuals aspiring to start a business is entrepreneurial experience. In this respect, Kolvereid and Isaksen (2006) found a positive effect of entrepreneurial experience (i.e. having had a business before) on entrepreneurial intentions. This is quite in contrast to the Jovanovician model, assuming that these ex-entrepreneurs had to close their unsuccessful business. An escape from this logic would be the ‘exit’ of a successful business, via a merger or acquisition. A more contrasting explanation may be that these ex-entrepreneurs have not only learned passively whether they had the necessary entrepreneurial skills. These individuals also learned actively to develop or augment their entrepreneurial skills, perhaps not sufficient for running their prior business, but promising enough for future entrepreneurial efforts.5

But how would human capital impact renascent entrepreneurship. On the one hand, it elevates W, or the opportunities available to ex-entrepreneurs in working for an incumbent organization. On the other hand, a higher level of human capital may provide the ex-entrepreneur with the absorptive capacity to learn from the entrepreneurial experience and augment the initial endowment of entrepreneurial skills. This would suggest a positive relationship between human capital and the propensity for ex-entrepreneurs to be renascent entrepreneurs.

Financial capital

A series of studies (Evans and Leighton, 1989; Evans and Jovanovic, 1989; Blanchflower and Oswald, 1998) has identified that a lack of financial resources constrains new and small firms. The theory of liquidity constraints assumes that a major concern of nascent entrepreneurs is obtaining finance, which would imply that the receipt of capital (e.g. via an inheritance or gift) increases an individual’s likelihood of becoming self-employed, both through the direct supply of capital and through the increased likelihood of bankers providing capital (due to the collateral provided). However, research on nascent entrepreneurship has shown mixed evidence and has generally found no effects of household wealth and income (Kim et al., 2003) but a positive effect of individual income (Van Gelderen, 1999).

Social capital

Recent research also suggests that social capital may impact entrepreneurship in general and nascent entrepreneurship in particular (Davidsson and Honig, 2003; Hoang and Antonic, 2003; Arenius and De Clercq, 2005). Davidsson and Honig (2003) have argued that individuals who come from families who own businesses (bonding social capital), or from community networks that own or encourage self-employment (bridging social capital). There might be a self-reinforcing effect, that however does take some time to develop (perhaps extending over the life course of the first business): improved entrepreneurial skills positively affect the recognition of entrepreneurial opportunities (cf. Ronstadt 1988), while the pursuit of new opportunities improve the entrepreneurial skills in a trial-and-error process.
capital), will utilize their individual level social capital resulting in more successful discovery activities (i.e. nascent entrepreneurship) than those who do not.

Davidsson and Honig (2003) as well as Kim et al. (2003) and Wagner (2005) found a positive effect of having entrepreneurial family and friends, i.e. entrepreneurial role models. This factor revealed to be negatively related to young firm exit (Stam et al., 2006).

Social capital may provide a mechanism for absorbing entrepreneurial experience and transforming it into learning and the augmentation of entrepreneurial skills, which would suggest a positive relationship between social capital and the likelihood of ex-entrepreneurs to become renascent men.

Demographics

Age
Studies have typically found that nascent entrepreneurship tends to decline with age. For example, in an international study Blanchflower et al. (2001) found that for individuals the probability of preferring to be self-employed is strongly decreasing with age. A negative effect of age on nascent entrepreneurship has also been found in many other country studies (Van Gelderen, 1999; Diochon et al., 2002; Reynolds et al., 2004). A common interpretation of this consistent finding is that younger individuals may be more adventurous (i.e. overconfident: Forbes, 2005) and, hence, may be more likely to have entrepreneurial preferences.

Gender
A consistent empirical result emerging in the literature on nascent entrepreneurship is that gender matters. In particular, women exhibit a consistently lower likelihood of becoming a nascent entrepreneur than are their male counterparts (Van Gelderen, 1999; Diochon et al., 2002; Reynolds et al., 2004; Wagner, 2005).

Urban location
Only a few studies focusing on nascent entrepreneurship have taken into account the geographic location of individuals. The meager evidence accumulated to date indicates that people in urban locations are more likely than their rural counterparts to become a nascent entrepreneur (Van Gelderen, 1999; Wagner and Sternberg, 2004; Arenius and De Clercq, 2005; Kolvereid and Isaksen, 2006). Due to the density of people and organizations, urban and especially metropolitan locations provide more opportunities than their more rural counterparts (Jacobs, 1961).

Exit type
Research has identified the existence of a diversity in types of exits: for example voluntary exits to acquire a better job (Van Praag, 2003; Bates, 2005), exits due to personal circumstances, successfully selling the firm (Headd, 2003), and bankruptcy (Thornhill and Amit, 2003). It is likely that the type of exit and perhaps also the timing of the exit – either
in the first crucial three years (“valley of death”) or later on – affect the entrepreneurial preferences after firm exit.

For example, successfully selling the prior firm is likely to deliver financial resources that can be used as starting capital for a restart, while bankruptcy is likely to lead to (short term) financial constraints lowering the feasibility of a restart. To a certain extent, the effects of these types of exit on entrepreneurial preferences can be interpreted with the theory of liquidity constraints. We assume that the receipt of capital due to the sale of (parts of) the prior firm also has a positive effect on the preferences to start a new firm again. In line with this argument, we expect that entrepreneurs whose firm was closed due to bankruptcy are relatively resource constrained (they are likely to have debts, and have problems with getting bank loans in the near future) and thus less likely to intent to start again. However, research by Van der Klaauw (1998) revealed the opposite effect: entrepreneurs that went bankrupt were more likely to have entrepreneurial preferences! The study by Van der Klaauw (1998) also revealed that entrepreneurs that stopped because of personal reasons were less likely to have entrepreneurial preferences.

Concerning the timing of the exit, it may be inferred that entrepreneurs whose prior firm has survived the so-called valley of death (the first three years after start-up), have a strong belief that they possess a relatively strong endowment of entrepreneurial skills. This would suggest that they might have a higher propensity for becoming renascent men.

4. Measurement issues

The literature has typically not linked previous entrepreneurial experience to nascent entrepreneurship. Those studies that do account for entrepreneurial experience have only included a measure indicating that some experience with entrepreneurship has been accrued. However, how the prior business experience of the ex-entrepreneur was terminated has not been measured and analyzed. As explained in the previous section, this neglects a very important factor that may impact not just the post-entrepreneurial career in general, but also renascent entrepreneurship in particular.

Measuring entrepreneurial experience presents several challenges. We have started with a representative panel of firms that were registered as independent start-ups in 1994, 1998, 1999 and 2000 (on these panels see e.g. Bosma et al., 2004; Stam and Schutjens, 2005). The firms that did not survive were traced within one year subsequent to the closure of the business, and a number of characteristics were recorded in a survey. At the end of 2004 we had placed telephone calls to all 510 ex-entrepreneurs that had closed their business in the previous decade. We contacted 240 respondents, and collected information on several variables reflecting entrepreneurial experience, current occupations, and entrepreneurial preferences.

We thus have collected information from (at least) three points in time: the start-up of the firm ($T^0$), the closure of the business ($T^1$; 1 to 10 years after start-up) and a survey subsequent to firm exit ($T^2$; 1 to 9 years after closure). If the firm survived more than one year, we have also gathered information each year between the start-up and the closure of the firm (the years between $T^0$ and $T^1$). Figure 2 depicts the data collection points in time.
The non-response analysis revealed that there are no significant differences between the non-respondents and respondents, with the exception of age: respondents tend to be older than non-respondents, which suggests that renascent entrepreneurs (as these tend to be relatively young) were undersampled. This response bias can be attributed to the higher mobility of younger people, which makes it harder to trace them via telephone surveys.

To measure whether an ex-entrepreneur has the (stated or revealed) preference for starting a new firm again two dichotomous variables were initially constructed. The first reflects the re-entry into entrepreneurship by having started a new firm again (serial entrepreneurship). The second reflects the intention to (re)start a new firm.

The dependent variable to be estimated reflects whether the respondents had no subsequent preference to (re-)enter into entrepreneurship (value 1: “one-night stands”) or to (re)enter into entrepreneurship again as a control group (value 0: “renascent entrepreneurs”). Table II shows the distribution of ex-entrepreneurs across the different post-entrepreneurial trajectories.6

<table>
<thead>
<tr>
<th>Renascent entrepreneurs and one-night stands (N=240)</th>
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</thead>
<tbody>
<tr>
<td>Definition</td>
</tr>
<tr>
<td>Renascent entrepreneurs</td>
</tr>
<tr>
<td>One-night stands</td>
</tr>
</tbody>
</table>

The independent variables influencing the decision to be a renascent entrepreneur can be categorized into four main groups, which reflect human capital, social capital, firm exit type, and demographic (control) variables.

The human capital of the ex-entrepreneurs is reflected by several different measures. Respondents were asked to indicate the highest level of education they had completed. This variable was coded as a nominal variable with low or medium level of education as 0 and high educational attainment as 1. Two dummy variables are included which indicate whether the individual had prior industry experience prior to starting her firm and whether the ex-entrepreneur had started more than one firm as an indicator of prior entrepreneurial experience.

The measure of social capital reflects bonding social capital (Davidsson and Honig, 2003). The indicator of bonding ties consists of a dummy taking on the value of one if the

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6 In the Netherlands about 2% of the adult population (18-64 years) can be characterized as nascent entrepreneurs, while about 5% expects to start a business within the next three years (Bosma and Wennekers, 2004).
respondent knew family or friends running their own business. This variable could also be interpreted as entrepreneurial role models, or even as “pre-market” entrepreneurial experience, and may thus reflect an aspect of human capital (Kim et al., 2003).

Three variables are used to characterise the type of firm exit. The first variable indicates whether or not the prior firm was successfully sold (in total or parts). Firms which exit due to acquisition may be inferred to have been a success in that they exhibited (statistically significant) above average sales revenues and employment prior to exit. This variable also reflects the availability of financial capital, as it can be assumed that the sale of the firm frees financial resources for the ex-entrepreneur. Due to the low number of bankruptcies (only seven) we were, in fact, not able to use this measure of “firm failure”. However, since six of the seven entrepreneurs with bankruptcy as the cause of firm exit responded that they still had entrepreneurial preferences, this variable seems to be highly relevant. A second indicator of firm exit reflects a low commitment to entrepreneurship, i.e. closure for non-business reasons. The dummy variable “exit due to personal circumstances” (like personal health or family situations) was used. The timing of the exit is reflected by the dummy variable which indicates a prior firm age of less than or equal to three years, indicating a relatively early firm exit.

The final category of variables reflects demographic characteristics of the ex-entrepreneur, and consists of gender (a dummy for male), age (a dummy for being 40 years or younger), and urban location (a dummy for being located in one of the four largest cities in the Netherlands: Amsterdam, Rotterdam, Utrecht or The Hague). These variables are included to control for demographic influences.

5. Empirical results

In order to shed light on possible differences between the group of renascent entrepreneurs with (N=137) and the group of ex-entrepreneurs without subsequent entrepreneurial preferences (N=103), univariate descriptive statistics are provided in Table III. Univariate non-parametric statistical tests identify statistically significant differences between the two groups of ex-entrepreneurs. Non-parametric tests have less rigorous assumptions than parametric tests, and are appropriate for the relatively small sample and nominal variables. Chi-square tests are used to identify significant differences between the two groups of ex-entrepreneurs with regard to variables measured at a nominal level.
Table III

Differences between renascents and one-night stands

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Renascent No.</th>
<th>Renascent %</th>
<th>No preference anymore No.</th>
<th>No preference anymore %</th>
<th>Chi-square Statistic</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly educated</td>
<td>59</td>
<td>43.1</td>
<td>31</td>
<td>30.1</td>
<td>3.785</td>
<td>0.052</td>
</tr>
<tr>
<td>Prior industry experience</td>
<td>63</td>
<td>46.7</td>
<td>38</td>
<td>36.9</td>
<td>2.285</td>
<td>0.131</td>
</tr>
<tr>
<td>Prior entrepreneurial experience</td>
<td>21</td>
<td>15.3</td>
<td>8</td>
<td>7.7</td>
<td>3.164</td>
<td>0.075</td>
</tr>
<tr>
<td><strong>Social capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial role models</td>
<td>52</td>
<td>38.0</td>
<td>27</td>
<td>26.7</td>
<td>3.672</td>
<td>0.055</td>
</tr>
<tr>
<td><strong>Nature firm exit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sold (parts of) prior firm</td>
<td>20</td>
<td>14.8</td>
<td>6</td>
<td>6.0</td>
<td>4.536</td>
<td>0.033</td>
</tr>
<tr>
<td>Exit due to personal circumstances</td>
<td>23</td>
<td>16.8</td>
<td>34</td>
<td>33.0</td>
<td>8.543</td>
<td>0.003</td>
</tr>
<tr>
<td>Prior firm age (&gt; 3 yrs)</td>
<td>29</td>
<td>21.1</td>
<td>29</td>
<td>28.2</td>
<td>1.566</td>
<td>0.211</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (female)</td>
<td>39</td>
<td>28.5</td>
<td>41</td>
<td>39.8</td>
<td>3.402</td>
<td>0.065</td>
</tr>
<tr>
<td>Age (&gt; 40 yrs)</td>
<td>92</td>
<td>67.2</td>
<td>94</td>
<td>91.3</td>
<td>19.598</td>
<td>0.000</td>
</tr>
<tr>
<td>Urban location</td>
<td>8</td>
<td>5.8</td>
<td>10</td>
<td>9.7</td>
<td>1.269</td>
<td>0.260</td>
</tr>
</tbody>
</table>

The entrepreneurial preferences in the post-exit period range from 64% directly subsequent to firm exit to 57% during the survey a few years after firm exit. These preferences are still considerably higher than the entrepreneurial intentions in the overall adult population in the Netherlands, which is only 37% (see Blanchflower et al., 2001).

Table III shows that renascents and one-night stands exhibit statistically significant differences with regard to seven characteristics. Renascent entrepreneurs exhibit relatively high human and social capital: they have higher levels of educational attainment and have had greater prior entrepreneurial experience as well as more entrepreneurial role models. This suggests that both in a temporal and a social context, renascent entrepreneurs have been exposed to relatively high levels of entrepreneurship.

There is also evidence suggesting that the type of exit out of entrepreneurship is related to the likelihood of becoming a renascent entrepreneur. Renascent entrepreneurs are more likely to have successfully sold their prior business but less likely to be stopped in their entrepreneurial career by personal circumstances. The prior firm age and location are not related to renascent entrepreneurship as expected. Renascent entrepreneurs are somewhat more likely to have closed their prior firm within three years subsequent to exit, although the difference cannot be considered to be statistically significant. In contrast to the prediction, location in an urban area actually reduces the likelihood of being a renascent entrepreneur. Finally, only a very small proportion of the one-night stands are younger than 41 years old, and they also tend to be less often male than are their renascent counterparts.

A binary logistic regression is also used to analyse the likelihood that an ex-entrepreneur has no subsequent entrepreneurial preferences. The logistic regression tests

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7 These percentages are comparable with earlier research by Stokes and Blackburn (2002), who found that almost 70% of the business owners that had to close their business claimed that they were encouraged by their experience to continue as a business owner.
the probability of having entrepreneurial preferences or not. The SPSS statistical package was used for all statistical analyses. The results are shown in Table IV.

### Table IV

**Binary logistic regression estimating abstinence from renascent entrepreneurship**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.938***</td>
<td>.523</td>
</tr>
<tr>
<td>Educational level (high)</td>
<td>-.769**</td>
<td>.321</td>
</tr>
<tr>
<td>Prior industry experience</td>
<td>-.389</td>
<td>.319</td>
</tr>
<tr>
<td>Prior entrepreneurial experience</td>
<td>-1.020**</td>
<td>.509</td>
</tr>
<tr>
<td><strong>Social capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial role models</td>
<td>-.661*</td>
<td>.343</td>
</tr>
<tr>
<td><strong>Nature firm exit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sold (parts of) prior firm</td>
<td>-1.220**</td>
<td>.577</td>
</tr>
<tr>
<td>Exit due to personal circumstances</td>
<td>1.121***</td>
<td>.376</td>
</tr>
<tr>
<td>Prior firm age (&gt; 3 yrs)</td>
<td>.554</td>
<td>.359</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (female)</td>
<td>.324</td>
<td>.344</td>
</tr>
<tr>
<td>Age (&gt; 40 yrs)</td>
<td>2.339***</td>
<td>.487</td>
</tr>
<tr>
<td>Urban location</td>
<td>1.186*</td>
<td>.604</td>
</tr>
</tbody>
</table>

\[N = 231\]

Model \(X^2\) = 63.005

\[Df = 10\]

\[-2 \text{ Log likelihood} = 251.905\]

\[\text{Nagelkerke } R^2 = 0.321\]

\* p < 0.10; ** p < 0.05; *** p < 0.01

### Human capital

Human capital seems to be positively related to renascent entrepreneurship. All three variables have the expected negative coefficient on being a one-night stand entrepreneur. Prior entrepreneurial experience has the strongest effect, followed by the general human capital indicator. The effect of prior industry experience has the expected direction, but is not statistically significant.

### Social capital

The social capital variable – having entrepreneurial role models – has the expected negative relationship with abstaining from renascent entrepreneurship. Ex-entrepreneurs with entrepreneurial families and/or friends seem to be persistent in their preference for entrepreneurship and are not deterred by a negative entrepreneurial episode.

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8 In order to test for the robustness of our results, we also estimated regressions using a sub-sample of ex-entrepreneurs with no subsequent serial entrepreneurs and a sub-sample without pre-exit serial entrepreneurs (see Stam et al. 2005a).
Firm exit type

Two of the three variables related to the type of firm exit have rather strong effects in the expected direction. The success of the prior firm is negatively related to abstaining from renascent entrepreneurship, while personal circumstances are positively related to abstaining from renascent entrepreneurship. In contrast to the expectations, entrepreneurs whose prior firm has survived the valley of death are not more likely to be renascent entrepreneurs. The effect is even (although not statistically significant) the other way around – those entrepreneurs who terminated their business within three years subsequent to start-up are somewhat more likely to become renascent entrepreneurs. One possible interpretation is provided by McGrath (1999), who suggested that entrepreneurs view their startups as a real option and thus are not deterred from entering into subsequent entrepreneurship by terminating previous businesses.

Demographics

The strongest variable explaining abstinence from nascent entrepreneurship is provided by the age variable – younger ex-entrepreneurs are much more likely to be renascent entrepreneurs than are older ex-entrepreneurs. However, since age is a proxy for other – yet unknown – underlying variables, this does not provide much insight by itself. If age makes such a large difference, how does the explanation differ for older ex-entrepreneurs in comparison with younger ex-entrepreneurs? A regression was estimated on the subpopulation of older ex-entrepreneurs, which yielded largely the same result as the regression for the entire population, with one remarkable exception. Entrepreneurial preferences of older ex-entrepreneurs are not affected by entrepreneurial role models, but rather by prior industry experience. They seem to be less affected by entrepreneurial role models and more shaped by their industry experience (which of course is at best meager for younger ex-entrepreneurs). Perhaps industry veterans are more likely to maintain entrepreneurial preferences, due to a lack of other career opportunities.

The other demographic variable, gender, has no significant effect on abstaining from renascent entrepreneurship, while the urban location (with relatively high levels of nascent entrepreneurship in general) has an unexpected effect. Ex-entrepreneurs living in large cities are less likely to have entrepreneurial preferences.

Our results are comparable to the only other study that analysed renascent entrepreneurship (Wagner, 2003), which also found no effect of gender, a negative effect of age, and a positive impact of entrepreneurial role models and higher education on the probability to be involved in starting a new business subsequent to firm exit. In contrast to our study, Wagner (2003) found a positive effect of the regional share of nascent entrepreneurs in general on the probability of renascent entrepreneurship.

6. Are renascent entrepreneurs different from nascent entrepreneurs?
While focusing on renascent entrepreneurship is new and relatively unexplored, a large literature has compiled a series of consistent, systematic findings concerning nascent entrepreneurship. How do the factors conducive to renascent entrepreneurship differ from those shaping nascent entrepreneurship?

Based on the empirical evidence presented in the previous section, the answer appears to be similar but not at all identical. Such a comparison between nascent and renascent entrepreneurship is presented in Table V. To a large extent those factors conducive to nascent entrepreneurship have a similar impact on renascent entrepreneurship (cf. Wagner, 2003). There seems to be some type of sorting mechanism – those individuals with the ‘wrong’ entrepreneurial profile, or endowed with those characteristics that typically are not associated with becoming a nascent entrepreneur, but in fact did start a firm, are less likely to have the preference to start again subsequent to terminating the initial business. This selection mechanism essentially provides the learning referred to by the Jovanovician model – those entrepreneurs selected out of entrepreneurship have apparently learned that they are not favorably endowed with characteristics reflecting entrepreneurial talent. As a result of learning about their underlying, but invisible (meager) endowment of entrepreneurial talent, these ex-entrepreneurs abstain from making the same mistake twice.

But perhaps this is a bit too deterministic. Individuals that have once entered into entrepreneurship might have two important advantages in contrast to de novo nascent entrepreneurs – first, they have accumulated entrepreneurial experience which increases the probability of having acquired entrepreneurial skills (and as a consequence a higher P*), and second, when they have successfully sold their prior firm the access to financial resources increases. These two advantages make them more likely to intend to start again.

In addition, the effects of two explanatory variables are different for renascent entrepreneurs than for nascent entrepreneurs. First, gender does not make a difference for renascent entrepreneurs. Once female entrepreneurs have terminated their business, they are not less likely to become renascent entrepreneurs. This raises the question, “Does the

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Nascent/latent entrepreneurship</th>
<th>Renascent entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (high)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Industry experience</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Entrepreneurial experience</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Income (high)</td>
<td>+</td>
<td>x (+)*</td>
</tr>
<tr>
<td>Entrepreneurial role models</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Gender (male)</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>Age of entrepreneur</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Location (urban)</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

+= positive relation
0 = no (statistically significant) relation
-= negative relation
x = not measured
* sold prior firm
negative female bias melt away once they have done it?” Or is this because the effect of other variables influencing entrepreneurial preferences have been controlled for, which makes the direct gender effect insignificant (as it was significant in the univariate analysis; cf. Verheul, 2005 for a discussion of this phenomenon).

Second, an urban location has a positive effect on nascent entrepreneurship in general, but it turns to a (weakly) negative effect on renascent entrepreneurship. So, once entrepreneurs have terminated a business in a large city, they are less likely than their rural counterparts to prefer renascent entrepreneurship. Urban people may be more likely to do it once, but rural people once they have done it, are more likely to fancy entrepreneurship again. No one night stand for them.

7. Conclusions

Boyan Jovanovic’s theory of selection and passive learning has provided a compelling framework for understanding and analyzing the gap between nascent entrepreneurship and actual entrepreneurship. Because of the uncertainty confronting a nascent entrepreneur and her potential resource providers concerning her unobservable underlying endowment of entrepreneurial skills, some nascent entrepreneurs will be constrained from attaining their goal of entering into actual entrepreneurship. Only by being able to directly observe the actual entrepreneurial performance can inferences be made concerning the underlying entrepreneurial skills. But according to the Jovanovician model there would be no reason for becoming a renascent entrepreneur. Once a negative entrepreneurial experience had revealed sufficient information to infer that the entrepreneur is not well suited for entrepreneurship, there would be little to be learned from subsequent episodes of entrepreneurship.

This paper has challenged the view of entrepreneurial learning posited in Jovanovic’s (1982) model and instead suggested that, in addition to learning about the underlying endowment of entrepreneurial skills (passive learning), episodes of entrepreneurship can also augment that endowment of entrepreneurial talent (active learning). This would explain why ex-entrepreneurs would choose to become renascent entrepreneurs.

However, the findings of this paper suggest that the ability of ex-entrepreneurs to learn from their entrepreneurial experience in an endowment augmenting matter is not homogenous, but rather is shaped by characteristics influencing the capacity to absorb knowledge and learn from that entrepreneurial experience. While some of these characteristics conducive to renascent absorptive capacity are similar to those that have been found to promote nascent entrepreneurship, others, such as gender are found to have a strikingly different impact on renascent entrepreneurship.

This study shows the added value of a longitudinal research design, in which not only the prior experience but also the performance of the prior firm is taken into account. Both issues revealed to be important in the explanation of renascent entrepreneurship. As public policy increasingly focuses on promoting entrepreneurship to generate employment, growth and global competitiveness, it is important to recognize that renascent entrepreneurs provide not just an important source of entrepreneurship, but also a source with
entrepreneurial skills that may be augmented and enhanced compared to those of novice entrepreneurs.

In order to increase entrepreneurial activity in society, government policies and programmes should aim at increasing individual awareness of the possibilities of entrepreneurial careers, as well as providing individuals with entrepreneurial experience. One way to realize this is to stimulate individuals to make the transition into entrepreneurship (once) early in their life, this will probably lead to a substantial increase in the potential supply of entrepreneurs in society, as individuals that have been an active entrepreneur once are more likely to prefer to become an entrepreneur once again than individuals that stay within the “employee” status.

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