THE PLANNED DECISION TO TRANSFER AN ENTREPRENEURIAL COMPANY*

Hannes Leroy
Sophie Manigart
Miguel Meuleman

April 2009
2009/577

* We thank the Flemish government through STOIO (Steunpunt Ondernemen en Internationaal Ondernemen) for the financial means to complete this project. The paper benefited from discussions at the 2007 ICSB Conference, 2008 Babson-Kaufman Entrepreneurship Research Conference and the 2008 Academy of Management Meeting. We are indebted to Dawn De Tienne and Marc Gruber for helpful comments. All errors remain our own.

1 Corresponding author. Katholieke Universiteit Leuven, Naamsestraat 69, box 3545, B-3000 Leuven, Belgium (Hanes.leroy@econ.kuleuven.be)
2 Universiteit Gent, Kuiperskaai 55E, B-9000 Gent, Belgium and Vlerick Leuven Gent Management School, Reep 1, B-9000 Gent, Belgium (sophie.manigart@ugent.be)
3 Vlerick Leuven Gent Management School, Reep 1, B-9000 Gent, Belgium (Miguel.meuleman@vlerick.be)
THE PLANNED DECISION TO TRANSFER AN ENTREPRENEURIAL COMPANY

ABSTRACT

We expand and test Ajzen’s Theory of Planned Behavior (TPB) to explain the transfer of an entrepreneurial venture upon exit. Our results confirm TPB: transfer intentions and perceived control over the transfer are the main drivers of the likelihood to transfer. In addition, contextual business characteristics complement TPB in explaining transfer outcomes. While intangibility of firm assets directly impacts transfer outcomes, business viability is partially mediated via transfer intentions. These results shed more light on the role of implicit planning in transfer decisions and help to better understand contextual factors impacting the process of entrepreneurial exits.

Keywords: entrepreneurial exit, exit process, transfer decision, Theory of Planned Behavior.
THE PLANNED DECISION TO TRANSFER AN ENTREPRENEURIAL COMPANY

EXECUTIVE SUMMARY

As a direct consequence of the ageing workforce, many entrepreneurs will exit their firm in the coming years. Baby-boomers, on the verge of retirement, will be forced to decide how they will exit their firm. Several authors suggest that a business transfer is a more desirable option in terms of both personal well-being and sustained economic wealth for suppliers, customers and employees. A business transfer however may not always appear as the most feasible option to the entrepreneur. In this article, we investigate the variables that impact the entrepreneurial decision whether or not to transfer a business. To model individual decisions, we use the psychological Theory of Planned Behavior (TPB) and expand it with contextual business characteristics that previous entrepreneurial literature has suggested to be important in determining exit outcomes.

TPB models the variables that drive conscious, individual decision making based on careful consideration of available information (planned behavior). Perceived desirability towards the transfer (personal attitudes), perceived social pressure to transfer (subjective norms) and perceived control over the transfer (perceived behavioral control) will drive the behavioral intention of the entrepreneur to transfer his or her business. According to TPB, in most cases positive transfer intentions will translate into actual transfer behavior. In some cases however, contextual factors may hinder behavioral intentions from becoming reality. The viability of the business and the intangibility of firm assets typically present themselves as two major hurdles to continuing the business under new ownership. These measures of actual control over transferring may be partially included in the perceived control and therefore behavioral intentions of the entrepreneur but can also directly impact transfer behavior despite the best intentions. In this study we investigate how contextual variables such as business viability and intangible firm assets contribute to the transfer decision as modeled by the TPB.

We investigate our hypotheses in a sample of 175 recently exited micro-firms in Belgium. Micro-entrepreneurs present themselves as an ideal setting to study these individual level decisions.
Furthermore, micro-entrepreneurs are an understudied group, large in number and high in average age, prone to exit in the coming years. We randomly drew micro-entrepreneurs from the full target population of exited enterprises in the period 2001 to 2006. We surveyed entrepreneurs on the central variables included in the TPB-model (personal attitudes, subjective norms, perceived behavioral control, transfer intentions), on transfer outcomes and on measures of intangibility of firm assets and business viability. We analyzed these data using structural equation model comparison techniques.

The results largely confirm the relationships suggested by the Theory of Planned Behavior. In order of importance, perceived control, subjective norms and personal attitudes are the most important predictors of the intention to transfer. In turn, intentions to transfer are the most important predictor of the actual transfer outcome. In addition, we find that actual behavioral control, measured by business viability and intangible firm assets, increases the likelihood of a transfer over intentions. More specifically, business viability is partially included in transfer intentions while intangible firm assets directly impact transfer outcomes despite intentions. These results hold when including several control variables in the model. For example, entrepreneurial experience impacts perceptions of perceived control, while the generation of the firm and the number of employees impacts perceived social pressure.

This study has several important implications. First, our results indicate that three factors impact transfer intentions and subsequently transfer behavior: perceived personal desirability of a transfer, perceived social pressure to transfer and perceived control over the transfer. Practitioners (individual entrepreneurs, advising consultants and governmental institutions) are wise to consider each of these variables to understand or stimulate the decision to transfer a firm. Second, our results indicate that actual control over the transfer may impact transfer outcomes partially via intentions (business viability) or directly despite intentions (intangible firm assets). Practitioners are advised to consider these limitations to transfer intentions and anticipate these potential obstructions to transfer behavior. Third, our results suggest that the Theory of Planned Behavior successfully models the variables that represent the process of planned decision making of an individual entrepreneur. Practitioners can use this model to better understand the variables the individual entrepreneur includes when he or she plans to transfer his or her firm. Furthermore, starting from this implicit model, practitioners and academics
alike may consider how explicit or formal planning adds to, complements or diverges from the process of implicit planning.
THE PLANNED DECISION TO TRANSFER AN ENTREPRENEURIAL COMPANY

In light of the aging workforce, many entrepreneurs will be forced to exit their business within the next years due to retirement (e.g. European Commission, 2006). Upon the voluntary exit of the entrepreneur, a venture can be liquidated and disappear or it can be transferred to another party. We define a business transfer as the transfer of ownership of an enterprise to another person or enterprise that assures the continuous existence and commercial activity of the enterprise (Sharma, Chrisman & Chua, 2003a). Previous research suggests that transferring the venture produces more psychological well-being for the entrepreneur compared to liquidation (Petty, 1997). Further, business transfers may sustain economic wealth in terms of continued customer relationships, continued supply-chain and continued employment (Petty, 1997).

Even though entrepreneurial exit and transfer decisions can have a significant impact on the entrepreneur, the firm, competitive dynamics and economies through wealth distribution (Wennberg, Wiklund, DeTienne & Cardon, 2009), little attention has been paid to entrepreneurial transfer decisions (DeTienne, 2009). Traditionally, the exit and transfer of businesses has received attention of researchers such as economists or organizational sociologists at the industry level (e.g. Hannan & Carroll, 1992) and business or strategy scholars at the firm level (e.g. Sarkar, Echambadi, Agarwal & Sen, 2006). Few scholars however have considered how individual entrepreneurs, as the designers and dominant forces of their organizations (Sarasvathy, 2004), impact exit outcomes. Especially for smaller firms the individual entrepreneur plays an important role in the strategic course of the enterprise and the exit choice at the end of the entrepreneurial life-cycle (DeTienne, 2009).

We draw upon the psychological Theory of Planned Behavior or TPB (Ajzen, 1991) to better understand transfer decisions when entrepreneurs exit their firm. TPB has been used previously to explain behavior in entrepreneurial contexts (e.g. Krueger, Reilly & Carsud, 2000, Kolvereid & Isaksen, 2006). TPB models the socio-cognitive elements that make up deliberative decision making on an individual level (Azjen, 1991). The central thesis of this model is that forming intentions toward a particular behavior (for instance the transfer an enterprise) depicts the rational process by which individual attitudes are translated into actual behavior. Hence, the process of individual attitudes
driving behavioral intentions and intentions driving actual behavior depicts the process of planned behavior.

We first test whether TPB appropriately describes the decision of an individual entrepreneur to transfer an enterprise. In line with TPB, it is expected that the individual attitudes of entrepreneurs form a behavioral intention to transfer which in turn is the major determinant of the actual exit and transfer outcome. Second, following Ajzen (1991), the original TPB model is expanded with measures of the actual control over the behavior. For complex behaviors such as business exits and transfers, it may well be that individuals do not include all important information in their mental model (Ajzen, 1991). Their actual control over the business transfer may hence neither be accurately captured by their perceived control over the transfer, nor by their intentions. We focus on two dimensions that previous literature identified as important in determining transfer outcomes and hence actual behavioral control: business viability (Gimeno et al., 1997) and intangibility of firm assets (Zander & Kogut, 1995).

The research setting for this study is the full population of micro-firms that ceased to exist under current ownership in the period 2001 to 2006 in Belgium. Using a questionnaire based design, we randomly drew 175 usable responses. We analyzed this data using structural equation model comparison techniques.

The results provide strong support for the variables modeled by the TPB: transfer attitudes drive transfer intentions and intentions are the main driver of transfer outcomes. Actual behavioral control, as measured by the viability of the business and the intangibility of firm assets, impacts the likelihood of a transfer over intentions. Our results show that some business characteristics are partially included in the behavioral intentions of the entrepreneur (e.g. business viability) while other characteristics impact transfer outcomes despite intentions (e.g. intangible firm assets).

This paper makes two main contributions to the literature. First, we show that the Theory of Planned Behavior is a relevant framework to study entrepreneurial behavior. We follow previous research on TPB for entrepreneurial start-ups (Krueger, Reilly & Carsud, 2000, Kolvereid & Isaksen, 2006) but apply it to the context of exit decisions (Sharma, Chrisman &
Chua, 2003b). Second, we show that adding actual behavioral control in an expanded model of TPB is superior to the basic TBP model in explaining entrepreneurial transfer behavior. This measure has until now received little attention in empirical models testing TPB. Explicitly exploring the role of actual behavioral control in explaining transfer behavior is hence a further contribution of the study.

The rest of the paper is organized as follows. First, we set out our theoretical framework and related hypotheses. Second, we introduce the research setting of our study. The following section outlines the data and method used in the analyses. Next, we present the findings from the empirical analyses. Finally, we discuss our findings, conclude and outline potential avenues for future research.

THEORETICAL FRAMEWORK AND HYPOTHESES

The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior was developed to model conscious, individual decision making and behavior based on careful consideration of available information (Ajzen & Fishbein, 1980). One of the main assumptions of TPB is that a significant amount of behavior is under control of the actor. If this is the case, a behavior can best be understood by an individual’s intention to perform that behavior. Intentions are a person’s motivation, willingness to exert effort, and try hard. Intentions hence serve as a behavioral plan that mediates between attitudes and actions (Ajzen, 1991).

TPB has been successfully used to explain an entrepreneur’s start-up intentions (Krueger et al., 2000) and outcomes (Kolvereid & Isaksen, 2006), as well as exit intentions (DeTienne, 2009) and intentions to family succession (Sharma, Chrisman & Chua, 2003b). To the best of our knowledge, no studies have applied TPB to model what happens with a firm upon entrepreneurial exit. We argue that the TPB-model is particularly applicable to exit decisions. An exit is typically a rare event in the entrepreneurial life cycle and involves unpredictable time lags between the intentions and the actual outcome. Exit behavior, therefore, is assumed to be less influenced by automated habits and deliberative planning becomes an important precursor to actual behavior (Conner & Armitage, 1998). Exit intentions are hence important to translate individual attitudes into actual exit behavior.
Applying TPB to firm transfers, TPB proposes three variables that impact the probability of a transfer: the personal desirability of a transfer to the entrepreneur (personal attitude), the social acceptability of a transfer to a normative reference group (subjective norms) and the perceived feasibility of an actual transfer (perceived behavioral control). Perceived behavioral control represents the anticipated impediments and obstacles to actually performing the desired behavior (Ajzen, 2002). Behavioral intentions to initiate a transfer mediate the impact of these variables on the actual exit outcome. These relationships are shown in Figure 1 (Ajzen, 1991; Ajzen, 2006). We formulate the following hypothesis:

*Hypothesis 1. Transfer intentions mediate the relationship between personal attitude, subjective norms, perceived behavioral control and the transfer outcome.*

---

**Actual Behavioral Control**

Previous TPB research found that the perceived control over a behavior not only impacts the behavior indirectly through intentions, but it also impacts it directly (Conner & Armitage, 1998). Lack of control over a behavior may hinder outcomes despite the best of intentions. This can be easily demonstrated for business transfers: the entrepreneur can have the best intentions to transfer but may not be able to find suitable buyers. For simple behaviors, the basic TPB model includes these contextual impedances in perceptions of control that directly impact behavior. For complex events such as business transfers, Azjen (1991) suggested to include a measure of actual behavioral control for a number of reasons.

First, actual control may impact perceived control, implying that entrepreneurs correctly incorporate drivers of actual behavioral control in their mental models: “To the extent that perceived behavioral control is veridical, it can serve as a proxy for actual control and contribute to the prediction of the behavior in question” (Ajzen, 2006, p. 1).

Second, actual control may directly impact the outcome if perceived behavioral control is not fully veridical and hence entrepreneurs do not fully incorporate all drivers of actual behavioral control in
their intentions. As a firm transfer is a rare and complex event for an entrepreneur, it is likely that the entrepreneur is not fully aware of all factors that may impact the likelihood of transferring the firm. We therefore expand the original TPB model with factors that determine the actual control over a transfer. The actual control over a transfer may have either a direct effect or an indirect effect on the probability of transferring the firm, depending on whether entrepreneurs fully or partially include this effect in their mental models.

Previous research has shown that the likelihood of transferring a venture depends on business and industry characteristics that make some ventures more attractive to transfer than others (Birley & Westhead, 1990; LeBreton-Miller, Miller & Steier, 2004). We focus on two business characteristics identified in previous literature as being important drivers of business transfers, namely the viability of the venture and the intangible assets tied to the founder.

Butler et al. (2001) identified historical performance as having an important impact on the transfer outcome. Firms with a good track record of performance are more attractive as takeover targets as they have a proven business concept that is valuable to others (Gimeno et al., 1997). As a new owner, it is easier to operate a business that performs well than to turn around an unviable business. The risk of taking over a viable business is therefore lower. It is hence more likely that ventures with higher performance levels will be transferred, compared to ventures with lower performance levels. Hence:

\textit{Hypothesis 2. Business viability positively impacts the likelihood of a transfer.}

Intangible factors such as product know-how, expertise and personal customer relationships are important in operating a business. In going-concern, these types of tacit knowledge are valuable and lead to superior performance thanks to their specific characteristics, including non-codifiability, non-teachability and complexity (Kogut & Zander, 1993). The upside of tacit knowledge is that it serves as a shield against unintended imitation by rivals. In the context of business transfers, however, the mobility of the assets and resources controlled by a venture determines whether a transfer is probable. High levels of intangible firm assets will hence hamper the probability of a positive transfer outcome. First, it is more difficult for outsiders to assess the value and properties of intangible firm assets
Further, their non-teachability and complexity make it more difficult to transfer them to a third party (Zander & Kogut, 1995). For example, in the context of family businesses, Bjuggren and Sund (2002) note that family idiosyncratic knowledge is a major factor that prevents selling a firm outside the family. In an entrepreneurial company, the firm is often portrayed as an extension of the entrepreneur (Chandler & Hanks, 1994). The firm’s intangible assets are hence intimately linked to the entrepreneur as an individual (Gimeno et al., 1997), making it hard to transfer them to a potential acquirer. These assets have a high probability to disappear from the organization once the entrepreneur exits.

From an acquirer’s point of view, taking over a venture with higher levels of intangible firm assets is thus more risky and less valuable: taking possession of property or inventory is easier than acquiring product knowledge or customer intimacy. We hence expect that ventures with more intangible assets are less attractive take-over candidates.

**Hypothesis 3. Intangibility of firm assets negatively impacts the likelihood of a transfer.**

**DATA AND METHODS**

**Sample Frame and Data Collection**

The extended TPB model is tested in a sample of recently exited Belgian micro-entrepreneurs employing at most ten employees. Micro-businesses are sometimes described as the fruit flies of management science as they allow the study of isolated processes that would be confounded in larger organizations (Katz, Aldrich, Welbourne & Williams, 2000). More specifically, micro-businesses can be seen as an extension of the individual entrepreneur (Chandler & Hanks, 1994): entrepreneurs drive to a large extent what happens with their firm. As the TPB was devised to model the decision making of individuals (Ajzen, 1991), TPB should be especially applicable to micro-businesses. We hence chose this narrow context of study to facilitate empirical specification and testing of hypotheses.

The Belgian Value Added Tax (VAT) governmental administration provided contact data on the full population of 166,493 organizations that terminated their VAT-number between 2001 and 2006.
The Value Added Tax-number is a unique number that identifies a business; it is terminated when a firm ceases economic activity or when a firm is transferred to either another business or another individual. The termination of a VAT number is hence a valid indicator of entrepreneurial exit. Database matching in BELFIRST\(^4\) allowed deleting sole proprietorships, reducing the population to 89,528 exited micro-entrepreneurs that had operated an incorporated firm.

We randomly selected 650 entrepreneurs from the target population. The individuals were all contacted by telephone to increase the response rate and to ensure that the intended person – the former business owner – would personally fill in the questionnaire. A number of individuals were unable to participate due to sickness, old age or language barriers, reducing the initial sample to 447 potential respondents. 112 entrepreneurs completed the survey within the first two weeks after administration. After a follow-up telephone call, an additional 85 respondents raised the response rate to 197 or 44%. We deleted 22 responses due to missing data bringing the actual response to 175. Comparison of early and late respondents shows no significant differences between the two groups of respondents in percentage of transfers ($\chi^2(1)=0.009$, $p=0.924$). We were able to test whether respondents differ significantly from the population in terms of industry or legal form. The sample has slightly more firms in agricultural activities and slightly less in services ($\chi^2(1)=4.35$, $p<0.05$). It is comparable to the population with respect to the legal form ($\chi^2(5)=30.5$, $p>0.05$). The sample is hence broadly comparable to the population and does not suffer from selection or response bias.

The average entrepreneur in the sample is 53 years old (SD = 13), has 17 years of entrepreneurial experience (SD = 15) and about two third are male (66%). Only 3% of the entrepreneurs had no education, 11% completed elementary school, 62% high school and 22% higher education. The average entrepreneurial company employs 2.2 employees (SD = 1.7) including the entrepreneur, has existed for an average of 22 years (SD = 15) and for 0.9 generations (median=0; maximum=9). The companies are active in agriculture (22%), in construction (13%), in retail or in wholesale (29%), in the hotel and restaurant industry (11%), in services (15%) and in other industries (10%).

\(^4\) BELFIRST is a database containing financial data and other company demographics on the full population of Belgian enterprises subjected to VAT-taxes.
Survey Design and Measures

A questionnaire was developed based on scales validated in previous research and pre-tested with five business transfer experts and with ten micro-entrepreneurs. The pre-tests indicated that some items needed to be rephrased or adapted to the entrepreneurial context. The complete survey is provided in appendix.

**Dependent variable.** Three firm exit alternatives were distinguished (Petty, 1997): transfer to a family member (17.7% of the respondents), transfer to a third party including employees or another company (20.6%) and voluntary exit or liquidation (61.7%). The dependent variable is coded as 1 in case of transfer to a family member or to a third party (67 cases or 38.3% of the sample) and 0 in case of voluntarily liquidation (108 cases or 61.7%). To enhance the reliability of the dependent variable, we further asked whether the activity continued under new ownership (Sharma et al., 2003a). This measure correlates perfectly with the constructed business transfer variable.

**Theory of Planned Behavior (TPB) variables.** TPB has been used in previous research in an entrepreneurial setting. As much as possible, the survey instrument of Krueger et al. (2000) is replicated. The central variable in the model is the intention to transfer the business, rather than liquidating it. It is measured with three items: self-perception of the entrepreneur on the ‘consideration, preparation and likelihood’ of a transfer occurring (Cronbach’s $\alpha = 0.91$). Personal attitude, subjective norms and perceived behavioral control are measured using both general and specific items (Krueger et al., 2000). Personal attitude towards the transfer is measured with 3 items measuring the desirability (general), attraction and enthusiasm toward the thought of transferring (Cronbach’s $\alpha = 0.92$). Given the difficulties with the subjective norm-scales (Krueger et al., 2000), the three items of Kolvereid and Isaksen (2006) are used, measuring the attractiveness of a transfer from the perspective of people significant to the entrepreneur (general), family and close friends (Cronbach’s $\alpha = 0.90$). Finally, perceived behavioral control includes a general perceived feasibility item (Krueger et al., 2000) and two self-efficacy items (Kraft, Rise, Sutton & Røysamb, 2005) (Cronbach’s $\alpha = 0.91$).

Bankruptcy and involuntary liquidation was a fourth alternative. As these exit modes are neither intentional nor under the control of the entrepreneur, these cases consisted the missing data on our survey instrument. We excluded them from further analysis, as they typically do not represent volitional or planned behavior.
**Business variables.** Business viability includes an assessment of the most recent revenues and their recent evolution up to three years before the exit. The two items correlate highly ($r = 0.58$, $p > 0.01$). The importance of intangible firm assets is measured by two items that capture the importance of customer relationships and product knowledge (Zander & Kogut, 1995). The two items correlate highly ($r = 0.75$, $p > 0.01$). A self-reported measure of business viability and intangible firm assets is used, because objective measures for these variables is typically not available for micro-enterprises. Previous research gives support to the reliability and validity of these self-reported measures (Dess & Robinson, 1984).

**Control variables.** Based on previous research, several variables are included to control for non-specific effects: entrepreneurial experience, age of the entrepreneur, sex, type of education, number of employees and family generation of the firm (Pennings, Lee & Witteloostuijn, 1996; Wennberg et al., 2009; Detienne, 2009). The means, standard deviations and correlation coefficients of all variables are given in Table 1, with Cronbach’s alpha on the diagonal. Entrepreneurial experience is measured as the general experience as entrepreneur and the specific experience within the focal sector ($r = 0.74$, $p > 0.01$).

Two methodological control variables are included. A common flaw in TPB research is that it is retrospective in nature (Norman & Conner, 2005). To control for this effect, two versions of the survey instrument are used. In the first version, TPB items precede action items ($N=55$), while the order is reversed in the second version ($N=119$). Second, some respondents answered the questionnaire on paper, others electronically. A dummy variable with response mode is included in order to control for unintended effects of response mode.

---

**Method of Analysis**

Structural equation (SE) modeling (with M Plus software) is used to analyze the data. This method is similar to most multivariate methods, but has the added value of checking whether the model
implied by the hypotheses has a good fit with the actual covariance matrix of the data. SE modeling hence allows comparing the fit of expanded models with nested models.

Several fit indices that are generally considered as important (Hu & Bentler, 1998) prove the adequacy of a structural equation model. First, the \( \chi^2 \)-test tests whether the hypothesized covariance matrix is different from the observed covariance matrix. Second, the standardized root mean square residual (SRMR) presents the overall difference between the observed and predicted covariances. Third, RMSEA signifies the amount of error of approximation per model degree of freedom and takes sample size into account. Finally, Bentler’s comparative fit index (CFI) indicates how much better the model is compared to a baseline model. In case of a good model fit, the \( \chi^2 \)-test fails to reject the null hypothesis that actual and implied covariances are equal, the SRMR is situated below 0.08, the confidence interval for RMSEA lies between 0.04 and 0.08 and CFI exceeds a value of 0.95 (Hu and Bentler, 1998).

First, the adequacy of the measurement model is checked with a maximum likelihood estimation procedure. A confirmatory factor analysis assesses the factorial validity of the survey items. In a second step, the covariances implied by the measurement model are used to test the structural relations of the hypothesized model. It is tested whether a hypothesized path model with specified relations between the constructs has a good fit index. Further, the expanded model is compared with the base model to check whether it has a better fit to the data. As the outcome measure is dichotomous, the weighted least square parameter estimation procedure is used to produce consistent, unbiased and efficient estimators (Muthén, du Toit & Spisic, 1997).

**RESULTS**

**Measurement Model**

In a first step a confirmatory factor analysis is conducted on all scaled variables: attitude, subjective norms, perceived behavioral control, business viability and intangible firm assets (see Figure 2). This analysis reveals high factor loadings for all the items on the expected factors and the communal explained variance in all but one item exceeds 0.50. The fit indices confirm the adequacy of
the model. The $\chi^2$-value of 115.81 (131 degrees of freedom) is not significant at the 0.001 level ($p=0.02$). The SRMSR is 0.04 and implies that the model fit is good. The RMSEA is 0.04 (with the confidence interval ranging from 0.014 to 0.061), which is within approved boundaries. Bentler’s CFI is 0.99, which is well above the cut-off of 0.95. These indices suggest a good fit for the measurement model.

Structural Model

In the second step, the structural relations between the variables involved are configured. More specifically, we aim to confirm the basic TPB-model (hypothesis 1) and expand it with actual behavioral control variables: business viability and intangible firm assets (hypotheses 2 and 3). Hence, a structural path model is conducted on the basic TPB-model where intentions mediate the effect of personal attitude, subjective norms and perceived behavioral control on actions. Table 2 provides the fit statistics of this and further models. The fit of the first model is good, with fit indices of $\chi^2 (2) = 6.81$ ($p = 0.03$), RMSEA = 0.117 and CFI = 0.95. All parameters are significant and explain 55% of the variance in intentions and 39% in actions, supporting hypothesis 1. In a second model, the basic model is expanded allowing for a direct impact of perceived behavioral control on actions. This model provides a better fit to the data and confirms the basic TPB model for transfer outcomes. The effects of personal attitude, subjective norms and perceived behavioral control (in order of importance) on the transfer outcome are mediated through intentions, while perceived behavioral control also has a direct positive effect on the transfer outcome.

Next, the model is further extended with the proxies of actual behavioral control, business viability and intangible firm assets, to test hypotheses 2 and 3. First, a model is tested with business viability and intangible firm assets directly impacting the likelihood of a transfer (Model 3). The extended model explains a higher proportion of the variance in actions (44%) with significant parameter

---

6 The SRMR cannot be computed as this measure is based on the Pearson product-moment correlation matrix, which is unavailable for a dichotomous outcome. For similar reasons, the RMSEA is inflated.
estimates for viability ($t = 0.62, p = 0.000$) and intangible firm assets ($t = -0.29, p = 0.009$), supporting hypotheses 2 and 3. Even though a higher proportion of variance is explained, the fit indices of model 3 are not optimal: $\chi^2 (4) = 17.91 (p = 0.001)$, RMSEA = 0.141, CFI = 0.87. Modification indices suggest an indirect effect of viability on actions via transfer intentions, which is tested in Model 4. This model has a good fit ($\chi^2 (3) = 4.41 (p = 0.22)$, RMSEA = 0.05, CFI = 0.99). Adding the proxies for actual behavioral control hence yields a model that is superior to the basic TPB model in explaining firm transfer outcomes\textsuperscript{7}. Interestingly, the direct effect of perceived behavioral control on actions disappears when including measures of actual behavioral control.

---

Figure 3 shows the relationships implied by the final model, including control variables. Family generation, entrepreneurial experience and number of employees are significantly correlated to one or more of the core TPB-variables, but do not alter the relationships in the model. Entrepreneurial experience positively impacts the perceived behavioral control to transfer a firm. Generation of the firm and number of employees positively impact the subjective norms toward transferring the firm.

---

**DISCUSSION AND CONCLUSION**

In this study, we sought to extend previous research by studying entrepreneurial exit outcomes. More specifically, using insights from TPB, we analyzed the impact of the personal desirability of a transfer to the entrepreneur, the social acceptability of a transfer to a normative reference group and the perceived feasibility of an actual transfer on the intentions of transferring a business and the actual transfer outcome. We expanded the basic TPB model with the concept of actual behavioral control as

\textsuperscript{7} This is based on the comparison of the CFI indices and the larger amount of explained by the expanded model.
measured by firm viability and intangible firm assets. Using a questionnaire-based design, our hypotheses were tested on a sample of 175 micro entrepreneurs who recently exited their firm.

The results largely confirm the relationships suggested by the TPB. In order of importance, perceived control, subjective norms and personal attitudes are the most important predictors of the intention to transfer. In turn, intentions to transfer are the most important predictor of the actual transfer of a firm. In addition, measures of actual control such as business viability and intangible firm assets impact the likelihood of a transfer over intentions. Business profitability is partially included in transfer intentions while intangible firm assets directly impact transfer outcomes but not intentions. These results hold when including several control variables in the model.

Our findings make a number of contributions. First, we contribute to the literature on entrepreneurial exit. The results of our study show that Ajzen’s theory of planned behavior is applicable to the transfer decisions of micro-entrepreneurs and explains a considerable amount of the variance in the transfer outcome. The original TPB-model fits the data well and demonstrates that intentions mediate the impact of personal attitudes, subjective norms and perceived behavioral control on transfer outcomes. Interestingly, the validity of the TPB-model is further corroborated by adding several control variables to this model. The number of employees and the generation of the firm are significantly related to the subjective norms towards a transfer and entrepreneurial experience is related to the perceived behavioral control over the transfer. The latter observation helps to explain the previous findings that entrepreneurial experience increases the probability of harvesting a business (Wennberg et al., 2009).

Second, we contribute to the literature on the TPB. Next to the social-cognitive psychological variables central to the TPB model, we added measures of an entrepreneur’s actual behavioral control over the transfer. Measures of actual behavioral control have until now received little attention in empirical models testing TPB. Explicitly exploring the role of actual behavioral control in explaining transfer behavior is hence a further contribution of the study. In complex and rare decisions such as a business transfer, the entrepreneur’s perception of his or her control over the outcome may not be fully veridical. Entrepreneurs do not recognize the intangibility of their firm’s
assets as an inhibitor of a transfer. This is a blind spot in their mental model. This relationship warrants further investigation. Further, they only partially include the impact of business viability in their mental model.

The third contribution of the present study is the combination of a psychological model with contextual, business factors to explain entrepreneurial exit. Previous studies have mostly focused on variables either at the personal level (e.g. Wennberg et al., 2009) or variables at the firm or industry level (e.g. Sarkar, Echambadi, Agarwal & Sen, 2006). By combining variables at the personal and business level and exploring their interrelationship, our study shows some of the mechanisms through which business characteristics influence entrepreneurial decision making. We have shown that the mental model of the entrepreneur largely drives what happens when the entrepreneur exits: psychological models are hence important in explaining firm behavior. The entrepreneur’s mental model is partially shaped by individual characteristics such as personal experience and personal attitude, together with pressures from significant others such as family and friends. It is further shaped by contextual factors, i.e. business characteristics such as the number of employees or the family generation of the firm. Business characteristics that directly impact the feasibility of the behavior are, however, not always fully incorporated in the entrepreneurs’ mental model, creating blind spots and making desirable outcomes less likely to occur.

For practitioners, our findings provide insights into managing the process of entrepreneurial exit. Our study shows some of the important drivers that influence transfer outcomes. A better understanding of these factors will allow entrepreneurs to incorporate these factors in their mental models, thereby creating a better alignment between intentions and outcomes. This will have two desirable effects. First, if the actual control over a transfer is high without entrepreneurs perceiving this, enhancing their insight may increase their feeling of control and their intentions, thereby enhancing the probability of a transfer. On the other hand, if entrepreneurs perceive their control over a transfer to be high without this being veridical, e.g. because the firm relies to a large extent on intangible firm assets, gaining a deeper understanding hereof may ultimately lower their aspirations and intentions. This, in turn, may save entrepreneurs’ resources as a potentially lengthy, time-consuming, costly and potentially frustrating transfer process is aborted early.
There are a number of limitations associated with this study that suggest avenues for future research. First, one limitation of the present study is the restriction of the sample frame to micro-entrepreneurs. While this particular research setting is especially relevant to model processes that could easily be confounded in larger organizations (Katz et al., 2000), it might limit the external validity of the findings. We therefore call for more research on the exit process and exit outcome in a more diverse set of businesses. In entrepreneurial settings, it might be interesting to expand our research to high growth entrepreneurial ventures. These ventures are often founded with explicit exit intentions. Testing whether TPB still applies in this setting would hence be interesting. Further, these ventures are often founded and managed by a team of entrepreneurs, rather than by a single entrepreneur. Future research could examine how the intentions of entrepreneurial teams are shaped. A further interesting avenue in entrepreneurial exit research would consist of understanding the role of explicit or formal planning to the implicit planning model of TPB. Explicit planning might serve as a moderator to determine whether business characteristics are included in the mental model through planning and therefore mediated via behavioral intentions.

A second limitation of this study is that intentions are measured after the behavior has occurred, a common but important limitation in many TPB-studies (Norman & Conner, 2005). For exit studies it is particularly difficult to use a prospective research design as the exit path can encompass several years, inducing lengthy time lags before the actual outcome is realized. Nevertheless, the relationship between TPB-variables and actions may have been inflated by our retrospective design. We would welcome longitudinal studies that would allow to measure intentions before the action takes place, providing a more fine-grained understanding of the entrepreneurial exit and firm transfer process.

To summarize, this study has shown that an expanded TPB model provides useful insights in entrepreneurial exit outcomes. Our results confirm TPB: transfer intentions and perceived control over the transfer are the main drivers of the likelihood to transfer. In addition, contextual business characteristics complement TPB in explaining transfer outcomes. While intangibility of firm assets directly impacts transfer outcomes, business viability is partially mediated via transfer intentions. These results shed more light on the role of implicit planning in transfer decisions and help to better understand contextual factors impacting the process of entrepreneurial exits.
REFERENCES


http://ec.europa.eu/enterprise/entrepreneurship/support_measures/transfer_business/index.htm>

(accessed 18/10/2006)


APPENDIX

Items used in the survey

Each of the following items was scaled on a five-point Likert-scale, ranging from totally disagree, disagree, neither agree nor disagree, agree to totally agree, unless otherwise indicated. Consistency in response categories was deliberate to ensure the simplicity of the questions for our respondents.

Theory of Planned Behavior-variables

**Intentions (1 = not at all, 5 = to a great extent).**
- To what extent did you consider transferring your firm?
- How likely was it that you would transfer your firm?
- To what extent were you prepared to transfer your firm?

**Personal attitude**
- The transfer of my firm seemed appealing to me.
- I wanted to transfer my firm.
- I was enthused at the thought of transferring my firm.

**Subjective norms**
- My close environment would support my decision whether or not to transfer.
- A transfer decision would be supported by my family.
- A transfer decision would be supported by close friends.

**Perceived behavioral control**
- The transfer of my firm seemed to be feasible.
- I was confident that I could transfer my firm.
- It was likely that I would transfer my firm if I tried

Action variable

How was your firm ended? Intergenerational transfer / Sale to a third party / Liquidation / Bankruptcy

Did the business continue under new ownership? Yes/no

Business variables

**Business viability**

How was profit the year before exit? (Very negative/ negative/ constant/ positive/ very positive)

How did turnover evolve in the 3 years before exit? (Strong decline/ decline/ constant/ growth/ strong growth)

**Intangible firm assets**

How important are your personal relations with costumers to the success of your firm? (unimportant, of little importance, moderately important, important, very important)

How important are your personal know-how of products or services to the success of your firm? (unimportant, of little importance, moderately important, important, very important)
FIGURE 1
FIGURE 2

Estimated Structural Equation TPB-measurement Model Including Business Viability and Intangible Firm Assets.
FIGURE 3

Estimated Structural Equation TPB- Model Including Business Viability, Intangible Firm Assets and Control Variables

* p < 0.05
** p < 0.01
### TABLE 1

**Mean, Standard Deviations and Correlations Included in the Study (N=175)**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transfer (1=yes)</td>
<td>0.38</td>
<td>0.48</td>
<td>/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TPB-variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Intentions to transfer</td>
<td>2.77</td>
<td>1.46</td>
<td>0.64**</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Attitude</td>
<td>3.24</td>
<td>0.88</td>
<td>0.29**</td>
<td>0.44**</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Subjective norms</td>
<td>2.64</td>
<td>1.26</td>
<td>0.48**</td>
<td>0.50**</td>
<td>0.29**</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Perceived Behavioral Control</td>
<td>2.93</td>
<td>1.18</td>
<td>0.49**</td>
<td>0.60**</td>
<td>0.26**</td>
<td>0.50**</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual Behavioral Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Business viability</td>
<td>3.15</td>
<td>0.76</td>
<td>0.32**</td>
<td>0.26**</td>
<td>-0.00</td>
<td>0.13</td>
<td>0.07</td>
<td>0.58**</td>
<td></td>
</tr>
<tr>
<td>7. Intangible firm assets</td>
<td>3.75</td>
<td>1.09</td>
<td>-0.23**</td>
<td>-0.06</td>
<td>0.01</td>
<td>-0.04</td>
<td>-0.09</td>
<td>0.17*</td>
<td>0.75**</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Entrepreneurial experience</td>
<td>18.84</td>
<td>15.01</td>
<td>0.14</td>
<td>0.27**</td>
<td>0.11</td>
<td>0.18*</td>
<td>0.30**</td>
<td>-0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>9. Age entrepreneur</td>
<td>53.63</td>
<td>13.14</td>
<td>0.14</td>
<td>0.26</td>
<td>0.17</td>
<td>0.12</td>
<td>0.16*</td>
<td>-0.02</td>
<td>-0.07</td>
</tr>
<tr>
<td>10. Sex (female = 1)</td>
<td>0.34</td>
<td>0.47</td>
<td>-0.06</td>
<td>-0.01</td>
<td>-0.06</td>
<td>0.02</td>
<td>-0.05</td>
<td>0.10</td>
<td>0.17*</td>
</tr>
<tr>
<td>11. Education</td>
<td>3.08</td>
<td>0.76</td>
<td>-0.08</td>
<td>-0.07</td>
<td>-0.07</td>
<td>0.03</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>12. Number of employees</td>
<td>1.22</td>
<td>1.66</td>
<td>0.13</td>
<td>0.18*</td>
<td>0.09</td>
<td>0.26**</td>
<td>0.10</td>
<td>0.12</td>
<td>0.16*</td>
</tr>
<tr>
<td>13. Generation of the firm</td>
<td>0.91</td>
<td>1.46</td>
<td>0.15</td>
<td>0.21**</td>
<td>0.11</td>
<td>0.27**</td>
<td>0.16</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>14. Survey administration (1 = internet)</td>
<td>0.40</td>
<td>0.50</td>
<td>-0.07</td>
<td>-0.03</td>
<td>-0.06</td>
<td>-0.06</td>
<td>0.05</td>
<td>0.05</td>
<td>0.19*</td>
</tr>
<tr>
<td>15. Survey format (1 = action first)</td>
<td>0.68</td>
<td>0.46</td>
<td>0.00</td>
<td>-0.03</td>
<td>0.10</td>
<td>-0.28</td>
<td>-0.06</td>
<td>0.09</td>
<td>0.17*</td>
</tr>
</tbody>
</table>

* p < 0.05
** p < 0.01
TABLE 2

Comparison of Structural Equation Model Fit Indices between Basic and Expanded TPB-models (N=175)

<table>
<thead>
<tr>
<th>Model Description</th>
<th>$\chi^2$</th>
<th>RMSEA</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: TPB where intentions mediates personal attitudes, subjective norms and perceived behavioral control</td>
<td>6.81*</td>
<td>0.117</td>
<td>0.95</td>
</tr>
<tr>
<td>Model 2: Model 1 + direct effect of perceived behavioral control on actions</td>
<td>5.50*</td>
<td>0.100</td>
<td>0.96</td>
</tr>
<tr>
<td>Model 3: Model 2 + direct effect of viability and intangible assets on outcomes</td>
<td>17.91</td>
<td>0.141</td>
<td>0.87</td>
</tr>
<tr>
<td>Model 4: Model 2 + direct effect of viability and intangible assets and indirect effect of viability</td>
<td>4.41*</td>
<td>0.05</td>
<td>0.99</td>
</tr>
</tbody>
</table>

* p > 0.05