



Business Takeover or New Venture? (Why) Do Women Prefer New Ventures?

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Abstract. This paper analyzes the role of (nascent) entrepreneurs' sex in choosing the mode of business entry. Using a unique data set and estimating logit regressions we show that nascent entrepreneurs' sex indeed affects their intended and actually chosen mode of entry. Compared to men, women are less likely to (intend to) take over a business than to start one from scratch because of gender differences in nascent entrepreneurs' resources (specific qualifications, time resources, and the capability of opportunity recognition) and other factors which affect the mode of entry. Though women are an underutilized potential as family business successors, tapping this potential requires fundamental societal changes, e.g. in regard to the gender-related division of labor and vocational choice.

Keywords: mode of business entry, gender, resources, business creation process.

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1. Introduction

Due to demographical changes, the number of family firms seeking a successor will continuously rise in Germany till 2030. At the same time, the number of potential successors will decline. Even though estimations do not indicate scarcities of successors till 2020 (Müller et al., 2011), for the following decade an increase of regional and sectoral shortages is to be expected. Hence, in order to prevent economic losses it is important to secure succession and therefore to tap the full potential of successors. Since in Germany the female share of successors lies clearly below the female share of founders, women are seen as underutilized potential as family business successors (e.g. Müller et al., 2011). This notion is internationally widespread (e.g. Vera and Dean, 2005). Considering this, the question arises why, compared to men, women seem to prefer starting a new business to taking over an existing one. Thus, our goal is to analyze the role of entrepreneurs' sex in choosing the mode of entry into entrepreneurship and to investigate the underlying reasons.

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2. Hypotheses Development

There is only a few studies on the mode of entry into entrepreneurship (Kay and Schlömer, 2009; Parker and Van Praag, 2012; Block, Thurik, Van der Zwan and Walter, 2013; Ullrich and Werner 2013; Bastié, Cieply and Cussy, 2013), even though it is of some practical relevance for policy makers and entrepreneurs seeking to exit their business (Block, Thurik, Van der Zwan and Walter, 2013). Gender issues were not part of the analyses, but the authors controlled for sex. The results are ambiguous. Nonetheless, these studies provide some hints for the subject at hand. So we decided to draw on the resource based view, especially because it promises to be fruitful for deriving explanations for possible gender differences in the mode of entry into entrepreneurship. We focus on the resources of the nascent entrepreneur. Due to data restrictions we limit our analysis to skills, abilities, and knowledge (human capital) as a representation of nascent entrepreneur's general capability of opportunity recognition and ability to organize his/her resources into a firm, to the existence of a business idea as evidence of an actual capability of opportunity recognition, and to time resources.

With regard to possible gender differences in the mode of entry we argue that, on the one hand, taking over a business and starting one from scratch require in principle the same resources but in different quantities. On the other hand, male and female nascent entrepreneurs still possess different levels of some of these respective resources (e.g. Gottschalk and Niefert, 2013). We assume that gender differences in nascent entrepreneurs' resources result in female nascent entrepreneurs preferring new venture to business takeover. In other words, we expect that resources mediate the relation between gender and nascent entrepreneurs' preferred mode of entry.

Parker and Van Praag (2012) showed for the Netherlands that taking over a business requires less qualification because of lesser information asymmetry. In Germany, nonetheless, this might be slightly different. In some sectors of the economy, namely in the craft and the liberal professions, the founder or transferee needs specific qualifications such as a master craftsman's diploma or a graduate degree. Though there are a great many of professions and trades which are carried out by males and females equally, there are also a lot of professions and trades in which females are underrepresented. Müller et al. (2011) show that especially in those trades which require a master craftsman's diploma the number of business takeovers is above-average. Thus, females' lack of required formal qualification (partly) causes the underrepresentation of females among transferees.

H1a: Individuals who possess a master craftsman's diploma are more likely to take over a business than to start one from scratch.

H1b: Women are less likely to possess a master craftsman's diploma than men.

Generally, businesses taken over are bigger than businesses started from scratch (e.g. Ullrich and Werner, 2013; IfM Bonn, 2000). Hence, businesses taken over involve more extensive and complex management needs which, at least as far as a specific business size is not exceeded, cannot be delegated to a hired manager. For this reason, businesses taken over usually demand more time resources of the transferee compared to founding a new business from scratch. Still, women bear more often the responsibility for household and child-rearing (Gwozdz, 2008). Hence, compared to men, they often have less time at their disposal and cannot strive for a full-time (self-) employment (e.g. Keller and Haustein, 2014). Thus, females' limited time resources redound to their lower involvement in business succession.

H2a: Individuals who intend to be full-time self-employed are more likely to take over a business than to start one from scratch.

H2b: Women are less likely to intend to be full-time self-employed than men.

In contrast to taking over an existing business, to start one from scratch necessitates a business idea. Though taking over a business also requires a capability of opportunity recognition, primarily in order to detect a suitable and sustainable company, without any idea on how to create a new opportunity a new venture is just an empty shell. Brush, De Bruin and Welter (2009: 16f) presume that, compared to men, women have a lower opportunity recognition for various reasons, e.g. restricted access to information because of different life experiences or formal business social networks. Hence, females develop less frequently business ideas. In contrast to hypotheses 1 and 2, this results in an overrepresentation of females among transferees.

H3a: Individuals who have a business idea are less likely to take over a business than to start one from scratch.

H3b: Women are less likely to have a business idea than men.

3. Research Sample

To test our hypotheses, we used data from the IfM Bonn Founder Panel. The data were generated specifically for the purpose of analyzing the impact of various factors on the process of becoming an entrepreneur. In order to get in touch with individuals who are considering to get self-employed the IfM Bonn visited 28 start-up exhibitions and trade fairs that took place in various metropolitan areas in Germany between 2003 and 2011 (Kay and Kranzusch, 2012). Interviewers approached the trade fair visitors at random and asked them to fill in a

standardized questionnaire. About one year after the fair took place, the respondents are contacted for a second time, this time by mail. The postal surveys are repeated – at intervals of one year – up to five times (Kay and Kranzusch, 2012).

The IfM Bonn Founder Panel starts with data collected at the fairs (wave A) and continues with a follow-up survey one year after the fair took place (wave B). Respondents who have not yet established a business are contacted again one year later (wave C). Respondents who have not started a new business two years after the fair took place are not subject to further surveys (Kay and Kranzusch, 2012). Our research sample incorporates data of waves A, B and C.

Wave A of the panel comprises data from more than 10,500 individuals. 6,219 of them gave their address and were contacted in wave B and C, respectively. About 43 percent (wave B) and 29 percent (wave C) of these, respectively, sent a completed questionnaire. More than 1,200 respondents of the surveys contacted in waves B and C entered self-employment. Hence, the IfM Bonn Founder Panel allows for analyzing both nascent entrepreneurs and entrepreneurs (Kay and Kranzusch, 2012).

4. Data Analyses

We used bivariate and multivariate methods to investigate the decision of individuals to start a new business or to take over an existing one. We estimated two (nested) logit-regression models, for individuals only planning to become self-employed and for individuals who actually switched into self-employment.

4.1. Dependent Variables

The first dependent variable *planned mode of entry* was measured as a dummy variable with the value 1 if the individual stated he/she is planning to take over an existing business, and 0, if the individual is planning to start one from scratch. This variable was surveyed in wave A. The second dependent variable *actual mode of entry* was also measured as a dummy variable with the value 1 if the individual actually took over an existing business, and 0, if the individual started one from scratch. This variable was surveyed in wave B and C, respectively.

4.2. Independent Variables

The main independent variable is *sex* which was coded as a dummy variable where 0 is male and 1 female. The mediating variables which cover information on individual's resources are *master craftsman's diploma*, *business idea at hand*

and *planning full-time self-employment*. They were also coded as a dummy variable with the value 1 if the individual has a master craftsman's diploma, a business idea and plans a full-time self-employment, respectively, and 0 otherwise. All independent variables were surveyed in wave A.

4.3. Control Variables

Finally, we included three sets of control variables: The first set represents further features of individual's human capital as secondary, higher, and vocational education, industry specific and self-employment experience, and finally the self-employment of individuals' parent(s). All variables were measured as a dummy variable with the value 1 if the individual has the respective human capital, and 0 otherwise. The second set of control variables represents socio-demographics factors and the third set motives for becoming self-employed. All these variables were surveyed in wave A.

Moreover, we controlled for changes in the economic environment by including a dummy variable for *year of first survey*. This variable was not only included to control for business cycle but also for fundamental changes in programs providing support to unemployed individuals who wanted to start their own business.² These changes had a severe influence on how many individuals benefited from these programs³ as well as on the characteristics of the beneficiaries, e.g. sex, motives for becoming self-employed, industries and place of residence (Caliendo and Kritikos, 2010; Caliendo, Hogenacker, Künn and Wießner, 2012).

In addition, the models for the actually chosen mode of entry include a dummy variable *period after first survey within which the start-up took place* that was coded 1 if the start-up took place within one year after first survey, and 0 if the start-up took place within one and two year(s) after the first survey. We included this variable because preparing a business takeover usually takes more time than preparing a start-up (Kay and Schlömer, 2009).

5. Results

38.7 percent of the individuals who are planning to become self-employed and 44.2 percent of the individuals who actually entered self-employment are female (see table 1). As expected, males and females planning to become self-employed

2. For an overview see Caliendo and Kritikos (2010) and Caliendo, Hogenacker, Künn and Wießner (2012).

3. In 2004 the number of beneficiaries reached a peak (351,355). In the following years the number dropped sharply, levelled out, and finally dropped again sharply. In 2013 32,531 individuals benefited from these programs (IfM Bonn, 2016).

differ significantly with regard to their resources. As expected, compared to females, males possess more often a master craftsman's diploma and plan more often to be self-employed in full-time. Against expectation, females have more often a business idea than males. Among individuals who actually became self-employed the gender differences are less pronounced. Significant gender differences occur with regard to the explanatory variables master craftsman's diploma and planning a full-time self-employment, but not with regard to business idea at hand. Hence, we can accept hypotheses 1b and 2b, but have to reject hypothesis 3b. Regarding the remaining human capital variables the results in table 1 reveals that, contrary to expectations, males do not universally possess higher levels of human capital than females.

Table 1: Mean differences between women and men for the explanatory variables

	Planning to become self-employed			Actually entering self-employment		
	Female	Male	Pearson Chi ²	Female	Male	Pearson Chi ²
Sex	0.387	0.613		0.442	0.558	
Master craftsman's diploma	0.033	0.096	53.522***	0.046	0.151	21.338***
Business idea at hand	0.855	0.821	7.627**	0.855	0.861	0.047
Plan: full-time self-employment	0.672	0.772	45.991***	0.717	0.873	28.100***
General qualification for university entrance	0.697	0.656	7.115**	0.695	0.642	2.367
Vocational training	0.577	0.543	4.378*	0.569	0.585	0.194
Graduate degree	0.457	0.414	6.649*	0.492	0.424	3.373 ⁺
Industry specific experience	0.615	0.673	13.582***	0.662	0.720	2.869 ⁺
Self-employment experience	0.106	0.163	24.397***	0.151	0.159	0.084
Parent(s) self-employed	0.280	0.290	0.473	0.311	0.254	2.940 ⁺
Observations	1,480	2,341		325	410	

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Own calculations based on IfM Bonn Founder Panel

The results of the logit regressions show that, all other things being equal, sex affects the intended mode of entry but not the actually chosen one (see table 2). Concretely speaking, women are less likely to plan taking over an existing business instead of starting one from scratch, compared to men. This finding emphasizes the importance of differentiating between the various stages of the business creation process. Moreover, they make clear that fundamental changes with regard to the planned venture can occur in the business creation process.⁴

- Additional analyses show that individuals planning to take over a business far more often abandon the originally intended mode of entry into entrepreneurship than individuals planning to start a business from scratch. Moreover, in the process of becoming an entrepreneur males change the mode of entry into entrepreneurship significantly more often than females.

Table 2: Logit regression estimates for (1) planning to and (2) actually taking over a business

	(1a)	(1b)	(2a)	(2b)
Sex	-0.623*** (-4.60)	-0.453*** (-3.30)	-0.530 (-1.47)	-0.234 (-0.62)
Master craftsman's diploma		0.928*** (5.16)		0.848 ⁺ (1.85)
Business idea at hand		-0.754*** (-4.96)		0.323 (0.53)
Plan: full-time self-employment		1.049*** (5.92)		1.302* (2.15)
General qualification for university entrance	-0.112 (-0.77)	-0.0516 (-0.35)	0.294 (0.72)	0.316 (0.76)
Vocational training	0.212 (1.50)	0.270* (1.99)	0.0789 (0.21)	0.0152 (0.04)
Graduate degree	0.0878 (0.56)	0.253 (1.62)	0.0791 (0.19)	0.239 (0.54)
Industry specific experience	0.188 (1.46)	0.124 (0.95)	0.212 (0.51)	0.118 (0.28)
Self-employment experience	-0.147 (-0.83)	-0.145 (-0.80)	0.0413 (0.09)	0.0128 (0.03)
Parent(s) self-employed	0.322** (2.65)	0.312* (2.51)	1.151*** (3.41)	1.136** (3.26)
West Germany	0.529** (3.18)	0.455** (2.65)	0.600 (1.11)	0.741 (1.27)
Married	0.280* (1.97)	0.281 ⁺ (1.89)	0.365 (0.76)	0.318 (0.63)
Age	-0.0548 (-1.19)	-0.0789 ⁺ (-1.67)	-0.209 (-1.43)	-0.223 (-1.53)
Age (squared)	0.000495 (0.84)	0.000748 (1.23)	0.00203 (1.16)	0.00211 (1.21)
Children	0.273 ⁺ (1.89)	0.323* (2.13)	1.041* (2.24)	1.090* (2.14)
Employed	0.525*** (4.32)	0.543*** (4.43)	0.459 (1.37)	0.513 (1.42)
Motive: (anticipated) unemployment	-0.162 (-1.28)	-0.248 ⁺ (-1.89)	0.0548 (0.15)	0.0484 (0.12)
Motive: Higher relative earnings	0.221 ⁺ (1.79)	0.210 ⁺ (1.67)	0.0582 (0.16)	0.0112 (0.03)
Motive: Autonomy	0.0716 (0.35)	-0.0120 (-0.06)	-0.249 (-0.50)	-0.423 (-0.83)
Motive: reconciliation work / family	-0.435*** (-3.32)	-0.388** (-2.95)	-0.522 (-1.41)	-0.424 (-1.13)
Year of first survey (reference: 2003)				
2004	-0.155 (-0.89)	-0.184 (-1.03)	0.837 (1.49)	0.920 ⁺ (1.65)
2005	-0.316 (-1.17)	-0.339 (-1.20)	-0.703 (-0.72)	-0.455 (-0.46)
2006	-0.310 (-1.49)	-0.634** (-2.83)	0.273 (0.41)	0.549 (0.72)
2007	-0.390 ⁺ (-1.86)	-0.374 ⁺ (-1.76)	-0.147 (-0.21)	-0.0461 (-0.07)
2008	-0.526 (-1.14)	-0.451 (-0.97)	0 (.)	0 (.)
2009	-0.456 ⁺ (-1.85)	-0.500* (-2.00)	0.982 (1.40)	0.929 (1.32)

Table 2: continued..

	(1a)	(1b)	(2a)	(2b)
2010	0 (.)	0 (.)	0.0125 (0.01)	0.0823 (0.06)
2011	-0.491 ⁺ (-1.94)	-0.464 ⁺ (-1.84)	-0.0195 (-0.02)	-0.107 (-0.12)
Start-up within one year after first survey			-0.759* (-2.12)	-0.810* (-2.27)
Constant	-1.756* (-2.00)	-1.545 ⁺ (-1.71)	0.498 (0.17)	-0.789 (-0.26)
Observations	3,821	3,821	735	735
Pseudo R ²	0.061	0.100	0.154	0.180

t statistics in parentheses; ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Own calculations based on IfM Bonn Founder Panel

The inclusion of the three explanatory variables master craftsman's diploma, business idea at hand and planning a full-time self-employment into the regressions (models 1b and 2b) results in a decrease of the coefficient for sex by 0.170 and 0.296, respectively. This suggests that these variables actually mediate the relation between sex of the (nascent) entrepreneur and the mode of entry.

The results in detail: With regard to hypothesis 1a the estimations show that individuals with a master craftsman's diploma indeed are more likely to both plan to and actually take over a business instead of starting one from scratch. Since females are less likely to possess a master craftsman's diploma (see table 1), this specific qualification requirement indeed lowers females' likelihood of taking over a business. As expected, planning a full-time self-employment increases the probability of taking over a business (hypothesis 2a). Since females are less likely to intend a full-time self-employment, compared to males (see table 1), females' limited time-resources indeed results in a lower probability of taking over a business.

With regard to hypothesis 3a our estimations show that individuals who have a business idea indeed are less likely to intend to take over a business. But, having a business idea does not affect the actual mode of entry. Since females are more likely to have a business idea, compared to males (see table 1), having a business idea also contributes to females' less frequent intention to take over a business.

6. Discussion and Implications

This study investigated whether and why, compared to men, women prefer to start a new business to taking over an existing one. Drawing on the resource based view we assumed that gender differences in nascent entrepreneurs' resources explain the gender differences in the mode of entry into entrepreneurship. Our

results show that women indeed (intend to) take over an existing business less often than men because of gender differences in nascent entrepreneurs' resources and other factors that influence the mode of entry. We identified three resources: specific qualifications, time resources, and the capability of opportunity recognition. As assumed, compared to men, women are less likely to possess these specific qualifications (i.e. master craftsman's diploma) and are more likely to have limited time resources. Either affects taking over a business negatively. Not as assumed, compared to males, females are more likely to have a business idea. This finding indicates – in line with DeTienne and Chandler (2007) – that female nascent entrepreneurs do not have a general disadvantage in recognizing business opportunities. More importantly, having a business idea favors starting a new business. Thus, opportunity recognition also seems to contribute to women's underrepresentation among transferees.

All in all, our results indicate that women are indeed an underutilized potential as family business successors. Anyhow, tapping this potential requires fundamental societal changes, e. g. in regard to the gender-related division of labor and vocational choice. Societal changes take a long time and need to be initiated. Hence, short term measures are needed. With regard to limited time resources better childcare availability would enable mothers to devote more time to their self-employment. As a result more women might strive for taking over a business. Though the German government enhanced the childcare availability in recent years considerably the demand still exceeds the supply. Especially full-time childcare is scarce.

The lack of females who possess a master craftsman's diploma is mainly the result of a lack of females who train as a craftsman (Haverkamp, Müller, Runst, and Gelzer, 2015). Previous efforts to encourage young females to take up a trade were largely ineffective. Future measures need to take in account that multiple factors influence the vocational choice (Boll, Bublitz and Hoffmann, 2015). Role models certainly are one facet of such programs, preferably broadcasted widely in all kinds of media. Additionally, female craftsmen are more reluctant to get a master craftsman's diploma than male craftsmen (Haverkamp, Müller, Runst and Gelzer 2015). This fact opens up another direction of thinking. In 2004, the German government abolished the need to possess a master craftsman's diploma in various trades to become self-employed. If it is possible to abolish this need in further trades this might remove another obstacle on females' way to taking over a business.

Our analyses do not answer all questions regarding gender differences in the mode of entry into entrepreneurship. Future research could explore whether factors which affect the mode of business entry have the same effect for males as for females. Moreover, it would be intriguing to learn more about the changes in the mode of business entry in the course of the start-up process. What are the reasons for abandoning the intended mode of entry and, especially, for the observed gender differences in abandoning the intended mode of entry?

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