## "On the characteristics of an individual who prefers to work for a family business."

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#### Abstract

This paper studies the relationship between individual human characteristics and their influence on the chance said individual would prefer a family business as employing entity. These characteristics and preferences have been measured using an indicator of occupational preference, an indicator of risk, an indicator of current employment, an indicator of level of education and an indicator of previous entrepreneurial experience. These indicators were derived from the Flash Eurobarometer report number 354. Using a logistic regression model it is found that education and risk attitude can be used to predict the chance an individual prefers working for a family business. Based on these findings new research can be done on the drivers of occupational choice in general and the choice for a family business as employer in particular to shed more light on occupational choice drivers.

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### Introduction

Family businesses have always been important within the economic systems of free markets. One of the similarities of Walmart, Samsung, Toyota, LG, Carrefour, Fiat, BMW, Mars, L'Oreal, Ikea and Heineken is that they are all (largely) family owned. Some family names like Medici, Rothschild and Ford are in the history books because of their entrepreneurial success. Even though family businesses are not a new phenomenon, today they have to compete with large publicly listed companies and other not family owned private companies. Nevertheless, family businesses still play an important role in the economic landscape of a considerable amount of the biggest nations in the world. In Germany in 2000, 30 percent of the companies with a turnover higher than 1 billion Deutsche Mark were family owned (Klein, 2000); the Wallenberg family controlled 43% of the Swedisch stock market registered companies measured in 1998 stock value (Agnblad, Berflöf, Högfeldt, & Svancar, 2001), Barca and Becht (2001) found similar families in Europe and the same situation occurs in Asia (Claessens, Djankov & Lang, 2000). Even in the USA, which is known because of its high proportion of publicly owned corporations (Morck & Yeung, 2003), 27% of the national workforce is employed in family businesses owned by a family for multiple generations and family managed (Astrachan & Shanker, 2003).

Identifying what type of individual prefers to work for a family business could have an important impact on the hiring procedures of family businesses. The businesses could decide to target their recruitment campaigns more specifically at their target groups or just the opposite: exert effort to attract other types of workers in order to make the company more diverse. Another beneficiaries of this research could be employment agencies and policymakers. More knowledge about the type of individual who favors working for family businesses increases the precision of their matches between employee and employer. This could lead to shorter periods of unemployment thereby lowering the social security costs for the society and increasing job satisfaction of future workers which might result in less absence from work and higher overall productivity.

Even though occupational choice is a factor with an important influence on a human life, the literature focusing on factors that influence the choice for an occupation an individual makes are predominantly focused on a few independent variables. The existing literature mainly makes distinctions between the difference in occupational choice and occupational chances between males and females. However, research on other drivers of occupational choice is quite scarce. This statement can easily be illustrated using Google scholar. From the first 25 available articles eight are about general occupational choice and the associated frameworks.

Another eight make the distinction between occupational choice for males and for females. Two address occupational choice and uncertainty and the others handle occupational choice among ethnical minorities, rural and urban workers, the influence of college size, the influence of risk aversion, the influence of human capital, occupational choice for school teachers and the influence of taxes on occupational choice. This means that in the 25 most relevant papers only five variables are named that possibly influence the choice between a family business or a non-family business (gender, ethnicity, human capital, uncertainty in combination with risk aversion and rural versus urban).

This general image painted by the first 25 results is a good example of how the available documentation on occupational choice looks. The over documentation of the influence of gender and the under documentation of other factors influencing occupational choice tells us there is a gap in research on occupational choice, even with regard to really basic control variables such as age, the country where an individual lives, the educational degrees earned and other basic factors like these.

To investigate the effect of certain drivers of occupational choice restrictions have to be implemented to assure the question of interest is not too broad. That is why in this paper the focus is shifted not to occupational choice in general but to the occupational choice to work for family businesses. As indicated before, family businesses make up for a significant part of the economy which makes them a good start in the research concerning occupational choice.

The limited knowledge about occupational choice in general and the choice for a family business in particular complicates signals that there is a considerable research gap with regard to these subjects. The current literature only tells us something about the differences between jobs in family businesses and jobs in publicly owned businesses. However, there is no knowledge on which kind of employees these differences attract. Are they young or old, male or female, risk taking or risk averse, entrepreneurial or non-entrepreneurial, urban or rural inhabitants, do they have certain kinds of jobs, are they higher or lower educated, etc. The lack of knowledge on this area is also concluded by Sharma (2004) in his overview of family business studies. He says:

'We have hardly scratched the surface of understanding this stakeholder group. The theoretical models proposed need empirical verification. Clearly, there is a need to devote more attention to understanding the perspective of nonfamily employees, issues that are important to them, and that would lead to superior performance of these individuals along various dimensions.'

This research is meant to fill this gap in knowledge. The purpose of this paper is to find more characteristics of the individuals who prefer a family business as employer. To do this general principles of occupational choice and general knowledge about family businesses can be substantiated with previous scientific research and based on these general principles and general knowledge more specific predictions will be made concerning the possible drivers associated with the occupational preference of working for a family business.

It can be concluded, that even though human resource management is an important factor to gain a competitive advantage over your competitors (Ulrich & Lake, 1990), the amount of sources focusing on employee characteristics of family businesses is remarkably low. The available existing literature on the job preferences of individuals with regard to the type of business they want to work for is quite minimal. The research question of this paper is therefore:

# Which type of individuals prefer to work for a family company and which kind of individuals rather work for a non-family business?

The used dataset is the Flash Eurobarometer 354 from 2012. The data is commissioned by the European Commission to shed more light on entrepreneurship and the perceptions of individuals concerning entrepreneurship. By investigating data from the Flash Eurobarometer dataset more light will be shed on the way individuals make their occupational choices and in particular the drivers that bring individuals to consider working for a family business.

To obtain more clarity on the processes behind the selection of the most applicable job, whether this is in a family business or a non-family business, the literature review of this paper starts by scrutinizing the existing knowledge concerning family businesses. In the second part of the literature review the knowledge concerning occupational choice is linked to the knowledge on family businesses and based on this, hypotheses are formed. The hypothesis will concern predicted relations between an individual's characteristics and the likelihood said individual will prefer a family business as employing entity. Following the literature review, the used dataset and the methodology used in the empirical part of this paper will be discussed. After the empirical research and the results of this empirical research this paper will be concluded by a discussion of the research results, practical implications of these results, a conclusion and a discussion about the limitations of this paper and the possible follow-up on this research.

#### **Literature review**

The field of occupational choice is not a new area of expertise research is focused on. Actually, investigating the drivers of occupational choice and how individuals try to obtain the job best matching their own characteristics is one of the early fields of research systematically investigated by economists all over the world. A lot of the occupational choice models date back at least three decades and the oldest source used in this paper is from 1955.

#### Family businesses characteristics

To maintain the scientific objectivity it should be noted that the definition a 'family business' is at least ambiguous (Desman & Brush, 1991; Upton, Vinton, Seaman & Moore, 1993). In the current literature a family business is usually defined by family ownership. Some authors add the requirement that family members should manage the firm. A really strict definition is the definition in which a family owns and manages a business that has been in the family for more than one generation. In this paper the first, least strict definition is used defining the family business as a business owned by a family that has the majority share over the company.

Even though said family businesses are not always governed by family members alone, these businesses still differ from non-family businesses. In these times of crisis they usually survive better. This higher rate of survival in economically bad times can be attributed to a modest and cautious way of business without taking big risks with firm assets. This more risk averse attitude is confirmed by Donckels and Fröhlich (1991) and Gallo, Tàpies and Cappuyns (2004). Corporate governors in family businesses are usually more prudent and are less likely to take (big) risks because a considerable proportion of the family's assets are invested in the firm. This might not always be a wrong strategy. Naldi, Nordqvist, Sjöberg and Wiklund (2007) conclude that risk taking in a family business is negatively related to performance. However, this prudency also implies that in economically prosperous times family businesses might neglect chances to expand and make more profits. This expresses itself in a lower orientation on foreign markets and a slower growth of family businesses (Gallo, 1993). The restrained attitude in terms of risk taking might hurt the competitiveness of the family business in the long run.

Poutziouris (2001) agrees with the notion that family businesses are more risk averse than publicly owned companies. He found out that family companies are significantly more dependent on revenues created in the past for business expansion compared to non-family businesses. Family businesses like to play it safe and rarely use venture capital to execute fast growth plans, but rather use former generated profits for slow and gradual expansions. This is not only a risk averse behavior, but also enables them to keep more control over the company as a family. This argument of retaining ownership and managerial control is also suggested by Reynolds (1997) but seems to be contradicted by Westhead and Cowling (1997) who claim that the growth ambitions of family businesses are actually the same as those of non-family businesses. That high growth ambitions and a risk averse attitude towards attracting capital and allowing outside influence in the company do not actually contradict each other is one of the conclusions of Donckels and Lambrecht (1999).

René Berkvens, CEO of Damen Shipyards indicates that the focus of family businesses is different from publicly owned businesses. He claims that in the average stock market registered company the planning horizon is usually only a year, while the planning in family businesses is significantly more long term focused. (Dijkstra & Kosterman, 2014) This long term focus was already named in 1975 by Danco. In addition to that René Berkvens also claims that family businesses are more focused on continuity and that they provide higher standards with regard to customer satisfaction and employee satisfaction and the public image of the company. This combination of financial and non-financial goals is confirmed by Davis and Taguiri (1989), Olson et al. (2003) and Stafford, Duncan, Dane and Winter (1999). The notion that family is an important factor even in large family businesses is proven by Gallo, Tàpies en Cappuyns (2004) who indicate that family businesses do not only aim to optimize stock value, but also aim to pass on traditions and give family members and their offspring chances to join and own a financially healthy company focused on surviving on the long term. McConaughy (2000) agrees with the importance of non-monetary goals. He found out that the tenure of the family business leaders usually lasts three times as long as the tenure of nonfamily business leaders. This means the original visions of the founder of the company are usually much more represented in the current day company than the original visions of the founder of a non-family owned company.

The different approach family businesses take towards their operations might also influence the type of employees these businesses attract. Mitchel, Morse and Sharma (2003) indicate that the higher decision load due to social commitments involved when considering certain transactions might withhold certain types of employees from working for family businesses. However, Donckels and Lambrecht (1999) indicate that making business decisions in family businesses is usually easier because the managerial power and the equity holding family members are often the same individuals, which prevents agency problems due to opposing interests of management and shareholders and causes a faster decision making process. With regard to employment, Lubatkin, Ling and Schulze (2003) express the concern of some employees to be used for the direct gratification of certain family members instead of providing long term value for the company.

Loyalty of both family members and non-family employees might be another factor on which family businesses differ from non-family businesses. In some businesses trust, loyalty, a personal and informal relationship, and having family ties can cause a competitive advantage over non-family businesses. This is one of the conclusions of James (1999) in his research on contractual relations within family businesses. Just like many other authors he stresses the delicate balance between informal family ties and formal contractual relations. Finding the right balance can be rewarding because informal relations can ascertain a fast decision making process, while contracts can provide clarity with responsibility, corporate liability and the respective tasks of family members and regular employees.

Taking into account the previously discussed knowledge concerning family businesses one might conclude they are more conservative than their non-family business counterparts. Donckels and Fröhlich (1991) seem to agree with that in their conclusions on the research question if family businesses are really different. They conclude that family businesses are more inwardly directed and aimed at the family. The family businesses managers usually can be described as all-rounder and organizers who have good organizational skills, rather than as pioneers who introduce new innovative products to the market. Donckels and Fröhlich name this difference between family businesses are more conservative. The firms are more at themselves, cooperate less with other firms, hire less subcontractors, and are less interested in exporting and internationalization. Family businesses are not only more conservative in their day to day operations, but are also financially more conservative. They usually take less debts and have higher liquidity ratio's (Anderson & Reeb, 2003; Daily & Dollinger, 1992; Gallo & Vilaseca, 1996).

The last conclusion is that family businesses pay higher basic wages and are more concerned about employee satisfaction and wellbeing (confirmed by Ward, 1988), but are less inclined to offer employees additional schooling, involve them in decision making or share profit with employees. The inward orientation of family businesses is also named by Cohn and Lindberg (1974).

#### Occupational choice

For most individuals their occupational choice is one of their big decisions in life. You spend a considerable part of your life working for an employer which means a job not fitted to your needs and interests can decrease your enjoyment of life severely. Usually occupational choice is not a decision you make randomly in a spur of the moment but rather a process you develop over time through interactions with other individuals you meet in your private life, your education or just by random accident. Occupational choice is not only formed by meeting other individuals but also by your surroundings, your social environment and sometimes by straight luck of being at the right place at the right time. In addition to that occupational choice is linked to your self-esteem and the social image you are given by your surroundings. The wide range of factors affecting occupational choice makes it hard to identify the drivers associated with this choice for a certain profession, allowing endless combinations of individuals and their opinion(s) on your future, chances either grabbed or ignored and environmental influences to influence your future up to some extent. To give an example: if an occupational choice model tells us Afro-Americans are less likely to become surgeons, most likely this is not only affected by their race, but also by a an endless combination of factors of for example environment, monetary factors, peer influences and presented chances during development. This means that without including a huge amount of variables, keeping in mind that not all variables influencing occupational choice can be captured, a research might miss crucial factors influencing occupational choice. This notion is even further complicated by the differences between preferences and occupational choice; only in a perfect world occupational choice and occupational preferences will be exactly the same. In the real world occupational choice is influenced by the opportunities available, the information available and an infinite combination of environmental factors. Blau, Gustad, Jessor and Parnes (1955) identified three drivers of occupational choice in their conceptual framework: psychology, economics and sociology. Psychology and economics will be used in this paper, and human capital (education) will be added to predict how general occupational choice factors can influence the preference for a family business or a non-family business. Human capital is a separate category because it does not directly fall under one of the three categories named by Blau, Gustad and Jessor.

#### Risk attitude

Family businesses are usually more conservative; they have usually more traditional areas of expertise, pay their employees more, offer them higher job securities but give them less chances for further education, offer less chances to participate in decision making, and give less opportunities to share in profits generated by the company (Donckels and Fröhlich, 1991).

These factors tell us something about risk attitude from employees in family businesses and publicly owned businesses.

First of all, we see that family businesses are the safer option in terms of employment. They

pay good basic salaries and employees of these companies incur low risks of losing their job because family businesses care more about employee satisfaction and provide more job securities. This will attract the risk averse individuals. Risk taking individuals put a lower value on the incurred risks which means they might be more easily persuaded by the progressive secondary job benefits of publicly owned business, such as being able to participate in firm decision making, and getting chances to develop oneself by participating in educational programs.

The second factor is the difference in payment structure between family businesses and publicly owned businesses. Family businesses pay a higher basic wage, however, publicly owned businesses are more likely to set up profit sharing agreements with their employees. These profit sharing agreements involve a certain degree of uncertainty. It is rational to assume that risk averse individuals will be more likely to choose for the higher fixed wage, whereas risk taking individuals would be more tempted by the lower wage combined with an uncertain reward based on company performance. This notion is substantiated by Donin, Dohmen, Falk, Huffman and Sunde (2007) who concluded that there is a correlation between general risk attitude and the attitude towards risk of earnings and they also concluded that the least risk averse individuals are sorted in the occupations with the highest risk on earnings.

Is it true that risk taking individuals are indeed more attracted to businesses with more risk involved? Research conducted by Bellante and Link (1981) gives reason to believe so. They found out that risk averse people tend to work for the (low risk) public sector whereas risk taking individuals prefer to work for the private sector which involves more risk.

Combining these findings the hypothesis with regards to risk reads:

Hypothesis 1: *Risk taking individuals are usually less inclined to work for a family business.* 

#### Current labor conditions.

Your current labor conditions can influence your job preferences. One may assume an individual will be more likely to choose an occupation resembling the current occupation. People made a choice for a certain occupation and they did this because they had reasons for it. These reasons might still stand today, which suggests they will be more likely to look for jobs in the same field of expertise. Another reason why people would be more inclined to look for jobs in the same area of expertise is change adversity. An occupation resembling the current occupation means less changes both in job profile as in company characteristics which could be favorable for individuals who don't like changes. Having this change averse attitude

suggests that (at least some) people look for new jobs resembling the characteristics of their old job. That means that people who are working in a family business or at least a business resembling a family business might be more tempted by jobs in family businesses whereas people in businesses with characteristics of publicly owned businesses will be more inclined to work in publicly owned businesses.

Former notion implies that it might be possible to say something about the preference for family businesses or publicly owned businesses solely by looking at the current occupation of an individual. Matching the characteristics of the current occupation to the characteristics of family owned businesses and publicly owned businesses might reveal preferences.

An example of this matching process: the entrepreneur is on average less conservative than an employee (Koh, 1996; Begley and Boyd, 1988; Naldi, et al., 2007). This means there might be a better match between an entrepreneur and a publicly owned business, since these are more liberal compared to family businesses (Donckels and Fröhlich (1991); Anderson & Reeb, 2003; Daily & Dollinger, 1992; Gallo & Vilaseca, 1996). This means working in a family business would be more costly in terms of changes for an entrepreneur because of the necessary changes in attitude, which suggest the entrepreneur would prefer a publicly owned company as employer in case of an occupational change.

The manual worker is an occupational group which is usually lower educated. According to Hyman and Wright (1979) there is a relationship between education and liberal and conservative values. Manual workers are usually lower educated, which means it is rational to assume they are more conservative than higher educated workers. This lower education and conservative values means they will be more inclined to work for the more conservative family businesses which usually offer lower educated jobs in a more conservative environment.

The regular employee is usually higher educated than the manual worker. This means it is very likely that a higher percentage of employees prefers working for a family business compared to manual workers. Better chances for additional education and more chances to get involved into business decision making as indicated by Donckels and Fröhlich (1991) might also be more important for higher educated individuals than for lower educated individuals.

Last of all, what will be the preference of the unemployed? One might assume that the experience of having lost a job or the difficulty of finding a job makes the unemployed more risk averse. Family businesses are perceived to offer more job certainty which makes them the

safer option in terms of employment. This might persuade unemployed individuals to prefer a family business as employer.

In conclusion the following hypothesis can be formed:

Hypothesis 2: Entrepreneurs and employees are less likely to prefer working for a family business than manual workers and unemployed individuals.

#### Years of education

Predicting the influence of education on the chances someone prefers a family business as employer is a bit more difficult. There are a few leads that suggest something about this relation.

Family businesses being assumed to be more conservative (Donckels and Fröhlich (1991); Anderson & Reeb, 2003; Daily & Dollinger, 1992; Gallo & Vilaseca, 1996) might attract more low skilled workers. The link between education and liberalism is proven quite extensively, so extensively that Hyman and Wright (1979) concluded that "*Many measurements on thousands of adults aged 25 to 72, drawn from 38 national sample surveys conducted from 1949 to 1975... establish that education produces large and lasting good effects in the realm of values.*". By 'good' effects they meant liberal values. In other words: Hyman and Wright found that more education results in more liberal values. The conclusion of Hyman and Wright that education results in more liberal values is shared by Scheepers, Grotenhuis and Slik (2002) who indicate in their research that higher educated individuals have less conservative moral attitudes. They place the remark that although in general the relation between education and liberalistic attitudes is proven, the relation between education and liberal values is stronger in heterogeneous and secular societies than in homogeneous religious countries.

If Hyman and Wright are indeed right and more education indeed leads to more liberal values, this might suggest that higher educated individuals are more likely to prefer working for a more liberal publicly owned company whereas lower educated individuals are more likely to prefer working for a more conservative family business. It seems reasonable to assume that employers prefer working with employees matching their own values and employees would make the same consideration.

The notion that family businesses provide jobs for lower educated individuals than non-family businesses could imply that there is some sort of selection effect. Blundell, Dearden and Sianesi (2005) found in their research on the effect of education on earnings that compared to leaving school at 16 without any qualification, attaining a basic degree results in an average higher payout of eighteen percent, attaining an advanced degree results in a twenty-four

percent higher payout and completing any form of higher education on average translates in a twenty-seven percent increase in wage. The selection effect is confirmed by Daviddson and Honig (2003). They found out that a higher amount of human capital translates in a higher ability to spot chances which means higher educated individuals are not only more capable of doing advanced jobs but they can find them more easily as well. Davidsson and Honig (2003) indicate that individuals with higher human capital might not only be more perceptive towards opportunities but these individuals might have more alternatives as well. Comparing family business and publicly owned businesses, this might mean individuals with high levels of human capital are more likely to go for a high risk, high reward option first because they are more likely to get other chances in case of failure. Family businesses usually provide lower educated labor which suggest lower educated individuals are more likely to work for a family business. This is congruent with the finding that family businesses are more employee intensive and therefore the average sales per employee are lower (Gallo & Estapé, 1992). If you see human capital as a simple production factor which is congruent with how Gary Becker (1964) perceives human capital this would support the possibility that there is a selection effect of lower educated individuals in family businesses. In addition to that family businesses provide higher wages but they offer lower chances for additional education (Ward, 1988). Higher educated individuals usually are more inclined to study on the job in order to unlock career chances which suggests another selection effect.

Even though research on education and occupational choice does not unanimously point to one direction, due to the probable mismatch between the more conservative family businesses and the more liberal higher educated employee, it can be stated that the most likely effect of education on the likelihood someone prefers to work for a family business is a negative effect. Therefore, the derived hypothesis is:

*Hypothesis 3: Lower educated individuals are usually more inclined to work for a family business.* 

#### Prior entrepreneurial experience

Based on the existing literature on family businesses the relationship between prior entrepreneurial experience and the preference to work for a family business is intuitive. Entrepreneurs are usually risk taking, self-confident and innovative individuals (Koh, 1996). The average entrepreneur prefers autonomy, resists conformity, adapts easily to change and has low need for external support (Sexton & Bowman, 1986). While Koh (1996) indicates that the average entrepreneur is risk taking family businesses are said to be risk averse (Poutziouris 2001; Anderson & Reeb, 2003; Daily & Dollinger, 1992; Gallo & Vilaseca,

1996). This is the first contradiction between family businesses and entrepreneurs that suggests entrepreneurs prefer working for publicly owned businesses. The second mismatch is the former indicated (Koh, 1996) autonomous and non-conforming attitude of entrepreneurs in opposition to a more strict and structured approach of family businesses. A family business is more tethered to the past and has more 'baggage' from the founding forefather. This means the business is less prone to changes which might class with the non-conforming and innovative attitude of the entrepreneurial individual. A third contradiction is the more conservative approach of family businesses. Whereas entrepreneurs like taking risks by innovating, family businesses usually take the conservative inward approach and are less prone to push the boundaries by innovating and expanding the business into foreign markets (Gallo, 1993). The innovative trait and risk taking attitude of entrepreneurs is substantiated by Koh (1996) in his research on entrepreneurial characteristics among Hong Kong MBA students. He found that the individuals with an affinity with entrepreneurship display a higher degree of innovativeness and are more likely to be risk tolerant. The higher degree of risk tolerance among entrepreneurs is supported by Begley and Boyd (1988) as well as Naldi, et al., (2007) who indicate that entrepreneurial traits like risk tolerance, innovativeness and proactiveness usually go together. In line with the other research on the relationship between the affinity with entrepreneurship and the preference for a family business, Naldi et al., (2007) found that even though family businesses occasionally undertake risky ventures, they take risk up to a lower extent than non-family businesses. This is caused by a different view on the company. Where non-family business leaders might see the company they manage as a way of earning money for several decades maximum, family business leaders have a complete different perception of their company. Family business managers are usually more risk averse because they perceive their business as their legacy to their children. This makes an entrepreneurial gamble less alluring because the stakes are higher. A wrong decision in a publicly owned business might ultimately cost you your job in case of bankruptcy, but a wrong decision in a family business might destroy your legacy you build for your children. In addition to that, in a family business money invested in the company is usually 'family money' whereas in a publicly owned business this is money owned by external entities. This makes it easier for a manager of a publicly owned business to take high risks because less money of his own and his family is involved. A family business manager might also identify more with the business he or she runs. It is intuitive that it would be easier to identify with a business you own than with a business you manage. In this way the business provides prestige, both for the family business manager as well as for his family and possible (family) successors. These factors together provide an explanation why family business managers

prefer not to get involved in uncertain entrepreneurial ventures and rather lead their business in a conservative way (Morris, 1998). Every 'gamble' they make by undertaking entrepreneurial ventures is a gamble with family money. (Sharma, Chrisman & Chua, 1997). Donckels and Fröhlich (1991) confirm that family businesses have a more conservative attitude, in fact they literally name it in their research and in addition to that they state that family business managers are less often pioneers, family businesses are more risk averse, they are less growth oriented and they consider innovativeness and creativity less important than non-family businesses do.

Considering all previous elements, the hypothesis is:

*Hypothesis 4: Individuals with previous entrepreneurial experience are less likely to prefer working for a family business.* 

#### **Data and Methodology**

The dataset used in this empirical part of this paper will be the Flash Eurobarometer report number 354. The Flash Eurobarometer report number 354 is conducted by TNS Opinion & Social at request of the so called 'Directorate-General Enterprise and Industry' which is part of the European Commission. The interview was conducted by telephone in 27 member states of the European Union and 12 countries outside the European Union. In India the interviews were conducted face to face. All participants were interviewed in their own mother tongue. The interviews were conducted between the 15<sup>th</sup> of June and the 8<sup>th</sup> of August 2012. In the used dataset the results of 42080 interviews are listed. The dataset has been compiled by combining the results of 42080 interviews taken in 40 countries. In 39 countries approximately 1000 interviews were taken. The USA is the exception with a total of 3001 interviews. From the 42080 individuals in the dataset, only 22710 individuals answered the question if they want to work for a family business or a publicly listed company or other company, not (largely) owned by a family. 11.86% of the responding individuals did not choose whether their ideal employer is a family business or a non-family business. From the remaining individuals 60.62% indicated they rather would like to work for a non-family business whereas the other 39.38% would prefer working for a family business. The three major reasons people indicated as rationales why they prefer working for a family business are better working conditions, better job security and a stronger commitment to the local community. The top three reasons people indicated they would prefer working for a not family owned business are (again) better working conditions, higher wages and more personal training. In EU countries the percentage of people who prefer to work for a family business is a bit higher with 41% and in 9 of the EU countries more than 50% of the individuals prefer working for a family business.

The dataset is restricted by excluding all the individuals who do not answer or do not know if they prefer to work for a family business. Another restriction made in the dataset is the removal of everyone who had more than 35 years of education because he / she is an outlier that might influence the data too much and everyone who had 0 years of education because this is most likely a not observed individual. A third restriction is removing everyone who refuses to answer about his / her current occupation, students and individuals who are looking after the house, retired persons and individuals who indicate they have no jobs for 'another reason'. These previously mentioned groups might skew the data. Knowing how these former mentioned individuals make their occupational choices does not make sense because these individuals will not (yet) have to make this choice. All persons who 'do not know in what

type of area they live' are deleted from the data as well. The last dropped group is everyone who indicates he or she would spend the money of an inheritance or indicates he or she would work less or stop working. The inheritance question is used to test if someone is risk taking or risk averse. Spending the money or either working less or completely stop working does not tell us anything about risk attitude which is why these individuals are omitted from the dataset. In the end 9290 useful individuals remain in the dataset on which the empirical part of this paper is based.

The used independent variables in this research are divided in four control variables and four main variables. All variables and how they are coded are discussed below shortly.

#### The dependent variable

The data on the dependent variable is derived by asking the question: Suppose you could choose between working for different kinds of companies, which one would you prefer? The data is coded by a 1 for every individual who prefers working for a family business and by a 0 for every individual who prefers working for a publicly listed business. The question whether people would like to work for a family business or for a publicly listed company / private company not family owned is asked in binary form. Individuals could choose for a family business or for a non-family business. This question is only asked to individuals who indicate they prefer to work for an employer instead of being self-employed. This already limits the dataset by more than 40%. It is good to keep in mind that this selection already influences the word: people who want to start a business because they prefer an entrepreneurial career. This does not mean that the remaining individuals are not entrepreneurial. You can also be entrepreneurial within a company sometimes called 'intrapreneurship'.

Since the dependent variable is a dummy, using a logistic regression model is the most sensible way to calculate the effects of certain human characteristics on the chance someone would prefer to work for a family business. There is no particular reason to use a probit model and the results of a logistic regression model are easier to interpret. To check if the main variables indeed add explanation power two logistic regression models are estimated, one without the main variables and one including these main variables.

#### Main variables

Risk attitude – to measure whether an individual is risk taking or risk averse a variable is used indicating what an individual would do after inheriting a certain amount of money. Five possible actions can be chosen by the respondent: Start a business, buy a house (or repay mortgage), save the money, spend the money or work less / stop working. Individuals who

stop working or work less and individuals who would spend the money of an inheritance are omitted. Nothing can be said concerning their risk attitude. The individuals who start a business with the money are considered to be risk taking, buying a house (or repaying the mortgage) and saving the money is considered to be risk averse. In the end 16.24 percent is risk taking and 83.76 percent of the sample is risk averse.

Current occupation – the original current occupation variable (D5) is divided in 22 categories. In this paper the variable is recoded in four categories: self-employed, employees, manual workers and unemployed. 6.72 percent of the individuals in the dataset is self-employed, 8.55 percent of the individuals is employee, 13.75 percent of the individuals is manual worker and 10.98 percent is currently looking for a job. More than the majority of the used individuals in the dataset being classified as employee is a bit worrying. The other occupational groups are quite small, especially the groups of self-employed persons. This makes sense because the dependent variable is only measured over the individuals who indicated before they prefer to work for an employer.

Years of education – is measured as an age on which an individual stops his / her fulltime education. This variable might be a bit biased because someone who repeats a class is classified the same as an individual who took an extra year of education. There is no way to filter this bias though. The individuals in the final dataset had on average 20.61 years of education. The distribution of the education variable seems to be almost a normal distribution. The histogram can be found in the appendix under the name of 'figure 1'.

#### <Figure 1 to be inserted here>

Although the histogram is almost normally distributed there is a big spike in the individuals who indicate they had eighteen years of education. Most likely this spike can be explained by two rationales. Eighteen is the age in most countries individuals become adults. This is why a lot of countries dictate individuals are obliged to be educated until their 18<sup>th</sup> birthday. A second rationale might be that in a lot of developed countries secondary education ends at an age of eighteen years. One might expect a variable like education to be normally distributed and apart from the spike of individuals who had eighteen years of education, which can be accounted for, the education variable in the used dataset indeed has a normal distribution. This is an indication that the individuals used in the dataset indeed mirror society as a whole in terms of educational attainment.

Previous entrepreneurial experience – for this variable the observed individuals answer if they ever started or took over a business or if they are taking steps to start or take over a business.

20.82 percent indicates they ever started or took over a business or indicates they are currently starting a business and the remaining 79.18 percent falls within neither of these categories. Since these individuals did indicate they have a preference of working as employee and not self-employed, they are either entrepreneur out of necessity or because they are 'truly entrepreneurial' within a paid employment. However, they did indicate that they have at least some experience with entrepreneurship which implies this group is on average more focused on entrepreneurship than the 79.18% indicating they never started or took over a business and are not taking steps to start or take over a business.

#### **Control variables**

Age – the compilers of the dataset chose not to include age as a continuous variable but rather as a categorical variable with 6 categories: 15-24 (613 individuals), 25-34 (1954 individuals), 35-44 (2485 individuals), 45-54 (2456 individuals), 55-64 (1268 individuals and 65+ (193 individuals). The downside of this approach is that valuable information is lost compared to a continuous age variable. The oldest two age groups and the youngest age group make up for much smaller percentages of the total group in the restricted dataset compared to the full dataset. This can be explained by the omission of individuals who are retired or student. Unfortunately this means the restricted dataset deviates from the original dataset, but there is no way to fix this problem without including non-useful individuals.

Gender – gender is a control variable that is used in almost every single piece of research available. The variable is coded 1 for male and 2 for female. The male-female division is not completely even. 43.51 percent of the respondents are male which leaves the remaining 56.49 percent to be female. This distribution is not that skewed, so both groups are adequately big to derive meaningful conclusions using the analysis.

Living area – the compilers of the dataset made a distinction between three types of living environments individuals could live in: Rural area or village, small or medium-sized town and large town/city. In the used dataset, 28.46 percent lives in a rural area, 36.88 percent lives in a small or medium sized town and 34.65 percent lives in a large town or city. The distribution is quite close to the original distribution, which suggests that the restricted dataset still mirrors the original dataset quite accurately, which in turn suggests that the restricted dataset mirrors the distributions in living area of the outside world, as described by the compiling entities of the dataset, quite accurately.

Country – indicates the country an individual lives in. The Netherlands is chosen as a base category. This partly because this paper is written in the Netherlands, but mainly because the Netherlands is one of the most 'average' countries with regard to the distribution of people

preferring to work for either a family business or a non-family business. This makes comparing other countries easier because in this way the assumption can be made that all countries in which the workforce does not significantly differ from the Netherlands in regard to their employment preference are 'average' countries as well.

#### Assumptions testing

For this type of logit with these independent variables only the assumption of no multicollinearity has to be checked. The first assumption is that there is no multicollinearity in the variables. The only two variables that are continuous or ordered are the education variable and the age variable.

#### <Figure 2 to be inserted here>

Using a collin test (figure 2) the low VIF score indicates we do not have to take multicollinearity in account. It can be concluded that the age variable and the education variable are not multicollinear. Because multicollinearity could be proven not to be an issue the model can be estimated.

This does not mean the model indeed does describe the data as it should. To be more sure the model indeed measures what it should measure it has to be made certain that the model is the right model and specified in the right way. To do that a test to check for misspecification in the model is useful. If the model is misspecified the linktest will result in a significant hatsq predictor.

#### <Figure 3 to be inserted here>

Figure 3 shows this is not the case, with a p value of over 0.900 the hatsq predictor does not even come close to being significant which leads to the conclusion the model is correctly specified.

#### <Figure 4 to be inserted here>

The second test used is the goodness-of-fit test, which is already implemented in the logistic regression model. For this the chi-square is used which measures if the full model with all the used variables is a better predictor than the intercept only model. The chi-square value is significant on the 1% level which indicates that the full model is indeed a better predictor than the intercept only model. Using fitstat the same conclusion can be made. Basically all measures such as Mcfadden's (adj) R2, Cragg Uhler's R2, Efron's R2, (adj) Count R2, Akaike

Information Criterion and Bayesian Information Criterion indicate that the model indeed fits the data.

<Figure 5 to be inserted here>

Another aspect that a goodness-of-fit test can clarify is whether a full model using all available variables is a better predictor of the chance someone prefers working for a family business than a restricted model using only control variables. Figure 5 shows that the full model indeed has a higher explanation power. The pseudo-R2 in the regression model confirms this conclusion.

<Figure 6 to be inserted here>

Another factor looked at is the correlation between the used variables. All correlations between the used variables are low and therefore the assumption can be made that the correlation between the used variables does not distort the model in any significant way.

All in all, rejecting the notion that there could be multicollinearity in the model, taking into account that there is no misspecification and no high correlation between variables and with the finding that the goodness-of-fit of the model does not provide reasons to worry about this model it can be concluded that this logit model should indeed be a valid predictor of the chance an individual would like to work for a family business, using the formerly indicated independent variables.

### **Results**

In this chapter the results derived from the logistic regression and the marginal effects model are discussed. First of all the results concerning the four main variables will be listed. After that the effects of the control variables will be shortly discussed. All used numbers in this section can be found in table 7 in the appendix unless indicated otherwise.

<Table 7 to be inserted here>

#### **Risk** attitude

The effect of a risk taking attitude has a significant and quite large effect on the preference to work for a family business or a non-family business. A risk taking individual has on average a 7.2% higher chance to prefer working to a non-family business, ceteris paribus. This means the hypothesis stating: *Risk taking individuals are usually less inclined to work for a family business*. ' can be accepted.

#### Previous entrepreneurial experience

In this analysis no relation has been found between the possession of previous entrepreneurial experience and the preference to work for family businesses or not. Both the individuals who indicated they started or took over a business in the past and the individuals who indicated they are busy starting or taking over business show no significant deviation from the individuals without any entrepreneurial experience. This means the hypothesis stating: *'Individuals with previous entrepreneurial experience are less likely to prefer working for a family business.'* must be rejected.

#### **Current occupation**

Based on this analysis, there is no reason to believe that current occupation has any effect on the preference to work for a family business or a non-family business. The only significant effect that has been found is the effect of having no current occupation. Unemployed individuals are 3.4% less likely to prefer working for a family business than individuals with a job (ceteris paribus). This means the hypothesis that *Entrepreneurs and employees are less likely to prefer working for a family business than manual workers and unemployed individuals*. ' must be rejected.

#### Years of education

Education in years is significant. With every extra year of education the chance said individual would prefer to work for a family business is lowered by 0.6%, ceteris paribus. This means the hypothesis stating: '*Lower educated individuals are usually more inclined to work for a family business*.' can be accepted.

#### The control variables

**Age:** the age of the respondents in the dataset does not seem to have any significant effect on the likelihood they prefer to work for a family business, ceteris paribus.

**Gender:** the gender of the respondents is significantly related to the chance an individual prefers working for a family business. Females are 2.5% more likely to prefer working for a family business compared to males, ceteris paribus.

**Living area:** the area an individual lives in has without any doubt a significant effect on the preference to work for a family business. People in small towns and rural areas are respectively 2.7% and 7.3% more likely to prefer working for a family business than people in large cities.

**Country:** all countries used in this analysis are compared to the Netherlands. The effect of living in the Netherlands on the preference to work for a family business or a non-family business is quite close to the mean of the country effects used in this analysis. The upper limit is Germany in which an individual is 29% more likely to have a preference to work for a family business compared to the Netherlands, ceteris paribus. The lower limit is Japan in which an individual is 31% less likely to prefer to work for a family business compared to the Netherlands, ceteris paribus.

#### Full model vs restricted (control) variable model

Comparing the full model using all the available variables with the restricted model with only control variables it can be noticed that the differences are quite small. Figure 4 and 5 show small differences. In general it can be said that the full model indeed has a bit more explanation power although the difference is not that big.

## Discussion

#### Risk attitude

The found result that risk taking individuals are less eager to work for a family business is as the expected based on the predictions. This means that risk taking individuals are indeed willing to trade the higher basic wage and high job security in family businesses for secondary job benefits such as the ones indicated by Donckels and Fröhlich (1991): chances to develop using additional education, chances to share in business decision making and a higher variable pay based on company performance.

More thoroughly this implies that there are two possible factors affecting the choice for a family business or a publicly owned business. A combination of these three factors eventually influences the relation between risk attitude and this occupational choice.

First of all apparently risk taking individuals might value a fixed wage less than risk averse individuals. This means risk taking individuals are more likely to choose for a variable pay element.

Second of all risk taking individuals might be less affected by a lower job security.

Even though by using this analysis no final conclusion can be made which of these factors influences the found differences in occupational choice between risk averse and risk taking individuals it is most likely that the conclusion can be made that for risk taking individuals a combination of fixed wages and a higher job security in family businesses does not compensate for the higher educational and employee participation chances and possibilities of profit sharing one gets more frequently in publicly owned businesses.

With the confirmation of the hypothesis that risk averse individuals are indeed more likely to prefer being employed by a family business, it can also be concluded that the selection effect of risk averse individuals into risk averse businesses and risk taking individuals into risk taking businesses, as described by Bellante and Link (1981), indeed does not only occur when individuals express their preferences for a public or a private business, but it occurs as well when individuals make the choice between a family business and a publicly owned business. Apparently risk is indeed a factor involved in the decision between employers.

#### **Current occupation**

The found effects that the current occupation has on the preference to work for a family business or a publicly listed company are not according to the predictions. There is no reason to assume that the current employment has any effect on the preference to work for a family business or a publicly owned business. This tells us several things.

First of all if the assumption that individuals are more likely to look for job opportunities in the same field of expertise as the current job holds, this implies that neither of the used occupational categories has big resemblances to family business or publicly owned businesses. This in turn might tell that there are no big overlaps between family businesses / publicly owned business and one of the occupational categories.

Secondly it tells the manual worker values working for a family business at the same level as working for a publicly owned business. This implies that the manual worker on average does not value the more conservative values of family businesses (as indicated by Donckels and Fröhlich, 1991) enough to have a significant impact on his occupational preferences. The same can be said about the values of entrepreneurs and employees: there is no reason to believe their preferences are strong enough to influence the choice for a family business or a publicly owned business as employing entity.

The effect for unemployed individuals is significant but directly contradicts the made predictions. One of the characteristics of family businesses is that they take better care of their employees, which would lead to the belief that the unemployed individuals would be more likely to want to work for a family business. This is not the case. A possible rationale for this is that this effect might be negated by a general distrust in the labor market. However, this is just one possible explanation for these counterintuitive figures. Another possible explanation is that employees in family businesses have more job security. This implies that a higher percentage of unemployed individuals originally worked for a publicly owned business, and the reasons for this former choice might still apply, even after losing a job.

#### Years of education

Analysis of the data indicates that there is indeed reason to believe that the age at which an individual stopped with his or her full-time education is negatively related to the preference to work for a family business. This is in line with the expectations. As indicated there is more than one possible rationale why this effect would occur.

First of all it could be that family businesses are more conservative, thereby attracting more conservative (usually lower educated) employees. The positive relation between education and liberal values has been proven by Hyman and Wright (1979) and Scheepers, Grotenhuis and Slik (2002). This possible effect is not the only effect which could be derived from theory. Another likely cause of the negative relation between education and the preference to work for family businesses is a selection effect caused by the lower wages family businesses pay which influences lower educated individuals to perceive family businesses as more viable

options. It makes sense that unrealistic options are considered less favorable, even if they would be the best options objectively. This effect could increase the preference of lower educated individuals for family businesses.

On another level Davidsson and Honig (2003) indicate that higher educated individuals, are not only more likely to get higher jobs, but in addition to that they are better at spotting the opportunities and chances in publicly owned companies which include chances of schooling and career advancement thereby lowering the availability of jobs in publicly owned businesses for lower educated individuals. In daily life this means a higher educated individual might accept a job below his abilities in a publicly owned business in order to gain future chances. Additional schooling and participation in business decision making by employees might reimburse for a lower basic wage because it offers chances for further career advancement. However, assuming Davidsson and Honig (2003) are right and higher educated individuals are indeed better at spotting chances this could mean higher educated individuals would be more likely to spot the benefits publicly owned companies offer while the lower educated individual might not spot this chances and accept a job in a family business offering higher rewards on the short term. In daily life this means higher educated individuals might be perceived to be more focused on long term goals while lower educated individuals are perceived to think only about the short term, while in reality higher educated individuals have more ease to establish and accomplish long term visions and goals, because they are better in spotting chances created by secondary job benefits.

#### Previous entrepreneurial experience

Even though the expectation was that a negative relation would be found between the availability of previous entrepreneurial experience and the eagerness to work for family businesses, it was not found in this analysis. The question if an individual prefers to work for a family business or a non-family business is only asked to the individuals who indicated in a previous question they prefer to be an employee. This means that the individuals who indicate they are in the process of starting / taking over a business apparently did not have entrepreneurship as their ideal career choice, which means they are pushed into entrepreneurship out of necessity or they only want to be part-time entrepreneur. The individuals who owned a business in the past apparently where not that enthusiastic about entrepreneurship because nowadays they prefer working as an employee. It might be very possible that this is the reason why no significant results could be found for this aspect of the analysis: even though the individuals in this question have some experience with entrepreneurship it is not their first choice at this moment and while they might possess some

of the entrepreneurial traits, most probably they do not possess the entrepreneurial spirit the really committed entrepreneurs possess.

Although prior entrepreneurial experience does not warrant a higher preference for a publicly owned business as hypothesized, this result in itself is valuable. It indicates that the group existing of necessity entrepreneurs and entrepreneurs who did not make it are most likely not significantly more autonomous, more risk taking, more innovative and non-conforming compared to the average employee. This in turn could be (albeit circumstantial) proof that failing or quitting entrepreneurs indeed do not possess the average entrepreneurial traits.

## Implications

One of the expectations is that certain human characteristics influence the type of employer individuals prefer. These links could have relevance for theory and practice.

#### Theory

To research if certain human characteristics influence the favored type of business individuals prefer to work for is important from a scientific perspective because it helps to gain a better insight in the motives of choosing between a family business as employer and a non-family business. This could result in occupational choice models with a higher explanation power. The performed analysis suggests that risk attitude, gender, education in years, unemployment and type of urban environment are predictive for the occupational preference for a family business or a non-family business. It also shows that age and current area of employment do not influence this decision up to such a degree it can be proved using this data. Last but not least it shows that entrepreneurial attitude might not be that big an influence on the choice between family or non-family businesses. Adding this findings to the existing literature provides a better insight in occupational choice, specifically the occupational choice for family businesses.

#### Practice

A better insight in the human characteristics that drive occupational choice for family businesses and non-family businesses could provide these businesses with tools to focus their recruitment campaigns better on the wishes and needs of their target group of potential employees. This could mean a better selection of the best fitting employees and better chances of attracting talent to the company. This paper provides insight in the characteristics of the prospective employees of both family businesses as well as non-family businesses. However, not only businesses could benefit from this information, but it is also valuable to businesses aiming to reintegrate people in the labor market. In practice this would mean for a risk averse, lower educated lady from a rural area the reintegration office will focus more on a job in a family business, whereas the risk taking, higher educated male from a large city would be advised to work in a non-family business. Businesses or (semi)government agencies providing (young) individuals with educational advices could gain from the acquired insights as well by priming individuals for certain kinds of jobs based on certain characteristics.

## Limitations and recommendations

As in every research, this analysis has limitations.

First of all, all family firms are treated the same. No distinction is made between a huge company making billions of euro's every year and a small family business with only a few employees. It might be well imaginable that a lot of people picture a small family business when presented with the question if they prefer a family or non-family business, not a mega corporation. Distinguishing on size and perhaps other characteristics like 'family influence' could change the findings of this research.

Another limitation is that even though we now know that countries influence the preference for a family business or a non-family business quite a lot, we do not know why. This problem could probably be partially solved by including the Hofstede dimensions for the used countries in the analysis.

Last but not least, this research only measures preferences, but does not question if these preferences indeed result in the optimal solution both in terms of employee wellbeing as well as in added value to a business. It goes too far to go into this deeper in this final part of limitations and recommendations but this might be a good start for follow up research.

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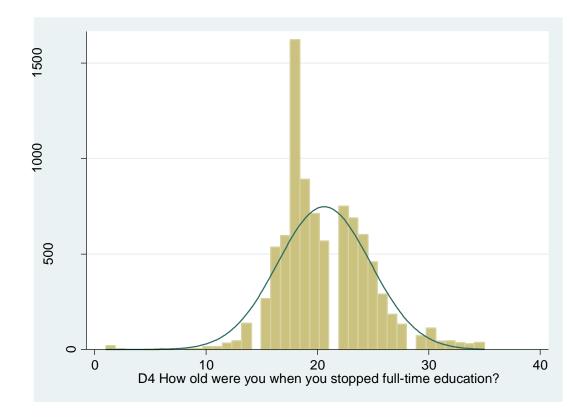
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## Appendices

**Appendices - Descriptives** 

Figure 1: Histogram years of education



## Appendices - Assumptions testing

#### Figure 2: Collinearity Diagnostics

	SQRT		
Variable	VIF	VIF	Tolerance R-Squared
Age in categories	1.00	1.00	0.9952 0.0048
Education in years	1.00	1.00	0.9952 0.0048
Mean VIF	1.00		

	Eigenval Cond Index			
	1	2.8889	1.0000	
	2	0.0937	5.5521	
	3	0.0174	12.9036	
Condition Number	12.9036			

Eigenvalues & Cond Index computed from scaled raw sscp (w/ intercept) Det(correlation matrix) 0.9952

#### Figure 3: linktest logistic regression

Dependent variable: preference for family business

	Coefficient	Standard error	p-value
_hat	1.002123	0.523044	0.000***
hatsq	0.0019128	0.362851	0.958
Constant	-0.0003766	0.0273561	0.989

Notes: \*\*\* This variable is significant at the 1% significance level

#### Figure 4: Measures of Fit for logistic of q3 full model

Log-Lik Intercept Only:	-5984.413	Log-Lik Full Model:	-5443.952
D(8913):	10887.904	LR(50):	1080.921
		Prob > LR:	0.000
McFadden's R2:	0.090	McFadden's Adj R2:	0.081
Maximum Likelihood R2:	0.114	Cragg & Uhler's R2:	0.154
McKelvey and Zavoina's R2:	0.163	Efron's R2:	0.114
Variance of y*:	3.928	Variance of error:	3.290
Count R2:	0.663	Adj Count R2:	0.129
AIC:	1.226	AIC*n:	10999.904
BIC:	-70234.028	BIC':	-625.845

#### Figure 5: Measures of Fit for logistic of q3 control variables model

Log-Lik Intercept Only:	-5984.413	Log-Lik Full Model:	-5474.413
D(8923):	10948.826	LR(43):	1020.000
		Prob > LR:	0.000
McFadden's R2:	0.085	McFadden's Adj R2:	0.078
Maximum Likelihood R2:	0.107	Cragg & Uhler's R2:	0.146
McKelvey and Zavoina's R2:	0.154	Efron's R2:	0.108
Variance of y*:	3.889	Variance of error:	3.290
Count R2:	0.661	Adj Count R2:	0.123
AIC:	1.231	AIC*n:	11040.826
BIC:	-70264.122	BIC':	-628.634

#### Figure 6 - Correlations

	Preference family / public business	Previous business experience	Risk attitude	Age in categories	Gender	Years of (fulltime) education	Area of living (rural or urban)
Preference family / public business							
Previous business experience	-0.0120						
Risk attitude	-0.0252	-0.1955					
Age in categories	0.0195	0.0703	0.0540				
Gender Years of	0.0345	-0.1204	0.0702	-0.0065			
(fulltime) education	-0.0864	-0.0285	0.0521	-0.0693	۔ 0.0040		
Area of living (rural or urban)	-0.1086	0.0192	-0.0541	-0.0277	- 0.0149	0.1325	

## Appendices – Logistic regression

#### Table 7 - Logistic Regression + Marginal effects

#### Dependent variable: prefers working for family business dummy (standard error)

N: 8969

	Marginal effects control variables Pseudo-R2: .0852 Prob> chi2: 0.000	Marginal effects full model Pseudo-R2: .0903 Prob> chi2: 0.000
Risk taking		072*** (.048)
Age in categories	.002 (.020)	001 (.020)
Female gender	.020** (.051)	.025** (.540)
Education in years		006*** (.006)
Base: no business experience		
Started business		001 (.067)
Taking steps to start		012 (.011)
Base: Occupation - Employee		
Occupation - Self-Employed		.018 (.109)
Occupation - Manual worker		.020 (.081)
Occupation - Unemployed		034 (.066)
Base: Rural area		
Small / medium sized town	031** (.050)	027** (.051)
Large town / city	082*** (.043)	073*** (.045)
Base: Netherlands		
Belgium	.164*** (.377)	.159*** (.372)
Denmark	.007 (.226)	.015 (.236)
Germany	.299*** (.713)	.291*** (.699)
Greece	.243*** (.553)	.228*** (.528)
Spain	183*** (.077)	191*** (.074)
Finland	.127*** (.335)	.128*** (.346)
France	.234*** (.508)	.230*** (.505)
Ireland	099** (.130)	105** (.127)
Italy	.058 (.252)	.044 (.240)
Luxembourg	.168*** (.381)	.160*** (.371)
Austria	.218*** (.493)	.204*** (.470)
Portugal	038 (.167)	055 (.156)
Sweden	.180*** (.402)	.186*** (.423)
United Kingdom	008 (.189)	024 (.177)
Bulgaria	.027 (.243)	003 (.217)
Cyprus	.093** (.282)	.087* (.278)
Czech Republic	.090* (.280)	.082* (.276)
Estonia	.053 (.266)	.047 (.261)
Hungary	.204*** (.435)	.186*** (.409)
Latvia	135*** (.116)	152*** (.107)
Lithuania	053 (.191)	071 (.177)
Malta	142*** (.118)	160*** (.107)
Poland	030 (.173)	041 (.167)

Romania	.050 (.249)	.009 (.214)
Slovakia	012 (.184)	025 (.175)
Slovenia	.091* (.297)	092* (.299)
Turkey	169** (.163)	200*** (.136)
Iceland	043 (.182)	036 (.190)
Croatia	074 (.158)	088* (.149)
Russia	.215*** (.488)	.188*** (.444)
Switserland	.189*** (.424)	.193*** (.435)
Norway	221*** (.064)	216*** (.069)
Brazil	025 (.200)	048 (.183)
Japan	306*** (.039)	311*** (.039)
United States	053 (.138)	048 (.142)
China	192*** (.107)	223*** (.088)
Israel	175*** (.089)	166*** (.095)
India	135*** (.123)	167*** (.104)
South Korea	227*** (.070)	229*** (.071)
Constant	.650	1.676 (.369)

Notes:

\* This variable is significant at the 10% significance level

\*\* This variable is significant at the 5% significance level

\*\*\* This variable is significant at the 1% significance level