Innovation Outcomes: Spin-off Processes in Family Firms

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In partial fulfilment of the requirements for obtaining the degree of

MASTER OF SCIENCE IN INDUSTRIAL ECONOMICS AND MANAGEMENT (120 CREDITS)

Specialization:
Entrepreneurship and Innovation

Course ID: IY2560

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Karlskrona, Sweden

May 2014
Abstract

The purpose of this thesis was to analyse the relationship between being an employee of a family firm and transition to self-employment. It was ascertained empirically whether being employees of family firms have a positive influence on the phenomenon of spin-offs in Sweden.

Using a data set of individuals as well as firms for the whole of Sweden, the thesis applied a logistic regression model to analyse the influence of family firms on spin-off processes. Specifically I examined how employees of firms as at 2007 transitioned to self-employment in 2008. I also examined the characteristics of employees who spin-off and the choice of industry of operation of spin-offs.

Disagreements between owners of family firms and employees about the strategic focus of the business arise as a result of the long-term horizon of family firms, coupled with agency issues as well as organisational culture that encourages the direct involvement of owners of family firms in the routines. Employees who discover innovative and risky ideas are likely to exploit them outside the company due to the reluctance of the family firm to implement them, due to its long-term orientation.

The thesis established a nexus between family firms and spin-off processes. The results suggest that being an employee of a family firm has a positive and significant influence on the decision to transition to self-employment. The results also indicate that employees in relatively higher occupational categories are less likely to spin-off as compared to employees in relatively lower occupational classifications. In terms of the choice of industries of operation, it is found that spin-offs are less likely to be established in the same industry as their parent firms. Increasingly, spin-offs are carving their own images in their respective new industries. Last but not least, contrary to evidence that employees of smaller firms are more likely to spin-off, our results show otherwise.
Acknowledgement

My profound gratitude goes to my mentor and supervisor Professor Martin Andersson for your professional and invaluable guidance from the process of developing a research proposal to writing the final thesis. Your critical comments have shaped my independent theoretical and practical analysis. You gave me the opportunity to learn how to conduct quantitative research. You also assisted me in accessing data. Please accept my sincerest appreciation for your time and patience.

I acknowledge Sam Tavassoli, a PhD candidate at the department for granting me access to data. I also thank you for the useful guidance and words of encouragement during the process of writing this thesis.

To Assistant Professor Philippe Rouchy, Director of the Masters programme. You have been a great source of inspiration. If there is one person I could always turn to for advice, it is you. Even at odd times, you have shown a high sense of responsibility. I thank you sincerely.

To Assistant professor Urban Ljungquist, your critical and useful comments helped in improving the quality of this thesis. I appreciate your time and efforts.

And to the Government and the people of Sweden, the Swedish Institute, whose financial support I was able to pursue my Masters education. I am grateful. In me you have an ambassador without a budget.
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Chapter One: Introduction

1.1 Background to the study

The importance of new firms to regional and national economic development cannot be underestimated. Some of the most significant innovations of the 20th century, such as computers and Internet services can be attributed to small and new firms (Fritsch, 2011). Even though some of these new firms are prone to failure due to the liability of newness, they contribute to regional and national development by stimulating improvements on the part of incumbent firms (Andersson and Klepper, 2013; Fritsch, 2011).

While many new firms are founded by first time entrepreneurs or employees of existing firms (Shane, 2003), the process by which employees leave existing companies to create new firms is relatively under researched. The characteristics of firms from which employees leave to establish their own, as well as the motivations for these processes have also received little attention (Andersson and Klepper, 2013).

The exploitation of entrepreneurial opportunities depends on the choices made by the people who discover them. While some might sell the information; others choose to disclose it to their employers and exploit it on behalf of the employer or create a new firm to exploit the opportunity. The uncertainty of the opportunity, risk-adjusted expected value of the opportunity are some of the factors that would inform the decision of an individual to either set up his own company to exploit the opportunity, exploit it on behalf of the employer or sell the information (Shane, 2003).

Many firms are owned or run predominantly by families in many parts of the world, including Europe amid varying degrees of ownership (Eklund et al, 2007; Stamm et al, 2011; Sharma, 2004; LaPorta, 1999). Particularly interesting about family firms is their contribution to national economies. For instance, about 65% of all registered firms in Latin America are registered as family firms. It is also important to note that more than 50% of registered companies in Europe are organised as family firms and account
for about 65% of Gross National Product (GNP) among European Union member states. Family firms account for about 50% of the private business sector contribution to Gross Domestic Product (GDP) in Sweden (Bjuggren et al, 2012).

The share of family firms in manufacturing and retail in Sweden are 61% and 62% respectively (Brunk et al, 2008). These family firms remain a major source of employment and innovations (Wikström et al, 2010; Zahra, 2005). This thesis focuses on family firms because of the aforementioned contribution to various economies including the Swedish economy.

Using a comprehensive individual data of employees and firms in Sweden, the thesis applies theories about family firms and spin-off theories to explore the relationship between family firms and self-employment in Sweden.

1.2 Justification of the Study

The phenomenon of spin-offs has received substantial attention of researchers in the field (Andersson and Klepper, 2013; Klepper, 2009; Klepper and Thompson, 2009). This attests to the significant contribution of new firms to economic development at the meso and national levels. While researchers in the field have explored the characteristics of companies that generate spin-offs, the kinds of firms that are spawn, and the characteristics of employees who leave these firms to establish their own, the performance of these newly founded firms have also been investigated. The motivation for this process has also been included in previous studies (Andersson and Klepper, 2013).

It is worth noting that studies in this field have focused extensively on private sector enterprises, broad sectors of industry, multinationals, Venture capital supported companies and foreign owned firms just to mention a few (Eriksson et al, 2006; Andersson and Klepper, 2013; Klepper, 2009).

Various studies have been conducted relative to specific industries in different countries. Notable examples in the automobile industry are (von Rhein, 2008) in Germany, (Klepper, 2007) in the US, and (Boschma and
Wenting, 2007) in Britain. Other studies have been conducted in other sectors such as the high tech manufacturing namely biotechnology (Klepper, 2009).

At the macro level, a number of studies have also been conducted to examine start-ups and spin-offs of all kinds founded by employees. The notable ones are a country level study of Denmark (Eriksson and Kuhn, 2006; Sorenson and Phillips, 2008). Gompers et al, (2005) studied venture capital supported employee start-ups of publicly traded firms in the US. Elfenbien et al (2008) also studied the rate at which engineers desert employers to establish new firms in the United States. A similar study is that of Muendler et al, (2012) which studied spin-offs and start-ups using a Brazilian employer- employee matched data set. The rest are Norway (Hvide, 2009) and Portugal (Baptista and Karaöz, 2006).

It is important to note that Andersson and Klepper (2013) recently have conducted a similar macro level study using Swedish employer- employee matched data. This particular study examined the characteristics and performance of new firms and spin-offs in Sweden.

While various classifications of firms have been studied in relation to spin-offs ranging from multinational enterprises (MNEs), through private firms to high-tech manufacturing firms, as mentioned above, little is known about family firms in particular and the dynamics this category of firms is capable of bringing to the spin-off discussion.

It has been established succinctly to the best of our knowledge that family run firms as a category of firms from which, employees spin-off, has not received much attention especially at the macro level. Meanwhile, it is also important to reiterate that a large proportion of firms are registered as family firms and they contribute significantly to national economies in terms of innovations and employment (Bjuggren et al 2012).

Even though family business research has also received tremendous attention, much of the studies have rather concentrated on corporate governance, economic performance and succession just to mention a few (Palmberg et al, 2010). The evidence of this assertion finds expression in the following observation: Between 1996 and 2010 the most researched topics in
family enterprise based on a review of 251 articles are 1) Corporate governance (17.9%), 2) succession (10.7%), 3) economic performance (7.9%), 4) resources and competitive advantage (6.3%) 5) and 6) entrepreneurship and innovation (5.2%) (Sharma (2013).

Family firm research in the broad area of entrepreneurship and innovation has focused extensively on the involvement of families in new ventures and how long it takes for a new firm to become a family owned or registered as such (Chua et al, 2004). Another area that has received tremendous attention is the ability of business owning families to raise their children up to be entrepreneurs. A significant finding in this area is that considerably large numbers of entrepreneurs are raised in families that own or have owned businesses before (Fairlie and Robb, 2007).

Emphasis has also been on why some family firms are able to innovate and survive beyond the tenure of the founders and as well as the tenure of second the second generation with the involvement of non-family professionals who bring with them new management perspectives and energy (Bergfeld and Weber, 2011; Huybrechts et al, 2013). The social and technological aspect of innovation in family firms has equally been examined quite well (De Massis et al, 2013; Zahra et al, 2013). There is thus a preponderance of knowledge about the aforementioned streams of research.

The spin-offs phenomena as well as the potential benefits they bring to both industrial and regional growth is widely recognised. Yet it is known that spin-offs emerge from several kinds of incumbent firms as it has been established above (Wallin et al, 2007). What is not known is, if there is any relationship between the spin-off process and this special category of firms known as family businesses.

This is against the background that, family firms are unique in their own form, as they posses certain characteristics and resources which are driven from the involvement of a family in either ownership or management of these firms (Habbershon and Williams, 1999). Family firms are invariably different from non-family firms in several dimensions, such as, but not limited to the sources of investment resources, labour, organizational
culture, social capital, strategy and even succession planning (Kraiczy, 2013; Hall et al, 2008, 2001).

It is yet to be known if by virtue of these resources peculiar to family firms, the processes by which employees desert incumbent firms to establish their own firms could be influenced differently. Against the background of the values that form the core of resources of family firms, the thesis bridges this gap between spin-off research and family firm research by exploring the relationship between family firms and spin-offs in Sweden.

1.3 Objectives and Research Questions

This thesis seeks to establish if there is any positive relationship between family businesses and spin-off processes. Precisely, the study examines the likelihood of transitioning into self-employment by virtue of the fact that one is an employee of a family firm. The thesis also aims at determining the kind of employees who desert family firms for self-employment. Finally, the thesis examines if the industrial classification of a parent firm influences the choice of industry by spin-offs.

In view of this, the following research questions are addressed in the study:

a) Does being an employee of a family firm stimulate self-employment?

b) What are the characteristics of employees who spin-off from family firms?

c) What is the choice of industry of operation of family business spin-offs?

1.4 Structure of the Thesis

Following this introductory chapter, the rest of the thesis is organised as follows: Chapter 2 presents the theoretical background and hypotheses. Chapter 3 presents the methodology while the results are captured in chapter 4. Chapter 5 contains the analysis. Finally the conclusion, theoretical reflection and implications are presented in chapter 6.
Chapter Two: Theoretical Background and Hypotheses

2.1 Family Firms

Westhead et al (2002) underscores the lack of consensus on a theoretical and operational definition of a family firm. These authors note that researchers have often used four variables to define a family firm: 1) whether a single family group owns more that 50% of the shares in an undertaking, 2) whether members of a family or emotional kinship group perceive the firm as being a family firm, 3) whether the firm is managed by members drawn from a single dominant family group and 4) whether the firm has experienced an intergenerational ownership transition to a second or later generation of family members drawn from a single dominant family group that owns the firm. It is argued that two or more of the variables above need to be considered when defining a family business. This is driven from the term “familiness” which refers to the bundle of resources that are unique to a firm as a result of the involvement of the family in the firm (Habbershon and Williams, 1999).

Three conditions must be fulfilled in order for a firm to be considered a family firm. 1) The current principal holder should be planning to transfer the company further in the family. 2) The company should have been in the current principal owner’s family for at least two generations. 3) At least three representatives of the owner family are active in the company (as employees or board members)(Brunk et al, 2008).

According to Vikström and Westerberg (2010) a firm is regarded as a family firm where: 1) at lest one member of a family owns the firm, 2) at least one member from the same family is active in managing daily activities in the firm, and 3) the leading actor in the firm regards the firm as a family firm. This points to control of ownership and active participation in management as prerequisites of a family firm.
A research report on family firms in Europe concluded that there exist over 90 different definitions of family enterprises (Mandl, 2008). Most definitions are related to issues of control, ownership and management of the firm. For instance Villalonga and Amit (2006) conceive of a family firm as one that has the founder of the firm, a blood relative, or an in-law acting as a CEO or as a block-holder. In this they defined a firm as a family firm where the control and ownership is in the hands of the founder, an heir or a member of the founding family. While control is surmised at 20%, less than 50% voting rights is accepted in a dispersed ownership structure to indicate a de facto control of a firm. Furthermore, the identity of the CEO and chairman of the board (COB) is used to distinguish the kind of management under which a firm is. Whether founder, descendent or external management. The three distinctions are as follows: Where the CEO is a descendant and the COB is the founder, the firm is coded as being managed by the founder. In a situation where the COB is a descendant and the CEO is an external manager, the firm is coded as being managed by a descendent. But if both the CEO and the COB are non-family members or externally hired, the firm is regarded as being under external management.

Bjuggren and Palmberg (2008) in another study have also defined family firms as firms that are controlled directly or indirectly by one family or an individual such that this family or individual is the largest owner. They also accept the surmised and arbitrary ownership of 20% of voting rights introduced by La Porta et al (1999).

This thesis adopts a demographic definition as proposed by Westhead et al (2002) and reinforced by Daily and Dollinger (1993) and conceives of a family firm as one that meets at least two or more of the following conditions 1) located in a rural area, 2) small and medium size 3) operates in the manufacturing, wholesale and retail industry and 4) if it is old (Brunk, 2008). A detailed explanation is given in section 2.3.
2.2 Theories About Family Firms

Organisational culture, social capital theory, resource-base view, agency theory, professionalization and succession are discussed below. The section underpins how these theories facilitate spin-offs.

2.2.1 Organisational Culture

Understanding the pattern of beliefs and values in a family is critical to understanding the processes of entrepreneurship in it. Hall et al (2001), emphasising the role of organisational culture in family businesses have argued that while some cultural patterns seek to preserve the primordial way of doing business others are geared towards promoting entrepreneurial change. It is noted that the inward looking character of family firms coupled with the reliance on old traditions make them resistant to change (Dyer, 1994). The risk is that successors tend also to run the firms in accordance with these established family traditions and values. In trying to understand the cultural dimension of family firms, a three-dimensional conceptual model of family firm culture is developed, namely, degree of cultural openness, degree of cultural explicitness and whether one or a few family members dominate the culture (Hall et al, 2001).

Alvesson (1993: 2-3) defines organisational culture as “a shared and learned world of experiences, meanings, values and understandings which inform people and which are expressed, reproduced and communicated in partly symbolic form”. The culture of an organisation serves as a filtering mechanism of new and competing ideas. The strategy of an organisation therefore derives its source from the organisational culture. This culture determines what kind of change is desirable and acceptable or refused within a family firm. Change process and an organisation’s future are therefore interwoven (Johnson, 1986; Schoenenberger, 1997). It is generally established in research that family values, goals, and relations greatly influence strategic change in family firms (Harris et al., 1994; Dyer, 1994; Sharma, Chrisman, & Chua, 1997). Meanwhile, change is more likely to be fiercely resisted in family firms than in other organisations due to the
emotional attachment that tend to be deeper and potent in family firms than in other firms (Dyer, 1994).

Founder run firms are dominated by the founder’s beliefs and way of thinking. This can be the result of the need for control and suspicion. It is noted that family members usually stay longer in leadership positions in family firms that explains the perpetuation of the family culture. Employees observe the values and respect family member managers not just because of their formal positions in the firm but also because of their ownership and power in the firm. Therefore, the ability and willingness of family managers to canvass and accept ideas of all employees is ultimate to determining the entrepreneurialism in the family firm (Aronoff & Ward, 1997).

2.2.2 Social Capital Theory

Similar to organisational culture is the theory of social capital. Social capital refers to the totality of resources that are connected to the possession of a strong network of institutionalized relationships of mutual approval (Nahapiet and Ghoshal, 1998). The trust and norms that link these people refer to the relational dimension of social capital. Shared language, systems and interpretation of issues in a particular group deals with the cognitive dimension of social capital. Organisational social capital as it relates to the organisational culture of family firms refers to the resources that epitomises the nature of the social relationships in the firm, which enable firm level coordination. The emotional attachment of owners to the business influences the desire of a family to maintain control and possibly transfer ownership to a future generation. It also influences strategic decisions as only members of the owning family may understand and appreciate their vision towards the firm (Kraiczy, 2013).

2.2.3 Resource-Base View

Habbershon and Williams (1999) describe ‘familiness’ as the bundle of unique resources available to business as a result of the involvement of a
family. The most important of these unique resources is the survivability capital. The survivability capital refers to the resources that the family is willing to put together for the success of the business. These resources include time, dedication, emotions, free labour and sacrifices in the form of financial loans to the firm (Sirmon et al, 2003). This becomes the foundation of the desire to control strategic decisions and the direct involvement in the routines of the firm, to the displeasure of agents or non-family employees.

2.2.4 Agency Theory

The theory of agency primarily examines the relationship between a principal and an agent. The principal-agent problem occurs when one party attempts to motivate another to act on his behalf. This is typical of an employer – employee relationship where the employee is the agent while the employer remains the principal. The agent normally has more information than the principle about any activity to be carried out. The parties may also share the same interests while they differ on the information shared. An ethical problem arises only where the two share divergent interests. Assumptions about self-interest and rationality, as well as information asymmetry remain critical to this kind of relationship (Husted, 2007).

Family business owners or founders envisage goal conflict and sometimes opportunism on the part of the agent, and for that matter non-family employee. They seek to align these differing interests with their personal involvement in the routines of the firm. This affords them the opportunity to monitor and ensure that decisions reflect their own interests and family values (Shapiro, 2005). Apart from the institutional structures, agency theory also explains the strategic behaviour of firms (Hill et al, 1992).

2.2.5 Professionalization

It is largely acknowledged that the most appropriate course of action for any business is to professionalize its management. Professionals introduce objectivity and rationality into the environment of emotional milieu. This is
an alternative to nepotism and conflict ridden family firms (Dyer, 1986). This has established a notion that equates family members to non-professional managers and thereby calling for their replacement with professionals in order for the firms to grow and prosper in a fast changing world economy. It has also created the impression that equates professionalization to bringing in outsiders and non-family members (Hall et al, 2008).

Hall et al (2008) argues that professional family business management rests on two competencies, namely formal and cultural, where only the former is explicitly recognized in family business literature. Weber’s notion of bureaucratic organization is essential to understanding professional management. A bureaucratic organization is characterized by efficient, modern and rational approaches of organizing economic undertakings. This is based on objective rules, norms and rational decision-making. Authority is often based on the manager’s technical qualification instead of personal characteristics and ownership rights Weber, 1968).

In the decision-making arena, four primary differences have been identified between professional managers and founders or family owners. These are 1) motivation and emotional orientation, 2) analytical orientation, 3) interpersonal orientation, and 4) structural or positional issues (Schein, 1983; 1995). It is however important to note that the problem with professional management is that it undermines the social and cultural contextual particularities that is crucial to the workings of family firms (Hall et al, 2008).

Contrary to paternalistic management culture where control and power is concentrated within the dominant family, especially founder controlled firms, there is a growing trend where descendant managed family firms who face different challenges tend to involve professional hands and know-how that are usually non-family members. In some instances, these have led to the predominance of non-family members in top management of family firms (Huybrechts, 2013; Dumas 1998; Lussier et al, 2004).
2.2.6 Succession

It is argued that succession in family firms tends to favour relationship-based arrangements. This intra-family cum generational transfer is executed by the founder to preserve the family character, culture, knowledge of the firm and control in the business (Dyer, 1998; Bjuggren and Sund, 2001). There are also situations of competitive successions where descendants seek to demonstrate their preparedness and competence to gain strategic leadership roles in the family firm (Gupta et al, 2012). Meanwhile, there are instances where responsibility is transferred to external or professional managers. It is important to note that non-family firms use more professional and task based approaches of succession planning (Lussier et al, 2004).

Some times conflict can arise during succession in a family firm. Dumas (1998) explains that, there are some non-family employees who perceive themselves as the ‘right hand man’ of the founder, with the hope that they will take over the management of the firm when the founder is due to retire. These hither to ‘right hand’ men become disgruntled and frustrated when they are not favoured during the succession. An intense rivalry may arise which eventually leads to the exit of such a person from the firm.

2.3 Characteristics of Family Firms

Lussier et al (2004) simplifies the overarching characteristics and styles of present day family firms. These include, among others:

2.3.1 Disagreement and Conflict about Managerial Decisions

Kellermanns et al (2008) state that the entrepreneurial behaviour of a firm can be influenced by the degree of family influence in the firm, as indicated by the number of generations involved in the business. Although the founders of family firms often base their firms on innovative ideas, over time they may lose their entrepreneurial edge (Corbetta, 1995; Salvato, 2004). The involvement of subsequent generations increases the firm’s chances to
identify and pursue entrepreneurial opportunities. It has been argued that the involvement of family members in a business often leads to good performance, especially when family employees hold the positions of CEO, directors and other top management ranks (Chu, 2009). It is the convergence of these people and external managers or non-family employees that leads to disagreements.

Family business literature has emphasised the issue of conflict and disagreement in family firms. This mostly occurs either between owners (founder or descendants) and non-family managers about the strategic focus of the firm (Dumas, 1998). This characteristic of family firms has received some significant attention in research. Disagreements may arise about issues of compensation of non-family top management (Palmberg, 2009). Succession related issues could also be a fundamental source of conflicts and disagreements (Bjuggren and Sund, 2001).

2.3.2 Authority Over Decision Making

Decision-making is a crucial process in any business undertaking. The authority for decision-making in founder family firms is more centralised than it is for subsequent generations. A first-generation founder often tends to have a specific ambition and focus for the business and is passionate to execute that vision for personal fulfilment (Dyer, 1998). The theory of agency is also used to justify why owners of family businesses want to reserve all decision-making powers and influence to themselves (Husted, 2007). It is observed that owners of investments are better placed to make the best efficient and optimal decisions than any hired person will do (Eklund et al, 2007)

2.3.3 Female Family Members Working in the Family Firm

Until recently, it was unusual to have women (wives or daughters) of founders rising to senior positions in family firms especially in traditionally male dominated industries (Sonfield et al, 2009; Dumas, 1998). This is due to the shift in organizational cultures of family firms, especially more
protestant societies of the West, where power is distributed more equally and professionalism is encouraged (Dumas, 1998). Contrary to this, in other jurisdictions where women have less power, they are biased against and do not play active roles in family firms, but are rather represented by husbands, brothers or in-laws (Gupta et al, 2012; Haberman et al, 2007, Vera et al, 2005).

2.4 Demographic Typification of Family Firms

Westhead et al (2002) identified four fundamental characteristics of family firms as compared to non-family firms:

2.4.1 The age of the business: It is argued that family firms are more likely to be older or to have been established much longer than non-family businesses (Westhead et al, 2002).

2.4.2 The size of the firm: Generally family firms are preponderant among small employment size groups of firms. This observation has been reinforced by evidence from Europe (Donckels & Fröhlich (1991) and Daily and Dollinger (1993).

2.4.3 Industrial activity of the firm: some new family firms have the tendency to be engaged in manufacturing and the service sectors. Family firms are not vigorously present in the banking and finance sectors (Brunk et al, 2008).

2.4.4 The location of the firm: Family firms are mostly associated with rural areas (Brunk et al, 2008).

2.5 The Spin-off Processes

Spin-offs are commonly referred to as firms founded by employees of incumbent firms (Klepper and Thompson, 2010) Spin-offs may also include the transfer of the right to physical assets and intellectual property from an employer to a new firm or entrepreneur (Wallin et al, 2007).

Some spin-offs are created out of the venturing activities of an established firm (Wallin et al, 2007). Here the parent firm is effectively involved in the creation of the new organisation. These are also referred to

Klepper et al (2010) observed that disagreements among members of a management team on the strategic direction of a firm could cause some individuals to leave such a firm to pursue their ideas. This happens when less influential people in a firm generate ideas that are not recognised by those who hold much influence in decision making.

The probability of firms that have experienced a change in management, especially a CEO to create spin-offs is higher. The argument is that new CEO or leadership may change the strategic focus or target of the enterprise and bring about a reorganisation that reduces the decision making influence of incumbent leadership. This is more pronounced when the new manager or CEO is from another industry.

2.6 Disagreements and Spin-offs

Klepper and Thompson (2010) developed a theory to explain the role disagreement plays in spin-off formation. According to this, three streams of theories account for spin-offs. 1) When an employee discovers something by chance which is of economic value and he chooses to exploit it independently. 2) A discovery may be common knowledge in a firm but less valuable to attract the attention of incumbent firms. And 3) Employees undergo a kind of training with employers about how to compete profitably in a particular industry. This knowledge is then exploited by setting up a new firm.

Three elements in the model that are particularly useful to this thesis are 1) Acquisitions, CEO changes, and the probability of a spinoff. When a firm is acquired by another from a different industry, it leads to reorganisations and change in target with its accompanying issues that may lead to spin-offs 2) Firm quality and the probability of a spinoff. Here firms that perform well are expected to spawn-off more firms over the period of its existence. 3) Parent quality and spin-off quality: It is argued that better performing parent firms normally will spin-off better performing firms where performance is measured over the life span of the parent firm (Klepper and
Contrary to the notion that employee spin-offs are always motivated to implement novel ideas, evidence shows that most spin-offs continue to implement old ideas that parent firms intended to discard. Sometimes disagreements about the value of technologies emerge among employees, which often lead to two typologies of spin-offs occur 1) where an employee is convinced that it is worth adopting a new technology but the firm disagrees. 2) Where an employee is not in agreement with a decision of the firm to adopt a new technology and is willing to invest in order to continue with the technology (Thompson et al, 2011). The thesis focuses on disagreements as the engine of spin-offs as depicted in the theoretical framework.

2.7 Theoretical and Analytical Framework

Following the theoretical background, an analytical model is proposed upon which the analysis in this thesis is anchored. The core elements in the analytical model include: Organisational culture; social capital; resource-base view; agency issues; professionalization of family firms and succession as seen in figure 2.1. The subsequent parts of the section show how these core elements bring about disagreement about the strategic choices of family firms, and how that encourages employees to transition to self-employment.

Family firms are plagued most of the times with disagreements and conflicts between owner managers and non-family employees about the strategic direction of the business (Vera, et al, 2005; Eklund et al, 2007) For instance while growth is a major ambition of most firms, survival tends to be the ambition of family firms (Daily and Dolinger, 1993). Families have emotional attachments to firms. In most cases, members would have invested a large part of their time and wealth in the company. Sometimes personal needs are put ahead of organisational goals. Therefore, it is the general wish that the business remains in the family or is handed over to the next generation. Long-term survival as a goal is superior to expansion and growth (Brunk et al, 2008).
The long-term horizon of family firms therefore makes investments and innovative ideas that are geared towards growth and yet risky and uncertain less attractive to owners of family firms (Brunk et al, 2008). This breeds disagreement between owners and employees and for that matter, discoverers of such innovative ideas, over the strategic direction of the firm. This could be about the adoption or otherwise of a technology. These employees eventually become frustrated and exit to experiment their ideas (Klepper et al, 2010; Thompson et al, 2011).

Again the alignment of the agency problem of differing interests necessitates the involvement of the owners in the routine decision-making of the firm (Husted, 2007; Shapiro, 2005; Zahra, 2005, Schulze et al, 2001). Decision making authority is centralised in owner managed family firms and

Figure 2.1: Theoretical and Analytical Framework
makes it difficult for non-family employees to influence critical and strategic decisions of the firm (Lussier et al, 2004). The frustration leads to the exit of employees, who experiment their ideas in the market through setting at their own enterprises (Zahra, 2005).

The main argument for the hypothesis one is that the agency problems in family firms encourages direct involvement of family members, which undermines the discretion of non-family employees who then quit to establish their own firms (Husted, 2007; Zahra, 2005).

**Hypothesis 1: Employees of family firms are more likely to choose self-employment.**

Where family members are involved in a company as employees, non-family employees may feel sidelined in key decisions (Sund et al, 2007). This may also be as a result of rivalry between family members and high-ranking non-family employees or external managers (Vera et al, 2005). The organisational culture may be such that family employees of similar ranks and employment category especially those at higher levels of management have more influence and discretion in the routines of the firm by virtue of their membership of the owning family (Alvesson, 1993; Dyer, 1994; Hall et al, 2001).

According to the resource-base view, ‘familiness’ is an important resource that enhances the survivability capital, which in turn gives family members more authority and discretion. The presence of trust and shared vision by members of the family also adds to the authority and discretion of family members as compared to non-family employees.

Non-family employees who want their ideas to be recognised may have to get the approval of a member of the family. The unwillingness of the firm to accept ideas from non-family employees undermines professionalism of external managers (Hall et al, 2008). It also erodes entrepreneurialism in the firm and among employees as well (Aronoff and Ward, 1997). Employees who are unable to accommodate such an organisation culture and rivalry leave the firm to establish and run their own companies (Dumas, 1998).
**Hypothesis 2: Employees of family firms in higher employment categories are more likely to become self-employed.**

Most performing spin-offs are those created by employees in the same industry as the parent firm (Klepper, 2009). These are called intra-industry spin-offs. While some employees spin-off to satisfy career aspirations, others do because of a failure on the part of an employer (Iturriaga et al., 2008). Some spin-offs are voluntary creations of parent firms (Wallin et al., 2007), and then some borne out of an employee’s desire to be his own boss (Klepper, 2009).

From a resource base view, it is argued that corporate spin-offs occur mainly 1) to create complementarities, 2) to focus on a firm’s core business and 3) to appropriate rents (Sahaym, 2013).

Meanwhile, spin-offs that venture into industries different from that of parent firms have to deal with some difficult choices in its continuous affiliation with the parent firm. A continuous affiliation with the parent firm such as operating in the same industry provides legitimacy of its ability to succeed in the industry. Yet the continued affiliation hinders it from carving its own identity in a new endeavour (Sahaym, 2013).

Andersson and Klepper (2013) argued that an employee’s work experience is more valuable if he or she establishes a firm in the same industry of the parent firm. Also spin-offs of larger performing firms in the same industry are predisposed to perform.

**Hypothesis 3: Spin-offs of family firms are established in the same industry as their parent firms.**

Bjuggren and Sund (2001) looking at intergenerational successions of small and Medium size family firms, observed some important alternatives. 1) Selling the firm to an outsider, 2) interfamily successions. Other options are transferring ownership through a gift of shares or will. Interfamily successions are the most preferred path for most family firms (Westhead et al., 2002).
As posited earlier, a change in leadership of a firm and the disagreements that may arise due to such changes and reorganisations are seedbeds for spin-offs (Klepper and Thompson, 2010). In the context of family firms, succession from one generation to the other is a fertile ground for major changes in the strategic direction of inherited firms. Especially so when the owners have previously been in different industries and therefore exposed to different ways of organising (Klepper and Thompson, 2010). This reorganisation may not go down well with other equally important top managers who have been in the company for a considerably longer period of time. Yet they may not have the authority to resist the restructuring. These changes come with reallocation of resources and influence that may leave some hitherto influential managers with less authority and discretion (Sund et al, 2010; Dyer, 1994).

Family members do not always make good employees in family firms. Some are often incompetent given the responsibilities at stake (Carsrud and Brännback, 2011). Hall et al (2008) also noted that in a situation where meritocracy and professionalism are relegated to the backburner, and familiarity and family relationship or nepotism is rewarded in a firm that is controlled by a family, those who feel unfairly treated for having been overlooked in promotion to leadership positions, sometimes resist by resigning their positions. These employees set up firms in similar industries and compete with their former employers (Lussier et al, 2004).

Sometimes poorly planned succession also leads to deep problems within the owning families. Other children of the founder may be displeased by the manner in which the succession has been conducted. This has the tendency to affect the routines of the firm. Some may choose to exit the family and to found their own firms (Bjuggren and Sund, 2001; Bjuggren et al, 2005; Lussier et al, 2004).

The main argument is that where there is a transfer of ownership or management responsibility to family members, non-family employees who considered themselves confidants of the founder before the transfer of ownership who feel they deserved a promotion but has been sidelined may leave the firm (Wang, 2010). It applies to family employees who may not be
pleased with the succession plan (Bjuggreen and Sund, 2001). They leave the firm to establish their own companies. The change in management due to the transfer also leads to reorganisation thus leading to spin-offs (Klepper, et al, 2010).

**Hypothesis 4: Non-family employees are more likely to spin-off when there is an intergenerational succession in a family firm.**
Chapter Three: Methodology

3.1 Collection of Data

The individual level data set used in this study is from Statistics Sweden, which is the state institution in charge of collecting and managing national statistical data. This is a comprehensive data in which all firms or establishments in Sweden are captured in different data sets. The location of firms as well as individual employees is captured. Apart from the individual data of all persons in Sweden, the total number of employees in the country, industrial classification according to the European Community, and the International Labour Organisation (ILO) employment classifications are also covered in this database. The demographic data of individuals such as gender, wage income, education, professional status, civil status, place of residence and birth are all available. Also available are balance sheet information of firms such as remuneration, turnover value added and sales. The data also identify MNEs.

It is important to note that field data collection was not employed in this study. The study therefore relied on the available data at Statistics Sweden. No interviews were conducted, neither were any questionnaires were administered.

Since most of the variables required for the analysis were not in the data, the available data were used to generate the needed variables using the Stata software package. Section 3.2.3 shows how the variables were generated. Table 3.1 also explains the variables in detail.

3.2 Measures

3.2.1 The Basic Empirical Model

\[
\text{Spinoffs} = \beta_0 + \beta_1 \text{FamilyBusiness} + \beta_2 \text{SpinIndustry08} + \beta_3 \text{Employment1} + \beta_4 \text{Employment2} + \beta_5 \text{Employment3} + \beta_6 \text{Employment4} + \]

\[ \beta_7 \text{Employment}_5 + \beta_8 \text{Employment}_6 + \beta_9 \text{Employment}_7 + \]
\[ \beta_{10} \text{Employment}_8 + \beta_{11} \text{Education}_1 + \beta_{12} \text{Education}_2 + \]
\[ \beta_{13} \text{Education}_3 + \beta_{14} \text{Education}_4 + \beta_{15} \text{Education}_5 + \]
\[ \beta_{16} \ln(\text{Start-upRate}) + \beta_{17} \ln(\text{WageIncome}) + \beta_{18} \text{Gender} + \]
\[ \beta_{19} \ln(\text{Age}) + \beta_{20} \text{IndustryExp} + \beta_{21} \text{CivilStatus} + \]
\[ \beta_{22} \ln(\text{NetTurnover}) + \beta_{23} \text{MNE} + \beta_{24} \ln(\text{ValueAddedEmp}) + u \]

The description of variables is presented below. Table 3.1 is a tabular presentation of the variables.

**Table 3.1: Variable Descriptions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spin-off</strong></td>
<td>1 if a person was an employee in 2007 and became self-employed in 2008, 0 if a person was already self-employed or not an employee at all.</td>
</tr>
<tr>
<td><strong>FamilyBusiness</strong></td>
<td>1 if a firm is a family firm, 0 if otherwise</td>
</tr>
<tr>
<td><strong>SpinIndustry08</strong></td>
<td>This refers to the spin-off industry in 2008. It is coded 3 if the industrial classification of a spin-off is wholesale and retail, 2 for manufacturing, 1 for all other industrial classification.</td>
</tr>
<tr>
<td><strong>ln(Start-upRate)</strong></td>
<td>Regional start-up rates</td>
</tr>
<tr>
<td><strong>ln(WageIncome)</strong></td>
<td>Wage income</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Gender is coded 1 for males and 0</td>
</tr>
</tbody>
</table>
### Continuation of table 3.1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ln(Age)</strong></td>
<td>Age of employees</td>
</tr>
<tr>
<td><strong>IndustryExp</strong></td>
<td>Industry experience is coded 1 if an employee has 7 or more years of industry experience and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>CivilStatus</strong></td>
<td>1 if married or in a registered partnership and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment1</strong></td>
<td>Employment1 is coded 1 if an employee is in the category of Legislators, senior officials and managers, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment2</strong></td>
<td>Employment2 is coded 1 if an employee is in the category of professional and 0 otherwise.</td>
</tr>
<tr>
<td><strong>Employment3</strong></td>
<td>Employment3 is coded 1 if an employee is in the category of technicians and associate professional, and 0 otherwise.</td>
</tr>
<tr>
<td><strong>Employment4</strong></td>
<td>Employment4 is coded 1 if an employee is in the category of clerks and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment5</strong></td>
<td>Employment5 is coded 1 if an employee is in the category of service workers, shop and market sales workers, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment6</strong></td>
<td>Employment6 is coded if an employee is in the category of skilled agricultural and fishery workers and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment7</strong></td>
<td>Employment7 is coded 1 if an employee is in the category of craft and related trades workers, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment8</strong></td>
<td>Employment8 is coded 1 if an employee is in the category of plant and machine operators, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Employment9</strong></td>
<td>Employment9 is coded 1 if an employee is in the category of elementary occupations.</td>
</tr>
<tr>
<td><strong>Education1</strong></td>
<td>Education1 is coded 1 if educational level of an employee is pre-high school shorter than 9 years, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Education2</strong></td>
<td>Education2 is coded 1 if educational level of an employee is pre-high education of 9 years or equivalent, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Education3</strong></td>
<td>Education3 is coded 1 if educational level of an employee is high school, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Education4</strong></td>
<td>Education4 is coded 1 if educational level of an employee is post-high school education shorter than 2 years, and 0 if otherwise.</td>
</tr>
<tr>
<td><strong>Education5</strong></td>
<td>Education5 is coded 1 if educational level of an employee is post-high school education longer than 2 years.</td>
</tr>
</tbody>
</table>
### 3.2.2 Dependent Variable

The dependent variable is spinoffs. This refers to employees of firms in 2007 who became self-employed or entrepreneurs in 2008. The professional code is used to determine which entrepreneurs are spin-offs or otherwise. All self-employed and business owners in 2008 are identified and traced back to 2007 to identify those who previously were employees and became self-employed in 2008. Thus, all employees of firms in 2007 who eventually become self-employed in 2008 are classified as spin-offs and coded 1 and 0 if otherwise.

### 3.2.3 Independent Variables

The independent variables are 1) the family business variable, which is the main explanatory variable 2) occupational or employment categories and 3) spin-off industry.

The main explanatory variable is the family business. This represents whether a firm is a family firm or not. The anonymous nature of the data posed a challenge on identifying family run businesses. To overcome this the demographic characteristics of family firms are used as proxies to determine the family firms for the purpose of analysis. Researchers have used the

---

<table>
<thead>
<tr>
<th>Education6</th>
<th>Education6 is coded 1 if educational level of an employee is PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNE</td>
<td>1 if a firm is multinational, and 0 if otherwise.</td>
</tr>
<tr>
<td>Ln(NetTurnover)</td>
<td>Net Turnover denoting firm size of a firm.</td>
</tr>
<tr>
<td>ln(ValueAddedEmp)</td>
<td>Value added per employee</td>
</tr>
<tr>
<td>u</td>
<td>Error term</td>
</tr>
<tr>
<td>( \beta_0 )</td>
<td>The intercept or constant</td>
</tr>
</tbody>
</table>

Source: Author’s Construction
demographic characteristics of family firms as the basis for identifying family run firms. Westhead et al, (2002) has argued that for a firm to be considered as a family firm it must meet at least two of the following conditions: 1) A Firm should be engaged in manufacturing and wholesale and retail. 2) It should be located in a rural area. 3) It should be a small and medium enterprise (SME) and 4) It should be an old firm or likely to have been established a long time ago. Emling also uses these demographic characteristics as the basis for identifying family run firms in Sweden (Westhead et al, 2002; Emling, 2000).

Daily and Dollinger (1993) also used the age and size of firms as the basis for a quantitative identification of family firms. With the data available, it is not possible to determine the age of the firms. So this fourth characteristic is omitted.

A firm is coded 1 if its operating industry is in manufacturing, wholesale and retail and 0 if otherwise. A firm is coded 1 if located in a less urban or rural area and 0 if otherwise. The regions of Stockholm, Gothenburg and Skåne are classified as more urban in relation to other regions and municipalities. Andersson and Koster (2011) refer to these three regions as Sweden’s major urban areas. To determine the size of firms, a firm is again coded 1 if it has less than 250 employees and 0 if otherwise. The European Union defines an SME as one with less than 250 employees (Schmiemann, 2008). The sum of these variables is ascertained, and then used to further determine the family firm binary variable. A firm is then coded 1 if the sum of the three variables equals 3 and 0 if otherwise.

The employment categorical variable is determined by using the ILO occupational four digit level classification. Dummy variables are created for all 9 occupational categories. For instance with regard to category 1, a variable is coded 1 if an employee is in the category of Legislators, senior officials and managers, 0 is assigned if otherwise. For Category 2, 1 is assigned if employees are professionals and 0 otherwise. Technicians and associate professionals are assigned 1 and 0 otherwise, for the third category. A variable is coded 1 if the employee is in the category of clerks
and 0 otherwise for the fourth category. For category 5, employees are assigned 1 for service workers and 0 otherwise. Skilled agricultural workers are assigned 1 and 0 otherwise, for the sixth category. For the seventh category, 1 is assigned to a variable for craft and related trade workers and 0 otherwise. Plant and machine operators are assigned 1 and 0 otherwise, for category 8. Finally, category 9 is coded as 1 if employees are in elementary occupation and 0 otherwise. Conventionally this would have been a categorical variable. I created dummies for all categories to enable us to ascertain the accurate effect of occupation on the likelihood of spin-offs (Agresti, 2002). These dummy variables are thus labelled as employment1, employment2 etc. as described in table 3.1.

The spin-off industry represents the preferred industries in which spin-offs operate. This is determined by using the industrial classification of firms in 2008, which is the year of spin-offs. The industry is coded 3 if it is wholesale and retail, 2 if it is manufacturing, and 1 for all other industrial classifications. Our sample covers firms in manufacturing and wholesale and retail sectors of the economy. This categorization is done to enable us to ascertain if entrepreneurs remain in the same industry as their parent firms or they move on to different industries.

3.2.4 Control Variables
Entrepreneurship literature recognizes that people who go into self-employment are not just randomly selected. Certain characteristics are peculiar to this category of people who exploit entrepreneurial opportunities (Shane, 2003).

Davidsson and Honig (2003) broadly classifies them as human and social capital. The human capital includes the following variables: years of education, years of experience as manager, years of work experience and previous start-up experience. The social capital includes parents in business, being married, encouragement by friends or family and close friends or neighbours in business.
Shane (2003) categorizes the characteristics that motivate self-employment into psychological and non-psychological factors. The following factors constitute the non-psychological individual characteristics: The first two have to do with the opportunity cost of not going for self-employment. 1) Low income earners have the tendency to go for self-employment than high-income earners. 2) People not in employment are less likely to want to exploit opportunities through self-employment than the employed. 3) Education increases the knowledge and skills of a person needed to identify and exploit opportunities. 4) Career experience: This includes general business experience, functional experience, industry experience, start-up experience and vicarious learning. 5) Age: unlike education and experience age has a curvilinear relationship with self-employment. Just as experience increases the likelihood of self-employment with increases in age, so do the negative effects of uncertainty and the opportunity cost of opportunities. 6) Social status and ties: This is also referred to as social capital. It is against the background that a person’s status in society could persuade others to believe in his opportunities when he or she discovers them. Social ties increase access to resources and information that are needed to exploit an opportunity. 7) Being married or a spouse: Having a working spouse shields one from the uncertainty of loss of income due to self-employment (Shane, 2003).

The psychological factors that influence self-employment include 1) core self-evaluation: Internal locus of control and self-efficacy increases the likelihood of self-employment. 2) Cognitive properties: Overconfidence, intuition and representativeness increases an individual’s chances of self-employment 3) aspects of personality and motives: while extraversion increase chances of self-employment; agreeableness reduces the chances of opportunity exploitation (Shane, 2003).

This thesis is unable to measure the psychological factors. The control variables are therefore as follows 1) Level of income 2) education 3) industry experience 4) Age 5) Social capital and 6) gender (Davidsson and Honig, 2003; Shane, 2003).
The level of income of an employee is measured as the wage income of employees in the year under consideration.

Education is measured using the International Standard Classification of Education (ISCED). The original data set indicates the level of education, according to the ISCED. The levels of education are further grouped into six categories, namely: 1) Pre-high school education shorter than 9 years. 2) Pre-high school education of 9 years or equivalent. 3) High school education. 4) Post-high school education shorter than 2 years. 5) Post-high school education longer than 2 years and 6) PhD education. Six different dummy variables are created for all levels of education. This is also to enable us ascertain the accurate effect of education on spin-offs (Agresti, 2002).

Industry experience is measured by the number of years an employee has worked within the industry. In determining this, I went back in time and compared the employees in 2007 that went into self-employment in 2008 to the list of employees in 2000. Those I found are coded having up to 7 years of industry experience thus given the coded 1. Those that could not be found in the 2000 data set, but are present in the 2007 data are said to have less than 7 years experience and thus coded 0.

Age as presented in the original data set is calculated using the personal numbers of people. Age has a curvilinear relationship with self-employment (Shane, 2003). Observing from the data, the minimum age of the self-employed is 16 while 84 is the maximum (refer to table 4.1).

Social capital provides information about entrepreneurial opportunities and sources of resources (Saxenian, 1994). The entrepreneurial culture in an area is also an important factor that influences the level of entrepreneurialism in people. A region with a high start-up rate is more likely to generate more entrepreneurs over time due to the persistent effect of culture over time. Also the social acceptance of entrepreneurship as a way of life may go a long way to influence people into self-employment within any locality or region (Andersson and Koster, 2011). I thus present regional start-up rates as a measure of social capital. This may include parents in business, encouragement from friends or family and neighbours in business that have a tendency to influence the decision to engage in self-employment.
as well as the availability of resources (Davidsson and Honig, 2003). The
regional start-up rate variable has been determined using the population
data of Sweden and a data set of new enterprises provided by Statistics
Sweden. These new firms are normalised by the population range 16-64
years of age to arrive at the regional start-up rate.

The civil status as to whether a person is married or not. All married
people and those cohabiting are coded 1 and 0 otherwise. This is against the
background that being married, especially to a working spouse is a form of
support mechanism to engage in self-employment since there is a
guaranteed income for the family. It also shields one against uncertainty
and the loss of income (Shane, 2003; Davidsson and Honig, 2003).

With regard to gender, an employee is coded 1 if he is a male and 0 if
otherwise. There are other control variables which include 1) the net
turnover of firms, which is used to measure the size of firms. 2) Value added
per employee, and 3) whether a firm is a multinational or not.

3.3 Methods

A logistic regression is the model employed for this analysis using the Stata
statistical software package. This model is chosen because the dependable
variable is binary or categorical (Agresti, 2002). Alternatively, probit
regression model could be used. However, the choice between logistic
regression model and probit regression is not very much on theoretical and
interpretative grounds. It is a matter of preference. Also, logistic regression
models tend to reach convergence quite well as compared to probit
regression models (Park, 2010).

An alternative model is the ordinary least squares (OLS). However, this
model applies only under circumstances where the dependable variable is
continuous and not binary or categorical (Agresti, 2002). OLS is not capable
of producing unbiased estimates when the dependent variable is binary
(Park, 2010).

The results are also reported in average marginal effects. Marginal effects
provide remarkably accurate approximations of the change in the dependent
variable that is as a result of a unit change in the independent variable. Marginal effects for binary variables are also easy to comprehend (Williams, 2012). Alternatively, the results could be reported in marginal effects at means. The limitation is that the marginal effects at means are less accurate as compared to average marginal effects (Williams, 2012).

The regression results could also be reported in either odd ratios or coefficients instead of the marginal effects. However, for ease and approximate interpretations of binary and categorical variables, marginal effects tend to be handy (Williams, 2012; Park, 2012).

3.4 Analysis and Presentation

The hypotheses are tested and the necessary interpretations and conclusion drawn. The analysis is conducted and compared to prior studies. The thesis makes use of statistical tools such as descriptive tools and tables for the purpose of analysis and clarity of presentation (O’Leary, 2010).

3.5 Methodological Limitations

The absence of data to measure the age of firms as part of the proxies needed to identify family firms may exclude firms that otherwise would have been identified as family firms. The other variables include location, industry and size (Westhead et al, 2002) However, the absence of one of these demographic characteristics does not invalidate the others since I was only looking for a sum of the four variables totalling not less than 3 to be deemed a family firm. I took a cue from Westhead et al, (2002) who argued that 2 or more of the defining characteristics of family firms should be considered in reaching a conclusion whether a firm is family owned on not. The number of firms identified as family firms could have been more if the age of firms were present.

The approach adopted to identify family run firms also has the potential to exclude firms that are family firms, but do not posses the characteristics used and the vice versa. Notable among them is IKEA, which is one of the obvious family firms, but not included in our sample due to its size. This
however, does not undermine the validity of our results considering that a large sample of firms is included which makes up for a sufficient representation of family firms.

Hypothesis 4 was to measure how successions in family firms lead to spin-offs. Unfortunately, I was unable to measure succession with the available data thus leaving out an aspect that could have added rigour to the study. Undoubtedly this would have added a new understanding of the phenomena of spin-offs in family firms.

3.6 Delimitations

The unit of analysis of this thesis is all persons in Sweden who in 2007 were classified as employees or owners of firms in Sweden. The number of firms identified as family firms and by extension employees of those firms could vary depending on the definition used in any particular study (Daily and Dollinger, 1993; Westhead et al, 2002). The definition adopted could focus on either the structural (ownership) or process (level of involvement) element of family firms (Westhead et al, 2002). It is found that using the widest definition of family firms to include both the process and structural elements on sample of firms, resulted in 81% of them being family firms. When a narrow definition was adopted that is focusing one element, the number reduced to 15% (Westhead et al, 2002). The composition of family firms in Sweden too could vary depending on the definition used.

This thesis used a demographic approach adopted from Westhead et al, 2002 as well as Daily and Dollinger (1993). This approach to identifying family firms has been applied by the aforementioned researchers and has proven to be robust. However, this limits the scope of family firms as identified in this thesis to firms in wholesale and retail, manufacturing, firms located in rural areas and SMEs. This excludes firms in the financial; hotel and restaurant sectors just to mention a few from being classified as family firms. It also excludes their employees from being counted as family firm employees. Notwithstanding, they are still included in the sample. This does not undermine the credibility of the study considering that both
empirically and theoretically, family firms are said to be preponderant within the limits of the approach (Brunk et al, 2008). This means that a large number of the firms in the sample are family firms, which is sufficiently representative.

### 3.7 Validity

Construct validity is an issue that could potentially undermine the findings. Construct validity looks out for consensus between concepts and measurement procedures adopted in a study. This ensures that the right measures are obtained when theories are operationalized (Ghauri et al, 2010). To this end, it has been ensured that, the theoretical background from which the hypotheses have been deduced, are reliably related to the measures and data used for the analysis (Bryman et al, 2011; O’ Leary, 2010). The measurement of family firms, spin-offs and all the other variables is in consonance with the conceptual and theoretical exposition as well as established standards as covered in this thesis. I applied tried and tested measures in the measurement of the variables. Specifically measures used in similar studies have been adapted to suit the purpose of this thesis (See Daily and Dollinger, 1993).

### 3.7 Reliability

The consistency with which a procedure or measure gives the same result at repeated tests. This looks at the overall internal consistency of measures in a study (O’ Leary, 2010). The Control variables are therefore introduced to ensure that the results of the study are not spurious or by fluke. Control variables, thus increase the reliability of a study by ensuring that causal effects are rejected. This ensures that the results are robust and also make it possible for other researchers to repeat the test and still achieve similar results (O’ Leary, 2010). As reflected in the empirical model, the following are the controlled variables used in the study: Wage income, education1, education2, education3, education4 education5, industry experience, Age, Social capital (regional start-up rate), gender, civil status, MNE, net turnover
and value added per employee. Refer to table 3.1 for detail explanation of the variables.
Chapter Four: Results

From the data set for 2008 that contains data of all individuals in Sweden, all self-employed people are identified by their professional codes. I traced them back to the 2007 data set to identify those who in 2007 were employees or owners of firms. This is done using their professional codes. This leaves me with a total of 4741782 observations. I also identified all self-employed people in 2008. Those that worked as employees of other firms in 2007 and became self-employed in 2008 are classified as spin-offs (Also explained in section 3.2.2). This is then merged with the balance sheet data to include firm level variables such as net turnover and value added. Value added is used to further determine value added per employee. The ownership data set is also merge with the main data set to determine the MNE status of firms.

I used the natural log of wage income, age, regional start up rates net turnover and value added per employee to allow for approximate interpretation (Andrew et al, 2007).

A perusal of the descriptive statistics shows that some variables have reported observations less than 4741782. This is as a result of missing values in the respective variables. For instance, the FamilyBusiness reports 3775105 while MNE is 2997586. ln(Net Turnover) is 2373418 while ln(ValueAddedEmp) is 1844325. The stata software by default deletes observations with missing values using a listwise approach. Only observations without missing values are retained for the analysis.

The individual variables had a VIF below 10. This means that multicollinearity is rather mild and may not bias the regression estimates. This approach is adopted because, Nachtsheim et al, (2004) proposes 10 as a rule of the thumb cut-off point beyond which the need arises to check for multicollinearity issues. Table 4.1 describes the measures and all variables.
Table 4.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spin-off</td>
<td>4741782</td>
<td>0.01</td>
<td>0.12</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>FamilyBusiness</td>
<td>3775105</td>
<td>0.11</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>SpinIndustry08</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Gender</td>
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<td>0.50</td>
<td>0.50</td>
<td>0</td>
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</tr>
<tr>
<td>ln(WageIncome)</td>
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<td>7.24</td>
<td>1.39</td>
<td>0</td>
<td>12.53</td>
</tr>
<tr>
<td>ln(Age)</td>
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<td>3.64</td>
<td>0.39</td>
<td>2.77</td>
<td>4.64</td>
</tr>
<tr>
<td>ln(Startup rate)</td>
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<td>4.58</td>
<td>0.22</td>
<td>4.26</td>
<td>4.92</td>
</tr>
<tr>
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</tr>
<tr>
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<tr>
<td>Employment3</td>
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</tr>
<tr>
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<td>1</td>
</tr>
<tr>
<td>Employment5</td>
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<td>1</td>
</tr>
<tr>
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</tr>
<tr>
<td>Employment7</td>
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</tr>
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<td>0.01</td>
<td>0.12</td>
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</tr>
<tr>
<td>Employment9</td>
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<td>0.17</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
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<td>1</td>
</tr>
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</tr>
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</tr>
<tr>
<td>MNE</td>
<td>2997586</td>
<td>0.44</td>
<td>0.50</td>
<td>0</td>
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</tr>
<tr>
<td>ln(Net Turnover)</td>
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<td>19.04</td>
<td>2.83</td>
<td>0</td>
<td>25.40</td>
</tr>
<tr>
<td>ln(ValueAddedEmp)</td>
<td>1844325</td>
<td>17.20</td>
<td>2.312</td>
<td>3.58</td>
<td>24.04</td>
</tr>
</tbody>
</table>

Source: Author's Construction
Obs, S.D, Min and Max in table 4.1 stand for observation, standard deviation, minimum and maximum respectively. Refer to table 3.1 for description of variables.

### 4.1 Fitness of the Model

Table 4.2 shows a Pearson chi2 of 1241203.54 and a P-value of 0.0000. This means that indeed there is an association between family firms, which is the main independent variable, and spin-offs.

**Table 4.2: Logistic model for spin-offs, goodness-of-fit test**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of observations</td>
<td>1202088</td>
</tr>
<tr>
<td>Number of covariate patterns</td>
<td>1201827</td>
</tr>
<tr>
<td>Pearson chi2 (1201801)</td>
<td>1241203.54</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Author’s construction

The P-value of the logit regression model is 0.000 as captured in table 4.3. This means that, overall, the logit regression model is statistically significant and explains the process by which entrepreneurs emerge from family firms. The model indicates that 99% of the model is correctly classified.

### 4.2 Average Marginal Effects

Table 4.3 presents the empirical estimates of average marginal effects.

**Table 4.3: Average Marginal Effects**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Marginal Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>FamilyBusiness</td>
<td>0.0087</td>
</tr>
<tr>
<td>(0.000)</td>
<td></td>
</tr>
<tr>
<td>SpinIndustry08</td>
<td>-0.0132</td>
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</tbody>
</table>
Continuation of table 4.3

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>-0.0166</td>
<td>(0.000)</td>
</tr>
<tr>
<td>IndustryExp</td>
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<td>(0.000)</td>
</tr>
<tr>
<td>CivilStatus</td>
<td>0.0026</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Gender</td>
<td>0.0080</td>
<td>(0.000)</td>
</tr>
<tr>
<td>ln(WageIncome)</td>
<td>-0.0051</td>
<td>(0.000)</td>
</tr>
<tr>
<td>ln(Age)</td>
<td>0.0077</td>
<td>(0.000)</td>
</tr>
<tr>
<td>ln(Startup rate)</td>
<td>0.0087</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment1</td>
<td>-0.0045</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 2</td>
<td>-0.0041</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 3</td>
<td>-0.0058</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 4</td>
<td>-0.0046</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 5</td>
<td>0.0069</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 6</td>
<td>-0.0082</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Employment 7</td>
<td>0.0010</td>
<td>(0.200)</td>
</tr>
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<td>Employment 8</td>
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<td>(0.708)</td>
</tr>
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<td>Education1</td>
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<td>(0.000)</td>
</tr>
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<td>Education2</td>
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</table>
## Continuation of table 4.3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education3</td>
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<td>(0.000)</td>
</tr>
<tr>
<td>Education4</td>
<td>-0.0012</td>
<td>(0.247)</td>
</tr>
<tr>
<td>Education5</td>
<td>-0.0010</td>
<td>(0.306)</td>
</tr>
<tr>
<td>MNE</td>
<td>0.0004</td>
<td>(0.082)</td>
</tr>
<tr>
<td>ln(Net Turnover)</td>
<td>0.0000</td>
<td>(0.906)</td>
</tr>
<tr>
<td>ln(ValueAddedEmp)</td>
<td>-0.0025</td>
<td>(0.000)</td>
</tr>
</tbody>
</table>

\[ N = 1202088 \]

\[ \text{LR chi2} \]

\[ (25) = 13738.15 \]

\[ \text{Prob > chi2} = 0.0000 \]

\[ \text{Pseudo R2} = 0.0938 \]

Source: Author’s Construction.

N is the number of observations; LR chi2 (25) is the likelihood ration chi square test. The number in the brackets is the degrees of freedom. Prob > chi2 is the probability of securing the chi2 statistic given that the null hypothesis is true. Pseudo R2 estimates the predictive strength of the model.

The variables are defined in table 4.1 and 2. p-values are provided in parentheses below the estimates of marginal effects. Note: Some variables are identified by the stata software as been correlated. This is because dummies are created out of categorical variables as stated in the methodology (Agresti, 2002). The Stata software thus omits Education6 and Employment9 due to collinearity. Refer to table 3.1 for description of variables.
For the main explanatory variable which is ‘family business’, the results suggest that employees of family firms are 0.87% more likely to spin-off as compared to employees of non-family firms.

With regards to the employment category as a determinant of spin-off, the evidence is that service and market sales workers are 0.69% more likely to spin-off, which is statistically significant. Meanwhile, craft and related trade workers are also 0.09% more likely to spin-off. However, this is not statistically significant.

Senior managers, technicians, professionals and associate professionals, clerks, skilled agricultural workers as well as plant and machine operators are 0.44%, 0.41%, 0.58%, 0.45%, 0.82% and 0.03% respectively less likely to spin-off. All are statistically significant except plant and machine operators.

Spin-offs of incumbent firms in manufacturing are 1.32% less likely to establish their new firms in the same industry as compared to those in other industries but manufacturing and wholesale and retail. Similarly, those in Wholesale and retail trade are 1.65% less likely to establish firms in the same industry as parent firms. They are all statistically significant as captured in table 4.3.

With regards to the control variables, it found that for every unit increase in the value added per employee of a firm, employees are 0.25% less likely to spin-off. This is statistically significant. Employees are 0.04% more likely to spin-off if a firm is an MNE. Meanwhile, for every unit increase in net turnover, employees are 0.00% more likely to spin-off. These are not statistically significant. A percentage increase in regional start-up rate is 0.87% more likely to lead employees to spin-off and it is statistically significant.

Last but not least, the results for wage income, gender, civil status, industry experience and gender are all statistically significant. Refer to the table 4.3 for details.
Chapter Five: Analysis

5.1 Family Firms as Seedbeds for Spin-offs

The thesis set out to measure the effect of family run firms on spin-off processes in Sweden. This particular aspect of the study represents the novelty of this thesis. Our main hypothesis is that employees who work in family firms are more likely to spin-off. The evidence suggests that employees of family firms are more likely to go into self-employment by way of establishing or owning firms as compared to employees of non-family firms. Furthermore the average marginal effect suggests that employees of family firms are 0.87% more likely to spin-off as compared to employees of non-family firms as captured in table 4.3. This is positively significant and shows the level of influence of familiness on spin-off process among employees of firms in Sweden.

It is plausible to argue that the organisational culture and agency problems in family firms are responsible for the rate of spin-offs. I have argued that the culture of an organisation as well as the survivability capital serves as a filtering mechanism of new and competing ideas (Kraiczy, 2013; Alvesson, 1993). This culture is the basis of accepting or resisting changes, hence the strategic choices of the organisation (Sharma et al, 1994; Johnsson, 1986; Schoenenberger, 1997). The emotional attachment of owners of family businesses towards the firms tend to be potent thus leading to agency problems (Dyer, 1994). In line with the agency problems, Eklund (2007) also found that owners of investments are better placed to make efficient decisions than others. More to the point, the beliefs and values of the founders and owners of family firms dominate decision-making (Dyer, 1998). The organisational culture and the agency problems that tend to dominate in family firms serves as the basis for disagreement about the strategic direction of the company which ultimately pushes employees to spin-off (Klepper, 2009).
Brunk et al (2008) found that family and personal needs are put ahead of organisational goals such that a long-term survival approach to business is preferred to expansion and growth. Because, the general wish is for the business to remain in the family through succession. This long-term perspective also adds to the argument of conflict about strategic decisions. Growth oriented, but risky investments and innovative ideas are less attractive and proponents of ideas are more likely to experiment them through self-employment.

Klepper and Thompson (2010) in proposing a theory of spin-offs argued that 1) some employees discover ideas and choose to exploit it independently 2) some discoveries are of less value to incumbent firms and can reasonably be to experimented outside the parent firm. In the context of family firms, it is reasonable to argue that innovative ideas of economic value geared towards growth in a risky and uncertain market environment are less likely to attract the attention of the owners. As I have argued earlier due to the long term horizon and desire to transfer ownership to future generations and not to loose the firm to financiers or market failures. This very much explains the predisposition of family firms towards creating more spin-offs (Daily and Dollinger, 1993).

When the firm level and other demographic control variables such as size, value added per employee, MNEs, regional start-up rate gender, age, civil status industry experience and education are introduced and controlled for, the family business variable is still significant.

It is revealing that for every unit increase in the size of a firm in terms of net turnover, employees are 0.00% more likely to spin-off. This however, is positive but not statistically significant and modestly contradicts a number prior finding, including of Hyytinen and Maliranta (2008) and Andersson and Koster (2011), Elfinbein (2008) Sorenson (2007), Andersson and Klepper (2013) and Hvide (2009). While various explanations have been advanced for this outcome, common to them is the idea that small establishments are more likely to spin new entrepreneurs due to the fact that employees of these firms are closer to all operations of the firm thus their appreciation of
the nuances of management and access to networks. The contradiction of our finding to the aforementioned findings may be as a result of the fact that while those studies covered a considerable longer time span. I used a cross sectional data and focused our study on transition to self-employment from 2007 to 2008. I argue that larger firms, particularly with higher turnovers are indicative of the sales volumes and the size of the market and economic rents and valuable resources (Habib et al, 2013). It is plausible to state that entrepreneurs emerge from these firms to serve segments of the market that have been poorly served by incumbent firms and to also compete with incumbents for the appropriation of economic rent (Shahaym, 2013).

I also argue that large firms tend to have more projects than it is the case in smaller firms. The management of many projects leads to synergies and knowledge spillovers that can consequently lead employees to self-employment (Hvide, 2009). Besides this it is argued that large firms tend to cause bureaucratic challenges such that they are slow in adapting initiatives and ideas proposed by employees (Hvide, 2009). Still on bureaucratic hindrances to flourishing ideas, Gompers et al (2005) also observed that spin-offs are created when large bureaucratic firms fail to fund ideas proposed by employees. Thompson et al (2010) has indicated clearly that when an employee is convinced that it is prudent to adopt a new idea and the employer is reluctant in doing so, it becomes an impetus to self-employment.

Klepper (2009) as well as Andersson and Klepper (2013) argue that the failure of an incumbent firm could push employees into self-employment. Larger firms also facilitate the creation of corporate spin-offs due to restructuring activities and other internal innovative activities. Ideas that do not fall in line with the core business of the incumbent firm which otherwise may not be commercialised is created as a spin-off to enable the incumbent to focus on its core business (Wallin et al, 2007). In some cases this is undertaken to create complementarities (Shahaym, 2013). Besides this it is firmly argued that firms of high quality and for that matter high performing firms are largely expected to pawn more entrepreneurs over the period of its
life lifespan (Klepper, 2009). These largely explain the positive association between the size of firms and the spin-off of entrepreneurs.

Generally, a high value-added per employee is indicative of the financial performance of a firm (Özer et al, 2000). Our model shows that a unit increase in value-added per employee is 0.25% less likely to lead employees to self-employment. I argue that increasing performance quite often leads to increases in compensation of employees. In line with this Palmberg (2009) found a positive relationship between performance of a firm and compensation of employees in family firms in Sweden. When closely linked to wage income, our model suggests that high-income earners are 0.51 less likely to spin-off (Shane, 2003). Both are statistically significant.

With regard to the likelihood of employees of MNEs spawning new firms, I find that Swedish MNEs are 0.04% more likely to spawn new entrepreneurs even though it is not statistically significant. I note that prior studies have found a rather unclear trend in the rate at which MNE spawn new entrepreneurs (Andersson and Klepper, 2013). This is largely due to the fact that most Swedish MNEs are increasingly transferring operations abroad Henrekson (2005). However Swedish MNEs are more likely to spawn spin-offs (Andersson and Klepper, 2013).

Regional start-up rates have a positive and significant influence on the likelihood of employee spin-offs. I find that a percentage increase in regional start-up rate is 0.87% more likely to lead employees to spin-off. This is consistent with the assertion that start-up rates can be explained by previous start-up rates in any geographical location. Regions with high start-up rates develop a strong entrepreneurial culture and capital over time, thus leading to high rates of start-up in the region (Andersson and Koster, 2011). Andersson (2013) christened it as the persistence of regional entrepreneurship culture, and found a positive association between new firm formation and regional start-up rates. Fritsch and Wyrwich (2012) refer to this phenomenon as regional entrepreneurship culture, which refers to the encouragement and social acceptance of entrepreneurs and their activities. The social acceptance of entrepreneurship and self-employment as
a way of life in the Swedish context is referred to as the Gnosjö spirit (Andersson, 2013).

I also find that while being a male increases one's chances of spinning off by 0.80% than females, an increase in age is also 0.77% more likely to be associated with self-employment. I find that married people are 0.26% more likely to spin-off. All these are statistically significant. To explicate this I note that Shane (2003) found a curvilinear relationship between age and self-employment. It has also been established that having a spouse serves as a guarantee for another source of income to the family should one fail in exploiting an opportunity. This insulates entrepreneurs against the risk and uncertainty that comes with exploiting opportunities, all things being equal (Shane, 2003).

The level of industry experience of an employee is also associated with self-employment (Shane, 2003). I find that an increase in years of experience is 0.49% more likely to lead an employee to self-employment. This is consistent with the observation that ‘years of work experience’ is positively related to an employee’s ability to perceive opportunities and take steps to actualize them (Davidsson and Honig, 2003; Shane, 2003).

Meanwhile the empirical result shows that education has no positive effect on self-employment in our sample. Except post-high school education shorter than 2 years (Education4) and post-high school education longer than 2 years (Education5) that are not statistically significant, the rest are statistically significant. It shows that while employees with a university education are 0.10% less likely to found spin-offs, those with post high school education of shorter than 2 years are 0.12% less likely to. Employees with high school education are 0.50% less likely to spin-off and employees with 9 years of pre high school education are 0.67% less likely to spin-off. Finally, I find that employees with less than 9 years of education are 0.77% less likely to spin-off. To express this differently, it is reasonable to say that employees with more education are more likely to spin-off than those with less education in terms of the number of years. It is widely noted in theory that education increases a person's knowledge and skills needed to perceive
and exploit opportunities (Shane, 2003). Our results also show that employees with higher education are more likely to found spin-offs as compared to those less much education. Erikson and Kuhn (2006) found a weak positive insignificant effect of education on founding spin-offs in Denmark. In line with our results, Andersson and Klepper (2013) also found that college educated employees in Sweden are slightly more likely to leave their employers for self-employment as compared to average employees.

5.2 Occupational Category as a Determinant of Spin-offs

The influence of occupational categories in explaining the process of spin-offs in family firms brings a rather nuanced perspective to discussion on the kind of employees who are predisposed to spin-off from family firms in Sweden. It is clear from the evidence that employees of certain occupational categories are more susceptible to self-employment than others. Table 4.3, shows that employees within the service and market sales workers as well as craft and related trade workers occupational categories are more likely to spin-off. Employees of the other six occupational categories are less likely to spin-off. Service and market sales workers are 0.69% more likely to spin-off, which is statistically significant. Meanwhile, craft and related trade workers are also 0.09% more likely to spin-off. However, this is not statistically significant.

Senior managers, professionals, technicians and associate professionals, clerks, skilled agricultural workers as well as plant and machine operators are 0.44%, 0.41%, 0.58%, 0.45%, 0.82% and 0.03% respectively less likely to spin-off. All but plant and machine operators are statistically significant (Refer to table 4.3).

Generally, employees in high levels of management, such as senior managers and professionals often are highly compensated (Palmberg, 2009). It is thus expected that employees with high compensation will be less motivated to transition into self-employment. Similarly, Shane (2003) found that low-income earners have the tendency to go for self-employment than high-income earners. Even as I control for wage income, it indicates that an in-
crease in wage income of employees is 0.50% less likely to stimulate spin-offs among employees of family firms. This is also statistically significant. Another motivation for the less likelihood of senior managers, professionals and the like category of employees to transition to self-employment could be attributed to the job security and seniority rules that exists in Sweden (von Below et al, 2010). It can be explained that in most cases people at high levels of management would have climbed the occupational ladder up to their current levels. Some of them may also be exempted from the exit rules by being classified as essential staff (Andersson and Klepper, 2013). They are therefore insulated from loosing their jobs in the event of downsizing. On the contrary, employees at lower levels like service workers who in most cases may not even be favoured per the exemption rules (classified as essential employees), are more likely to seek self-employment to due to the relative lack of security or in the event of insolvency (von Below, et al, 2010). This explains why senior managers, professionals, technicians and associate professionals are less likely to go for self-employment. This finding is contrary to the hypothesis as people in relatively lower levels of management are rather those going into self-employment.

5.3 Spin-offs and Choice of Industry

The preferred industry of operation of spinoffs of family firms has also been determined with a rather interesting outcome. The results suggest that employees of family firms who spin-off are less likely to operate in the same industry as their parent firms. This is an indication that new firms generated by employees of family firms increasingly are entering into different industrial settings. For instance spin-offs of incumbent firms in the NACE industrial classification of manufacturing are 1.32% less likely to establish their new firms in the same industry as compared to those in other industries but manufacturing and wholesale and retail. Similarly, those in Wholesale and retail trade are 1.65% less likely to go into the same industrial classification as parent firms. All these are statistically significant as can be seen in table 4.3.
It is important to state that parent firms as reflected in our sample are mainly in the manufacturing and wholesale and retail trade classifications. The evidence is an indication that the reforms undertaken in Sweden via the liberalisation of the service sector are indeed paying off in the form of new entrepreneurs in those sectorsHenrekson (2005). It is found that prior to the reforms services such as childcare, elderly care and healthcare that could be safely regarded as candidates for private sector participation were in the realm of state owned companies. This state monopoly restricted private participation in those sectors of the economy (Steinmo, 2010; Henrekson, 2005). It is therefore not surprising that the reforms have opened immense opportunities for private participation, hence the drift of employees and or spin-offs to those areas. They are thus carving new identities and establishing themselves in their respective new industries (Sahaym, 2013)

Another plausible explanation is that following the implosion of the Swedish desire for large corporations, many Swedish firms have witnessed mergers with international firms and also outsourcing some production to smaller units and service providers. Thus, many smaller players have entered the market (Brulin, 2000). Many of these are spin-offs from incumbent firms and of which family firms cannot be discounted.
Chapter Six: Conclusion

6.1 Summary of Findings

New firms remain the lifeblood of many economies, including Sweden. Apart from introducing new innovations they also serve as source employment for the increasing workforce, especially graduates (Fritsch, 2011). Some employees would usually work as employees for incumbent firms for a considerable period time before choosing self-employment. (Klepper, et al, 2010). By this they get educated about the process and also get exposed to networks (Gompers et al, 2005). Even though many have investigated the kinds of firms such as MNEs, large firms and Venture capital supported firms just to mention a few from which these employees exit to establish their own firms (Boschma and Wending, 2007; Eriksson and Kuhn, 2006; Klepper, 2009), this thesis focused primarily on family firms due to their overwhelming representation and contribution to the Swedish economy (Bjuggren et al, 2007).

Using the Swedish individual data of employees and firms, this thesis analysed how being an employee of a family firm accounts for the transition to self-employment in Sweden. Specifically, I analysed how employees of family firms as at 2007 switch to self-employment in the year 2008. This thesis set out to test the following hypotheses: 1) Employees of family firms are more likely to choose self-employment 2) Employees of family firms at higher-level management are more likely to become self-employed. 3) Spin-offs of family firms are established in the same industry as their parent firms and 4) Non-family employees are more likely to spin-off when there is an intergenerational succession in a family firm. Due to data availability I was unable to measure succession, thus the fourth hypothesis has not been tested.

I found that family firms are more likely to spawn new enterprises than non-family firms. This represents the novelty in the thesis. The
predisposition of family firms toward generating spin-offs finds expression in the impact of organisational culture and the role of agency in family firms (Hall et al, 2001; Husted, 2007). I explained that the organisational culture limits strategic choices to a survival approach thus limiting the influx of entrepreneurial ideas. Employees who discover these ideas will desert the incumbent firm to implement their ideas in their own firms (Aronoff and Ward, 1997). The agency problem encourages the personal involvement of the owners in the routines of the firm thus limiting the discretion of employees in implementing strategic decisions and ideas (Husted, 2007). This personal involvement is encouraged due to the personal resources and emotions (survivability capital) investment in the firm (Sirmon et al, 2003). This subsequently results in spin-offs on the part of employees some of who want to be their own bosses (Klepper, 2009). I have thus found a significant positive relationship between being an employee of a family firm and spin-offs in Sweden. This is consistent with the first hypothesis.

With regard to the kind of employees who spin-off, our empirical results revealed that employees in high levels of employment categories such as senior managers and professionals are less likely to spin-off. It shows clearly that employees in relatively lower employment groups such as sales and service workers as well as craft and related workers are more prone to spawn new firms. The job security and seniority rules coupled with exemption from the exit principle during periods of downsizing are all partly responsible for this phenomenon (Von below, 2010; Henrekson, 2005). This is contrary to the hypothesis where I expected employees in relatively higher occupational roles to spin-off.

Interestingly, evidence shows that spin-offs are less likely to operate in the same industries as their parent firms. Spin-offs of firms in manufacturing and wholesale and retail are less likely to remain in the same sector. These new firms are established in other economic sectors such as water information and communication, service activities, financial and insurance activities just to mention a few. This shows that a significant proportion of new entrepreneurs are carving new identities and images for themselves and their respective fields (Sahaym, 2013). It also shows that
employees that choose self-employment are not utilising to the full potential the experience gained from their employers. Andersson and Klepper (2013) argued that the experience of an employee is more valuable when applied in the same sector as that of the parent firm. The drift to these new industries is a manifestation of but not limited to the liberalization of the service sector of the economy and the increasing outsourcing by large companies to service and small producers (Brulin, 2000 Steinmo, 2010).

**6.2 Theoretical Reflection**

Theoretically, this thesis made use of literature from two main areas of research, namely family business and spin-offs. An effort has been made to connect otherwise two parallel streams of research in order to reveal the intricate nature of the formation of new firms from family companies. While this has been sufficiently achieved, the need to reflect on the theory and its implication for further research is noteworthy.

It is important to note that the culture of a family organisation, the role of social capital as well as the survivability capital resource, to a very large extent influences the strategic decisions at all levels of the organisation (Hall et al, 2001; Kraiczy 2013). Sharma et al, (1997) also recognises the potent effect of family values in influencing the strategic change. Family firms are often associated with a long-term view of the business with expectation to transfer ownership to future generations (Westhead et al, 2002; Emling, 2000; Brunk et al, 2008). These family values and expectations serve as a filtering mechanism of entrepreneurial ideas. Ideas that do not meet the family expectations are thus not likely to be accepted (Johnson, 1986; Schoenenberger, 1997). Proponents of such ideas are thus ready to implement them through their own initiatives.

The role of agency in family firms has also proven to be one of the fundamental causes of spin-offs. Agency issue espouses the position that owners of businesses envisage goal conflict with employees. This is averted by the personal involvement of the owner family the routines of the firm. This gives them the opportunity to monitor and ensure that decisions reflect
the family values and expectation. This personal involvement reduces the agency and discretion of employees (Shapiro, 2005). It also brings about disagreement and direct conflict in the management of the firm between owners and employees (Chu, 2009). Their involvement also directly determines the strategic behaviour of firms (Hill et al, 1992). In most cases they become frustrated and exit to pursue their ideas that were rejected (Klepper and Thompson, 2010).

The case of organisational culture and agency converges based on the fact that spin-offs are associated with disagreements (Klepper et al, 2010; Thompson et al, 2011). Disagreements about the timing of the adoption and or rejection of a technology have also been referred to as the basis for most spin-offs (Thompson et al, 2011).

I also note that the ability of a firm to create new firms depends on its quality and performance. Also, some employees join an industry to learn from employers on how to perform in the market before choosing self-employment (Klepper et al, 2010).

6.3 Research Implications

It is to be noted that hypothesis 4 could not be tested due to our inability to measure succession per the data available. It is stressed that succession of family firms tends to bring about changes in managers’ and the strategic visions of the affected firms. This is more potent when the new managers have been in different industries and for that matter have experimented different ways of organising (Klepper, 2009, Klepper et al, 2010). Reorganisations bring about changes in the allocation of resources and authority, which is a fertile ground for spin-offs (Sund et al, 2010; Dyer, 1994). Where meritocracy and professionalism are not adhered to in the transfer of managerial responsibility, employees feel overlooked and protest by setting up firms to be their own bosses and also compete with their former employers (Dumas, 1998; Luccier, et al 2004; Klepper and Thompson, 2010).
In view of hypothesis 4, future research may consider making a detailed study to measure the impact of intergenerational succession of family firms on spin-offs. This may also include Swedish farms, which have a good representation of family firms (Brunk et al, 2008).

It may also add new perspectives to the area of research if a distinction is made between successors who prior to succession had acquired some managerial training within the family firm as compared to those that have been in different industries (Sund et al, 2010). A closer look at how that impacts on spin-offs would be an interesting area to explore.

The level of spin-offs in Sweden is still quite impressive considering the combined effect of the welfare state, taxation and seniority rules in employment which to some extent were expected to impinge on self employment (Edmark et al, 2013; Henrekson, 2005). Future research may examine closely how the welfare state impinges on spin-offs relative to family firms.

The definition adopted could focus either structural or process element of family firms (Westhead et al, 2002). Thus the number of family firms in any research could vary depending on the kind of definition used (Daily and Dollinger, 1993; Westhead et al, 2002). It is found that using the widest definition of family firms to include both the process and structural elements on sample of firms, resulted in 81% of them being family firms. When a narrow definition was adopted, the number reduced to 15% (Westhead et al, 2002). The composition of family firms in Sweden too could vary depending on the definition used. This thesis used a demographic definition. Future research may consider widening the scope of the definition to include firms in the financial; hotel and restaurant sectors just to mention a few.

Increasingly more firms are professionalising their operations by hiring external managerial expertise such as CEO and chairman of the board (Hall et al, 2008; Villalonga and Amit; 2006). This thesis did not differentiate between firms managed exclusively by founders and those managed by external managers. It is yet to be seen if family firms managed by external
managers have a different effect on the process of spin-offs. To this end future research may consider unpacking this.
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