Family Matters

Essays on Family Firms and Employment Protection

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Linköping University

Linköping Studies in Arts and Science No. 592
Linköping University, Department of Management and Engineering (IEI)
Linköping 2013

Linköping Studies in Arts and Science No. 592

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Distributed by:

Department of Management and Engineering (IEI)
Linköping University
581 83 Linköping

Carl Magus Bjuggren
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Edition: 1:1

ISBN 978-91-7519-495-0

ISSN 0282-9800

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Department of Management and Engineering (IEI), 2013

This book was typeset by the author using L^AT_EX

PRINTED BY: LiU-Tryck, Linköping 2013

Acknowledgments

I am very grateful to my advisors Hans Sjögren, Dan Johansson and Bo Sjö for the continuous support, advice, and guidance throughout the process of writing this thesis. I would especially like to thank Dan Johansson for encouraging me to pursue a PhD in economics, which has been a very rewarding experience. I would also like to thank Mikael Stenkula and Sven-Olov Daunfeldt, who have contributed to this thesis. A special thanks to Per Skedinger who has given me most valuable comments on my papers. May Björklund, Ritva Kiviharju, Göran Hägg, and Christina Svensson have been a great help in administrative matters.

Financial support from Sparbankernas Forskingsstiftelse is gratefully acknowledged.

Throughout my PhD studies I have benefitted tremendously from the friendship, support, and advice from Simon Wehrmüller, Niclas Berggren, Karin Hederö Eriksen, Anna Sandberg, Arna Vardardóttir, Per-Olof Robling, Christoffer Rydland, Martin Kragh, Martin Korpi, Mikael Wendschlag, Anna Södersten, and many other people at EHFF, Stockholm School of Economics, Linköping University, and IFN.

During the PhD program I had the pleasure to visit George Mason University, and I would like to thank John Nye and Thomas Stratmann for their feedback and inspiring lectures. Many thanks to Ragnar Söderberg's Foundations and the Ratio Institute for the financial support during this stay. I also had the pleasure to spend a semester at the European University Institute in Florence, and I want to thank Russell Cooper and Juanna Joensen for making this visit possible.

Most importantly, I wish to express my gratitude to my family, Cecilia, Per-Olof, Lina, Björn, Mark, Emelie, and Sebastian, for their constant support and encouragement. And, a very special thanks to Sahaja.

Carl Magnus Bjuggren

Stockholm, October 2013

Contents

Introduction	1
Research on family firms	3
Identifying family firms and their contribution to employment and GDP . .	5
Empirical caveats when using self-employment as a proxy for entrepreneur- ship	7
Family ownership and the probability of exhibiting high growth	8
Sensitivity to shocks in family firms	10
Employment protection and productivity in small firms	11
 1 A Note on Employment and Gross Domestic Product in Swedish Family-Owned Businesses: A Descriptive Analysis	 15
1.1 Introduction	16
1.2 Data	18
1.3 Family-owned businesses and employment	21
Listed firms	21
The whole economy	22
1.4 Family-owned businesses and GDP	23
1.5 Concluding remark	24
1.A Tables	26
 2 Using Self-Employment as Proxy for Entrepreneurship: Some Empirical Caveats	 29
2.1 Introduction	30
2.2 The concept of "self-employment"	31
2.3 The Swedish data	34
2.4 Comparison between LFS and RAMS	37
2.5 Conclusion and discussion	39
2.A Tables	41
2.B Figures	42
 3 High-Growth Firms and Family Ownership	 45
3.1 Introduction	46

3.2	Theoretical background: family ownership and firm growth	48
3.3	The data	51
3.4	Empirical model	55
3.5	Results	56
3.6	Conclusions	59
3.A	Tables	61
3.B	Appendix	66
4	Sensitivity to Shocks in Family Firms	69
4.1	Introduction	70
4.2	Theoretical background	72
	Previous studies on implicit contracts in family firms	74
4.3	Data	76
	Definition and identification of family firms	77
4.4	Empirical strategy	80
	Wages, downsizing and growth	80
	Industry shocks	82
4.5	Results	83
	Industry shocks	85
4.6	Conclusions	87
4.A	Tables	90
4.B	Figures	99
5	The Effect of Employment Protection Rules on Firm Productivity - A Natural Experiment	103
5.1	Introduction	104
5.2	Theory and previous literature on employment protection and productivity	106
5.3	The Swedish LIFO-rules and the 2001 reform	109
5.4	Data	112
5.5	Empirical estimation	113
	Difference-in-differences estimation	114
	Results	117
5.6	Conclusions	124
5.A	Tables	127
5.B	Figures	135

Introduction

This doctoral thesis in economics consists of five essays, three of them published in peer review journals. Each chapter deals with slightly different topics, but they are bound together by the focus on family firms and small firms. In many cases the two groups of firms are interchangeable. These firms are of interest for several reasons. Family firms appear to behave differently than firms with more dispersed ownership and they might therefore have a specific function in the economy. They are believed to be more risk averse, have longer time horizons, and are more easily identified with their company and their actions (see Anderson & Reeb 2003, Chandler & Hikino 1990, Landes 1949, Bandiera et al. 2011, Sraer & Thesmar 2007, Block 2010). This could potentially make family firms less sensitive to labor demand fluctuations. Moreover, family firms constitute the majority of firms in an economy, and thus account for a considerable share of employment and GDP.

Most firms start up with a small number of employees and with a relatively concentrated ownership. The concentrated ownership in these firms coincides with the common definition of a family firm as well as with the notion of the entrepreneur. Schumpeter (1934), touched upon the importance and traits of family firms in his seminal theory of economic development.¹ Schumpeter recognizes the entrepreneur as the driving force of economic development, and he points to the desire to create a family dynasty, a private kingdom, as a main driving force for the entrepreneur. Hence, small firms and family firms are crucial for the dynamics of an economy. Sweden is in this context a particularly interesting case. From a historical point of view, the Swedish economic policies have up until the 1980s been shown to favor both large firms and highly concentrated ownership (Henrekson & Jakobsson 2001). Starting in the mid 1980s, a number of deregulations took place in Sweden with the intention to improve the efficiency of the economy. The reforms involved a leveling

¹The first edition in German was published in 1911.

of the previous, more distortive, tax system as well as deregulations of several markets (Henrekson 2005, Johansson 2007). As shown and discussed in essay 1 in this dissertation, this is likely to have influenced the observed increase in the share of family firms in the 1990s.

Although often interchangeable, family firms are not to be equated with small firms since they are to be found within the whole size-distributional spectrum. In Sweden, the relatively high share of family firms that are publicly listed is likely to have been a result of the historical economic policies that favored a high concentration of ownership. A higher presence of family firms, foremost among larger firms, can also be seen as a cultural expression or as a second-best solution to an institutional setting in which the legal structures and the contractual enforcements are weak (Bertrand & Schoar 2006). Moreover, it appears to be important to distinguish between publicly listed family firms and private family firms. Some of the features of publicly traded firms are similar to features that are found in family firms; hence the family firm status becomes more of a distinguishing factor within the group of private non-listed firms. This is discussed and analyzed in more detail in essay 4 in this dissertation.

The essays are structured according to the degree of inference that is being made, and according to how the topics relate to each other. The first two essays are descriptive studies. Essay 1, "A Note on Employment and Gross Domestic Product in Swedish Family-Owned Businesses: A Descriptive Analysis", published in *Family Business Review*, thoroughly describes the data and the process of identifying family firms. Essay 2, "Using Self-Employment as Proxy for Entrepreneurship: Some Empirical Caveats", published in *International Journal of Entrepreneurship and Small Business*, identifies a number of potential caveats and shortcomings in the definition of self-employment in the official statistics. Essay 3, "High-Growth Firms and family Ownership", published in *Journal of Small Business and Entrepreneurship*, and essay 4, "Sensitivity to Shocks in Family Firms", use different types of regression analysis techniques to test hypothesis about differences between family and non-family firms, and draw inference from the estimated coefficients. Finally essay 5, "The Effect of Employment Protection Rules on Firm Productivity - A Natural Experiment", uses a policy change as a natural experiment to try to estimate the causal effect of employment protection of firm productivity. I will begin by giving a short introduction to the field of family firms where I describe the historical development of the literature and structure it into three broad fields of research. Then

follows a section of summaries of each of the five essays.

Research on family firms

The theories and concepts of family firms are dominant in the dissertation and I will therefore start by giving a short history and introduction to the field. It is by no means a complete review of the literature. There is to my knowledge no comprehensive survey of family firm research that combines all of the different existing fields. Such a survey would be a productive task for future research. According to my perception, the literature on family firms within economics related topics could be divided into three broader fields, however unavoidably somewhat overlapping. First, there is the finance and corporate governance literature that focuses primarily on principal agency problems. This is probably the field with the largest number of studies and is represented by for example Fama & Jensen (1983), La Porta et al. (1999), Faccio & Lang (2002), Anderson & Reeb (2003), Morck et al. (2005). The focus is primarily on performance, trying to discern what is the most economically efficient way of organizing and controlling a firm. The finance field is overlapped with studies within the field of business and management (see Dyer 2006, Nordqvist & Melin 2010).

Second, there is the business history literature that focuses on in-depth analysis and description of the life and decisions in family firms, not seldom does it entail case studies of well-known and successful dynasties. The field is characterized by a more historical methodology and is represented by for example Casson (1999), Sjögren (2006), James (2006), Colli & Rose (2008), Perez & Colli (2013), Landes (2006).

Third, there is a small and upcoming field within economics and finance that draws inspiration from more mainstream economics and incorporates methods that are more typical to the field of applied microeconomics. The studies are, in addition to performance, concerned with issues related to labor economics, labor contracts, wages and risk behavior. This field is represented by for example Sraer & Thesmar (2007), Bennedsen et al. (2007), Bassanini et al. (2011), Bach & Serrano-Velarde (2011). It is my belief and hope that this segment of the family firm literature will expand and establish itself as a persistent field within economics. Below follows a chronological description of the evolution of the field of family firms.

According to Stewart et al. (2010), the earliest study of family firms emerged just over 80 years ago with the seminal book on corporate governance "Modern Corporation and Private Property" by Berle & Means (1932), in which they contrasted the widely held firm with family firms. The focus was on the agency problems that could arise due to an increase in the separation between ownership and control. The transfer of power from owners to managers and the dispersion of ownership could cause a situation where managers would have increased incentives to benefit themselves on the behalf of the shareholders. The study of ownership and control since continued within the areas of finance, corporate governance, and management. In 1972, Burch estimated the share of family firms, among the Fortune's top 500, to be about 45 percent (Burch 1972). Burch argued that the literature at the time had greatly exaggerated the managerial revolution and the decline and death of family firms. A previous study by Lerner (1966), which is strongly criticized by Burch, had estimated the share of family firms to be 26.6 percent. In the 1960s the family firm literature expanded within a number of disciplines (Stewart et al. 2010). At Harvard Business School, scholars such as Alfred Chandler within business history and John Kenneth Galbraith within economics, discussed family firms from an institutional perspective (Chandler 1962, Galbraith 1967). They both came to the conclusion that family firms should be seen as precursors to firms run by professional management. This came to be the dominating view within the business literature and caused family ownership to be more or less overseen the following two decades. The analyzing of family firms, though, continued within fields of anthropology, sociology, and psychology (Stewart et al. 2010).

Within the field of finance and corporate governance there was a continuation of the study of ownership and control, influenced by Berle & Means (1932). Some of the more influential studies are by Jensen & Meckling (1976) and Fama & Jensen (1983). In 1986 a group of business researchers and practitioners got together and created the Family Firm Institute (FFI) and in 1987 they issued the first number of *Family Business Review*.² This thus formed a somewhat of a revival of the field within business. In Europe, the Family Business Network was founded in 1990 and is a network of family firms with the aim of "promoting the success and sustainability of family firms world wide" (The International Family Business Network 2013). The shaping of these organizations inspired researchers to again look into the issues of

²*Family Business Review* has become a prominent journal within business, ranked as number 19 with an impact factor of 2.6., according to "2012 Journal Citation Reports", Thomson Reuters, 2013.

family firms.

The research expanded during the 1990s with studies on sub-fields such as family succession (Handler, 1994), and integration of non-family managers (Dyer 1989, Daily & Dollinger 1992). At the end of the 1990s there was a development towards family firms within the finance literature. Well-known studies by La Porta et al. (1999), and Faccio & Lang (2002), studied the ownership concentration in different countries, in effect extending the work of Burch (1972) to cross-country analyses. The relationship between ownership and control that was initially discussed by Berle & Means (1932), still constitutes a significant field of inquiry (see e.g., Morck et al. 2005).

The increasing access to data has enabled the use of larger data sets and panel data when studying family firms. This development has opened up for new identification strategies and more elaborated statistical methods. For example, by using the gender of a departing CEOs first born child as an instrument for succession, Bennedsen et al. (2007), study the impact of successions on performance. Bassanini et al. (2011), use a matched employer-employee dataset to access wages and skill structure of the workers in family firms. A problem however when using large datasets becomes the identification of family ownership. For example, Bassanini et al. (2011) use a cross-section sample of firms in which the manager is interviewed and asked directly about the family control. Bach (2010), uses the last name of the incumbent CEO and compares it to the succeeding CEO. One of the contributions of this dissertation is the identification of family firms in a panel of full population data. This allows for accessing a large amount of micro data on family firms.

Identifying family firms and their contribution to employment and GDP

It is a devious task to try to identify family firms in large datasets, since ownership concentration is not accounted for by official statistics. By necessity, a majority of the previous studies have had to rely on closer firm-by-firm inspections, using surveys and smaller samples of firms. As a result, much of the knowledge has been based on what sometimes is described as "street lore" (Shanker & Astrachan 1996, Astrachan & Shanker 2003). In essay 1, "A Note on Employment and Gross Domestic Product in Swedish Family-Owned Businesses: A Descriptive Analysis", published in *Family Business Review*, Dan Johansson, Hans Sjögren, and I, use a tax

reform in 1993 that makes it possible to identify all family owned firms in Sweden. The 1993 tax reform resulted in labor income tax for high-income earners being greater than capital income tax. To prevent high-income earners from benefiting from this discrepancy, the Tax Authority defines concentrated ownership, so called closely held firms, and within this group of firms, specifies the share of the surplus that is to be taxed as labor income. This results in a systematic identification of all closely held firms in Sweden. To limit the possibilities to circumvent the tax rules by distributing shares among family members, the Tax Authority investigates family relationship of all ultimate owners. Family members that own shares in the same company are therefore regarded as one owner.

As it turns out, the definition of closely held firms is aligned with commonly used definitions of what constitutes a family firm. A closely held firm is defined as a firm in which four or fewer owners control more than 50 percent of the ultimate voting rights (Swedish Tax Authority, 2008, Part 3, Ch. 9; SFS, 1999: 1229). The exact number of owners is registered for all closely held firms. In a closely held firm with two or less owners it is thus certain that at least one owner controls at least 50 percent of the ultimate voting rights. Moreover, in a closely held firm with five owners, at least one owner holds 20 percent or more of the ultimate voting rights. The definition of a family firm as a firm in which one individual or family is the largest owner and controls at least 20 percent of the ultimate voting rights has been used by e.g. La Porta et al. (1999), and Faccio & Lang (2002). However, the Tax Authority excludes publicly listed firms from the classification of closely held firms. The average number of owners in publicly listed firms is large and they are therefore thought to be less able to exploit the tax asymmetry. The ownership structure in publicly held Swedish firms are mapped out every year by Sundqvist (1993-2009), and using this information we were able to classify the publicly listed firms one by one.

By matching the data on closely held firms with register data on employment and value added, we were able to analyze the contribution of family firms to employment and GDP from 1993 to 2006. Moreover, we could get a rather exact estimate on the number of family firms in the economy. The findings reveal that the share of family firms in the economy has increased from about 60 percent in 1993 to 75 percent in 2006, and that they account for up to one fourth of employment and one fifth of GDP. The study is, to our knowledge, the first to identify all family firms in the economy and the finding thus gives an indication of the accuracy of previous

estimations as well as making way for more elaborate statistical analyses of family firms using register-based panel data.

Empirical caveats when using self-employment as a proxy for entrepreneurship

The concept of entrepreneurship is hard to define, both theoretically and empirically. The most frequently used measure of entrepreneurship in empirical studies is self-employment (see e.g., OECD 1998, Acs et al. 1994, Blanchflower 2004). In essay 2, "Using Self-Employment as Proxy for Entrepreneurship: Some Empirical Caveats", published in *International Journal of Entrepreneurship and Small Business*, Dan Johansson, Mikael Stenkula, and I, show that there are several difficulties with using official self-employment data. Using Sweden as an example, we show that one can get diametrically different developments of entrepreneurship depending on which statistical source that is used.

An advantage with using self-employment data is that it is readily available and allows for comparison across countries and time. For instance, time series data for OECD countries is made available online via OECD stats extracts. However, a further investigation of the data reveals a number of difficulties. First, there is no commonly accepted definition of self-employment. As a consequence, it is unclear whether owners of incorporated businesses should count as self-employed. As it turns out, when included, the number of owners of incorporated businesses account for a significant share of self-employed. Second, the number of industries that is included in the data is not coherent. Third, the data is created either from surveys or from registers, resulting in different sampling errors. Fourth, when generating data from surveys, the results are dependent on whether it is the interviewer or the respondent that does the classification. As noted by Hanaeus et al. (2006), there is a tendency for individuals to identify themselves as self-employed although register-based statistics might not make the same assessment. Moreover, what further complicates the classification is that some individuals have two occupations and draw income from both a self-owned company and an employer.

The OECD self-employment data on Sweden is based on the labor force surveys (LFS). This data is produced by Statistics Sweden, and over time, as part of their regular operation, they change the definition of who should be regarded as self-employed. This results in sudden changes in the reported number of self-employed

and makes it problematic to create longer coherent time series. For example, the Swedish data take a leap in 1987 due to the inclusion of owners and managers of incorporated businesses in the definition of self-employed. This leap has by several studies been interpreted as a true increase in the level of self-employment (see e.g., Blanchflower 2000). Similar sudden jumps can be seen in other countries' statistics over time.

In addition, there is a second official source of self-employment data in Sweden, the labor statistics based on administrative sources (RAMS). The fact that it is register-based makes it possible to match with other micro data on firms, and is thus an attractive source for researchers. However, when we compare the two Swedish sources of self-employment data, LFS and RAMS, over time, we find that they on several occasions take opposite directions. While one of the sources reports an increase in self-employment, the other one reports a decrease. This can be explained by LFS including loss-making firms, whereas these firms are excluded from RAMS. Results on self-employment thus hinges on the chosen statistical source as well as the chosen time period. Our study highlights some of the problems that pervade studies that uses self-employment as a proxy for entrepreneurship and will hopefully serve as to improve the research within this field.

Family ownership and the probability of exhibiting high growth

A growing body of literature focuses on high-growth firms (HGFs) as the main contributors to job growth (Henrekson & Johansson 2010). This literature has, among other variables, recognized ownership as important in explaining rapid growth. However, ownership has been defined in a rather crude way. It has been defined as firm dependence, i.e. if a firm belongs to an enterprise group or not. In essay 3, "High Growth Firms and Family Ownership", published in *Journal of Small Business and Entrepreneurship*, Sven-Olov Daunfeldt, Dan Johansson, and I, analyze whether family ownership matters for being a HGF. The literature on family firms point in the direction of family firms being more risk averse and slower growing. They are also believed to have longer time horizons, which enable a more long-term commitment with for example financiers. Hence, there is an anticipated link between family ownership and firm growth. Moreover, several policies aiming to facilitate the life and performance of family firms are in place and are being proposed in both Europe and the US (I.R.C. 2057, European Commission 1994, 2006). Equally so, political

attention is directed towards HGFs, as they are seen as one mechanism as to achieve economic growth (Schreyer 2000, Ahmad 2008, European Commission 2008, Bravo-Biosca 2010). The increased political attention that are given to both family firms and HGFs, in combination with the anticipated relationship between family firms and the speed of growth, makes it interesting to empirically analyze the impact of family ownership on rapid firm growth.

Using the identification procedure that is presented in essay number 1, we are able to use full population data and introduce family ownership as an explanatory variable when estimating the probability of being a HGF. We define a HGF as those firms that are among the 1 percent fastest growing firms over a certain time period (one-, three-, five-, seven, and ten-year periods). Growth can be defined in a number of ways and in order to be consistent with previous literature and to allow for some diversity, we use both absolute and relative growth in terms of employment. The initial findings indicate that family firms are less likely to be HGFs. However, when we separate the analysis to different size and age categories, the results reveal a more complex relationship. The negative effect appears to be driven by the smaller firms. Moreover, although the influence of family ownership is negatively correlated with the probability of becoming a HGF in the short run, in some cases, when studied over longer time periods, the relationship reverses.

The finding that small family firms are driving the negative effect could be a result of different growth ambitions. We are unable to test this hypothesis in the paper, but it is possible that small family firms on average value other things more than growth. Since growth is defined in terms of employment, the larger firms could represent a selection of family firms that have growth ambitions. Moreover, the findings that the negative relationship reverses when growth is studied over longer time periods, support the ideas that family firms have more of a long-run perspective and prefer long run survival and growth before short term success. In fact, it has been shown by Daunfeldt & Halvarsson (2012), that most HGFs are not persistent; they are rather to be considered as one-hit wonders. Previous studies suggest that family firms are more risk averse and have a more conservative growth behavior, and this could perhaps result in a more stable growth that turns out to be more successful over longer time periods. Although the study does not inquire deeper into this issue, it is suggested that the strategies that are pursued by family firms on average result in a higher growth measured over longer time periods, compared to a strategy of short-run spectacular growth.

Sensitivity to shocks in family firms

As mentioned above, the literature portrays family firms as more risk averse, and having longer time horizons, and families are as owners more easily identified with their company and its actions. Because of these features, family firms are believed to adopt more cautious growth strategies. This could make family firms less sensitive to fluctuations in sales within the industry and potentially function as to smooth out business cycles. Moreover, the same features could enable family firms to commit to implicit contracts with their employees, in which they insure them against the risk of dismissal associated with economic cycles. In return the employees are willing to work for lower salaries. In essay 4, "Sensitivity to Shocks in Family Firms", I investigate the sensitivity of family firm's employment and sales to shocks in industry level sales. In addition, I shed some light on the hypothesis of an implicit contract by investigating the differences in wages and employment turnover.

I am using the family firms identification strategy presented in the first essay "A Note on Employment and Gross Domestic Product in Swedish Family-Owned Businesses: A Descriptive Analysis". Therefore, I am able to use panel data in which I identify all family firms in the economy, both listed and non-listed, something that has previously not been feasible for this type of study. Moreover, I am able to locate firms according to municipality, and control for corporate groups. The specific inquiry of how sensitive family firms are to industry shocks has only been investigated in one previous study by Sraer & Thesmar (2007). In addition there are a few studies that are closely related to the topic (Lee 2006, Block 2010, Bach & Serrano-Velarde 2011, D'Aurizio & Romano 2013). This essay therefore contributes to a field where there is so far a limited number of empirical studies.

The results indicate that non-listed family firms appear to be less sensitive in terms of sales and employment to industry sales shocks. The results does not seem to be a result of family firms operating in less competitive industries. Moreover, the results are still present when adjusting the data to account for corporate group dependence. Contrary to previous studies, no effect is found for listed family firms. This could perhaps be explained by the fact that some of the features that are believed to be specific to family firms, such as long-term commitment, are features that can also be achieved by enlisting on the stock exchange. The estimations on wages and employment turnover are to be regarded as tentative since the data used are aggregates on the firm level, and one would need to match firm data with data on

employees in order to be able to control for individual specific effects. However, the results indicate that family firms pay lower wages on average. The estimated wage gap could be a result of family firms having a less productive and less ambitious workforce, and that they are therefore attracting low-ability workers. When looking at downsizing and growing, family firms are found to be less likely to both downsize and grow in terms of employees.

To sum up, the paper on family firms and how they behave when hit by sales shocks within the industry, gives support to the idea that family firms are more able to smooth out employment and sales over business cycles, and that they are engaging in less risky projects compared to firms with more dispersed ownership. The findings are also in line with the hypothesis that family firms are more able to commit to implicit contracts with their employees in which they offer a greater job security in return for lower wages.

Employment protection and productivity in small firms

The Swedish employment protection rules were introduced in the beginning of the 1970s, and since 1974 all Swedish firms are comprised by the last-in-first-out (LIFO) regulation, meaning that the last employed is the first one to go in case of shortage of work (22§ SFS 1999). The regulations have since been lively debated, and in January 2001 an exemption from the LIFO-rules was introduced for firms with less than 11 employees. The reform allowed these firms to disregard the LIFO-rules for two employees and was a result of an unusual cooperation between the green party and the center right-wing opposition parties in the parliament. It was decided upon in October 2000 and implemented in January 2001. The swift implementation of the reform, and the unlikely cooperation of parties make a quasi-experimental approach feasible.

In essay 5, "The Effect of Employment Protection Rules on Firm Productivity - A Natural Experiment", I exploit the 2001 reform as a natural experiment using a difference-in-differences (DiD) estimation to estimate the effect on labor productivity. Three other papers are using the 2001 reform as a natural experiment looking at work absence, hiring and separations (Lindbeck et al. 2006, Olsson 2009, von Below & Thoursie 2010). The contribution of this paper is that I can get a precise estimate of labor productivity by using register data. Also, unlike many other studies I try to discern the different mechanisms behind the results. Moreover, I am able

to tackle the potential problem of corporate groups. There might be incentives for firms to systematically transfer and account for profits and employees in different firms within the corporate group, which could potentially bias measures of labor productivity. Finally, this study contributes to a field where there is so far a limited number of empirical studies. The data used cover the total population of Swedish firms from 1997 to 2003, three years before and three years after the reform.³ An interesting feature of the reform is that it induces an exemption of two workers from the LIFO-rules independent of the size of the firm. Hence the effect of the reform is anticipated to be larger the smaller the firm.

The initial results from the DiD estimations indicate that being exempted from the LIFO-rules have increased labor productivity with 2.5 percent. The effect appears to be increasing over time, up to 3.5 percent increase in labor productivity in 2003. As anticipated by the outline of the reform, the smallest firms appear to be driving the results. I proceed by investigating the possible driving forces behind the estimated effect by limit the sample to only firms that were downsizing, i.e. those firms for which the reform is directly binding. In addition, I limit the sample to firms that stay within treatment and control throughout the whole period. The estimated effect of the reform then increases to 6 percent.

There are several mechanisms through which the effect could come. Facing a higher probability of dismissal could cause a behavioral change in workers, mitigating some problems of moral hazard, such as shirking at work. The reform could also have lowered the costs of adjusting to structural change by making it easier for firms to adjust the workforce. Furthermore, the reform could have made it easier for the smaller firms to retain valuable workers and to lay off less valuable ones. Additional estimations show that the probability of hiring and firing does not seem to have changed significantly with the reform. I therefore hold it plausible that the positive effect of the 2001 reform was due to a combination of a decrease in moral hazard behavior and the increased possibility for small firms to retain or lay off personnel based on the worker's idiosyncratic productivity.

The results are rather striking giving that the possibilities to evade the LIFO-rules are generally considered to be high. The economic significance of the estimated effect is non-negligible. For example, according to the U.S. Census Bureau, the

³The reform was decided upon in October 2000, and due to anticipation there might be an ambiguous effect already in late 2000. I therefore chose to exclude the year 2000 from the estimations.

annual percentage change in labor productivity in Sweden from 2000 to 2009 is 1.5 (U.S. Census Bureau 2012, p.850).

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