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IN WHAT HOMES DID SWEDISH CEOs GROW UP?

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Abstract

Sweden is often described as a country where intergenerational social mobility is high. It has also been found that social mobility decreases when we study the top of the income distribution. I study the occupational mobility for an elite group in society, namely the CEOs from large and prominent Swedish companies. I collect a new data set which contains 172 former and current CEOs born in the period 1900–1969, together with information on their fathers' occupations. I find that members of social group I are overrepresented by a factor of more than 11 and that members of social group II and III are underrepresented. I further find that more than half of the CEOs had a father in a managerial position but due to lack of data, I cannot measure the representativeness to society as a whole. CEOs with noble surnames are overrepresented by factor 10. While the Swedish income mobility increased during the period 1930–1950, my results show that this is not in case for the occupational mobility for the elite as I do not find any significant change in social group association over time.

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1 Introduction

High intergenerational social mobility can be thought of as individuals having the same opportunities *ex ante*, although all individuals do not achieve the same outcomes *ex post* (Causa and Johansson, 2010). This would mean that people had similar life chances, no matter in which home they grew up. When it comes to the inequality in society, opinions differ on which level is acceptable. People will end up with either one or the other opinion based on e.g. their preferences for solidarity and their opinions on how e.g. incentives stimulate economic activity. Most people, however, agree that a high level of *social mobility* is desirable for any country. In this thesis, I use an original dataset to study a specific aspect of the Swedish social mobility, namely the occupational mobility for top chief executive officers.

The story about social mobility often begins in the United States. The country has historically often been put forward as a society where social mobility is high¹. In polls, American themselves are confident in their country’s meritocracy. 67 percent of Americans agree with the statement that “people are rewarded for their intelligence and skill”. This is the highest in a survey including 27 countries. Furthermore, only 19 percent of Americans believe that “coming from a wealthy family is essential or very important to getting ahead” while the median is 28 percent for all countries (Isaacs, 2008). Some have argued that the perceived American social mobility is so high that the Americans even prefer less redistributive policies (Piketty, 1995). If we then leave the United States, we find that the US scores low on social mobility indicators when compared to the other countries, such as the Nordics, Canada and the United Kingdom (Björklund and Jäntti, 1997; OECD, 2010).

With that in mind, it is interesting that the notion of social mobility seems to be less pronounced in the Swedish debate and self-image than in the United States, although for example the previous center-right coalition government used terms like “equal life chances”. Among economists, however, Swedish social mobility has been studied extensively and in later years, one interesting findings is that the social mobility level decreases dramatically if we study the top 1 or top 0.1

¹“The American Dream” is nothing else than a dream about high social mobility.

percent of the income distribution (Björklund, Roine and Waldenström, 2012). In simple terms, if the correlation between a father's and a son's earnings is around 0.25 for the population as a whole, it reaches 0.9 for the top 0.1 percent according to the study. This finding has put the notion of Sweden as a high mobility country in question (Bergh, 2009). The study also serves as a rationale for this thesis.

My study concerns an even smaller group in society than in the aforementioned study, namely the CEOs in large and prominent Swedish firms. While Björklund, Roine and Waldenström (2012) study the 0.1 percent, my thesis can be said to study only a fraction of that number as only a handful of Swedes will ever be a CEO in a large firm. CEOs are specifically interesting to study since they, besides from being symbolic representants of the pure elite and being rich² also have much power in the Swedish society. In the words of Arvidsson and Hagström (1968), a firm's power is limited to its own activities only if the market is perfectly competitive. As real markets often are imperfect and are characterized by a small number of large firms which in themselves have power to affect the nature of the market, the decisions made by individual firm leaders will affect society. Hence, CEOs have much *de facto* power in society. Furthermore, Björklund, Roine and Waldenström (2012) claims that the study of the elite is especially important in the social mobility field as most people are interested the elite and why they became who they are. People seem to tolerate inequality if the way to the top is characterized by meritocracy and not inheritance or family background³.

Göran Hägg has written a bibliographical book on Swedish 19th and 20th century industrial power men. The anecdotal evidence from the lives of industrialists such as Carnegie, Dickson and Kempe shows, according to Hägg, that the initial starting point already “has to be up on the societal ladder” in order for you to succeed. Hägg further claims that “geniuses with two bare hands have in our country could become capitalist empire builders only during the latest social democratic era” (Hägg, 2013). Welfare reforms such as housing programs and free education would be likely explanatory factors. The subjects in the data I have compiled are born between

²Swedish executives enjoy high salaries. Landsorganisation i Sverige (LO) calculates for 2012 that the 50 highest paid executives earned 46 times more than the average worker, (LO, 2014)

³Björklund, Roine and Waldenström, (2012) cites a Gallup poll analyzed in Fong (2001) as the main source for this statement.

1900 and 1969 and were CEOs at between 1945 and today. Thus, some of them would have enjoyed such reforms.

Having in mind Björklund, Roine and Waldenströms's findings on the low mobility in the top and Hägg's suggestion that Swedish industrialists did not come from simple backgrounds before the latest social democratic era, we arrive to the purpose of this thesis. While Björklund, Roine and Waldenström have already given empirical evidence for the low mobility in the top with an *income* based approach, I aim to study the *occupations* of the fathers of the Swedish CEOs as they shed light over parts of the CEOs' socioeconomic backgrounds. This analysis lies close to what researchers refer to as "occupational social mobility". By comparing these occupations to the Swedish society as a whole, I will answer the question on how *representative* the Swedish CEOs' backgrounds are to that of the public. Furthermore, I want to study if any change in representativeness can be seen during the second half of the 20th century. Although the main analysis revolves around the occupations of the fathers, I will briefly analyze two other aspects of the CEOs' backgrounds; if their fathers worked as managers, and if the CEOs belonged to a noble family. In order to do this I have constructed a, to the best of my knowledge, unique data set which covers 240 current or former CEOs from large and famous Swedish firms. With the help from genealogical archives, I have gathered data on the occupations of their fathers of 172 of the CEOs which then is compared to official historical data on the labor force composition.

The thesis will contain a discussion about social mobility as a concept and how it is measured (Section 2), what empirical research says about the Swedish social mobility (Section 3), a detailed description of how the data was collected and categorized (Section 4), a section where I present the results, or in other words, what kind homes Swedish CEOs grew up in (Section 5) and lastly a discussion (Section 6).

2 What is social mobility?

We distinguish between *intragenerational* and *intergenerational* social mobility. The first notion is about to what extent an individual can change his or her income, or any other variable we are interested in, during the span of his or her own life span (See Bradbury and Katz, 2002). The latter notion is about how an individual's income (or any other variable of interest) relates to his or her parents' income. Intergenerational social mobility thus reflects the concept of "equality of life chances" (OECD, 2010). This concept in itself lacks an absolute definition (Björklund et al., 2012) but can be defined broadly in the words of Arnesson (1989) who writes that "people have equal opportunity for welfare when the cards they are dealt are such that if they play their cards as well as one could expect, they gain the same expected welfare". The metaphorical "cards" signifies something which the individual herself cannot decide over, just like she cannot choose her parents or any other initial condition in life. In other words, high intergenerational social mobility can be thought of as individuals in a society having similar life chances, i.e. similar probabilities of obtaining what they find desirable. As this study is about the backgrounds of Swedish CEOs, I will refer to the *intergenerational* social mobility if nothing else is stated.

From society's perspective, there are two arguments for why high social mobility is desirable; 1) socially mobile societies are better at *allocating human capital* such as skill and talent and 2) individuals in socially mobile societies are more *productive* as their motivation for hard work and effort increases if they feel that they can change their position in society (OECD, 2010). These two arguments come from an economic perspective and it is very well possible that a moral argument in addition to this would be that a socially mobile society simply is more *fair*. On the other hand, *too* high social mobility could theoretically decrease incentives for effort since individuals who have climbed the social ladder not would be able to remain in the position they have obtained.

The term social mobility is *not* an equivalent to the term equality although cross-country comparisons show that high social mobility is positively related to low inequality (Causa and Johansson, 2010; Corak, 2013; Hassler, Mora and Zeira, 2007).

2.1 Different approaches in studying social mobility

As this is a thesis about occupational mobility rather than income mobility, it is important to treat the distinction between the two concepts. Researchers from both sociology and economics are interested social mobility. In sociology, there exists a division between “class mobility and “socioeconomic mobility”(Jonsson et al., 2009). The first refers the notion of “class” which is assumed to be more inflexible, i.e, class is assumed to be fairly persistant over a person’s lifespan and across generations. “Socioeconomic status” on other hand, instead includes variables such as income and education. It is assumed that income and education is more easily changed during a lifetime or between generations and thus more flexible. It is clear that most economic research on mobility, regardless of measurement of focus, tend to focus on “socioeconomic mobility” rather than “class mobility”. This is arguably due to the fact that socioeconomic variables are easier to measure and accordingly preferred by economists which use quantitative measures to a wider extent than sociologists.⁴

The social mobility literature typically focuses on five measures: educational mobility, occupational mobility, wage mobility, income mobility and wealth mobility (Beller and Hout, 2006). For economists, the research field of social mobility gained popularity in the 1980s and the 1990s (Grusky and Weeden, 2006). As noted, the economists’ approach to social mobility differs from that of sociologists, specifically in that income mobility (closer to the notion “socioeconomic status”) is more common within economics and occupational mobility (closer to the notion of “class”) is more common in sociology (Grusky and Weeden, 2006; Beller and Hout, 2006). Sociologist studying occupational mobility focus on the status and prestige of different occupation types. This kind of analysis relies on standardized classifications of occupation and although detailed, less unbiased than when quantifiable incomes are analysed. However, as the economic focus on income may provide a, hopefully, statistically sound analysis of mobility, its narrow focus on “dollars and cents” is criticized by sociologists as “income-based measurement fail to take cognizance of other aspects of the quality of life that are not well correlated with economic

⁴Historically in Sweden, however, we see the word “ståndscirkulation” which roughly translates to “class circulation” although the term “stånd” probably not accords with the modern sociological term “class”.

advantage” (Grusky and Weeden, 2006). Beller and Hout (2006) further claim that social mobility in occupational status is not a good proxy for social mobility in income, or vice versa, simply because they ask different questions. In a way, both sociologists and economists use their differing measures as proxies for what economists call “utility”, which should be considered a function of income and not an equivalent to income. Accordingly, economists should not assume that income mobility alone captures these “other aspects of the quality of life”.

As my thesis is an economic thesis but with focus on occupational mobility, I will also describe a practical difference between measuring social mobility in terms of income and in terms of occupations. This relates to the comparability over time. With income cross-generational income data, a researcher can estimate correlations and/or divide income into quantiles. A typical researcher investigating income mobility may either estimate the correlation between parents’ and childrens’ income (see for example OECD, 2010) or ask the following question: “If A’s father was in the quantile x of the income distribution, what are the probabilities for A to end up in the same, or any other specific quantile, when A is an adult” (see for example Peters, 1992). Even though general economic growth (often) make all quantiles better off, the relative position in the income distribution is still of interest.

Analysis of occupational mobility becomes harder since it faces the problem of valuing different occupations against each other over time. An easy illustration of this is to compare a farm worker and an engineer in the early 20th century and today. Both occupations would be classified in the same way today and but differences in income and prestige has decreased. Correlations between parents’ and children’s incomes gives consistent estimates of how much income variation that is explained by parental income variation and as income quantiles always have the same size (in percents), every individual’s upward movement will be countered by another individual’s downward movement. In an analysis of occupations, it is very well possible that a larger fraction move up than down and at least theoretically possible that all individuals make an upward move, due to structural changes in society. I will attempt to solve this problem by comparing the data’s characteristics to that of society in order to obtain values for how representative the CEOs’ fathers’ occupations are in each decade of the studied time period.

3 Social mobility in Sweden

This section aims to describe social mobility in Sweden and give a general understanding of how social mobility is measured and what is found. Although mostly focused on static and cross-country measures instead of historical trends, the studies on the Swedish intragenerational income mobility are many. The literature on occupational mobility in Sweden is more sparse but Statistics Sweden provides a thorough investigation in the subject (Vogel, 1987).

3.1 Income mobility

Households receive money from several sources. The sum from all the sources is often categorized as income while earnings is often defined as salaries only⁵. The term income mobility includes both studies of income and earnings mobility (Beller and Hout, 2006). A meta study (Corak, 2006) finds that Swedish estimates for earnings elasticities⁶ range between 0.13 (Österberg, 2000) and 0.30 (Lindahl, 2002). Table 1 includes Corak’s reported estimates and additional estimates from more recent studies. According to Corak, Österberg’s lower estimates are due to the fact that a slightly older dataset was used (the son’s were born between 1941 and 1965) which can explain why the estimated elasticity is low. Gustafsson (2004) also provides us with a low estimate of 0.14, but as the sample is drawn exclusively from residents in Stockholm, Corak questions its external validity. We also see that earnings elasticities are consistently lower than general income mobility.

Swedish income mobility has also been measured by studying the correlation between siblings’ incomes. This correlation can be viewed as the fraction of the variance in income that is due to factors shared by the siblings. Family background and community characteristics are among those factors. Björklund et al. (2002) study a sample of individuals born between 1951 and 1964 and find that brother correlations⁷ in Sweden equals 0.250. This estimate is similar to

⁵See the US Census Bureau’s blog post on the distinction between the two concepts: <http://blogs.census.gov/2010/09/23/income-vs-earnings/>.

⁶In most simple terms, the elasticities is the β from the regression $y = \alpha + \beta x + \varepsilon$, where y is the son’s income (or earnings) and x is the father’s income (or earnings).

⁷As is conventional, females have been excluded from the sample as women’s labor force behavior varies more

TABLE 1: ESTIMATES OF SWEDISH INCOME AND EARNINGS ELASTICITIES

Author(s)	Elasticity
Österberg (2000) (earnings)	0.13
Gustafsson (1994) (earnings)	0.14
Björklund and Jäntti (1997) (earnings)	0.28
Björklund, Jäntti and Lindquist (2009) (income)	0.23–0.34
Björklund, Roine and Waldenström (2012) (earnings)	0.17 (avg), 0.45 (top 0.1 %)
Björklund, Roine and Waldenström (2012) (income)	0.26 (avg), 0.90 (top 0.1 %)
Lindahl (2002) (earnings)	0.30

Note: Based on the meta study Corak (2006).

that of other Nordic countries but significantly lower than in the United States (0.429). The authors' hypothesis is that family background and community factors are less important in the Nordics and that a more centralized wage-setting model results in a weaker relationship between productivity and earnings.

Björklund, Jäntti and Lindquist (2009) further elaborates on the brother correlations by studying change over time. They find that intergenerational income elasticities for individuals born in 1930 was 0.34 and decreased to 0.23 in 1950, a drop by 11 percentage points in how much income variation that is explained by family background. Since then, the Swedish income elasticity has been stable until 1968 after which they do not have any more data. This paper is particularly interesting as it provides quantitative evidence on increased social mobility during the middle of the 1900s.

Let us now move on to the *non-linearity* of income mobility, something which is revealed when we study different intervals in the income distribution which is in done in the study, which was briefly discussed in the introduction. By using a data set of over 100,000 father-son pairs born in the 1960s, Björklund, Roine and Waldenström (2012) can study earnings mobility with a focus on the top 0.1 percent in the income distribution. In the total sample, their model estimates an intergenerational elasticity of 0.262 for income and 0.168 for earnings, which is what the author expected based on previous literature. The authors then study elasticities for different parts of the income and earnings distribution and find that mobility decreases as we move up the scale.

than that of men, this complicates intergenerational analysis. Female labor force participation also varies across countries which complicates the authors' aim to do cross-country analysis.

In the bottom half in father income, the elasticity in income is 0.143 whereas the elasticity in the top (0.1 percents) is 0.896. For earnings, the elasticities in the bottom half is 0.065, which the authors comment by saying that “generational dependency is almost absent”. The top 0.1 percent has an earnings elasticity of 0.447. See Table 2 for the estimates in detail. A general conclusion from the article is therefore that income mobility not behaves in the same way in all layers in society. This is also supported in Canadian data in where earnings elasticities in the top percentile is found to be almost 0.8 (Corak and Heisz, 1999). This finding makes it interesting to study the “elite” in society, which is what this thesis aims to do.

TABLE 2: ELASTICITIES IN EARNINGS/INCOME FOR VARIOUS PERCENTILES IN THE EARNINGS/INCOME DISTRIBUTION, AS REPORTED IN BJÖRKLUND, ROINE AND WALDENSTRÖM 2012

	Global (P0–100)	P0–50	P50–75	P75–90	P90–95	P95–99	P99–99.9	P99.9–100
Income	0.262	0.143	0.430	0.400	0.293	0.207	0.392	0.896
Earnings	0.168	0.065	0.575	0.348	0.331	0.168	0.341	0.447

Note: Based on Björklund, Roine and Waldenström (2012), Swedish males born 1960–1967.

3.1.1 But grandfathers matter too

Most research on intergenerational social mobility focuses on how much of the income which persist from one generation to the consecutive generation. This is also the cases with the articles cited in the previous subsection. A very interesting contribution to the study of income mobility is therefore Lindahl et al., (2012) which points out that this might lead to an underestimation of intergenerational persistence. To illustrate this they lend a simple example put forward by Borjas (2009). If the elasticity between two consecutive generations’ income is 0.3 we have that 30 percent of the variation in income between individuals of one generation is explained by variation in the previous generation. If the difference between two fathers’ income is 20 percent, 6 percentage points ($=0.3 \cdot 20$) of this difference will remain in the next generation. In the third generation, $0.3 \cdot 6 = 1.8$ percentage points difference will persist, meaning that initially substantial income differences can be eradicated in only two generations.

Lindahl et al., (2012) analyze a Swedish data which contains three generations, where the

first is born around 1900 and the third roughly between 1950 and 1960. Income elasticities between generation 1 and generation 2 are found to be 0.356 and 0.303 between generation 2 and generation 3. Lindahl et al. then interestingly find that the predicted value from generation 1 to generation 3 is 0.108 ($=0.356 \cdot 0.303$), which substantially differs from their empirically found value of 0.184 they have when observing the elasticities directly.

In line with Björklund, Roine and Waldenström (2012), this effect is especially pronounced in the top quintile of the income distribution. 34 percent of grandsons to members of the top quintile remain in the top quintile (grandfather-son pairs). Notably, this value is almost as high as for father-son pairs.

In sum, by following the reasoning of Lindahl et al, measures of overall Swedish social mobility tend to be overestimated in several studies as they ignore the fact that there is a relationship of persistence between grandfathers and grandsons. Or in Lindahl et al.'s words; "human capital transmission has a memory that lasts longer than for one generation".

A second critique to the previous general two-generation estimates of Swedish social mobility is the innovative contribution from Clark (2013). He measures Swedish intergenerational social mobility by utilizing the fact that some surnames are more prestigious than others. Noble and latinized surnames names are shown to be overrepresented in various elite groups such as among attorneys, physicians and holders of master's degrees. For example, he concludes that 8 percent of the general population of 22 year olds in Sweden obtain a master's degree from a given group of universities whereas the equivalent rate for those having either a noble or latinized surname is 12–14 percent. Accordingly, the Swedish nobility seems to still enjoy *de facto* privileges although their previous formal privileges were completely abolished by 1866 (Clark, 2013). A much feasible critical point, and also in line with Björklund, Roine and Waldenström (2012) is that the mobility level of the general population is much higher than that of the elite (which is the group Clark study). Clark, however, responds to this by showing that noble surnames are underrepresented in lower income quantiles. Clark further shows that the use of his method will not support the common statement that Swedes enjoy much higher mobility rates than for

example the United Kingdom or the United States.

3.2 Occupational mobility in Sweden

As already noted, the literature on Swedish occupational mobility is more scarce. In this section I, however, use a detailed study on Swedish occupational mobility (Vogel, 1987) published by Statistics Sweden. The study uses Statistics Sweden’s “Socioekonomisk indelning” (SEI) classification which is a classification I will later⁸ show that I am not able to use. The findings from this study is therefore not directly comparable to my results. The empirical analysis is based on a sample of the Swedish population aged 30 to 74 in 1985.

Vogel provides estimates of the *total* occupational mobility, i.e. the percentage of individuals who did not end up in the same social category as their fathers. I report these values in Table 3. We see that occupational mobility has increased during the period. Among individuals born before 1920, 66.7 percent of men and 70.0 percent of women changed their social category whereas the corresponding values during the 1940s are 76.3 and 79.3 percents respectively. We also understand that the increase in occupational mobility starter earlier than the increase in income mobility which started to increase during the 1930s and 1950 (see the treatment of Björklund, Jäntti and Lindquist (2009) in section 3.1). Such an inconsistency is to be considered supportive to Beller and Hout (2006)’s claim that income and occupational mobility are *not* interchangeable proxies for each other.

TABLE 3: PERCENTAGE OF INDIVIDUALS IN OTHER SOCIAL CATEGORIZATION THAN THEIR FATHER, THE FIRST HALF OF THE 20TH CENTURY.

	All ages (30–74 years)	Born... Before 1920	1920–1929	1930–1939	1940–1949
Men	73.5	66.7	75.1	76.9	76.3
Women	75.1	70.0	75.2	76.8	79.3

Note: Based on Vogel (1987) who uses Statistics Sweden SEI classification (with 8 categories). My thesis uses 3 categories (further elaborated in the Methods section). As the probability of changing social categorization increases with the number of categories, Vogel’s estimates are not directly comparable to those of mine.

Let us then move to the occupational backgrounds of various groups. The SEI category “pro-

⁸See the the Method section where I discuss the classification problem.

professionals” can be subdivided into “lower”, “middle” and “higher professionals”. Vogel further defines the category “executives” which is a subcategory within higher professionals⁹. Vogel estimates the inflows to all SEI categories but I will focus on the “prestigious” categories as they are most relevant for the CEOs I study. I. Table 4 presents estimates for the increasingly prestigious categories; professionals, higher professionals and executives. The table is read as such as column 2–4 presents where the sons in a specific social category came from, or more specifically, the social category of their fathers. Column 6–7 presents my calculations of the ratios of each cell in column 2–4 and the corresponding reference number (“Ref.”) which is the society’s composition of sons’ backgrounds. This ratio then represents the representativeness of each social category in each of the groups. As is shown, 21 percent of the members of executives category came from working class homes whereas almost half (49.1 percent) were sons to professionals, out of which 23.7 percent were sons to higher professionals. Sons to workers are thus underrepresented by factor 0.45 which means that worker sons were only half as likely as the average person to be classified as executives as adults. Sons to higher professionals, on the other hand, were more than 5 times as likely (factor 5.38) to be classified as executives, as compared to the average person. Vogel’s analysis thus shows that the more prestigious a social category is, the lower is the representativeness of worker backgrounds, and the higher is the representativeness of professionals, and specifically higher professionals.

A caveat to this analysis is that it does not account for over-time changing social category compositions. Just as mentioned in section 2.1, a structural change in society which changes the relative share of the occupational categories will distort the results. In the Method section, I treat how I aim to solve this problem.

3.3 The contribution from this thesis

This section has shown that estimates for Swedish income mobility differs, partly due to data choice, partly due to the methodology used, and certainly due to if income is defined broadly

⁹Note that the category “executives” is not formally part of the SEI classification. Vogel estimates the category to consist of 35,000 individuals or circa 1–1.5 percent.

TABLE 4: SON’S AND THEIR FATHERS SOCIAL CATEGORY (SEI) ASSOCIATION AND EACH SOCIAL CATEGORY’S REPRESENTATIVENESS TO THE PUBLIC

<u>Father’s association</u>	<u>Son’s association</u>			Ref.	<u>Representativeness</u>		
	All profes- sionals	Higher profes- sionals	”The ex- ecutive board”		All profes- sionals	Higher profes- sionals	”The ex- ecutive board”
All workers	40.8	29.8	21.0	46.3	0.88	0.64	0.45
All professionals	29.8	41.7	49.1	16.5	1.81	2.53	2.96
Higher professional	9.5	17.2	23.7	4.4	2.16	3.91	5.38
Agriculture and self-employment	29.4	28.5	29.9	37.2	0.79	0.77	0.80
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>			

Note: Based on Vogel (1987) who uses Statistics Sweden’s SEI classification which is not directly comparable to other classifications. The classifications ”All workers” and ”All professionals” contain further sub-classifications. The sample’s subjects are Swedish men, aged 30–74 in 1985. The column ”Ref.” represents a reference value, i.e. Vogel’s reported composition of social categories for the population. The three columns under ”Representativeness” contain the ratio between each the cells under ”Son’s association” and the reference value (e.g. $40.8/46.3 = 0.88$ which suggests that ”All workers” are underrepresented among ”All professionals”).

or only as earnings. We have further seen that the standard two-generational models estimate elasticities are often lower than what the tri-generational models (Lindahl et al., 2012) suggest. Clark (2013)’s further shows that even if we go more than three generations back in time, family background seems to still play a role in life outcomes. The finding which I have claimed is the rationale for this thesis is Björklund, Roine and Waldenström (2012). When specifically studying the elite in society, it seems that income and earnings mobility become very low. I want to see if this also holds for social mobility measures with occupations. Vogel (1987) has already shown that for the flow to the top occupational categories, the occupational status of a person’s father is an important predictor. His most narrow definition of the elite (the category ”executives”) consists, however, of ca 35,000 individuals, or roughly 1–1.5 percent of the working population. In my analysis, I study an even more narrow definition of the elite, namely the individuals who have been recruited as CEOs for large and prominent Swedish firms.

Björklund, Jäntti and Lindquist (2009) and Lindahl et al., (2012) shows that Swedish income

mobility has increased during the 20th century. Vogel (1987) shows, although without properly controlling for structural changes in society, that this is also the case for occupational mobility. My analysis therefore contains an attempt to fill some of these gaps by studying potential changes in representativeness for various social backgrounds in the top. I try to do this by controlling for changes in the relative share of occupational categories in society during the studied time period in order to increase robustness.

4 Method

As described above, I want to find how representative the CEOs' background are to the general public. I have narrowed this down to study the occupations of the CEOs' fathers as the main analysis. Two further areas will be studied; if the fathers were in managing position and if the families were noble. Ideally I would like to have a large representative dataset randomly drawn from Swedish citizens alive between the end of World War II and today with information if they were CEOs in a larger Swedish firm. It is not feasible to find such data for a thesis like this. Instead I have compiled a smaller dataset containing only CEOs. Together with historical records on occupational statistics I am able to gain an understanding of the representativeness of the CEOs in my sample. This section will describe how the data was collected, how occupations are classified, how historical occupational statistics are found and lastly a brief subsection in how I am able to test the representativeness of CEOs with noble surnames, similar to that of Clark (2013). My econometric analysis is simple and will be self-explanatory in the Results section

4.1 Data collection

The empirical analysis of this thesis is based on a data set including 172 current or former CEOs of Swedish firms. To my knowledge, no previous similar data set exists.

I have constructed CEOs succession lines based on the 30 firms the OMXS30-list¹⁰ at the Nasdaq OMX Nordic Stockholm, the Stockholm stock exchange in the summer of 2014. The data set contains the name of the CEO from 1945 or from when the company was funded. CEOs born in other countries than Sweden are excluded if it is not the case that the CEO moved to Sweden at a very young age, since I then have assumed that they have been affected by the social mobility dynamics in Sweden from then. A weakness in this method is that the full list of CEOs only contains firms which were on the Stockholm exchange in 2014. Preferably I would have wanted a complete list of every individual that ever was a CEO at a Swedish large listed company (or according to any similar condition). According to my selection, a large listed firm would not be on the list if it was taken from the stock exchange, say, in the 1980s. This is problematic and will distort my results if we assume that the social backgrounds of the CEOs in some way is related to when in time a firm was listed on the stock exchange. I, however, do not think that such a relationship exists which is why I am confident that the selection principle manages to capture a representative sample of large and influential firms in Sweden in a satisfying way. The full list of CEOs contains 240 individuals.

I have then collected birthdates and parish of birth of all CEOs by using The National Archives of Sweden's databases "Sveriges befolkning" for the years 1990, 1980 and 1970 (Svensk arkivinformation 1991; Sveriges Släktforskarförbund, 1981; Sveriges Släktforskarförbund, 1971). This resource contains civil registry data on all Swedes alive in the specific year. If a CEO had a generic name (such as "Johan Andersson"), the search would return multiple hits. In this case I specified the search entry with other information I could find about the CEO, such as middle name, or birth town. This information have been found on firms' homepages or through e.g. interviews in newspaper. I deem it highly unlikely that I have mistakenly recorded a namesake instead of the actual CEO in this stage.

The next step has been to find the occupations of the CEOs' fathers and in this step 29 percent of the data have been gathered with help of questionnaires, 12 percent have been found

¹⁰These firms are, weighted after capital, the most traded stocks and include ABB, Alfa Laval, Assa Abloy, AstraZeneca, Atlas Copco, Boliden, Electrolux, Ericsson, Getinge, Hennes & Mauritz, Investor, Lundin Petroleum, Modern Times Group, Nokia, Nordea, Sandvik, Kinnevik, SEB, Securitas, Skanska, SKF, SCA, SSAB, Svenska Handelsbanken, Swedbank, Swedish Match, Tele2, Telia Sonera and Volvo Group.

in bibliographical lexicons and 59 percent of this data has been collected from archives at the National Archives of Sweden and its publicly available collection of genealogical archives. This data source is mainly used by individuals who conduct genealogical research on their own ancestral history. Swedish genealogical archives are detailed and, according to an employee at the archive, of international high class as it is common that people with Swedish ancestry can track their ancestral line back to the latter half 17th century. A common misconception is that only people with noble ancestry can “come far” but more or less every Swede has this possibility. The main source of information used, both for general genealogical research and for this thesis, is the collection of parish books¹¹. They are handwritten registries which contains information on baptisms (and later also include non-baptized children), marriages and burials. Most Swedish parish books are available in digital format in the form of scanned pictures.

I have used Svensk Arkivinformatiön’s (SVAR) “Den digitala forskarsalen” to find the relevant parish book in where the occupation of the subject’s father is found next to the registered baptism. Even when you have the name of an individual, it is not guaranteed that you will find the entry in parish book. In some cases I wasn’t able to find the relevant parish book. In other cases, I did find the relevant parish book but since the entries are not consistently registered chronologically I have not been able to find the specific entry.

The parish books’ data on occupations of fathers is from the the point in time when the child was born. As has been shown by Böhlmark and Lindquist (2006), the most unbiased proxy for an individual’s lifetime income is his or her annual income at around the age of 35. I am not aware of a similar conclusion of when a person’s occupation is as most representative but it is feasible to assume the representative age to be around the same time as for income.

The Swedish civil registry has a 70 years confidentiality period. This means that individuals less than 70 years old are not available for the public to find, for example, in parish books. For data subjects where the confidentiality applies, I have sent out a total of 94 questionnaires including a description of the study and a few questions. I have asked for the parent’s occupation both at the time of birth (to resemble the data in the parish books) and during the subject’s teen years.

¹¹ “Kyrkoböcker” or “församlingsböcker” in Swedish.

I received 50 replies which makes the reply rate 53 percent. This is a lower reply frequency than what I had wished. If it is the case that the recipients were uninterested in the study or if they did not want to spend time filling in the questionnaire, the low reply rate is not problematic. On the other hand, if some recipients of the questionnaire refrained from returning it on grounds which had with the study to do, for example that they did not believe that their backgrounds were interesting, or if they did not agree with the purpose of the research, the low reply rate is a potential source of bias. It is not meaningful for me to speculate in the extent, or the direction of the bias.

Lastly, a few subjects' fathers' occupations have been possible to find in series of the bibliographical lexicons "Svensk biografisk handbok – Vem är det?"¹². In 27 cases, I have used such lexicons for complementary information together with information from the parish books (reasons for this have been indistinct handwriting and when the occupation has been unknown to me). When I have not found the entry in the parish book, I have in 21 cases exclusively used the information found in the lexicons.

In total, out of the 240 CEOs in the sample, I managed to find the father's occupation for 172 observations, or for 71 percent.

4.2 Classification of occupations

In order to perform any analysis with the data, the occupations have to be classified according to a some principle. Within the field of sociology, classification of occupations is a complex and debated matter (Jonsson et al., 2009). For this thesis, it is undesirable to deeply investigate the sociological literature on the subject as it would take me far from the key intended economic analysis. Instead, my analysis requires an easy, transparent and most importantly, a consistent method for classification. Statistics Sweden uses the standard "Socioekonomisk indelning" (SEI). The SEI was published first in 1974 and later in a revised form in 1982. The stated purpose of the standard is to "shed light over the societal hierarchy based on the individual's position on

¹²As I have used multiple editions of this series, I will only cite the first edition (Thyselius, 1912)

the labor market, which is assumed to have an essential impact on the distribution of welfare and chances in life” (SCB, 2014). Preferably, my data should be classified according to this standard as it is both the most modern and conventional in research on occupations. However, several problems exists which makes it unfeasible for me to use the SEI. First of all, the standard was taken into use in 1974 and, as a consequence, historical statistics from the preceding period do not exist. This becomes problematic as I need to compare the composition of occupations in the data with the composition of occupations in society in order to draw conclusions on representativeness. Secondly, the classification is to a large extent based on labor union association and educational attainment which is information I lack for many of the occupations in the data. This would have required a more detailed description of the various occupations in the data. Thirdly, the SEI is detailed as it distinguishes between both skilled and non-skilled workers (in both the manufacturing and services sector) and lower, middle and higher professionals as well as self-employeds and farmers. This is certainly an advantage in that the analysis becomes more detailed but as my sample size is relatively small, I would not be able to obtain any power in my estimates, even if I had the necessary information for such a detailed classification.

For these reasons, a more suitable method is to use the prior *social group* classification. This classification was introduced in 1911 (Haldorson, 2007) and is accordingly more suitable for the time period the CEOs in my data were born in. Occupations and activities such as university enrollment and unemployment are divided into three categories; initially named “the higher class”, “the middle class” and “the manual labor class” but later referred to as social group I, II and III. See Table 5 for an overview of the composition of the types occupations within each group.¹³ The social group classification was criticized for its subjectivity and over-simplified “common sense” approach, which later led to the introduction of the more systematic SEI classification (Haldorson, 2007). While I acknowledge this weakness, I deem it feasible to use the social group classification rather than the SEI since 1) it exists historical statistics of the relative share of each social group in society for almost the entire period of study and 2) it is easier to classify occupations according to the three social groups instead of according to the

¹³Housewives were classified according to their husbands’ occupations.

TABLE 5: DESCRIPTION OF THE THREE SOCIAL GROUPS

<i>Social group I</i>	Firm-owners, managing professionals Higher professionals University students
<i>Social group II</i>	Farmers Smaller firm-owners Supervisors Technicians, office employees Lower professionals Students at "gymnasiet" and similar
<i>Social group III</i>	Smaller farmers, fishermen, forestry workers Workers Assistants Unemployed Invalids

Source: Haldorson (2007)

SEI's larger number of categories.

4.3 Historical labor force composition

In order to understand the representativeness of my sample's fathers' social position I have to turn to historical data on the composition of categories of occupations. I have used Statistics Sweden's series of publications "Riksdagsmannavalet" which contain declarations of the composition of the Swedish voter base. The publications are produced in between the parliamentary elections, which is why I have used the report published closest in time the start of each decade. The composition of the electorate provides a good estimate of the size of each social group. Table 6 shows the shares of each social group per decade. As the classification was introduced first in 1911, I did not find any data for the centuries first decade, and have instead used the same values as I use in the 1910s. Similarly, I did not find the composition for the 1950s and have instead used the values from the 1940s. For the 1960s, I have used Haldorsson (2007) reported values.

Table 6 shows the composition of social groups as presented in “Riksdagsmannavaalen” which lies closest in time to the start of every decade.

TABLE 6: COMPOSITION OF SOCIAL GROUP I, II AND III ACCORDING STATISTICS SWEDEN ELECTORATE SURVEYS

Decade	Social group I	Social group II	Social group III	Source
1900	6.4	40.5	53.1	Statistics Sweden (1915)
1910	6.4	40.5	53.1	Statistics Sweden (1915)
1920	8.0	40.7	51.4	Statistics Sweden (1922)
1930	4.5	39.0	56.5	Statistics Sweden (1933)
1940	4.5	38.2	57.3	Statistics Sweden (1941)
1950	4.5	38.2	57.3	Statistics Sweden (1941)
1960	7.8	34.7	57.5	Haldorsson (2007)
<i>Average</i>	<i>6.0</i>	<i>38.8</i>	<i>55.5</i>	

4.4 Categorization of managers

In Statistics Sweden’s “social group” classification, occupations which include managerial responsibilities are not immediately classified as social group I as for example smaller business owners are classified as members of social group II. Having a father in a managerial position could affect a son’s choice of occupation which is why the thesis very briefly also analyzes the amount CEOs which are sons to managers.

I have assigned the occupations in the sample with a dummy that signifies a managerial position. Admittedly, this classification is inevitably more vague than classification in social groups as a simple word or pair of words for describing someone’s occupation, which is what I have in the data, is insufficient in order to get an understanding of whether or not the individual’s occupation included managerial responsibilities. Titles such as “engineer” clearly means that the individual is a member of social group I and it is very possible but far from certain that this person’s job description included managerial tasks. In these cases I have classified them as “non-managers”. The fact that this person will be classified as not having managerial tasks suggests that the fraction of managers in my sample will be biased downwards. There is certainly a small risk that some of the titles in my data set has been wrongly specified. When filing the parish

records, the fathers of the newborn children did probably sometimes overstate the prestige in their occupation and perhaps even declare a managerial position when in fact there was none. These two sources of bias work in the opposite directions.

4.5 Nobility

As already discussed, Clark (2013) analyses the overrepresentation of the noble and latinized surnames in several Swedish elite groups such as physicians and lawyers. He does not, however, study the overrepresentation among the top CEOs.

The King of Sweden had up until 1975 the authority to knight individuals into nobility although this right has not been exercised since 1902. All descendants of a knighted person are considered noble. The reasons for gaining nobility, as well as the privileges accompanied with nobility have been of varying nature. By 1866, no formal privileges remained, except for the membership in "Riddarhuset". (Clark, 2013)

The *Sveriges Ridderskaps och Adels Kalender* provides a list of noble surnames in Sweden. In addition to this, we have the so-called unintroducted nobility, that is families residing in Sweden which have gained their noble titles in other countries than Sweden but are members of the "Association of the Unintroducted Nobility in Sweden". Just as Clark points out, some of the noble surnames are carried by individuals which are not members of the nobility. Examples of such names are the fairly common names Schmidt, Borg, Murray or even very common names such as Ericson and Hedin. It is more probable than not that these individuals are not of noble creed. Clark's way of tackling this problem is to only use the noble names which were carried by less than 400 individuals. I have used Statistics Sweden online *name search* to perform a similar exclusion of the common names (Statistics Sweden, 2015).

In this part of the analysis I am able to use the entire sample of Swedish CEOs, a data set with 240 observations. The reason that allows me to use this number of observation is that I do not need information on the fathers' occupations as the surnames themselves suffice to reveal this information on nobility.

A *considerable* caveat to this analysis is that I have only accessed the database of noble surnames through Wikipedia which is free for anyone to edit. The reason for why I consider the source satisfactory (although not optimal) is that every family in the Riddarhuset has a number attached to it. This number runs from 1 to 2350. In the Wikipedia source, the number of noble surnames matches this amount which, at least implies that the amount of surnames is correct. If a Wikipedia article is controversial, it is probably subject to false modifications. I do, however, not consider the article on noble surnames to be very controversial. The list of unintroduced nobility is however incomplete. This weakness will bias my results in a direction that makes me *underestimate* the nobility's share among the CEOs.

5 Results

I start by presenting the findings from the analysis on representativeness of the CEOs' social group associations, both for as static measure and across time. The second subsection will treat the CEOs which had fathers in manager positions and the last subsection covers the results from the analysis of noble surnames.

5.1 Social group representativeness

5.1.1 A static measure

I start by providing static figures from my finding, which means that I at this stage do not consider aspects of change over time in my sample. This subsection is therefore informative in gaining an understanding of total over- and underrepresentation of different social groups.

Table 7 shows the frequencies and percentages of the fathers' occupations according to each social group classification. Note that individuals born in 1880 (n=3) and 1890 (n=6) have been coded as born in 1900 in order to reduce the small outlier values. Under the same principle, individuals born in 1970 (n=3) are coded as born in 1960.

TABLE 7: DISTRIBUTION OF SOCIAL GROUP ASSOCIATIONS

Social group	N	(%)
I	119	69.2
II	25	14.5
III	28	16.3
<i>Total</i>	<i>172</i>	<i>100</i>

Note: These values use the entire sample. The term “social group association” specifically means the subject’s father’s occupational classification

Social group I contains individuals which with ease could be considered members of the societal elite. In the full-sample average, I find that 69.2 percent grew up in homes classified as social group I. Based on available data from the Statistics Sweden’s “Riksdagsmannavalen” statistics, this group represented on average 6.0 percent of society in the period 1900–1969. In terms of representativeness, we have that children from social group members are heavily overrepresented within the group of CEOs with a factor of 11.53 ($69.2/6.0$). If social group I association among the CEOs would have been exactly as high as in society, this value would have been 1.

By the same principles, the social group II averages 14.5 percent in my sample whereas the corresponding figure in society for the same period was 38.8 percent. The group is underrepresented in that it is only 37 percent ($14.5/38.8=0.37$) of what it needs to be to perfectly mirror society.

Members of social group III make up 16.3 percent of my sample. During the same time period, the group’s size in society averaged 55.5 percent. This gives that social group III only made up 29 percent of what it should have done in order to be representative.

5.1.2 Change over time

Thus far, the data shows that the CEOs in the sample were born into families which did not represent society as a whole in terms of social group association. Social group I is instead heavily overrepresented. The second purpose of the analysis is to study if any change in social group association can be seen over the time period of the sample.

Table 8 shows the composition of CEOs social group origin in each decade. At a glance, no trend can be seen. Table 9 is similar to Table 8 but differs in that I have divided the CEOs social group association by the corresponding fraction in society as a whole (as shown in Table 6).

TABLE 8: FREQUENCIES OF CEO SOCIAL GROUP ASSOCIATIONS PER BIRTH DECADE, PERCENTAGES IN PARENTHESES

Decade of Birth	Social group I	Social group II	Social group III	Total
1900	15 (65.22)	3 (13.04)	5 (21.74)	23 (100)
1910	11 (78.57)	3 (21.43)	0 (0.00)	14 (100)
1920	16 (76.19)	3 (14.29)	2 (9.52)	21 (100)
1930	24 (82.76)	2 (6.9)	3 (10.34)	29 (100)
1940	15 (53.57)	3 (10.71)	10 (35.71)	28 (100)
1950	26 (68.52)	7 (18.42)	5 (13.16)	38 (100)
1960	12 (63.16)	4 (21.05)	3 (15.79)	19 (100)

Let me then move on by performing a simple bivariate regression of the form

$$y = \alpha + \beta * yearofbirth + \varepsilon$$

where y is a dummy for having a father classified as either social group I, II, or III and $yearofbirth$ is the year the CEO was born. This regression tests if CEOs born later in the sample period has an increased or decreased probability of coming from a specific social group. I perform one regression for every social group. These three regression are performed in ordinary least squares form, presented in Table 10 but as the explained variable is a binary, logit form

TABLE 9: SOCIAL GROUP REPRESENTATIVENESS PER DECADE: THE SAMPLE'S SHARE RELATIVE TO THE SOCIETY'S SHARE

Decade	Social group I	Social group II	Social group III
1900	10.19	0.32	0.41
1910	12.28	0.53	0.00
1920	9.52	0.35	0.19
1930	18.39	0.18	0.18
1940	11.90	0.28	0.62
1950	15.20	0.48	0.23
1960	8.1	0.61	0.27

is used in Table 11. Weighted least squares regressions are presented in Table 12. In this form, I have assigned a weight to each observation to account for the composition of social groups in society for the respective decade.

As can be seen from the regression output, no coefficient to birthyear is significant at any conventional level in any of the nine regression. Thus, no evidence for a linear trend in increased or decreased representation of any group can be seen at this stage.

TABLE 10: FATHER'S SOCIAL GROUP REGRESSED ON SON'S YEAR OF BIRTH (OLS, ROBUST STANDARD ERRORS)

	(1)	(2)	(3)
	Social Group I	Social Group II	Social Group III
Year of Birth	-0.000768 (-0.44)	0.000166 (0.12)	0.000602 (0.43)
Constant	2.178 (0.64)	-0.176 (-0.07)	-1.002 (-0.37)
Observations	172	172	172

Note: Robust *t*-statistics in parentheses; ordinary least squares form; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 11: FATHER'S SOCIAL GROUP REGRESSED ON SON'S YEAR OF BIRTH (LOGIT, ROBUST STANDARD ERRORS)

	(1)	(2)	(3)
	Social Group I	Social Group II	Social Group III
Year of Birth	-0.00363 (-0.43)	0.00134 (0.12)	0.00449 (0.43)
Constant	7.843 (0.48)	-4.374 (-0.20)	-10.34 (-0.51)
Observations	172	172	172

Note: Robust *t*-statistics in parentheses; logit form; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

I move on by asking whether or not a change can be seen if I divide the time period into an “early” and a “late” time period. In order to not have any prior on when in time a change would have been seen I divide the sample into two periods in a way such that both time periods contain approximately equal number of observation. Table 13 shows how that the percentage of individuals born in social group I homes averaged 75.86 percent in the early period (11.99

TABLE 12: FATHER’S SOCIAL GROUP REGRESSED ON SON’S YEAR OF BIRTH (WLS, ROBUST STANDARD ERRORS)

	(1) Social Group I	(2) Social Group II	(3) Social Group III
Year of Birth	-0.000298 (-0.57)	-0.00290 (-0.93)	0.00320 (1.00)
Constant	0.637 (0.63)	6.025 (0.99)	-5.662 (-0.92)
Observations	172	172	172

Note: Robust *t*-statistics in parentheses; weighted least squares form; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

times society’s share) and 62.4 percent in the later period (11.13 times of society’s share). As for social group II, 12.64 percent were born into this group in the early period (0.32 times of society’s share) and 16.47 percent is the corresponding figure for the later period (0.44 times of society’s share). Social group III is almost doubled as 11.49 percent were born in these homes in the early period (0.21 times of society’s share) and 21.18 percent in the later period (0.37 times of society’s share).

The social group III association has become more representative in the late time period but Table 9 shows that the representativeness per decade has a high variation. In the 1900’, the fraction of social group III association in the sample was 0.41 times that of the society, but only 0.23–0.27 in the 1950’s and 1960’s. For social group II, we also see increased representativeness in the late period, but again, the low number of observations yields high variance per decade. It is therefore not possible to say that the results from the division into two periods gives satisfactory evidence for an increased social group III or social group II association among CEOs. This is supported by the fact that the weighted least squares regression (in where the unit of analysis is *individuals* and not *decades*) do not yield any evidence for a significant relationship between birth year and social group association.

TABLE 13: REPRESENTATIVENESS OF THE SAMPLE'S SOCIAL GROUP COMPOSITION DIVIDED INTO "EARLY" AND "LATE" TIME PERIOD

			Sample's social group composition (%)			Society's social group composition (%)			Representativeness $\left(\frac{\text{Society's share}}{\text{Sample's share}} \right)$		
Time period	Years	N	I	II	III	I	II	III			
<i>Early</i>	1900–1939	87	75.86	12.64	11.49	6.33	40.13	53.53	11.99	0.32	0.21
<i>Late</i>	1940–1969	85	62.35	16.47	21.18	5.6	37.03	57.37	11.13	0.44	0.37

5.2 The share of sons to managers

Let us then consider the share of CEOs which had a father in a manager position. For the entire period, 56.98 percent were born in a home where the father had a manager position. According to Wahl (2003), 4 to 10 percent of employed men had managing positions in 2002¹⁴. I have not managed to find more detailed statistics on the rate over time. If Wahl's estimate is representative for the time period of study in my analysis, manager backgrounds among CEOs would have been overrepresented between 6 to 14 times. Due to the lack of historical data, this result should be interpreted with caution.

Has the share of sons to managers changed over time? I regress the dummy for having a father as a manager on birth year in OLS and logit form (as I do not have data on the fraction in society over time, I do not use a weighted least squares form) and present the results in Table 14. As can be seen, none of the two regression forms return a significant coefficient to birth year.

If comparing the two periods, the "early" and the "late", I find that 55.17 percent born in the early time period are sons of managers whereas the corresponding figure in the late time period is 58.82 percent. I do not have access to historical data on how many individuals were managers in society at large and I will refrain from drawing any conclusions from the indicated change. If the share of managers in society is substantially lower in the the late period compared to the

¹⁴The rate of managers varies over sectors.

TABLE 14: MANAGER REGRESSED ON BIRTH YEAR (ROBUST STANDARD ERRORS)

	(1)	(2) Logit
Year of Birth	0.00191 (0.99)	0.00778 (0.99)
Constant	-3.123 (-0.84)	-14.78 (-0.97)
Observations	172	172

t statistics in parentheses

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

early period, even the higher fraction of manager backgrounds in the sample would suggest a decreased overrepresentation over time.

TABLE 15: FRACTIONS OF SUBJECTS WHO HAD A FATHER IN A MANAGING POSITION, EARLY AND LATE TIME PERIOD

Time period	Years	Father in manager position (%)
<i>Early</i>	1900–1939	55.17
<i>Late</i>	1940–1969	58.82

5.3 CEOs with noble surnames

As discussed in the Method section, determining whether or not a specific individual is of noble ancestry is difficult. Among the 240 CEOs, 24 surnames (10.0 percent) carry a surname which *could* be noble. 12 of the names are carried by more than 400 Swedes according to Statistics Sweden’s name search and these names have therefore been excluded. This means that 12 remaining surnames are noble. This equals 5.0 percent of the studied sample. Clark (2014) estimates that there exist 54,000 noble Swedes which today would mean that 0.5–0.6 percent of Swedes are noble. By this, nobility among the CEOs in the sample is overrepresented by a factor of about 10. This is in par with the overrepresentation of social group I association.

I divide the sample into an “early” and “late” time period again. The median birth year of the

sample with 240 observations is 1940¹⁵, which is why I let 1940 be the cut-off value between the two periods. I find that, out of the 12 total noble subjects, 9 were born in the early period, and 3 were born in the late period. As the share of nobility in society could have changed from in the early and late time period, I will refrain from drawing any conclusion on the changed representativeness of the nobility.

6 Discussion

The title of this thesis is “In what homes did CEOs grow up?”. This is a question within the field of social mobility and as I have discussed, there are many approaches to measuring social mobility and accordingly; many ways to answer the question. It is important to keep the words of Beller and Hout (2006) in mind as they claim that occupational mobility and income mobility are not the same thing. This means that we cannot just study one of the two and then draw conclusions on the other. In this thesis, I study occupational mobility and I have considered three aspects of the question in the title; the representativeness of the CEOs fathers occupations, whether or not their fathers were managers and lastly, whether or not their families were noble. My results show that a typical Swedish CEO grew up in a home where the father was a member of social group I. The father was also very likely to be in a managing position. It further seems as if sons born into noble families are overrepresented among Swedish CEOs.

The most important finding in the thesis is that the children born into social group I homes are heavily overrepresented among CEOs. Similarly, children born into social group II and social group III homes have during the studied period been underrepresented. Björklund, Roine and Waldenström (2012) conclude that social mobility measured by income is very low at the top of the income distribution. My results are to be viewed as a complement which goes in line with their study as I show that also the *occupational* mobility in the top layer of society is very low. The results further go in line with the analysis of occupational mobility in Vogel (1987).

¹⁵The fact that the median value is the same for both the total sample (n=240) and the subsample in which I have complete data for the fathers' occupations (n=172) means that the missing occupation values are not systematically related to the subject's birth year, i.e. the likelihood for finding the occupation of the father has been the same no matter the birth year.

As I have used an even more narrow definition of the elite than he does (the "executives"), the overrepresentation of the top social category is higher. This is what we could expect from Vogel's study as he showed that the more prestigious the category was, the more prestigious was the backgrounds of the members in the category.

Hägg (2013) claimed that it has been possible for "geniuses with bare hands" to succeed only during the latest social democratic era. Furthermore, both Lindahl et al., 2012 and Björklund, Jäntti and Lindquist (2009) find that social mobility measured as income increased during the middle of 20th century. The CEOs in my sample were mainly born in the period 1900 to 1969, a period which also was characterized by many social democratic reforms. However, I do not find any significant changes in their social backgrounds, even though I control for change in size of the social groups in society. Social group I has remained highly overrepresented among CEOs, over the entire period.

There exists a number of weakness to my study. First of all, the sample size is small. This means that if there in fact has been a change in representativeness for a social group, I have perhaps not been able to capture it with statistical significance. Furthermore, the classification of occupations have been made by me and there is of course very well possible that it has been systematically wrong. One way of solving this would have been to let a research assistant or a second author perform an independent classification and then compare several classifications of the same occupation.

It is important to note that this study attempts to answer the question on *how* occupational mobility in Sweden is characterized rather than *why* it is characterized in a specific way. Why are members of social group I overrepresented among CEOs? Why has not occupational mobility in the elite increased during the 20th century? These are questions which the data and method used in this thesis cannot answer. On the other hand, this thesis provides a background to a future researcher wishing to investigate the *why* questions.

Future studies on the same subject should first of all increase the sample size, perhaps also by including board members. Other interesting aspects to consider would be to study the

geographical origins and the level of education for both the CEO and the father. Furthermore, a larger sample size would make it possible to study if the representativeness of various social groups vary for firms of different size and for firms in different sectors.

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