

Patterns of Persistence

Intergenerational mobility and Sweden's social structure 1865-2015

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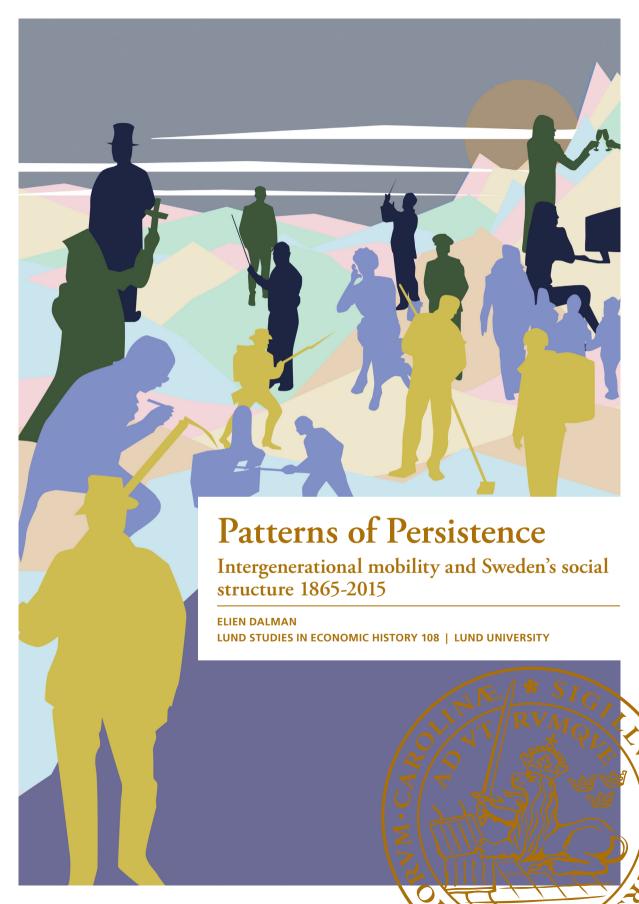
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Patterns of Persistence

Intergenerational mobility and Sweden's social structure 1865-2015

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Elien Dalman



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School of Economics and Management
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Man is born free, but is everywhere in chains

The social pact, far from destroying natural equality, substitutes, on the contrary, a moral and lawful equality for whatever physical inequality that nature may have imposed on mankind; so that however unequal in strength and intelligence, men become equal by covenant and by right.

Jean-Jacques Rousseau (1762), The Social Contract

In an open world, success depends on education, on equipping yourself to compete and win in a global economy. This means that national governments must ensure that everyone has an equal chance to get the education on which success depends. But it also means that those who land on top come to believe that they deserve their success. And, if opportunities are truly equal, it means that those who are left behind deserve their fate as well.

Among the winners, it generates hubris; among the losers, humiliation and resentment... it encourages the winners to consider their success their own doing, a measure of their virtue — and to look down upon those less fortunate than themselves... It leaves little room for the solidarity that can arise when we reflect on the contingency of our talents and fortunes. This is what makes merit a kind of tyranny, or unjust rule.

Michael Sandel (2020), The Tyranny of Merit

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Starting my PhD trajectory at Economic History in Lund meant a radical change in social environment. Not only did I move to a country I had never lived in before, but I also left all my friends and family behind. I am deeply grateful to my main supervisor Martin Dribe – and anyone else who was involved in my selection for the PhD position – for giving me this opportunity not only to develop myself academically, but also to start a new life: with new friends, a new home country, and a new family. For various reasons my life in the Netherlands had been strained before I went to Sweden, and I was incredibly lucky to meet so many warm and welcoming people after arriving in Sweden. Without them, and without this change in environment, I am certain that I would not have been able to write this book.

I therefore first and foremost want to thank all my nearest and dearest in my new home country for their help and support in building my new life as well as writing my dissertation. To this group belong several of my (former) colleagues. But especially Filip: without your love and support this would not have been possible. There are no words to describe how grateful I am to have you in my life. The same goes for our kids: you lighten up my days. I also want to thank my friends and family from my old home country for their love, and for continuing to form such a valuable part of my life.

I see my PhD trajectory as my first encounter with proper academic work; before starting the PhD, I rather approached academia as a tourist, trying to experience as many of the highlights of as many disciplines as possible. Changing this was hard work, but it was also highly rewarding. I was lucky to get the opportunity to learn from three supervisors with very distinct competences. From Björn Eriksson, my assistant supervisor during my first years, I learned how to communicate research – and the archaeologist's approach to historical data. My main supervisor Martin Dribe has a unique ability to strike the right balance between teaching his PhD students how to be an independent researcher and being promptly available if and when necessary. Even if at times I disagreed in the short term, I have taken to heart many of the things you have taught me about Sweden, social stratification, and economic history. Without my assistant supervisor Annika Elwert, I would not have been able to complete this dissertation. Thank you for your emotional support and for your valuable feedback on my ideas – I am afraid I have placed more than a fair share of the emotional burden of completing my PhD on you.

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Over the past pandemic years, I have often been working from home. I live close to Sweden's oldest building: the church of Dalby. During workdays I would regularly take a short walk and pass this church – with its beautiful view over the Scanian countryside – and its cemetery. On most of the gravestones on the cemetary four things are mentioned: a person's name, their dates of birth and death, their gender, and their occupations. Names, occupations, gender, and the era in which you live, are defining characteristics of an individual in society. They are also the main characters in this dissertation, and I use them to describe the Swedish social structure and patterns of persistence therein. I hope you enjoy reading it!

List of Papers

- Dalman, Elien. Social stratification of men and women in Sweden 1880-2015. Unpublished manuscript.
- II. Dalman, Elien, Dribe, Martin & Eriksson, Björn. A Schumpeter hotel? Surname status persistence in Sweden 1880-2015. Unpublished manuscript.
- III. Dalman, Elien. The impact of mothers. Intergenerational mobility in Sweden 1865-2015. Unpublished manuscript.
- IV. Dalman, Elien. Intergenerational status persistence in Sweden 1865-2015.The impact of occupational and surname status. *Unpublished manuscript*.

Author's contribution to the papers

II. ED led the study design, carried out the practical part of the study, in which BE contributed with the linking of historical census data. ED interpreted the results together with the co-authors and led the writing.

Introduction

Motivation, aim, and contribution

Our life chances are not fully equal, but depend on our family background. Those born into lower classes, with less educated or poorer parents, are less likely to end up in high status positions, than those with richer, more educated, or higher-class parents. At the other end those born into lower classes, with less educated or poorer parents, are more likely to end up in low status positions. Despite widely supported political efforts to equalize opportunities, such differences are seen across the world and across time. In this dissertation I ask how different dimensions of social status, such as the prestige associated with one's occupation, interact to shape inequalities of opportunity over the course of economic and institutional development.

Socio-economic life chances are commonly believed to have been unequal in preindustrial European 'ascription' societies; those born into the nobility or bourgeoisie had better chances to 'get ahead' in life than those born as children of peasants. There were clear differences, legally, politically, economically, and socially, between different social strata. These strata shaped the political and social hierarchy in pre-industrial Sweden, as in many other European countries (Ågren 2017; Stadin 2004). Nobility and the clergy formed a ruling elite, followed by an - in the nineteenth century expanding – urban upper class distinguished by their educational or economic position. Below them on the social ladder was the majority population of farmers, followed by landless laborers. Similarly, socio-economic life chances differed substantially by gender and marital status in a society dominated by patriarchic nuclear families which served both as units of production and reproduction. Women's work outside of the family was largely restricted to a period in young adulthood, or dependent upon agreement of the head of household (father or husband). Head of household social class or occupational status formed another dimension of distinction leading to diverging socio-economic outcomes in adulthood, for example through access to training (guilds). On the other hand, in a substantially less globalized world Sweden, as many pre-industrial societies, had an ethnically rather homogeneous population (with small Sámi and Finnish minorities in the north) and very few international immigrants, so that there was little room for distinct socio-economic life chances by ethnicity or migrant status.

Today, however, most of these dimensions of social status are no longer formally connected with different opportunities.¹ In modern societies, the ideal is for status positions to be attained through 'achievement' rather than 'ascription' (see e.g. Kerr et al. 2000; Lipset and Zetterberg 1959). This focus on meritocratic achievement is often connected to the idea of 'equality of opportunity' (Roemer 1998); socioeconomic outcomes may not be the same, but at some point in time all (children) should have equal opportunities to achieve any status position suiting their abilities. In a society with equality of opportunity, children may still end up in the same social status positions as their parents. Equality of opportunity does not imply high 'intergenerational mobility'; in a society with high intergenerational mobility of social status, the position of children does not resemble that of their parents much, while equality of opportunity can go alongside either high or low intergenerational mobility depending on which children end up in which positions.

That is, if we assume there to be perfect equality of opportunity in a society, this could go hand in hand with perfect immobility if children experiencing these equal opportunities ended up in the exact same status positions as their parents. The same situation of perfect equality of opportunity could also go hand in hand with perfect mobility if children do not at all perform so that they end up in similar status positions as their parents. At the start of industrialization, many contemporaries believed that industrialization and democratization would lead both to equal opportunities and high intergenerational mobility. Those from lower status backgrounds would aspire to get ahead in life and would have the chance and abilities to do so:

There is still a class of menials and a class of masters, but these classes are not always composed of the same individuals, still less of the same families; and those who command are not more secure of perpetuity than those who obey [...] At any moment a servant may become a master, and he aspires to rise to that condition.

Alexis de Tocqueville (2006 [1838]), Democracy in America. Volume 2.

Such increases in intergenerational mobility and in the importance of own achievements during economic and institutional development are also expected according to modernization theory in sociology (Treiman 1970). The idea of a meritocracy, with own achievement determining status attainment, has been described as naïve by some recent scholars from different backgrounds (see e.g. Sandel 2020). Based on a novel empirical approach, American economic historian

¹ In Sweden, only one of these dimensions of parental background creates legal inequalities between individuals in the twenty-first century: migrant status (Shachar 2009). Citizenship rights are limited to those with Swedish-born parents or new applicants fulfilling other restrictive conditions. Those without citizenship cannot vote in national elections, and those without other permits are not allowed to participate in society at all, for example through employment.

Gregory Clark in his polemic work *The Son Also Rises* (2014) claims that intergenerational mobility is as low today as it was historically.

The work by Gregory Clark, and many other recent studies showing lower intergenerational mobility than previously assumed, revived the debate on the level of intergenerational persistence experienced in different societies today and in the past. To what extent is your social status affected by your family background, and does this change over the course of economic and institutional development? And following from this, as different approaches to this question have given different answers: How should we define family background? Which information on which family members should be contained in 'social status origin'? Does what constitutes your 'social status origin' change as society transforms structurally and institutionally? These questions are the main focus of this dissertation.

Why do I study intergenerational persistence? What do I hope to find; what level of intergenerational persistence is desirable? Here again, the answer depends strongly on the question: intergenerational persistence of what? Setting a desired level for overall intergenerational persistence between parents and their children is not the task of a researcher, but rather the task of a politician based on ethical considerations. However, as the debate on 'ascription' and 'achievement' shows, intergenerational persistence at the group level is substantively different from intergenerational mobility at the level of individual families. Persistence at the level of social groups creates tangible social inequalities that can be linked to a society's wellbeing in a different way from persistence at the level of individual families. For example, persistent inequalities between social groups lower social trust and undermine social cohesion (Putnam 2000; Rothstein 1998; Savage 2021). Persistence at the level of social groups is hard to link to an individual's own achievements. Disentangling intergenerational persistence related to social group membership from parent-child mobility (in terms of occupational status) is one of the main aims of this dissertation. The types of group membership studied are preindustrial social strata (surname groups), gender, and social status. The latter means that I allow for heterogeneity in mobility levels by social status origin.

The overarching contribution of this dissertation is to show how the changing social structure — and social groups therein — are related to levels and patterns of intergenerational status persistence. I study such changes over the course of long-term economic and institutional development. By studying different dimensions of social status origin that may affect child status attainment, I distinguish between different types of intergenerational persistence, which differ in their consequences and desirability. Some social status dimensions, such as gender, migrant status, or pre-industrial social strata, would not be associated with differences in child status attainment in a 'meritocratic' society, as they do not represent traits resulting in differential achievement at the group level. Intergenerational persistence of social status as determined by such group belonging reflects 'ascription' rather than 'achievement'. In a meritocratic society we would not, on average, expect men to

perform better or worse than women, or those with a nobility origin centuries ago, on average, to perform better than those with a farming origin centuries ago.²

This dissertation specifically links the social status of these social groups to occupational intergenerational mobility and demonstrates how intergenerational mobility is mediated in important ways by such group belonging. As the relevance of different social groups in shaping the social structure changes over time, I expect intergenerational persistence of social status to reflect different patterns of persistence in different contexts. One of the major questions I ask, by distinguishing pre-industrial social strata, is to what extent inequalities related to social group belonging persist over time. I find high persistence of pre-industrial social strata (paper two) and, historically, an important mediating role of these social strata in determining levels of occupational intergenerational mobility (paper four). Both at the level of individual families, and as a group, higher social strata experience lower levels of mobility than the majority population in the late nineteenth and early twentieth century. These high-status groups manage to maintain their occupational structure as the rest of society converges to the same occupational structure with economic development.

Changes in family type and gender norms, and their implications for the composition of social origin, could have important consequences not only for our understanding of time trends in mobility but also for our understanding of differences between countries in mobility levels (Beller 2009). In previous research, Sweden is often found to experience increasing intergenerational mobility among cohorts born between ca. 1900 and 1972, and more so than other European countries (e.g. Breen 2004; Breen and Müller 2020; Erikson and Goldthorpe 1992). These results are however based on a one-parent conceptualization of family origin, which becomes increasingly ill-suited to capture parental social status origin - especially in Sweden, a country where mothers' labor force participation expanded both relatively early and rapidly (Stanfors and Goldscheider 2017; Thaning and Hällsten 2020). I find patterns of intergenerational mobility to differ substantially as family type and gender norms change; a lowering of father-child associations as Sweden transitions to a dual-earner society goes hand in hand with higher mother-child associations (paper three).

I first study how the Swedish social structure changes over the course of institutional and economic development (paper one). In this study I cover different dimensions of occupation-based social stratification, describe how they relate to each other

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² Even in the first generation, attaining nobility status did not reflect abilities paying off in the labor market today, but, for example, braveness on the battlefield. At least formally, what is rewarded and highly regarded in society changed as pre-industrial institutions were replaced by democratic welfare states (e.g. Tönnies 1966 [1931]; Weber 1978a [1921]).

empirically, how this changes over the long term, and how it differs by gender. I study both social class, occupational status, and 'microclasses'.

I find that overall levels of occupational intergenerational mobility are highly stable in the long run; at the surface, occupational mobility seems surprisingly unaffected by the roll-out of institutions for equal opportunities (cf. Beller and Hout 2006; Esping-Andersen 2015), or by sharp reductions in economic inequality (cf. "Great Gatsby Curve", see Corak 2013; DiPrete 2020). In contrast to income mobility, long-run levels of occupational mobility in Sweden are similar to those in the United States (Song et al. 2020). This finding is not new and the discrepancy between income mobility on the one hand, and educational and occupational mobility on the other hand, is often referred to as the "mobility paradox": Scandinavian countries, while more equal economically, display largely the same opportunity structure in terms of other dimensions of social status as less economically equal countries (Beller and Hout 2006; Breen and Jonsson 2005; Breen, Mood, and Jonsson 2016).

Seeing these levels of intergenerational mobility in conjunction with important social and structural transformations suggests that stable levels of occupational intergenerational mobility might indicate substantial decreases in terms of broader intergenerational persistence of social status. Most importantly, with economic and institutional development, the social structure becomes more varied and captures social status differences increasingly well – first as men enter the non-farming workforce during industrialization, and then as women enter the formal workforce. Moreover, the social groups studied in this dissertation – pre-industrial social strata and gender – become less important in shaping intergenerational mobility in Sweden over time.

An important qualification to this general conclusion of long-run reductions in intergenerational persistence is the arising status gap, observed in the different papers, between Swedish-born and foreign-born workers; this new dimension of social stratification becomes increasingly important in shaping patterns of persistence in the twenty-first century.

Research questions

The first paper focuses on the social structure, and answers the research questions:

1. How do different occupational dimensions of social status interact to shape the Swedish social structure over the course of economic and institutional development? How does this differ by gender?

Paper two to four focus on intergenerational persistence, and each reflect in different ways upon the overarching questions: Do levels and patterns of intergenerational persistence of social status change over the course of economic and institutional

development? Does the importance for intergenerational persistence of different dimensions of social status origin change over time?

The main research questions in each of the respective papers are:

- 2. To what extent does surname status persistence reflect lineages or preindustrial social status origins? Do levels and patterns of surname status inequality and persistence change over the course of economic and institutional development?
- 3. Does the extent to which fathers' and mothers' occupational status interact and affect children's status attainment change over the course of economic and institutional development? Does this differ between production units, male breadwinner, and dual-earner family types?
- 4. To what extent does surname status persistence reflect, and interact with, intergenerational mobility in occupational status? Does this change over the course of economic and institutional development? And does this differ by social status origin?

Clarifications

The dissertation revolves around different concepts relating to 'social status' and 'intergenerational persistence'. When referring to 'social status', I have a Weberian definition of the concept in mind; any marker of social or cultural distinction, often resulting in economic distinction – at least in the long run, and defined primarily through patterns of social interaction, can be referred to as 'social status' (Weber 1978a [1921]). Occupational status is an example of social status, as is 'surname status' (see later sections), gender, educational attainment, or ethnicity. The social status concept is more specific than the compound term 'socioeconomic status' also used in the dissertation. With socioeconomic status, I refer to social status as well as economic dimensions of stratification, such as Weberian social class, income, or wealth. Economic distinction is generally associated with social or cultural distinction, so that social classes often also form social status groups. But social status differences are not necessarily associated with economic inequality. The term 'social stratification' refers to a society's structure in terms of social status, and 'social inequality' to a hierarchical dimension thereof. 'Economic stratification' or, more commonly used, 'economic inequality' refers to differences in terms of economic status (income or wealth), which are inherently hierarchical.

The term 'intergenerational persistence' is used to encompass both 'intergenerational mobility' and other forms of socioeconomic status persistence over generations, such as persistence at the level of social groups rather than individual families. 'Intergenerational mobility' refers to (dis)similarities between parents and their children in one specific dimension of socioeconomic status. As a

form of intergenerational mobility, 'social mobility' is used to refer to occupationbased social status mobility, either in terms of social class or in terms of occupational status. For clarifications of other mobility concepts, I refer to the subsection on 'types of intergenerational mobility' in the background section.

Limitations

Occupational data, besides surname types, forms my main source of information about society's social structure. I do not study other important dimensions of social stratification such as educational attainment — which over the early decades of my study period was not so varied for most of the Swedish population, or economic dimensions such as income and wealth (but see the discussions on their development over time in the economic historical context section). The main reason for focusing on occupational data is data availability — individual-level information on income, wealth, or educational attainment is not available historically in the same way as occupational information. But arguably, occupation is also the most time-consistent and inherently meaningful dimension of social stratification, both over the life-course and over the course of Sweden's economic and institutional development. I complement occupational information with surname types, which reflect other dimensions of social status in Sweden historically. For further reflections on both occupational and surname status, see the later sections on 'social stratification in the long run' and 'measuring dimensions of social status across time'.

This dissertation spans a long time period, yet it does not fully cover the Swedish economic and institutional developments from the start of industrialization until today. I use individual-level data covering those living in Sweden across the period 1880-2016 and born from around 1810 until 1985. I observe children in parent-child pairs in cohorts born since 1865. These first cohorts of children experience Sweden's industrialization as (young) adults but complete their occupational careers in an industrialized country. This means that I do not observe parent-child cohorts growing up and growing old in a pre-industrial society, as would have been the case with census material from 1860 or 1870 - including cohorts born from 1845. It would be interesting to extend this study further back in time using the Swedish censuses of 1860 and 1870, which have in part been digitized by the Swedish National Archives (*Riksarkivet*) but, to my knowledge, have not been standardized or linked to more recent censuses. I also do not observe the Swedish population between 1910 and 1950. Parts of the 1930 Swedish census have recently been digitized by the Swedish National Archives, within the Swedpop project used for other data sources in this dissertation.

For the most recent period and contemporary levels of intergenerational mobility, I am limited by my empirical strategy to children reaching a point in their career where occupation reflects social status reasonably well, which means that I cannot include cohorts born after 1985. The life course of cohorts born today likely differs

substantially from that of cohorts born in the 1980s, which is also in some respects important for intergenerational mobility. The Swedish educational system has for example been reformed substantially since the late 1980s, with reduced educational equality as a result (Fjellman, Yang Hansen, and Beach 2019; Wennström 2020).

Economic-historical context

Several changes in the make-up of Swedish society over the past hundred-and-fifty years are reflected in levels and patterns of intergenerational persistence and social stratification. In this section, I summarize structural transformations of the Swedish economy, including sectoral change, economic growth, the changing institutions of family and work, changes in economic stratification, and the changing composition of individuals in the Swedish workforce in terms of migration background and gender. I also cover the emergence and expansion of institutions for equal opportunities. I situate these aspects of Swedish economic history, which form the context in which intergenerational persistence is studied, in their international context.

Structural transformation of the Swedish economy

Swedish industrialization occurred rapidly and took off during the last quarter of the nineteenth century. From 1890 until the middle of the twentieth century, the country outpaced the rest of the world in terms of economic growth, and especially in the earlier period in terms of real wage growth (Schön 2012).³ Economic growth in Sweden and other world regions is shown in figure 1 as reflected by the gross domestic product (based on internationally comparable data from the Maddison project, Bolt and Van Zanden 2020). Until 1850, the Swedish population had been largely agricultural and demand for household goods had been met by homecrafts production. Over a century, this changed entirely. Due in part to high real wage growth in the first phase of industrialization market consumption grew rapidly.

Rapid economic growth followed educational expansion and the growth of human capital among the Swedish population, as primary education expanded (Goldin and Katz 2008; Ljungberg and Nilsson 2009). In the second half of the twentieth century, after the introduction of comprehensive schooling, higher education also expanded. This human capital growth is shown in figure 1 and discussed in greater detail in the section on institutions for equal opportunities.

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³ See paper 1, and Schön 2012, p. 126, 206, 297, 331, 403 for statistics in this section.

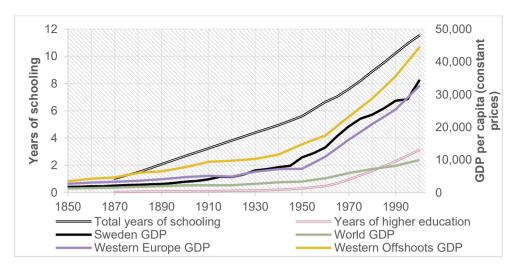


Figure 1 Growth of gross domestic product per capita and human capital in Sweden 1850-2000 Sources: Average years of schooling in the population aged 15-65, with 'higher education' as upper secondary, vocational, or tertiary education (Ljungberg and Nilsson 2009). GDP per capita (in constant 2011 international dollars) for Sweden and other world regions which industrialized early, with "Western Offshoots" including: United States, Canada, Australia, and New Zealand (Bolt and Van Zanden 2020).

As economic growth accelerated and market consumption grew, the employment structure changed fundamentally. In the late nineteenth century, most of the Swedish formal workforce was composed of farmers and general, low- and unskilled laborers. These two groups disappeared over the course of the twentieth century in favor of high-skilled and non-manual workers (see figure 2). In 1850, about half of Sweden's national product was generated in the agricultural sector, and the employment share was substantially higher. The share of agriculture in GDP had decreased to one-third by 1890, when 58% of the working population was still employed in the agricultural sector. Between 1890 and 1950, employment in industrial sectors (industry, crafts, construction, transport and communications) increased from 27% to 50% of the workforce. Compared to the US and other European countries, the transition from the primary to secondary sector happened relatively late in Sweden, but Sweden underwent a decisive industrial phase before transitioning to a post-industrial society – unlike some other late industrializers (Schön 2012, and paper one in this dissertation).

Thus, the late nineteenth and first half of the twentieth century marked an important shift from predominantly agricultural to predominantly industrial for the Swedish workforce (among men, see paper one). During the latter half of the twentieth century, the Swedish economy became post-industrial, as services rather than industry came to dominate the labor market of men as well as women. Women in the workforce had always primarily worked in the service sector (see paper one). The expansion of the service sector among men started with industrialization and

gradually progressed over the entire period 1880-2015. By the twenty-first century, the majority of the Swedish workforce – and the majority of men therein – were occupied in the service sector. Structural transformations during the period of 1880-2015 did not only entail sectoral change, but for the Swedish workforce they also meant general occupational upgrading, a shift from medium-skilled to high-skilled work, and a transition from manual to non-manual work (see paper one).

These structural transformations, and the growth of economic and human capital, shape intergenerational persistence in important ways. Their potential link to intergenerational persistence is discussed in the background, theory and previous research section, while actual findings are summarized in the paper summaries.

Changing institutions of family and work

Women's and mothers' formal engagement in the labor force increased substantially during the twentieth century, in Sweden as in many other countries (Goldin 1995; Stanfors and Goldscheider 2017). Increases in formal work reflect both real increases in productive work outside of the household, and formalization of work more generally. Before industrialization, the family often formed a production (as well as a reproductive) unit, and while both men and women worked, only the occupation of the head of household was formally registered (for example among proprietors, artisans, or farmers; see e.g. Goldin 1979; Nyberg 1994). In fact, in Sweden, women's labor force participation follows a U-shaped curve over the course of economic development – first decreasing during industrialization as the male breadwinner family type takes hold, and then increasing with the growth of the tertiary sector (cf. Goldin 1995; see e.g. Molinder 2021; Stanfors 2014).

Sweden forms a special case in following Goldin's hypothesized U-shaped trend, in the US or several more recently developing countries, increases in women's gainful employment have stalled in more recent decades, rather following an S-shaped trend. It is for these contexts hypothesized that the intergenerational transmission of gender attitudes and norms encourage women to (not) enter the formal labor force (Luke 2021).

Families observed in the late nineteenth century – the era of the production unit family type – are characterized by a high reproductive workload; marital fertility for these cohorts lies around four to five children per woman (Dribe and Scalone 2014). Both the productive nature of family units, and reproductive activity of family units, decrease in subsequent cohorts as Sweden experienced the first demographic transition and industrialized.

In the male breadwinner family type, societal gender norms promoted work inside the home for women, and work outside the home for men ('separate spheres', see e.g. Cherlin 2012; Rosaldo, Lamphere, and Bamberger 1974). In male breadwinner families, homemakers are more important than breadwinners for socialization and transmission of cultural resources (Hess and Shipman 1965; Kalmijn 1994; Marks

2008). With rising educational attainment, automatization of housework, and decreasing fertility, gender norms around women's work shift and women's formal work increases (Luke 2021; Stanfors and Goldscheider 2017). Especially during the 1970s, women's labor force participation expanded rapidly in Sweden, and a dual-earner family norm was established. This particularly rapid and substantial expansion of women's and mothers' work is likely related to generous Swedish family policies introduced around this time (Lewis and Åström 1992; Stanfors and Goldscheider 2017).

These changing institutions of family and work are summarized in figure 2, which shows fertility rates, the share of women in the formal workforce, and the share of men in typical pre-industrial occupations (farming and general laborers). The expansion of human capital and development of new technologies associated with industrialization – as shown in figure 1 – resulted in men's work shifting away from these two categories, is associated with declining fertility, and in the long run with increases in women's formal work.

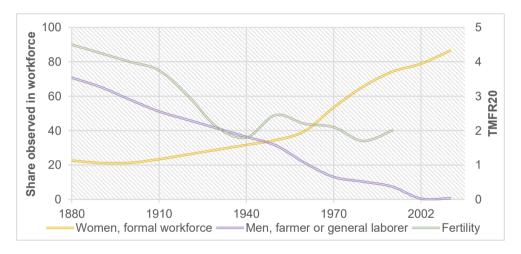


Figure 2 Demographic transition and men's and women's work in Sweden 1880-2015Sources: own calculations for observed labor force participations (see paper one); total marital fertility rate per woman aged 20-50 observed at 10-year intervals, based on Dribe and Scalone 2014.

The male breadwinner family is criticized to some extent by contemporaries; during the 1930s, sociologist and politician Alva Myrdal raises the "general issue" of combining gainful employment with 'homemaking' activities, and thereby makes the private sphere of the family public (e.g. Ekerwald and Ekerwald 2000). Relevant in this context is that this first movement to make working motherhood possible was reserved for women occupying high status positions – in practice if not in purpose. At the same time as gender questions were primarily raised among higher (non-

manual) social classes, the demand for women's formal work was also higher in the non-manual (higher) classes (see paper one).

A few decades prior to this first expansion of women's formal labor force participation, it was also among such high-status families that fertility first declined; in the late nineteenth century, the fertility transition was initiated by the non-manual, then 'elite', classes (Dribe and Scalone 2014). Socioeconomic differences in fertility are important for our understanding of intergenerational persistence and social stratification, as they determine the composition of social origins represented in the next generation. However, in Sweden, fertility has not followed a consistent social gradient historically.

By the late nineteenth century, high-status groups led the transition to lower fertility, so that they have less children than other social origins in the early cohorts in this dissertation. Today, in contrast, fertility is higher among high-status groups in Sweden and the other Nordic countries – although among cohorts not observed in this dissertation (Jalovaara et al. 2019). Over the course of the twentieth century and across the cohorts included here, these patterns have varied by gender, followed a U-shaped pattern, and differed by parity (Dribe and Smith 2021). Generally, these fertility differences appear to have followed the changing institutions of family in work; fertility was lower among working mothers when family policies were not yet in place, higher among lower-status mothers and higher-status fathers in male breadwinner families, and is recently higher in families who are able to benefit from the institutions facilitating the combination of family and work.

The transitions in work and family life have changed both the composition of the workforce and the composition of family social origins, fundamentally. However, the role of mothers and fathers in the family and in the workforce is far from equal also in the dual-earner family type. On average, mothers are responsible for the majority of housework and childrearing activities (Evertsson and Nermo 2004; Stanfors and Goldscheider 2017). The labor force is segregated by gender, and women far more often than men work parttime (e.g. Lewis and Åström 1992). On average, the occupational status of women is somewhat lower than that of men, and women more often work in lower-skilled occupations (see paper one). Despite these differences, both the occupational status of mothers and fathers, and the way in which they interact, play an important role in defining family social background in dual-earner families (see especially paper three).

Economic inequality in Sweden: changes and contradictions

Intergenerational persistence describes the consequences of inequality in terms of duration. The consequences of inequality, and of intergenerational persistence, are also determined by the levels of inequality; whether you are or aren't socially mobile becomes more or less consequential depending on the difference it makes for your life outcomes. Inequality — as intergenerational persistence — is clearly

multidimensional (status, class, earnings, wealth, ethnicity, etc.). I describe economic inequality, in terms of income and wealth, here. I describe its development over the study period. Inequality in terms of other dimensions of social stratification is described in paper one.

The Nordic countries, including Sweden, are widely seen as particularly equal and egalitarian, at least since the emergence of the welfare state (Esping-Andersen 2015). Whether Swedish equality is an historical heritage, or has arisen with the emergence of the welfare state, has been a matter of debate (see e.g. Bengtsson 2019). Certainly, Sweden forms a special case today in the shape of its economic structure; while income inequality is low internationally, Swedish wealth inequality is very high (Pfeffer and Waitkus 2021). I discuss the potential relationships between intergenerational mobility and the income and wealth distribution in the background section, and show here the developments in terms of income and wealth inequality in Sweden over the late nineteenth to twenty-first century. These are summarized, based on the previous literature, in figure 3.

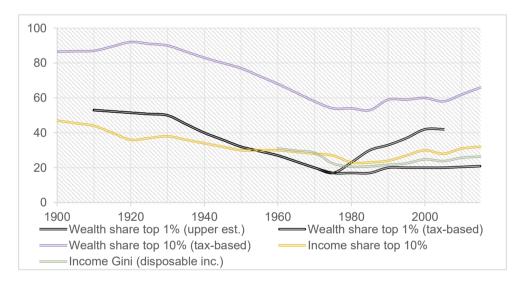


Figure 3 Income and wealth inequality in Sweden, 1900-2010

Sources: for top wealth shares until 2005 (Roine and Waldenström 2009); for estimated top wealth shares in 2012 (Lundberg and Waldenström 2018); for top income shares until 2005 (Roine and Waldenström 2008); for top income shares in 2010 and 2015 (Hammar, Roth, and Waldenström 2021); for an internationally comparable income Gini based on disposable income, SWIID v. 7 (Solt 2019).

Figure 3 shows substantial decreases in top income and wealth shares between 1910 and 1975. In 1910, the top 10% had owned over 90% of all wealth, which decreased to slightly over half of all wealth by the late 1970s (Roine and Waldenström 2009). A similar, although less radical, trend is seen for total (gross) income of the top 10% (Roine and Waldenström 2008). After 1980, income and wealth inequality appear

to be increasing, although the extent to which they increase is highly uncertain. This is demonstrated by the two black lines reflecting the wealth shares of the top 1%, with the lower bound reflecting taxed wealth and the higher bound including a variety of additional assets – held in Sweden or abroad (Roine and Waldenström 2009). After 2006, Sweden abolishes its general wealth taxes, and therefore its tax registers on wealth, making the assessment of wealth inequality uncertain (Lundberg and Waldenström 2018).

Figure 3 shows how wealth and income inequality have generally developed in parallel in Sweden. But a comparison of top 10% income and wealth shares indicates a large and persistent gap in levels; also when the full distribution is used to calculate wealth and income, Gini's wealth inequality is substantially higher than income inequality in Sweden. Although this is not shown in figure 3, the authors of these time series on top income and wealth shares have compared Swedish economic inequality to other European and 'Western Offshoot' (cf. figure 1) countries. These comparisons demonstrate that Sweden was not exceptionally equal but displayed internationally relatively high levels of inequality at the start of the twentieth century (for a study going further back in time, see e.g. Bengtsson 2019).

Today, Sweden displays relatively low levels of income inequality internationally, while wealth inequality is substantially higher than in most other European and 'Western Offshoot' countries. Sweden's comparatively high wealth inequality is primarily related to the housing market; not the share of home ownership per se, but the structure of the housing market and inequalities among home owners account for much of the international differences observed in twenty-first century wealth inequality (Pfeffer and Waitkus 2021). I show Sweden's outlier position in the twenty-first century as compared to several other countries – either European or 'Western Offshoots' – in terms of wealth and income inequality in figure 4.

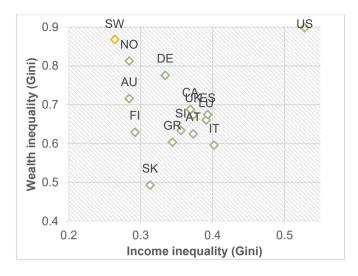


Figure 4 Income and wealth inequality in Sweden and other countries in the early 2000s Source: own adaptation of figure 1(a) in Pfeffer and Waitkus 2021, as based on the Luxembourgh Wealth Study (LWS, wave 9) including surveys conducted between 2005-2014. Standard country abbreviations (see source article).

Over recent decades, high immigration to Sweden has resulted in decreasing shares of Swedish-born among the full population. Across the income distribution, the incomes of Swedish-born have diverged from the incomes of foreign-born; foreign-born incomes are now substantially below Swedish-born incomes, while they did not differ much before 1995 (see e.g. Björklund and Waldenström 2021). At the same time as this new economic divide at the bottom arose, income shares at the very top – among fractions of a percent – have increased over recent decades. Thus an increasingly clear divide was created between a small economic 'elite' and the majority population (Hammar et al. 2021; Lundberg and Waldenström 2018; Roine and Waldenström 2008, 2009).

From emigration to immigration

Few migrated to Sweden from other countries before 1945. Until the First World War, Sweden was an emigration country with high rates of emigration to the Americas (see e.g. Nilsson, 2004). In the census data used in this dissertation, the share of immigrants increased slightly from 0.6% in 1880 to 1.2% in 1910 and 2.5% in 1950. Half of migrants to Sweden in this period were return migrants coming from the Americas. It is therefore likely that a large share of foreign-born individuals in this period were children of emigrated Swedes. Other migrants often came from the Nordic countries, Germany and Russia (Statistics Sweden 2016).

Since the 1930s, Sweden has become a net immigration country, with immigration exceeding emigration. Immigration to Sweden was particularly high after World

War II, around 1970, in the early 1990s and over a ten-year period around 2010 (Nilsson 2004; Statistics Sweden 2021). Since 2016, immigration to Sweden has decreased substantially (Statistics Sweden 2021). Accordingly, the share of foreignborn in my study population increased from 5% in 1960 to 12.5% in 1990 to 25% by 2015.

In the 1950s and 1960s, labor migrants came to Sweden to perform unskilled to medium-skilled manual work – mostly from Finland.⁵ This era of labor migration with liberal policies ended after restrictive legislation was introduced for non-Nordic immigrants in 1968, and immigration from Finland decreased as living standards within the Nordics had become relatively equal (Statistics Sweden 2016). In the early 1970s, immigration to Sweden decreased and was thereafter relatively stable for two decades. As the stock of immigrants increased, family reunification became an increasingly common reason to migrate to Sweden. The group coming in search of refuge also grew. Large waves of refugees resulted in high immigration levels in the early 1990s and during 2006-2016 (Statistics Sweden 2021).⁶

Higher levels of both immigration and emigration in recent decades also reflect a variety of other reasons related to globalization: international studies, family reunification (marriage), and labor migration. Migration to and from EU countries especially increased since Sweden became a member of the EU. About half of immigrants to Sweden in the twenty-first century were born in Sweden, the Nordics and the EU (Statistics Sweden 2016, 2021). Among recent Swedish cohorts, more women than men are born abroad. This is not because women are more likely to migrate, but because return migration is more common, and mortality higher, among men (Statistics Sweden 2016, 2021).

This changing composition of the increasingly large share of Sweden's population with a foreign background – immigrants as well as their (grand)children – is likely reflected in their position in the Swedish social structure, and their experience of intergenerational persistence of social status (see paper two and four).

⁴ The refugee immigration wave after World War II went largely undocumented as most refugees returned to their origin countries without registering in Sweden.

Over half of them came from Finland, but migrants also came from other Nordic countries, Germany, Austria and Italy and later Yugoslavia or Greece.

⁶ Particularly high levels of immigration in these years reflect the arrival of large numbers of refugees from Iran, Yugoslavia, Afghanistan, Iraq, Somalia, and Syria (Statistics Sweden 2021).

Institutions for equal opportunities

The welfare state

Over the period studied, democracy and the welfare state were gradually introduced in Sweden. As compared to a Diet system or census suffrage, universal suffrage may lead to policies and institutions better representing the interests and wellbeing of the full population. Importantly, the introduction of a democratic state system goes hand in hand with the introduction of legislation making citizens formally and legally equal also in other domains than voting rights. According to early philosophical work on democracy, in *The Social Contract* by Jean-Jacques Rousseau in 1762, and later writings by Alexis de Tocqueville (especially, *Democracy in America* 1835/40), democracy would have important implications for equality of opportunity and intergenerational mobility.

In 1880, Sweden was a country that had recently transitioned from a Diet system with four Estates of medieval origin (nobility, clergy, bourgeoisie, and farmers) to a two-chamber parliamentary system with voting right for men fulfilling rather strict age, income and wealth criteria. In practice, this transition was less radical, and had been accompanied by less political upheaval, than democratic revolutions in continental Europe. By the 1890s, one in four adult Swedish men were enfranchised, which was low in a contemporary European context (cf. 80% in Germany and France). Moreover, electoral participation among the enfranchised was low at one-fifth in 1872 and almost half by 1896. The first chamber was even more exclusive, with only a few thousand enfranchised men (Bengtsson 2019). In the early 1900s, the franchise was expanded, with the introduction of near-universal suffrage for men in 1907 and then women in 1919. Universal suffrage was introduced by the first liberal-socialist governing coalition.

Between 1932 and 1976, Sweden had social democratic governments who created and expanded the welfare state. The expansion of the welfare state is reflected quantitatively in increasing tax-to-GDP ratios, from 10% in the early 1930s to 50% in the 1980s (e.g. Magnusson, 2000). This gradual increase in taxation impacts the social structure as an increasing share of the population is formally working in the service sector to provide welfare, rather than performing this work informally. For example, childcare or elderly care in nursery schools or retirement homes is reflected in the formal workforce while such care provided by housewives is not.

As the welfare state expanded and taxation increased overall, wealth taxes also started increasing rapidly from the late 1930s. Sweden introduced its first wealth taxation in 1885, tax rates were initially very low (0.5%) and growing slowly – to ca. 5% by 1930. They were at their highest levels around 1970, after which they again decreased rapidly to levels more similar to those before 1950 (Du Rietz and Henrekson 2015). Sweden has no wealth taxation since 2007. Wealth taxation

reduces the possibility for intergenerational transmission of wealth and is thus related to intergenerational persistence.

Policies to reduce the dependence of children's wellbeing and opportunities on their parents' economic resources were also implemented during these decades, such as universal benefits (e.g. child allowance and free school meals) and the abolishing of fees for higher education (e.g. Breen & Jonsson, 2007). These efforts to equalize opportunity and facilitate schooling for all are associated with occupational upgrading and increases in intergenerational occupational mobility (e.g. for education Fischer et al. 2020; Meghir and Palme 2005).

The relationship between state and family changed with the introduction of family and other welfare policies beginning in the 1930s. The relationship between employer and employee became more equal and 'universalistic' welfare policies were introduced (e.g. Magnusson 2000), with the idea that everyone should benefit. Early example of such universalistic family policies are maternity (1938) and child (1948) benefits. Further family policies to alleviate child poverty and ease the combination of work and family for mothers were introduced in the 1950s and 1960s (Stanfors 2007).

In terms of gender equality in the workforce, some early progress was made with the opening of public employment and secondary education for girls and women in the 1920s, and the ban on dismissal due to marriage of women workers in 1939 (Stanfors 2007). These made (non-manual) formal work possible for women. In the 1970s, family policies became gender equal, in contrast to the distinct role assumed of mothers and fathers in earlier policies. Importantly, taxation became individualized in 1971 and parental leave replaced maternity leave in 1974. This was followed by further extensions of parental benefits during the 1980s. After temporal reductions during the 1990s crisis family benefits have largely been at their 1980s levels during the 2000s, except for further efforts to increase gender equality (Stanfors 2007).

The educational system

Public schooling had been introduced early in Sweden in 1842 (Westberg 2019). However, dissipation of full primary educational attainment was slow and completion of primary schooling did not become universal until around 1950, as shown in figure 1; initial roll-out of public schooling was slow, and especially on the countryside two-year 'minor' or parttime schools were more common throughout the nineteenth century than complete primary schooling (cf. Ljungberg and Nilsson 2009).

Few were able to attend secondary or higher education before the 1950s, and such education at the time formed a marker of distinction. 'Educated elites' formed an important high-status group in late nineteenth century Sweden (as signaled by their surname type, see paper two and four). Enrollment in secondary schooling expanded

rapidly for cohorts born after 1935 – especially with the introduction of comprehensive schooling (*grundskola*) in 1962 (e.g. Meghir and Palme 2005). The introduction of *grundskola* marked a major shift in the political purpose of education. In the late nineteenth and early twentieth century, higher education was strongly selective and primarily a pathway for intergenerational transmission of advantage. Public primary schooling was not aimed at equalizing opportunities for all children, but rather intended to create a sense of national (and religious) identity (e.g. Widerberg 1980).

Despite lack of intent, this early public primary schooling did lead to equalizing opportunities as increasing shares of the population became qualified for occupations with higher skill requirements (as shown in figure 1). Comprehensive schooling (grundskola) was introduced with the explicit aim of equalizing opportunities for all children (see e.g. Husén 1989; Paulston 1966). As higher educational expanded, the association between social origin and educational attainment declined in Sweden for cohorts born between the 1920s and 1950s (Jonsson and Erikson 2000). Some of these equalizing opportunities can be linked directly to the introduction of comprehensive schooling (Holmlund 2008; Meghir and Palme 2005). The introduction of comprehensive schooling initiated society-wide increases in higher educational attainment, as shown in figure 1.

⁷ This does not mean that attendance was entirely reserved to children from high status background, some children from other social backgrounds were selected to attend higher education.

Background, theory, and previous research

In this section, I situate my dissertation in the broader scientific literature and wider debates. I cover the previous work on social stratification and, especially, on intergenerational mobility which I consider most relevant to my own work.

Social stratification in the long run

Individuals and groups in a society are organized in one or more, stable or unstable, hierarchies of status. This process is known as social stratification, and in some form or another applies to any society. In pre-industrial or early-industrial societies – such as Sweden until ca. 1900, differences in occupational skill levels are small among the majority population, and ownership of more than a family production unit is concentrated to a small elite. In such a context, social class distinction is mostly present between a small elite and the rest. Such a dichotomous Marxian economic class distinction between bourgeoisie and proletariat was substantial in early industrial Sweden. As described by Max Weber, *economic* class distinctions in early industrial societies were often grounded in Weberian *social* 'status' or estate distinctions (Weber 1978a [1922], 1978b [1922]). High or low social status was strongly heritable and often shaped opportunities for economic attainment, e.g. through higher education, social networks and intermarriage (e.g. Edgren 2021; Fahlbeck 1892).

While 'class' is primarily an economic form of distinction, 'status' is inherently social (see e.g. Gane 2005). 'Status' in Weber (*stände*, *stånd*) is defined with pre-industrial status groupings in mind – although the concept can be applied much more broadly (e.g. to ethnic, racial or gender groups). It refers to social prestige, ascribed group belonging with shared customs, conventions and values and strong social ties. Group belonging is reflected in behavior; status groups tend to strive for intermarriage and interaction within the same group (Weber 1978a [1922]).

In a contemporary context, heritable status distinctions have presumably become less pronounced than in the Weberian context observed in early industrial Sweden and described above, as society moved from attainment through 'ascription' to attainment through 'achievement'. Nevertheless, differences in social origins still translate into distinct labor market trajectories today. Status groups share tastes, experiences, leisure pursuits, and self-presentation styles ('culture', cf. Bourdieu 1984), and employers are more likely to hire someone culturally similar to themselves (Rivera 2012). High status origins are today associated with higher wages for the same work, in Sweden as well as elsewhere (Hällsten 2013; Laurison

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⁸ Rather than vice versa, as suggested by Marx.

and Friedman 2016). As society transitioned from 'ascription' to 'achievement', a stronger link is generally expected historically than today between heritable status differences and labor market outcomes, such as class attainment (cf. modernization theory, Treiman 1970).

So far, the transition from ascription to achievement has often been studied by comparing levels of intergenerational mobility (of class or occupational status) over cohorts. The study of social mobility levels across cohorts does however not tell us whether social stratification along (heritable) status group lines became less consequential for children's occupational attainment during the same period, or whether the arising industrial social structure still reflected heritable status groups. This is a fundamental open question in our understanding of intergenerational persistence during economic and institutional development – as society presumably moved from 'ascription' to 'achievement'. In this dissertation, I try to answer this question by distinguishing heritable pre-industrial status groups using their distinct surname types, and also occupational status or class positions of parents, and studying how these interact and together are associated with children's occupational status attainment.

In Sweden, different status groups had distinct political power at least until the abolishment of the Diet system in 1866 and, given the association between economic conditions and status, most likely into the twentieth century (Bengtsson 2019). That the political power of high-status groups other than the nobility and clergy likely increased substantially as economic means rather than estate position became the basis for distributing voting rights after 1866. Not only political stratification, but also other forms of economic stratification was shaped in important ways by pre-industrial status distinctions (e.g. Norrby 2005; Palme 1947). The identification of high-status groups as nobility, clergy, bourgeoisie and other persons of status (ståndpersoner), farmers, or as none of these (e.g., the working classes), was of great consequence for inhabitants of Sweden. The higher status groups of nobility, clergy, bourgeoisie, and ståndpersoner held much of the political and economic power in the late nineteenth and early twentieth century. These status groups interacted and intermarried primarily with each other rather than with the majority population (see paper four). Moreover, their status group belonging often – but not always – corresponded to a high class position; they were often capitalists or (petty) bourgeoisie in a Marxian sense, owning the means of production and purchasing the labor power of others.

⁹ Note that Laurison and Friedman as well as Hällsten refer to 'class' rather than 'status'. Laurison and Friedman refer to a Bourdieusian class concept, where class and status are seen as strongly interdependent forms of social stratification. When referring to class in this dissertation a narrow economic class concept, following Weber, is intended. For broader social stratification 'status' is used, also following Weber.

An 'ascribed' trait such as status is more dependent on place of birth than, for example, active participation in a formal labor market. Therefore, pre-industrial social status of both mothers and fathers can be expected to form an important dimension of the intergenerational persistence; the distinct positions of men and women in the economic structure do not apply to this dimension of social stratification if operationalized without the use of occupations. Through intergenerational transmission and status exchange on the marriage market, status inequalities of fathers and mothers may have remained important for the occupational status attainment of later generations (as indicated for elites in e.g. Almenberg and Dreber 2009).

Is social stratification by heritable attributes (such as status groups reflected by surname type) or attained attributes (such as occupation) more consequential in a given context, and how are such attributes defined for different members of a family? Historically, both sexes were born and often married within a status group, with occupational choice largely limited to typical occupations for that prestige group (Tönnies 1966; Weber 1978 [1921]). This was the case in Sweden as in many other European societies (e.g. Fahlbeck 1892). When industrialization and gender revolution gave increasing shares of first fathers and then mothers more occupational opportunities (Stanfors and Goldscheider 2017), social stratification by occupation both increased quantitatively and became (formally) independent of pre-industrial social status heritage.

With industrialization, occupational social status positions (occupational status or class) increasingly form a relevant dimension of social stratification also outside of the owner/worker dichotomy. Partly because occupations are perceived as inherently meaningful to individuals and their social environment; it is often one of the first things we ask about when making acquaintance. Other indicators of socioeconomic status such as income and wealth are meaningful only within a context (e.g. currency, state) and through the possibilities associated with them (e.g. consumption, investment). The consequences of class background – on health, wealth and attitudes – are well-documented, especially in the Nordic countries (e.g. Brooks and Svallfors 2010; Esping-Andersen 1990).

Moreover, occupational social status positions are rather fixed over the life course; if class belonging could be changed at will at any time, it would be inconsequential for life outcomes. It is, however, well-known that class positions are tied to earlier life experiences, such as educational attainment, often persisting over the life course (after initial career progression), and partially persisting over generations (e.g. Barone and Schizzerotto 2011; Beller and Hout 2006; Breen 2004; Breen and Müller 2020; Härkönen and Bihagen 2011; Kalleberg and Mouw 2018).

In the dissertation I follow both an occupational status (prestige) approach, a traditional social class approach, with broad classes (conceptually) reflecting Weberian economic distinction, and a 'microclass' approach. These three

dimensions of occupational social status are discussed at greater length in the section on measuring social status using occupations. Surname-based social status is discussed in depth in the section on measuring social status using surnames.

Intergenerational persistence in the long run

A long tradition of social mobility research has found important associations between parental social status and child social status, in particular also as represented by occupations (Blau and Duncan 1967; Ganzeboom and Treiman 2003; Hauser and Featherman 1977; Hauser and Warren 1997; Sorokin 1927). The study of social mobility has to a large extent been descriptive. Whether the intergenerational association in social status reflects intergenerationally transmitted economic, cultural or social resources, personal traits such as cognitive ability, or some of each of these or vet something else, remains a matter of debate (see e.g. Morgan, Grusky, and Fields 2006, and later sections on mechanisms).

This dissertation connects to the literature on intergenerational mobility – and especially social mobility – in the long run. I study cohorts before, during, and after industrialization and post-industrialization, and across the emergence and expansion of the Swedish welfare state. The question on how patterns and levels of social mobility have changed under these developments has been one of the key interests in the mobility literature. Early on, it was suggested that all industrialized nations would have similar mobility levels – and likely higher than before industrialization (Lipset and Zetterberg 1959). Later on, a distinction was made between absolute mobility, where differences in the social structure are not controlled for, and relative mobility, where such differences are abstracted from (see more on this in the next section on types of mobility).

Once it was established that absolute mobility differed between industrialized nations, it was suggested that relative mobility was rather similar and stable between industrialized nations (with a market economy, liberal democracy, and a nuclear family system, cf. Featherman, Jones, and Hauser 1975). This hypothesis was long supported by comparative work on social mobility across countries (see e.g. Grusky and Hauser 1984; Hout and DiPrete 2006), also in the seminal book A Constant Flux by Robert Erikson and John Goldthorpe (1992). In more recent large-scale comparative studies, relative mobility levels are however deemed to change substantively over time (Breen 2004; Breen and Jonsson 2005; Breen and Müller 2020). A moderate form of the hypothesis has recently been suggested (Bukodi, Paskov, and Nolan 2020). Relative social mobility in these modern societies is suggested to have an upper bound. Societies may either recede from or move closer to this upper bound, depending on economic and institutional differences.¹⁰

¹⁰ The flexible formulation of the "Featherman-Jones-Hauser" hypothesis on stable levels of relative mobility in for example Erikson and Goldthorpe (1992) and recent work makes it close to a

The Constant Flux is also one of the first key publications questioning modernization theory on social mobility (Treiman 1970); the idea that social mobility – both relative and absolute – would continuously increase and converge between countries during industrial development (Erikson and Goldthorpe 1992). In recent studies, intergenerational mobility is generally found to be higher in the middle of the industrialization process than among later cohorts (as e.g. Berger et al. 2021; Long and Ferrie 2013; Song et al. 2020); differences in the occupationbased social status position of children and parents are large as the occupational structure changes fundamentally – and this is true both when studying relative and absolute mobility. Studies on social mobility going yet further back in economic development however find lower levels of social mobility before industrialization than during or after industrialization (e.g. Dribe, Helgertz, and Van de Putte 2015; Maas and Van Leeuwen 2016; Modalsli 2017). Thus, a long-run increase in social mobility over the course of industrialization is rather well-established, while this increase does not appear to result in similar levels across all societies with a market economy, liberal democracy, and nuclear family system – as initially suggested.

Types of intergenerational persistence

Studies on intergenerational mobility differ in what intergenerational transmission of socioeconomic status each of them studies. Long-term trends in social class mobility (e.g. Maas and Van Leeuwen 2016) may not be the same as trends in intergenerational rank-rank correlations (e.g. Song et al. 2020). The former study associations in a cross-table of discrete social class origins and destinations, controlled for contextual differences. The latter study positions on a hierarchical status scale that has been standardized through a rank-transformation to control for contextual differences. More broadly, studies on intergenerational mobility, intergenerational effects, sibling correlations, and equality of opportunity do not capture the same processes of intergenerational transmission (Björklund and Jäntti 2020; Stuhler 2018). The different approaches differ both conceptually and methodologically. In this dissertation, I follow the currently expanding "equality of opportunity" approach which tries to capture multiple components of social status or compound family background (cf. Björklund and Jäntti 2020; Roemer 1998). I refer to this broader concept of intergenerational transmission as 'intergenerational persistence'.

In this branch of the literature, previous simpler models of intergenerational mobility have been criticized for not answering the question of how family social

tautology; the hypothesis of constancy is accepted despite it being rejected by their statistical modelling, as differences are deemed non-substantive and the observed commonality more important. This commonality does however not exclude possible institutional effects on social mobility, nor does it make them implausible.

background affects child status attainment – and thereby doesn't reflect overall patterns of persistence and 'equality of opportunity' levels in society. Multiple rather than one generation of ancestors affect child status attainment, either directly or indirectly (e.g. Adermon, Lindahl, and Palme 2021; Hällsten and Kolk 2020; Lindahl et al. 2014; Solon 2018; Song and Mare 2017). Moreover, different indicators of socioeconomic status complement and interact with one another, so that intergenerational transmission of overall (dis)advantage is substantially higher than transmission of one specific aspect of socioeconomic status (e.g. Adermon et al. 2021; Engzell and Tropf 2019; Hällsten 2013; Mood 2017; Vosters 2018; Vosters and Nybom 2017). Higher intergenerational persistence than implied by parent-child associations is also found in the expanding sibling mobility literature; the similarity in outcomes between siblings is generally higher than between a parent and their child, reflecting their broader shared environment (e.g. Björklund and Jäntti 2020; Breen and Jonsson 2005).

The literature on broader intergenerational persistence has often referred to different findings as compared to the intergenerational mobility literature (one indicator of socioeconomic status) as measurement error. However, either approach can be relevant to answer different research questions (e.g. Breen and Jonsson 2005). In my dissertation, I take the multidimensional approach from the 'inequality of opportunity' literature and study how multiple components of parental status affect child status attainment, as I am interested in studying intergenerational persistence of (dis)advantages in a broad sense. To understand my approach and how it relates to other studies of intergenerational mobility it is important to clarify some basic concepts in the mobility literature.¹¹

Levels of *intergenerational* mobility at the individual level refer to disparities in socioeconomic outcomes resulting from the individual's family background. At the one extreme, when mobility is non-existent, such disparities generate complete intergenerational persistence: socioeconomic outcomes of one generation are completely determined by the previous generation – conditional on structural change. At the other extreme, when social mobility is at its maximum, individual outcomes are completely independent of parental outcomes. The chances to obtain a certain social status are the same for a son of a farm worker as for the son of a minister. Such social mobility at the individual level is often referred to as 'relative mobility' or 'social fluidity'.

'Absolute mobility', then, refers to mobility at the aggregate level and does not control for structural change. If the labor force composition of a country shifts towards higher (or lower) skilled occupations, absolute mobility can be high while relative mobility is low. As an example, say that the number of farm workers in a

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¹¹ The below concepts are covered in several key books on intergenerational mobility, see e.g. <u>Erikson and Goldthorpe 1992</u>, or for a - shorter - interdisciplinary review article Torche 2015.

country decreases considerably, then many sons of farm workers will have different occupations from their fathers, while the share of farm worker sons among those who are farm workers in the next generation – through which relative mobility is measured – does not need to change. In other words, 'relative mobility' abstracts from those parts of intergenerational mobility that are unrelated to the characteristics of the individual and occur because of aggregate changes in the labor market, while 'absolute mobility' does not.

From the perspective of the individual, however, 'absolute mobility' may be equally relevant. A family experiences whether their children are more 'successful' than the parental generation and might not know or care whether this is due to structural change or an individual achievement. On the other hand, relative 'upward' mobility may be experienced as more meaningful than absolute 'upward' mobility as absolute mobility may affect social stratification; in the first case one son of a farm worker becomes a teacher, in the second case all sons of all farm workers become teachers, and the status of being a teacher may change accordingly. Thus, both 'absolute' and 'relative' mobility can be important for experienced equality of opportunity and are relevant in different research contexts.

The terms 'upward mobility' and 'downward mobility' are used when social status is conceptualized hierarchically and then refer to vertical movements up and down the hierarchy of social status. Generally, intergenerational mobility using earnings or income is discussed in hierarchical terms as a one-dimensional hierarchy is inherent in this measurement of status. Social (class) mobility generally has both hierarchical and non-hierarchical components. 'Vertical mobility' then refers to either upward or downward mobility and may be considered – depending on the research question – a more substantial form of mobility as its alternative, 'horizontal mobility', which refers to movements between social classes that cannot be distinguished hierarchically.

I generally use the term 'mobility' to refer to intergenerational mobility. However, individuals also experience changes in earnings or occupation over their life-course. Such changes are often referred to as 'career mobility' or 'intragenerational mobility'. Career mobility is implicitly part of any study of intergenerational mobility, as the researcher has to choose one or more points in the life-course of each generation to designate that generation's status. Using different stages of the life-course in different generations, often an unwanted consequence of using survey material to study mobility, can lead to substantial bias in the estimation of intergenerational mobility.

Both levels of absolute and relative mobility are affected by changes and socioeconomic differences in demographic behavior; in a conventional 'retrospective' mobility approach, children are the 'focal' generation which is linked to their parents or other relatives. In a 'prospective' approach, the ancestor generation is instead the 'focal' generation which is linked to their offspring (Kolk

and Hällsten 2017; Song 2021; Song and Mare 2015). In contrast to the retrospective approach, this prospective approach includes individuals without children, and accounts for differential fertility – both in terms of number of children and generational gaps. Such fertility differences create differences between levels of intergenerational persistence at the societal and individual level.

Social origin, surname, and family types: heterogeneity in intergenerational persistence

Heterogeneity by family type: societal norms, homogamy, and accumulation

Intergenerational transmission of social status (i.e. occupational status, homemaker status, social class) is often seen primarily as a family-level, rather than individual-level, process. That is, family resources in one generation are assumed to be partly transmitted to the next generation. An individual-level approach would instead assume that each parent's resources are transmitted to the next generation independently of one another (e.g. Becker and Tomes 1979; Erikson 1984). A family-level mobility approach is to be preferred over an individual-level approach as parents are likely affecting each other's economic and labor market decisions rather than acting independently of one another (e.g. Dickens and Flynn 2001). In the study of occupational intergenerational mobility, a patriarchal perspective on social origin, where the family social status is represented by the occupation of the head of household, has long prevailed. It was criticized early on (Acker 1973, 1980; Rosenfeld 1978; Sorensen 1994) and continues to be so more recently (Beller 2009; Hout 2018; Korupp, Ganzeboom, and Van Der Lippe 2002; Thaning and Hällsten 2020).

The "dominance approach" in the social mobility literature was developed by Robert Erikson (1984) as a solution to recognized issues with the previous exclusion of mothers from social mobility studies (e.g. Watson and Barth 1964). The family would continue to form the unit of analysis in social mobility research, but their social status would be defined as the occupational class of the parent with highest status. In practice the dominant parent was mostly the father in mid-twentieth century households, but this role was increasingly often taken by the mother in more recent cohorts (e.g. Korupp et al. 2002; Meraviglia and Ganzeboom 2008). This "dominance" approach is still commonly used in studies of social mobility today, despite repeated critique (Beller 2009; Korupp, Ganzeboom, et al. 2002; Sorensen 1994; Thaning and Hällsten 2020).

There are obvious methodological benefits to using one parent rather than two, such as parsimonious modelling and no collinearity due to assortative mating (e.g.

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¹² In single parent households the individual-level and family level approach are equivalent and therefore the following discussion focusses on two parent households.

Sorensen 1994). Theoretically, pooling of resources within the household may be used as an argument to use only one parental measure reflecting both parents, such as total family income (Becker and Tomes 1979, 1986). Whereas the "dominant" approach treats families as a patriarchal (or matriarchal) unit, the "pooled" approach treats a family as the simple sum of its parts. It is evident that not both can reflect family social origin well, as underlying assumptions are clearly distinct. Max Thaning and Martin Hällsten (2020) show that the "pooled" approach (averaging of occupational status) performs better empirically also when it comes to occupational social status in recent Swedish cohorts. They demonstrate that the 'dominance' approach to social origin is still dominant in the sociological literature, despite performing worse than several other alternatives. A measure including the social origin of both parents, as well as an interaction between parents, is best able to explain sibling correlations in social status. Their findings are based on child status attainment not separated by gender, i.e. sons and daughters are not studied separately (Thaning and Hällsten 2020). It therefore remains an open question whether these findings apply in the same way to sons and daughters. I partly apply the pooled approach suggested by Thaning and Hällsten in paper four; there I use either the occupational status of the father – if the mother is not working, or the average of both parents' occupational status – if both parents are working. The "pooled" approach that treats parental resources as cumulative is an improvement upon the "dominance" approach in a number of contexts, but also has its limits.

It was not until a study by Emily Beller (2009) that the impact of mothers was brought back on the agenda of mainstream social stratification research. Beller shows that in a contemporary US context, both mothers and fathers impact child status attainment and found no interaction effects between the two parents – an additive model of mobility including fathers and mothers separately performed just as well as a multiplicative model (Beller 2009). Beller also finds that intergenerational mobility patterns differ for sons and daughters. She finds an increasing impact of mothers over time. As a result, intergenerational mobility has been overestimated for recent cohorts in studies using the dominance approach (Beller 2009).

Defining social origin as the sum of fathers' and mothers' social (occupational) statuses – an additive model – assumes that parents affect child status attainment independently of each other and that distinct transmission pathways, such as cultural or economic resource transmission, are cumulative (e.g. Beller 2009). It disregards the possibility that the impact of one parent with given social status differs depending on the social status of the other parent. Importantly, such interactions between parents change over time with changes in the institution of the family and changing gender norms. For example, in a breadwinner-homemaker context, specialization in the household may be positive for child outcomes (cf. Becker 1985), while it may be negative in a dual-earner context.

Parental resources may interact through *compensation*, where additional resources from the second parent are more beneficial for those with *fewer* resources from the first parent (Bernardi 2012; Erola and Kilpi-Jakonen 2017; Grätz and Wiborg 2020). In contrast, parental resources may interact through *multiplication*, where additional resources from the second parent are more beneficial for those with *more* resources from the first parent (Blau and Duncan 1967; DiPrete and Eirich 2006; Grätz and Wiborg 2020). For a more thorough discussion of compensation and multiplication, see paper three. In the context of social mobility, some evidence has been found for such multiplicative effects of both parents (see online appendix, Thaning and Hällsten 2020).

Moreover, status homogamy also affects the extent to which parents transmit social status to their children (Schwartz 2013). That is, a given cumulative social status of two parents may either reflect one parent with relatively high, and one parent with relatively low social status – or two parents with intermediate social status. Parents resembling each other (status homogamy) are expected to be more beneficial for child status attainment than parents who differ from each other (status heterogamy). If levels of homogamy affect child status attainment, then we can interpret this as a specific case of multiplicative accumulation. This can either be the result of multiplicative processes as described above, or the result of threshold effects where having two parents above a given threshold is more beneficial than having one parent with particularly high social status (Schwartz 2013).

Status homogamy has historically been especially profound among high status groups who have resources to transmit intergenerationally. In nineteenth century Sweden, homogamy in social origin was indeed stronger among high status (land holding) groups (Dribe and Lundh 2005). Also more recently, (wealth) homogamy is especially profound among high status groups (e.g. in the Nordic countries; Wagner, Boertien, and Gørtz 2020). The level of homogamy is important to answer the question to what extent family-level social origin affects child status attainment, as it describes resemblance between parents in terms of social status. That is, family social origin is a function of both assortative mating and occupational attainment of each parent. Erikson and Goldthorpe (1992, p. 261) maintain that information on the class distribution of men of a given class origin is sufficient to predict "with no great inaccuracy" their sisters' class distribution through marriage in all countries and cohorts studied. That is, status homogamy is deemed nearly complete and gender differences in intergenerational mobility and status homogamy negligible (Sorensen 1994).

However, homogamy, although substantial, is far from complete both historically and today (Dribe and Lundh 2005; Henz and Jonsson 2003). Homogamy also differs substantially by gender. In our Swedish context, fathers are married to mothers with lower levels of educational attainment ("male hypogamy"), while mothers are married to fathers with higher levels of educational attainment ("female hypergamy"). This pattern of male hypogamy and female hypergamy is persistent

for all cohorts of parents included in this dissertation, but did become less profound over time (see Henz and Jonsson 2003).¹³ The impact of children's status homogamy on intergenerational mobility has been studied empirically in the American and European context and is found to vary over time and space (Choi, Chung, and Breen 2020; Ermisch, Francesconi, and Siedler 2006; Holmlund 2022). Differences in parents' status homogamy and their impact on social mobility levels has not been the focus of previous research – although it has been recognized as relevant (e.g. Beller 2009; Mood 2017; Thaning and Hällsten 2020).

Intergenerational mobility of mothers' occupational status has barely been studied for historical settings. But in the context of the nineteenth century Netherlands, mothers' occupational and homemaker status are found to be relevant (Kong, Maas, and van Leeuwen 2020). Having a homemaker mother was positively associated with child status attainment, especially for sons. In this historical context, substantial gender differences in intergenerational mobility are found, with the father-son association being strongest. Over time, father-daughter mobility is found to have increased (Kong et al. 2020). Differences in intergenerational mobility by family type have been addressed mostly for the US context. Breadwinners are found to impact child status attainment more than men in dual-earner couples (Fischer and Hout 2006), while the role of homemakers seems to vary based on other factors (Beller 2009; Brea-Martinez 2022). Previous research has not yet addressed longterm patterns and trends in two-parent mobility as society transitioned from the agricultural production unit, to the male breadwinner, to the dual-earner family type. A large literature shows that gender differences in intergenerational mobility exist among children and change over time (with changes in family type, gender norms and structural development, see e.g. Olivetti and Paserman 2015; Torche 2015).

In a recent study, the family type transition from male breadwinner to dual-earner is shown to have reduced mother-child income mobility and thereby parent-child income mobility, despite father-child income mobility remaining constant for 1951-1979 birth cohorts in Sweden, Denmark and Norway. Thus, an observed overall reduction in income mobility over this period in Scandinavia does not necessarily reflect reductions in the transmission of 'underlying' socioeconomic status, but rather an increase in the extent to which family income reflects both fathers' and mothers' broader socioeconomic status. A similar trend – although less pronounced – is observed also in the US (Ahrsjö, Karadakic, and Rasmussen 2021). Given distinct patterns of occupational and income mobility in the Scandinavian countries (Breen and Jonsson 2005; Breen et al. 2016; Karlson 2021), it is interesting to study this transition also using occupational status. All the more so as the transition from male breadwinner to dual-earner society likely impacted the occupational status of

¹³ More recent Swedish cohorts experience female hypogamy, but these do not form parental cohorts in our study. See e.g. Chudnovskaya and Kashyap 2020.

families more strongly than household income, e.g. if breadwinner fathers, on average, work more hours than dual-earner fathers.

Based on these theoretical and methodological considerations and previous empirical studies, I expect the impact of mothers and of parents on child status attainment to strongly depend upon the contemporary context of family and work. Processes of accumulation and multiplication in intergenerational transmission are likely relevant but also strongly dependent upon the societal family type context. In societies where families as production units dominate, the occupational status of both parents is perfectly correlated and necessarily well represented by the head of household. In societies where a substantial share of parents form male breadwinner family units, the major distinction will be between specialized and non-specialized households. In such societies, the social position of homemakers relative to mothers in formal employment, or relative to those in production units, will matter for intergenerational persistence. In these societies the occupation of the head of household represents the occupational social status of both mothers and fathers, while other dimensions of mother's independent social status are probably important for child occupational status attainment.

Unlike in production units, the parents in male breadwinner families perform clearly distinct tasks in distinct spheres – therefore the social status in these family types is probably more two-dimensional than in family production units. For example, the homemaker status of a mother per se may increase the propensity for her children to become homemakers themselves or engage in similar formal work such as childcare services, irrespective of the father's occupational status. Moreover, the strength of the father-child status association may depend on their partners occupational or homemaker status ('breadwinner effect', as also found in Fischer and Hout 2006; Hout 2018). The influence of homemaker mothers on child status attainment may depend both on the social status of her partner (which due to assortative mating partly reflects the mothers' social origin), and on prevailing gender and family norms. A previous study on social mobility using both parents suggest just this, that the category of homemaker mothers is highly diverse and therefore their impact on child status attainment varies (Beller 2009).

The influence of a working mother's occupational status on their children's occupational status attainment may similarly depend upon prevailing gender and family norms. Her labor market attachment and thereby the extent to which a mother's broader socioeconomic status is reflected by her occupational status differs between these contexts. These dependencies are the reason that I study intergenerational persistence and the role of both parents therein with a focus on societal family norms as well as actual family constellations in paper three. In this paper, I do find important differences in patterns of intergenerational persistence between different family types and by societal family norms.

Heterogeneity by gender

According to gender-role model theory, same-gender parents could play a larger role than opposite-gender parents in intergenerational mobility of social status (e.g. Rosenfeld 1978). Children identify with the same-gender parent and – either through socialization or unconscious imitation – behave similarly to the same-gender parent (Boyd 1989; Kong et al. 2020). Such gender differences in intergenerational mobility have indeed been found in some contexts (for the US, Beller 2009).

The applicability of gender-role model theory is linked to contextual factors. In societies with both male breadwinner and dual-earner families, working mothers provide a role model function for their daughters. There is a clear mother-daughter association in labor force participation, so that more working mothers raise more working daughters (Siegel and Curtis 1963; Stevens and Boyd 1980), working outside of female-dominated occupations (Rosenfeld 1978). Gender attitudes and corresponding family types may also be transmitted intergenerationally (e.g. Luke 2021).

Whether children choose gender-segregated occupations is associated with their parent's propensity to choose such occupations. But gender segregation in the labor force in itself could also lead to more mobility among opposite-gender parent-child pairs; parent and child of the same gender are more likely to end up in occupations dominated by their gender (Eriksson 2015; Korupp, Sanders, and Ganzeboom 2002). Both gender-role models and gender segregation in the labor force could thus be associated with gender differences in intergenerational mobility, where the samegender parent is more important in explaining child status attainment.

Both gender segregation of the labor market and gender segregation in the family were stronger and more formalized in historical contexts than in Sweden today (e.g. Janssens 2014; Widerberg 1980), and therefore gender differences in intergenerational mobility could be more pronounced historically. Changes over time in the extent to which roles in the family and labor force are gendered suggest that the inclusion of gender is particularly important when studying intergenerational mobility over a long period of time. Gender differences in intergenerational mobility could be more pronounced under the male breadwinner and production unit family types than in dual-earner families (Beller 2009; Kong et al. 2020).

Heterogeneity by occupational social origin

I study intergenerational mobility of mothers and fathers by social origin to see whether parents matter at different points in the social structure and to explore processes of accumulation of parental resources. There is a broad literature on wealth and income mobility and their differing rates of intergenerational persistence at different points of the distribution. A number of previous studies, both on Sweden

and other countries, have found intergenerational persistence of socioeconomic status to be higher at the high end of the social structure (Adermon et al. 2021; Björklund, Roine, and Waldenström 2012; Bratsberg et al. 2007; Hällsten and Pfeffer 2017; Munk, Bonke, and Hussain 2016; Reeves et al. 2017). Especially intergenerational transmission of wealth is particularly strong among the wealthy (Pfeffer and Killewald 2018). Top income persistence is high and similar across countries with very different welfare regimes; the variation in overall mobility levels derives from differences in income persistence at the lower end of the income distribution (Esping-Andersen 2015).

Previous research has shown that wealth, income, occupational status and other indicators of socioeconomic status complement each other in terms of overall intergenerational persistence (Hällsten and Thaning 2021). Social climbers often experience worse economic outcomes even within high-status positions (Hällsten 2013; Hansen and Toft 2021; Laurison and Friedman 2016). Both this complementarity of different dimensions of socioeconomic status, and the economic differences within social classes at the top, suggest that some of the high economic persistence at the top is not associated with high occupational status persistence.

It is not entirely clear from previous research whether occupational status would also be transmitted more strongly at the high end of the social structure, and there are both methodological and theoretical reasons for this uncertainty. Differences by social origin in father's and mother's relative time investment in their career and family – where lower-status families follow more traditional patterns and higher-status families more gender-equal patterns (Bonke and Esping-Andersen 2011) – could result in differences in the relative importance of fathers and mothers at different social origins. If parental time investment creates high persistence, mothers in low status families could be more important than fathers – while both parents would be similar in high status families. If more parental time invested in children means a weaker labor market attachment and this in turn would make occupational status of a parent less persistent over generations, then mothers in low status families could be less important than fathers – while both parents would still be similar in high status families.

In practice, detailed differentiation on an occupational status scale is often lacking among high-status occupations (see also Blanden 2013). Elite intergenerational persistence will therefore often not be captured by social mobility measures. Theoretically, high income and wealth persistence at the top can be related to processes not reflected by occupational attainment, such as inheritance or geographical income inequalities. Social networks (e.g. dynastic social capital), manners and habits, and other forms of distinction could play a role in a high level of high-status persistence economically as well as socially (e.g. Almenberg and Dreber 2009; Reeves et al. 2017). Other possible explanations of high income and wealth persistence, relating to credentialism and ability more broadly, can also result in high social as well as economic immobility.

Thus, I cautiously expected to find lower intergenerational mobility of occupational status at the higher end of the social structure, but less so than for income and wealth mobility; in paper three this is generally what I find when it comes to fathers, but not mothers. Both among late nineteenth century cohorts, and among the most recent cohorts born in the 1970s and 1980s, I find that mother-child associations in occupational status are *higher* at lower social origins, while father-child associations are higher at high social origins. These differences might be linked to gender differences in parental time investment by social origin (cf. Bonke and Esping-Andersen 2011).

High persistence at the top in the Scandinavian countries has received particular attention, as these countries are generally seen as egalitarian. Gøsta Esping-Andersen evaluates the relationship between welfare regimes and intergenerational persistence (Esping-Andersen 2015; Esping-Andersen and Wagner 2012). He finds – also beyond the economic realm – that equalization in Scandinavia has been a 'bottom-up' process; welfare policies have benefited children from disadvantaged backgrounds and substantially reduced their disadvantages, as compared to other countries' policies. At the same time, the opportunity structure of higher-status groups appears rather unaffected by welfare policies.

Esping-Andersen suggests three possible explanations for this imbalance (Esping-Andersen 2015). He deems the first two – political constraints and compensatory strategies – to be unlikely in the Scandinavian context, but suggests that intergenerational persistence at the top is unaffected by policy because its mechanisms cannot be equalized through policy, and that this policy-resistant form of intergenerational persistence has become increasingly important over time. Examples of such policy-resistant mechanisms behind high persistence at the top are increasing socioeconomic differences in parental investment (of time and resources), increasing status homogamy, and regressive pension systems (Esping-Andersen 2015).

Such high, and apparently policy resistant, intergenerational persistence at the top could explain high surname status persistence as I find in paper two and paper four, as social status reflected by surnames mainly distinguishes traditionally high-status groups from the rest of the population – they make little distinction among the broad majority.

Heterogeneity by surname type

One of several recent approaches to study intergenerational mobility over long time periods or across varying contexts has been the use of surnames and surname groups to proxy family lineages (e.g. Clark 2014; Güell, Rodríguez Mora, and Telmer 2015). Gregory Clark and collaborators depart from the idea that conventional intergenerational mobility studies suffer from bias due to measurement error. At the surname (group) level, random variation in any one indicator of socioeconomic

status would be lower than at the individual level because more than one individual is observed in the same surname (group). Therefore, they suggest that parent-child associations in "underlying" socioeconomic status can be approximated better at this level than at the parent-child level (cf. Bukowski et al. 2021; Clark 2014; Clark et al. 2015; Clark, Leigh, and Pottenger 2020; Clark and Cummins 2014, 2015). This idea rests upon a large number of stringent assumptions on the nature of intergenerational mobility patterns and social stratification, which are unlikely to apply in real world situations (e.g. Maas 2015; Torche and Corvalan 2018).

An alternative benefit to using surnames is that they allow studies of intergenerational mobility using only cross-sectional data sources that would otherwise be too limited for mobility research. In this case, surnames are used not because they form a better measure than parent-child associations, but because they form a measure on equal footing that can be applied more easily to a wider range of contexts (Barone and Mocetti 2021; Güell, Pellizzari, et al. 2018; Güell, Rodríguez Mora, and Telmer 2007; Güell et al. 2015; Santavirta and Stuhler 2021). The methodology of this latter approach is also applied to study intergenerational persistence using first names (Olivetti and Paserman 2015; Olivetti, Paserman, and Salisbury 2018; Santavirta and Stuhler 2021), and in other evaluations of the surname approach (Chetty et al. 2014; Feigenbaum 2018).

Both approaches find high intergenerational persistence of socioeconomic status. Higher than implied by the intergenerational mobility literature, if intergenerational mobility would be a simple parent-child transmission process ("AR(1)", cf. Becker and Tomes 1986). Thereby they confirm the broader recent literature on intergenerational persistence (e.g. also using multidimensional status indicators, three or more generations, or siblings) in finding higher intergenerational persistence when conceptualizing socioeconomic status more broadly than the earlier intergenerational mobility literature did. However, both approaches lean heavily on the 'informational content' of lineages contained in rare, often high-status, surnames (Santavirta and Stuhler 2021). Thus, resulting estimates of intergenerational persistence may reflect high-status groups in society more than other social strata (see also e.g. Maas 2015). Indeed, intergenerational persistence as measured using surnames appears to be somewhat higher among higher-status groups, both at the surname and surname group level (see paper two, and Barone and Mocetti 2021; Santavirta and Stuhler 2021).

In this dissertation I apply a group-level surname approach. In paper two, we find that much of the informational content of individual surnames in Sweden is contained in a small number of surname groups distinguished by their distinct pre-industrial social status. In this introduction to the dissertation, I discuss the Swedish social status groups as based on surname types in the section on 'measuring social status using surnames'. This means I depart in substantive ways from the existing surname mobility literature. While they use surnames as a proxy for family lineages, I see surname group as a proxy for pre-industrial – non-occupational – social status

groups. Paper two covers this distinction between surname groups as social strata, and surnames as proxies for families, extensively. With an empirical evaluation, we show in this paper that most of the 'informational content' of surnames reflects these pre-industrial social strata rather than individual family lineages, as the informational content of different surnames *within* pre-industrial social strata is rather low.

This distinction is important, especially in the context of a major critique to the surname mobility literature. When using surnames, intergenerational mobility is estimated using grouped data. This means that intergenerational mobility at the surname group level only reflects the between-group component of parent-child intergenerational mobility (Torche and Corvalan 2018). Within surname groups, intergenerational mobility may be either high or low. Depending on this, high surname-level intergenerational persistence has different implications for an individual's chances to move up or down the social ladder as compared to their parents. In paper four, I disentangle surname status persistence – the between-group mobility also covered by paper two – from intergenerational mobility of occupational status. I estimate parent-child associations in occupational status attainment within surname groups and across the full population, and describe how patterns and changes over time in intergenerational mobility differ by pre-industrial social origin (as defined by surname type).

We find very high surname status persistence in Sweden in paper two, across all social strata distinguished by surname type. However, the two large surname groups contain 25-65% of the Swedish population. For such large groups, intergenerational mobility *within* surname groups is of great importance for child status attainment, as members of these surname groups are distributed across all social strata to a much larger extent than the members of small high-status surname groups. In paper four, I show that historically high surname-level intergenerational persistence and high parent-child persistence among high-status groups goes hand in hand with substantial intergenerational mobility within the large group with lower status (patronymic) surnames.

Combining the study of individual-level and group-level processes of intergenerational persistence has been suggested as a new and valuable direction of mobility research (Güell, Rodríguez Mora, and Solon 2018). A similar approach has been applied in the context of geographical or neighborhood differences in intergenerational mobility (Chetty et al. 2014; Chetty and Hendren 2018a, 2018b; Connor and Storper 2020), and racial or ethnic differences in intergenerational mobility (Chetty et al. 2020; Davis and Mazumder 2018; Torche and Corvalan 2018). However, this dissertation is the first to disentangle intergenerational mobility along the lines of pre-industrial social strata and show how high withingroup mobility for the majority population goes hand in hand with strong patterns of persistence among high-status groups.

Mechanisms behind intergenerational mobility

Clearly contextual factors and the way in which one accounts for them matters for our understanding of intergenerational mobility, both at a large and small scale. Mobility levels differ when comparing individuals to either one or both parents, of differing or same gender. Mobility levels differ by the extent to which parents resemble each other's social status (through homogamy). They differ as the institutions of family and work transform, for men as well as for women. Mobility levels differ by social origin. They differ by surname status and gender. Mobility levels differ during and as a result of structural transformations of the economy. Once one accounts for these important differences, other mechanisms behind different levels of intergenerational mobility at the family level remain.

One major contributor to both intergenerational mobility and intergenerational persistence is education. Publicly financed universal education, together with other institutions for equal opportunities, give broader parts of the social structure access to qualifications necessary for high status occupational attainment (e.g. Breen and Müller 2020). The impact of such institutions for equal opportunities on intergenerational mobility is discussed in the next section, while I shortly cover previous research on parental investment (of time or money) and biological and other personal characteristics in this section. These important mechanisms are discussed only briefly here, as they are not directly studied in the dissertation.

Parental investment

At the family level, a key contributor to the intergenerational transmission of social status from parents to children is parental investment, of time as well as other resources (e.g. Heckman 2006; Schneider, Hastings, and LaBriola 2018). Different forms of parental investment have been linked to children's educational attainment, also in the Nordic context (Thomsen 2015). The size of the association between parental investment and attainment is substantial, especially in early life. In the US, parenting style and home learning environment have been found to explain more of income-related gaps in kindergarten test scores than maternal education does (Waldfogel and Washbrook 2011).

Parental investment of both time and economic resources has increased in recent decades, especially parental investment in early life before equalizing institutions such as schools come into play (e.g. Bianchi, Robinson, and Milke 2006; Kornrich and Furstenberg 2013). As parental investment has increased during the past half century, it presumably becomes an increasingly important contributor to intergenerational persistence over time. Especially because social inequalities in parental investment have increased during recent decades (Mclanahan 2004; Schneider et al. 2018). Inequalities in parental time investment are not only high in economically more unequal settings such as the US, but also in a recent Nordic context (Bonke and Esping-Andersen 2011).

In the American context, mothers' education is generally seen as more consequential than fathers' for the effect of parental time investment on children's educational attainment, as mothers tend to spend more time on childrearing activities. When tested in a Nordic context, this assumption is violated; both mothers and fathers with higher levels of educational attainment invest more time in their children – especially if both parents are highly educated (Bonke and Esping-Andersen 2011). Homogamy plays an important role in parental time investment in the Nordics as its effect differs by educational level. Lower-educated homogamous parents spend less time on caring, and time spent is more gendered with mothers doing most of the childrearing. In contrast, highly-educated homogamous couples both spend more time on childrearing, in an egalitarian rather than specialized way (Bonke and Esping-Andersen 2011).

In terms of intergenerational mobility, these patterns may be reflected in higher intergenerational persistence — both from fathers and mothers — among (homogamous) high-status parents in the dual-earner family type. Specialization among low-status parents along traditional gender lines may be reflected in lower status associations between mothers' occupational status and their children's occupational attainment, as the labor market attachment of these mothers is weaker. On the other hand, if time investment is a key mediator in parent-child associations, mother-child associations could be higher in low-status families as mothers spend more time with children in such families — especially also in terms of mother's non-occupational social status.

Personal characteristics

It is not always clear what content of parental time investment results in intergenerational transmission between parents and children. When it comes to intergenerational persistence in an exact occupational category, parents can be role models to their children (Jonsson et al. 2009). When it comes to intergenerational persistence of a certain class belonging, but not the exact same occupation, time investment is often linked to the transmission of a broad array of characteristics – including characteristics which are generally not seen as 'meritocratic' in defining occupational attainment, such as personality or social skills (Jackson 2007).

Certain personality traits and social skills can increase one's chances to be employed in specific occupations or social classes, while being less valuable for attainment in other occupations or classes. Parental social networks may also play an important role in giving access to certain occupational positions but not others (e.g. Pöyliö, Erola, and Kilpi-Jakonen 2018). It is likely that information asymmetries exist between high- and low-status families in terms of employment processes, career paths, and career attractiveness. Importantly, career aspirations are to an extent shaped by one's parents and broader social environment. Thus, perceived desirability as well as accessibility of high-status positions likely differs between high- and low-status families (e.g. Bernardi and Ballarino 2016).

On the other side of the employment process, the employer may value characteristics in a potential employee that are related to social origin – such as certain social skills. In particular, employers generally prefer to employ candidates with characteristics similar to themselves (e.g. Rivera 2012).

In the following section, on the impact of institutions for equal opportunities, I discuss inheritance – a form of parental investment – and its relationship to intergenerational persistence.

Inheritance of traits

Studies on intergenerational 'direct' effects often want to abstract from any contextual components of intergenerational persistence and study to what extent the social status of parents and children resembles each other net of any parental investment or contextual or group-level differences. A focus on such 'direct' effects is motivated by the presumed inevitability of 'direct' intergenerational effects; these should not be dependent on policy context and therefore intergenerationally transmitted inequalities of this kind are inevitable as long as inequalities in outcomes exist (e.g. Björklund and Jäntti 2020; Stuhler 2018). To distinguish direct and indirect intergenerational effects, specific subsamples have been studied where presumably indirect factors are not at play or can be controlled for, such as adoptees and monozygotic twins.

Using monozygotic twins, the effect of a mother's schooling on children's educational attainment *net* of the mother's inert abilities is studied in the US context (Behrman and Rosenzweig 2002, 2005); with the latter reflecting the part of the mother's intergenerational persistence that exists regardless of circumstances. Once inert ability and the father's schooling and earning are controlled for, these studies find no direct effect of a mother's schooling on children's educational attainment – or rather a negative effect. In contrast, a positive direct effect of the father's schooling on children's schooling is found (Behrman and Rosenzweig 2002, 2005). A study using adoptees rather than twins comes to a similar conclusion; rearing mothers, but not biological mothers, affect their children's educational attainment – suggesting that time investment is more important than inert ability in the case of mothers (Plug 2004).

Results such as these – which reflect a broader literature in which mothers are seen as primarily affecting intergenerational persistence in their role as homemakers, while fathers primarily in their role as breadwinners – could be highly context-dependent, as indicated by results in paper three in this dissertation. Contextual differences in these results are made plausible by similar studies in a Swedish context, using Swedish adoptees (Björklund, Lindahl, and Plug 2006; Grönqvist, Öckert, and Vlachos 2017). In these studies, both adoptive and biological parents are found to affect children's educational attainment, earnings, cognitive and non-cognitive abilities. Adoptive parents appear to be more important for outcomes in

later childhood as outcomes in early childhood (Björklund et al. 2006; cf. Kalmijn 1994). Both cognitive and non-cognitive abilities are persistent over generations – and more so than income, but appear to be transmitted along separate lines (Grönqvist et al. 2017). In contrast to the earlier literature based on the US, in Sweden direct intergenerational effects from adoptive mothers to their children are stronger than from adoptive fathers (Grönqvist et al. 2017).

Overall, these studies on twins and adoptees, which try to disentangle biological and childrearing pathways in intergenerational mobility, confirm a picture of multidimensionality and context-dependency of patterns of intergenerational persistence. In contrast to expectations, causal genetic intergenerational effects do not seem to generalize across contexts – suggesting that contextual factors mediate the importance of biological factors differently across contexts, and consequently that there is no fixed level of (genetic) intergenerational persistence that exists regardless of context. These contrasting findings on intergenerational effects taken together highlight the relevance of studying intergenerational persistence descriptively, with attention to context, and as a society-wide phenomenon, as I do in this dissertation.

The impact of institutions for equal opportunities

The educational system

The expansion of public schooling is often seen as the most important policy reform in the transition from an 'ascription' to an 'achievement' society; as education becomes available universally, those with highest ability, rather than those with parents in the right positions, can attain more prestigious occupational positions. Occupational sorting becomes based on educational qualifications rather than quality markers more dependent on family background. The actual effect of the expansion of schooling on intergenerational mobility and equality of opportunity is, however, difficult to quantify; school expansion often occurs nation-wide and overlapped with the development of other institutions for equal opportunities. Moreover, school expansion at different levels may affect opportunities differently. In Denmark, educational mobility increased with the expansion of secondary schooling, but decreased with further educational expansion at the tertiary level (Karlson and Landersø 2021).

In Sweden, the effect of the introduction of comprehensive primary and secondary schooling on intergenerational mobility has been quantified, exploiting the gradual implementation of the reform during the 1950s and 1960s (Holmlund 2008; Meghir and Palme 2005). The introduction of comprehensive schooling (*grundskola*) meant both an increase in compulsory schooling duration to nine years (from seven or eight), the abolition of educational tracking at early ages, and the introduction of a nationally unified curriculum. The effect of this reform on earnings of the full

population was either marginally positive (Meghir and Palme 2005), or non-existent (Holmlund 2008). However, both studies find the reform to have increased equality of opportunity as children with lower social origins benefited while the incomes of children with well-off parents were reduced by the reform.

Those with lower-educated fathers were positively affected by the reform, both in terms of educational attainment and earnings. Earnings increased most for children with lower-educated fathers who themselves had high cognitive ability, but also increased among those with lower ability. However, for children to fathers with more than compulsory schooling (less than one in five fathers), earnings decreased substantially after the reform (Meghir and Palme 2005). Holmlund finds a 12% increase in income mobility caused by the educational reform (Holmlund 2008). These studies thus strongly suggest that opportunities in Sweden depended more on ability, and less on family background, after the introduction of comprehensive schooling.

This much-studied compulsory school reform has been compared to a more specific earlier Swedish reform which did not affect tracking but only extended educational duration by increasing term length (Fischer et al. 2020). In contrast to the later reform, this earlier reform resulted in higher earnings across the social structure, increasing overall economic growth rather than equality of opportunity. Compared to this term extension, the negative effects of the compulsory school reform during the 1950s on earnings of individuals from well-off families (either highly educated or with high lifetime incomes) suggest that the tracking system existing in Sweden before the compulsory school reform particularly benefited individuals with high-status family backgrounds. ¹⁴ Negative effects of tracking on equality of opportunity are also found outside of Sweden across a variety of national contexts (Brunello and Checchi 2007).

Education plays a role in intergenerational mobility in three ways. *Equalization* takes place when the effect of class origins on educational attainment declines. Mobility can also increase as a result of *expansion*; if labor markets are more meritocratic at higher levels of educational attainment (i.e. less dependent on class origin), then increasing shares of each cohort attain higher levels of educational attainment. This increases mobility without changes in the effect of class origin at a given level of educational attainment. Finally, reductions in the association between educational attainment and social destination would also lead to higher mobility. In Sweden, both equalization and expansion played an important role among 1906-1972 birth cohorts (Breen and Jonsson 2007, 2020).

¹⁴ There was a marginal negative effect on years of schooling among these groups as well, but this is unlikely to explain the more sizeable negative effect on earnings given existing estimates of the returns to schooling.

Equalization was mostly important among cohorts born during the first half of the twentieth century; among these cohorts, the association between parental class and educational attainment was substantially reduced as primary schooling expanded. Educational expansion, both at the secondary and tertiary level, drove reductions in social mobility among cohorts born 1945-1964 – cohorts affected by the previously discussed compulsory school reform (Breen and Jonsson 2007, 2020). Among cohorts born after 1964, social mobility no longer increases. Studying the role of the expansion of tertiary education on social mobility has so far been difficult in the Swedish case, as cohorts experiencing tertiary but not secondary expansion are born from the 1960s. The survey material often used to study social mobility ends in 1972, so that few cohorts experiencing tertiary expansion are observed (but see on Denmark, Karlson and Landersø 2021). ¹⁵

Studies on other countries show that the equalization process observed in Sweden occurred also elsewhere; in countries such as France, Germany, Italy and the Netherlands a weakening of the relationship between social origin and educational attainment during the twentieth century was associated with increased social mobility (Breen and Müller 2020).

Overall, the introduction of comprehensive schooling during the 1950s and 1960s thus increased social mobility for affected cohorts, and descriptive studies suggest increases in social mobility due to school expansion even for earlier twentieth century Swedish cohorts. The preconditions underlying processes of equalization and expansion are however context-dependent, and it is not a given that further educational expansion also increased social mobility. In more recent contexts, parental compensation has been raised as a pathway reducing 'direct' social mobility, controlled for educational attainment; parents compensate for the weakening relationship between social origin and educational attainment in order to ensure that their children's social status resembles theirs – regardless of their educational attainment (Bernardi and Ballarino 2016).

Reductions in social mobility as (tertiary) education expands can also occur regardless of conscious parental compensation strategies. This may be the case if other family background characteristics than educational attainment become more valuable on labor markets as a result of reduced variability in attainment (e.g. Bernardi and Ballarino 2016; Karlson and Landersø 2021). Educational reforms, especially tertiary expansion, and increases in compulsory years of schooling, have been found to increase such parental compensation in twenty-five European countries, including Sweden (Pöyliö et al. 2018). The observed increase in the 'net' association between social origins and destinations is in fact large enough to

Among 1975-1985 Swedish birth cohorts and reaching occupational maturity by 2021, one in three has a university degree and over half have attended some tertiary education. Among 1955-65 Swedish birth cohorts, this was still substantially lower with 20% having a university degree and less than 40% some tertiary education (Statistics Sweden 2022).

compensate for any reductions in the association between social origin and educational attainment, resulting in constant levels of social mobility over European cohorts born ca. 1940-1975 (Pöyliö et al. 2018).

The overall effect of educational systems on social mobility is difficult to study, as changes in educational systems often happen simultaneously with other contextual changes, and internationally comparable educational systems are associated with different mobility regimes. Several studies have captured the association between education and mobility by comparing educational systems and levels of inequality of opportunity among European countries (Pöyliö and Kallio 2017; Schlicht, Stadelmann-Steffen, and Freitag 2010). The comprehensive account by Schlicht and collaborators found a number of policy effects differing substantially between former Communist and Western democracies (including Sweden). Higher educational expenditure, high preschool attendance, and long hours per school year, are associated with smaller parental background effects on educational attainment in Western democracies. Sweden has among the lowest number of hours per school year, but high educational expenditure and high preschool attendance (Schlicht et al. 2010). When only the possibility of preschool attendance was evaluated, no association with mobility was found (Pöyliö and Kallio 2017).

Contrary to expectations, tracking, a high share of private schools, and large class size increased educational mobility (Schlicht et al. 2010). In the data used for this study, Sweden had no tracking, a low share of private schools, and small class sizes – all associated with low educational mobility. Although most aspects of the Swedish educational system studied here point towards strong associations between parental social origin and educational attainment, educational mobility is actually found to be relatively high in Sweden (Schlicht et al. 2010).

This study would thus suggest that relatively high educational mobility in Sweden today exists despite, rather than because of, the Swedish educational system. However, an increase in school leaving age and higher proportions completing tertiary education – both observed in Sweden – are found to be associated with increases in social mobility. Both in a European comparative perspective (Pöyliö and Kallio 2017), and specifically at the moment of implementation in Sweden (Holmlund 2008; Meghir and Palme 2005). 16

Early life conditions have been shown to affect later life socioeconomic outcomes in important ways (Heckman 2006). Much of the debate on education and intergenerational mobility, however, focuses on educational expansion and therefore on secondary and tertiary education, undergone at teenage or adolescent

¹⁶ Whether increased mobility with the introduction of *grundskola* is due to increases in school leaving age or to the abolishment of tracking cannot be addressed by the referenced studies, although other research points towards the latter (Brunello and Checchi 2007; Fischer et al. 2020).

ages. Whether an educational system equalizes opportunities or not might depend largely on the quality and scope of high-quality, pre-school institutions (as suggested by Esping-Andersen 2015; but see Pöyliö and Kallio 2017).

Before the 1960s, daycare attendance in Sweden was not widespread and daycares were mostly used by poor families, such as those with single mothers (Elwert and Quaranta 2022). They may thus have played a role in enhancing upward mobility chances for those at the very bottom of the social structure. Although today's Swedish pre-schools are both universal and high-quality, their further expansion occurred rather late – during the 1970s through the 1990s. Moreover, early expansion of publicly financed pre-schools during the 1970s was far greater among children from middle class families than among children with a lower-class background (Nyberg 2012). Potential equalizing effects of Swedish pre-schools among broader groups of the population would thus not be observable for cohorts born prior to 1980, and would be outside of the scope of my dissertation – or most other existing studies on social mobility in Sweden.

The welfare state

Although education is seen as the key component in the relationship between social origin and destination, other aspects of the welfare state have also been suggested to relate to social stratification and mobility. Overall, social mobility levels do not differ much between countries with different welfare regimes, and do not always differ in expected ways (Breen and Müller 2020; Erikson and Goldthorpe 1992). This makes the question of how institutions influence intergenerational mobility a difficult one to answer. Social democratic welfare regimes, such as the Swedish, are suggested to reduce inequality of opportunity relative to other regimes (e.g. Beller and Hout 2006; Sørensen 2006; Tranby 2006). Under these regimes, social policies reducing inequality of opportunity are expected to increase intergenerational mobility in terms of income, as well as education and occupation (Sørensen 2006).¹⁷

As other welfare policies increase mobility in social democratic welfare regimes, the role of educational systems is suggested to be more limited here than in liberal welfare regimes (cf. Beller and Hout 2006). Not only education, but also other policies and institutions may matter less for intergenerational mobility in a low economic inequality context (cf. Hertel and Groh-Samberg 2019). The Swedish welfare regime transitioned to become more liberal and less economically equal since the 1990s and thus the role of education in reducing inequality of opportunity in Sweden may have increased over time. Moreover, in recent decades returns to education have increased, which could lead to decreasing income mobility (cf. Harding and Munk 2020).

¹⁷ This link between low income inequality and high mobility may be limited to income mobility, see discussion on the "mobility paradox" of the Nordic countries elsewhere (see e.g. Breen, Mood, and Jonsson 2016; Karlson 2021).

It has been suggested that the equalizing effect of educational expansion as well as other welfare institutions does not affect all parts of the social structure equally. Equalization of opportunities in the Nordic countries has been a bottom-up process, where the impact of disadvantaged social origins is substantially reduced, while advantages connected to a high-status origin remain constant (Esping-Andersen 2015; Esping-Andersen and Wagner 2012). Specifically, generous *universal* welfare provisions may decrease the disadvantages associated with a lower class background, while leaving higher social origins unaffected.

Equalization as a bottom-up process has functioned well to reduce social inequalities in the Nordic countries during much of the twentieth century. More recently it may facilitate the quick integration of immigrant groups. As previous lower-status groups, immigrants in Sweden generally experience more intergenerational mobility than natives (OECD 2018). On the downside, the lack of mobility at the higher end of the social structure, in combination with high and increasing wealth inequality, may increasingly reduce access to high-status positions for those from other social origins (see e.g. Adermon et al. 2021; Hansen and Toft 2021).

Family policies, which generally redistribute income from the general population to families with (young) children, have also been linked to intergenerational mobility of social status. A comparative European study suggests that increased expenditure on family services – financing policies facilitating the combination of family and work – is associated with increased upward educational mobility for those from lower status origins (Crettaz and Jacot 2014). In particular, the expansion of preschools may alleviate the adverse effects of a childhood in poverty (Esping-Andersen 2015).

Gender equalization policies, and the early increase in labor force participation among mothers, reduced poverty risks at the bottom of the Swedish income distribution. The increase of women's labor force participation across the social structure is associated in time with reductions in the relationship between social origin and educational attainment. Thus, gender equalization and family policies may indirectly be at the heart of high social mobility in the Nordic countries (Esping-Andersen 2015 - high when studied using the 'dominance' approach to social origin).

The important role of family policies is partially confirmed for policies not related to gender equalization. Maternity leave policies are shown to form a perfect example of institutional compensation; longer paid maternity leave is associated with higher occupational attainment among children from low-status origins, while it does not affect the occupational status of children from high-status origins either positively

or negatively (Pöyliö and Kallio 2017).¹⁸ With regards to maternity leave, the idea of institutional reductions of intergenerational persistence as a bottom-up process is thus confirmed.

The progressive redistribution of economic resources is a key characteristic of the welfare state. Together with levels of economic inequality, more broadly, it has been linked to social mobility. The literature on the relationship between inequality and mobility is described in the following section.

The distribution of income and wealth

Current levels of economic inequality, and how they have changed over time, are important in the study of intergenerational persistence, especially because of a recently widely confirmed pattern termed 'the Great Gatsby Curve' (Corak 2013) – countries with lower levels of economic inequality generally display higher levels of income mobility. Similarly, in a cross-country comparison, lower levels of economic inequality between social classes appear to be associated with higher levels of social mobility (Hertel and Groh-Samberg 2019).

Although the 'Great Gatsby Curve' is widely established in cross-country or regional comparisons, its generalizability to changes over time appears limited (DiPrete 2020; Durlauf, Kourtellos, and Tan 2022); generally, there is no clear association between reductions in economic inequality and subsequent reductions in relative intergenerational mobility – as studied in most of this dissertation. Absolute mobility, which does not control for structural changes in the economy or social structure, is more consistently related to economic inequality also over time (DiPrete 2020).

The 'Great Gatsby Curve' – and its social mobility equivalent – relate income or earnings inequality to intergenerational persistence. A rapidly expanding literature also links wealth to social stratification and mobility, as a complementary dimension to income or earnings (Hansen and Toft 2021; Killewald, Pfeffer, and Schachner 2017; Pfeffer 2018; Pfeffer and Killewald 2018). Especially in Sweden, wealth appears to be associated with intergenerational persistence in important ways not accounted for by studying income mobility (Hällsten and Pfeffer 2017; Hällsten and Thaning 2021).

The relationship between wealth inequality and intergenerational persistence is in some ways more direct than that between income inequality and persistence, as wealth refers to capital stocks rather than flows – which are more persistent over time. Inherited wealth results in intergenerational persistence of socioeconomic status in a very direct way, and in Sweden as in many other developed economies

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¹⁸ The same study does however not find significant associations between pre-primary education or family allowances and social mobility, possibly due to limited identification strategies rather than the lack of an association.

about half of all private wealth is inherited (Ohlsson, Roine, and Waldenström 2020). In Sweden, inheritances play an important role in explaining intergenerational persistence of wealth, explaining up to half of such persistence (Adermon, Lindahl, and Waldenström 2018). While wealth inequality is discussed as a possible explanation for the 'Great Gatsby Curve' in terms of income – especially through its role in distributing political power (Durlauf et al. 2022), most of the comparative literature on the link between economic inequality and mobility has not focused on wealth as its measure of economic inequality (DiPrete 2020).

Through inheritance, wealth inequality present in one generation is partially transmitted to the next generation – also when taking differential fertility into consideration. Inheritance taxation can be seen as an institution for equal opportunities, as it limits the direct intergenerational transfer of wealth. Welfare states differ in the extent to which they limit intergenerational transmission of wealth through differing tax regimes. Among the wealthiest, wealth is transmitted intergenerationally and not depleted by each generation – as rates of return on inherited wealth are high among this group. However, inherited wealth among other groups of the population is generally depleted within one generation and therefore less consequential for mobility levels (Nekoei and Seim 2018). Inheritance tax rates, and tax evasion, among the wealthiest are therefore consequential for levels of intergenerational mobility – but perhaps inheritance or other wealth taxes are less important in determining mobility levels among the rest of the population.

In the dissertation I make use of several pre-industrial high-status surname groups. As the wealthy, these groups form an elite – at least in terms of their occupational status – in Sweden. I do not quantify the extent to which these two dimensions of elite status interact, but it is likely that wealth and high surname status overlap to a considerable extent – especially over the long term. Thus, particular patterns of intergenerational persistence which apply to the wealthy could also be at play for high-status surname groups.

Data and methods

Census and register data across time

Throughout the dissertation I use administrative data in the form of historical and contemporary full-count censuses and official registers. The included historical censuses (1880, 1890, 1900, 1910, 1950) cover the full population living in Sweden at the time (4.6-7 million individuals). Statistics Sweden (*Statistiska centralbyrån*) started compiling population statistics from 1858. Swedish censuses from 1860 are based on excerpts from church books kept by local priests. Priests sent excerpts of parish registers (*husförhörslängden*), and birth-, marriage- and death registers to Statistics Sweden who centrally compiled full population censuses base on the former, and population statistics based on the latter (Statistics Sweden 1969).

Resident registration was fundamentally reorganized in 1946, importantly with the introduction of personal identifiers in 1947. Consequently, censuses compiled by Statistics Sweden in 1950 and 1960 are no longer based on local priest excerpts, but instead on tax registers (mantalslängder). These tax registers were however still based on excerpts from church registers (see e.g. Statistics Sweden 1969). From 1968, automation of population statistics resulted in the creation of continuous registers; whereas local population statistics were sent in at fixed intervals previously, this now happened on a continuous basis.

The historical census material is of relatively high quality internationally as the demographic, geographic, and socioeconomic information contained in it was recorded by local priests rather than reported by a population with – initially – little education among the majority. The 1880-1910 censuses have been digitized by the Swedish National Archives in the SweCens project (The Swedish National Archives, Umeå University, and the Minnesota Population Center, 2011a, 2011b, 2014; The Swedish National Archives and the Minnesota Population Center, 2016).

Within the Swedpop project (www.swedpop.se), occupational information has been harmonized across the 1880, 1890, 1900, 1910 and 1950 censuses. Other information from the 1950 census used in this dissertation, such as surnames, is from an earlier digitized version of the census (Arkiv Digital 2015). Importantly, the 1950 census includes numeric personal identifiers.¹⁹

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¹⁹ The 1950 census misses some important information (e.g., complete personal identifiers) for specific groups (children born in central Stockholm in the years directly prior to 1950). This is likely related to the process of assigning unique personal identifiers taking some time to coordinate in early years, especially in densely populated areas (also indicated by duplicates elsewhere). However, this does not limit my work as I use the census material for two purposes not affected by these limitations. Firstly, I link individuals living in Sweden both in 1910 and 1950 – who are adults in 1950 and were assigned personal identifiers upon introduction in 1947.

Since 2001 Statistics Sweden maintains an annual occupational register. I use data from this register, in combination with other relevant registers, to define occupational status among recent cohorts.²⁰

The 1970-1990 censuses contain self-reported information on the occupations of individuals. Occupations in the occupational registers are reported by employers and reflect current employment. For the purpose of studying social stratification and mobility, the self-reported information, with high coverage, is preferable over the information contained in the occupational registers. These registers miss occupational information on individuals in project employment, larger non-salaried employers, and most small employers (with 0-2 employees). This means that both some high status occupations such as consultants or investors, but also low-status occupations such as small shop-owners and other self-employed (e.g. construction workers, cleaners) are not included. Coverage in the occupational registers is better for the public than private sector and consequently better for women than men (Statistics Sweden 2011).

Why census and register data?

Each of the papers in the dissertation describes long-term patterns in social stratification or mobility. To do so, data sources covering a long time period have been combined and, to the extent possible, aligned. Throughout the dissertation, descriptive statistical methods are used. The dissertation aims to describe changes over time across the Swedish population with high external validity. Therefore, it makes use of data sources covering the full population rather than survey material. Such data sources are generally more limited in the depth of individual-level information which is available than, for example, targeted surveys. This means that the research questions that can be answered using such sources in one way are more limited; administrative and census data generally does not include any subjective information (on for example attitudes, beliefs). However, in another way the range of questions that can be answered using longitudinal full-population data is much wider than when using a sample.

This type of data lends itself well to study small subpopulations or rare outcomes, such as elite surname groups, for which smaller samples do not have the statistical power. It also lends itself well to study broad changes over time across society, as I do in this dissertation (cf. Stuhler 2018). In particular, the dissertation emphasizes several dimensions of heterogeneity in social stratification and mobility. Such heterogeneity can limit the representativeness of studies based on (smaller) samples.

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Secondly, I observe surnames and occupational information for adults in 1950 and link this to subsequent generations using continuous registers.

²⁰ Modern register and census data used in the dissertation are part of the Swedish Interdisciplinary Panel (SIP), a compilation of different official register and censuses starting in 1960 (hosted at the Centre for Economic Demography, PI: Jonas Helgertz), or part of

Compared to other sources, full-population administrative data is also less vulnerable to attrition; generally, all those who stay in the country can be followed over time, especially since the introduction of personal identifiers (in Sweden in 1947).

In previous studies, results on patterns of intergenerational persistence have varied or been inconclusive (for a short interdisciplinary literature review, see e.g. Stuhler 2018). Trends in intergenerational mobility have often been studied over a relatively short observation period, or over few birth cohorts. In economic history and historical sociology, some studies on long-term trends in intergenerational mobility have been conducted, also with contradictory conclusions (e.g. Dribe et al. 2015; Long and Ferrie 2013; Maas and Van Leeuwen 2016; Song et al. 2020). These studies differ in methodology as well as sample size, and descriptive studies such as those on intergenerational mobility trends are particularly sensitive to such differences (see e.g. Engzell and Mood 2021; Stuhler 2018). These inconsistencies in the existing literature illustrate the importance of a thorough and consistent research design in answering questions on changes over time in social stratification and mobility – which I hope to provide in this dissertation by using standardized occupational information from full-count censuses and registers.

Linking individuals and families across time

In order to study intergenerational persistence records of individuals need to be linked across time as well as to their parents and children. Such a longitudinal data structure is necessary to observe both parents and children in their prime working ages. The 1880-1950 censuses include information at the individual and household level. This structure with household and individual layers makes it possible to link children to their parents reliably, and observe their family relationship. Individuals in these historical censuses are linked between census years and to a register of all deaths (*Sveriges dödsbok*) by Björn Eriksson using probabilistic name linking methods (as elaborated in Dribe, Eriksson, and Scalone 2019; Eriksson 2015).

For data compiled after 1950, I use personal identifiers to link individuals to themselves across time. As the register of deaths (*Sveriges dödsbok*) also includes personal identifiers and is linked to the historical 1880-1910 censuses, I also use personal identifiers to create a link between the data from 1950 onwards and the historical data. This creates longitudinal data on individuals, but to also be able to link individuals across generations to their family members, I use the multigenerational register (*flergenerationsregistret*) from Statistics Sweden. This register covers most parent-child links for children born from 1932 onwards, with some limitations for early cohorts.²¹ To follow families over time, I link censuses from 1950 (1950-1990) and occupational registers (2001-2016) to each other using

²¹ Coverage is rather low for birth years before 1935, I therefore use the multigenerational register for children born from 1935 onwards.

personal identifiers. Intergenerational links and current presence in Sweden are retrieved from the multigenerational register and register of the total population (RTB) from Statistics Sweden.²²

Research design and statistical methodology

To make best use of this unique data source, the research design and statistical methodology must fit the data across time. Each of the studies uses data sources compiled from 1880 until 2016 and covering Swedish birth cohorts from 1810 until 1985. Changes in data sources make the use of data spanning such a long period challenging, and much time in this dissertation project has been spent on data management and designing a study population of parent-child cohorts that are, to the greatest extent possible, followed across time. The alignment of occupational coding considerations around the measurement of dimensions of social status (see subsequent subsections) have received particular attention.

Throughout the dissertation, descriptive statistical methods are used. These methods are best suited to describe long-term developments in social stratification and intergenerational mobility. Knowing, descriptively, how these processes develop over the long term is a prerequisite for asking relevant questions about underlying mechanisms. This could seem straightforward, but requires careful consideration of applicability of definitions and methods in different contexts — and differences between these result in substantively different results (e.g. Engzell and Mood 2021).

In sociology and social history relative social mobility, or 'social fluidity', the association between parental class origin (O) and child class destination (D), has long been studied using log-linear models (Breen 2004; Breen and Müller 2020; Erikson and Goldthorpe 1992; Grusky and Fukumoto 1989; Hauser 1978; Hout 1983). In such models, the (log) odds ratios of mobility tables (OD crosstables) are compared over time or contexts using a hypothesized mobility structure. The best model to explain a mobility table is chosen by comparing goodness-of-fit statistics (such as BIC) between specifications. This approach generates rather complex outcome parameters and relies on specific assumptions on the pattern of change. Specifically, it assumes that class boundaries are fundamental in intergenerational mobility while status differences within social classes are assumed to be inconsequential. This assumption is questionable given the literature on microclass mobility showing that big class immobility to an extent reflects occupational immobility (e.g. Griffiths et al. 2019; Jonsson et al. 2009), as well as the literature evaluating class boundaries and comparing class to occupational status where

²² The modern register and census data used here are part of the Swedish Interdisciplinary Panel (SIP), a compilation of different official register and censuses starting in 1960 (hosted at the Centre for Economic Demography, PI: Jonas Helgertz).

theoretical expectations do not align with empirical findings (e.g. Bihagen and Halleröd 2000; Bihagen and Lambert 2018).

In this dissertation, I therefore operationalize child status attainment using a continuous occupational scale. Parental social origin is also primarily operationalized using occupational status, although I often perform sensitivity analyses using social class instead.²³ Occupational status is rank transformed in order to make occupational status positions more comparable across time; the rank transformation controls for structural transformations of the occupational structure. However, as the variation in underlying occupations differs quite substantially over time, the rank transformation alone is not sufficient to make parental and child status distributions fully comparable across cohorts; the variation in the rank transformed occupational status indicator differs across time. I control for this by standardization of the occupational status rank.

After careful consideration of variable definitions and controls, most analyses are performed using OLS regressions, or linear probability models in the case of binary outcomes. In the study of surname status persistence, I make use of the proportion of explained variance (R²) statistic, which has a generally bad reputation because of its limited usefulness in goodness-of-fit testing. Its use has been revived in the surname mobility literature (Güell et al. 2015) and I extend this approach by applying it to group-level intergenerational persistence. In most papers, relatively complex interaction hypotheses are tested, and to make the results of these tests interpretable, expected outcomes are visualized at different values of explanatory variables.

Measuring dimensions of social status across time

Measuring social status using occupations

Occupational information is recorded in string format in the 1880-1950 census data. These occupational strings are recoded into HISCO (Leeuwen, Maas, and Miles 2002) in a standardized way within the SwedPop project (www.swedpop.se). In the dissertation, I create HISCO codes for modern occupational source data as available in the 1960-90 censuses. This makes the occupational coding used in the dissertation substantially more consistent over time as was possible with existing coding schemes (see paper one). From this standardized occupational information, I derive information on social stratification in the form of social class as well as occupational status (or prestige). In this section, I describe some of the important considerations and decisions related to that process.

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²³ Social class is assumed to be a more specific indicator of labor market status than my operationalization of occupational status, which reflects social status more broadly.

The link between social status and occupations at young ages is less stable than at 'mature' ages, both historically and today.²⁴ Historically, occupations at younger ages may be on-the-job training or a way to save capital for a future career. These phases are incorporated in the educational and welfare system in later cohorts. For example, farmers and farmers' wives often started their career as agricultural or domestic servants (e.g. Lundh, 2004). In more recent decades, establishment in the labor force happens at increasingly older ages and this differs by educational attainment (e.g. Gottfries, 2018). It is increasingly common for occupations held by individuals in their twenties to be precarious (side jobs, temporary jobs) and not reflect eventual occupational status of individuals (e.g. Savage et al., 2013).

Thus, an important aim in the dissertation has been to observe individuals' occupations at 'mature' ages. In paper one on social stratification, I reflect on the importance of age for the social structure by studying different age groups. In paper two, only men aged 30-60 are included. In paper three and four, which use longitudinal data, I have tried to abstract from changing career trajectories by observing as complete career trajectories as possible, and have subsequently used the highest attained occupational status or class position over the life course – after the age of 25 - to define social status. This abstraction from differing career trajectories is especially relevant in a study on intergenerational persistence which includes both men and women. Occupational status of women is relatively lower in childbearing ages, and career trajectories change over cohorts (Härkönen, Manzoni, and Bihagen 2016).

In previous research occupational status is generally defined using either occupational prestige rankings from surveys (e.g. Treiman's prestige scale, Treiman 1977), indices reflecting other socioeconomic status attributes associated with an occupation (education and income, e.g. ISEI, Ganzeboom, De Graaf, and Treiman 1992), or social distances between occupations (e.g. CAMSIS, Prandy and Lambert 2003).²⁵ The first and last definitions are most in line with a Weberian definition of social status. Weber explicitly defines assortative mating and social interaction amongst themselves as a defining characteristic of status groups (Weber 1978b [1922], 1978a [1922]).

As it is not possible to conduct a survey to generate a subjective prestige ranking historically, the alternative of a social distance based occupational status measure is most suitable to define social status in historical contexts. A standard historical status scale, in the spirit of CAMSIS, has been created based on HISCO

²⁴ The age range for occupational maturity, or career completion, is not necessarily constant over time. The Swedish workforce appears to reach occupational maturity at increasing ages over cohorts born during the twentieth century (Bihagen, Shahbazian, and Kiellsson 2022).

²⁵ For an excellent discussion of contemporary as well as occupational status measures – with the emphasis on social network based measures as used in this dissertation - see especially chapter 3 in Lambert and Griffiths (2018).

occupational coding (as used here). This HISCAM status scale is derived using marriage certificates covering seven countries, including Sweden, and the period of 1800-1938 (Lambert et al. 2013). The scale captures social distances by using social networks as reflected by marriage certificates.

Social class has long been the most widely used measure of social stratification in the literature on social mobility (Breen 2004; Breen and Müller 2020; Erikson and Goldthorpe 1992). Theoretically as well as empirically, the concepts of occupational status and social class differ in substantive ways. Social class, following a Weberian tradition, directly reflects economic conditions and labor relations – rather than social networks and prestige (Weber 1978b [1922], 1978a [1922]). There is a temporal difference between the two concepts as well; status is inherently more persistent than class, as it reflects a collective value placed on one's social position (social esteem), while class reflects an individual's actual (current) economic situation. Class is a categorization, which divides members of a society over a limited number of social groups. Between these groups, clear boundaries should exist, while groups are relatively homogenous amongst themselves (see e.g. Crompton 2008).

In paper one of this dissertation, I compare the Swedish social structure as defined by social class to that defined by occupational prestige. I find that over the course of economic and institutional development – and as human capital among the workforce increases – the occupational social structure appears to become more 'gradational' and less 'discrete' in nature. While both dimensions of social stratification have their distinct inherent value, I mainly use occupational status in the study of intergenerational persistence. Occupational status lends itself well to study heterogeneity along non-occupational dimensions of social status.

I operationalize social class using an internationally standardized historical class scheme based on HISCO occupational coding, and called HISCLASS (Van Leeuwen and Maas 2011). The HISCLASS scheme has some particular advantages over contemporary class schemes for application in a study of long-term patterns and trends. It is feasible to use in a contemporary as well as a historical context, as it specifies a sufficient number of class boundaries between large social groups today which were often small in pre-industrial contexts; it contains five non-manual classes (Van Leeuwen and Maas 2011).

Empirical studies in the Swedish context generally find dependence relationships (employer/employee) to be rather inconsequential for social inequality (Le Grand and Tåhlin 2013; Tåhlin 2007). From a long-term perspective the inclusion of dependence relationships as a distinctive feature of a class scheme is problematic, as positions with high authority and autonomy commonly held by employers until the early twentieth century became managerial employee positions since the later twentieth century. This shift towards managerial positions is abstracted from in the

HISCLASS scheme by classing together all supervisory positions (either owners or managers).

Differences in skill requirements between jobs create important distinctions in terms of wage and prestige (Le Grand and Tåhlin 2013; Tåhlin 2007). Therefore, another advantage of the HISCLASS scheme is its distinction of four different skill levels, which are related to the duration of required training for different jobs. In our study, educational attainment of the workforce changes substantially. Arguably, occupations that historically had the same skill requirements can still be grouped as one social class with similar social status in modern times – although the actual number of years or days of training of those occupying these classes will have generally increased substantially. Moreover, HISCLASS separates the farmers and farm workers from other social classes. This is also useful when a class scheme is applied to a context first dominated by and later virtually without a primary sector.

Beside 'big' social classes and an occupational status scale, I also use microclasses in the dissertation. Microclasses are defined as (groups of) occupations which are seen as reflecting 'classes' in their own right – reflecting occupational networks and specific shared expertise which create a sense of class belonging and shared class interests (Weeden and Grusky 2005). Intergenerational mobility has been shown to follow microclass lines to a significant extent (Griffiths et al. 2019; Jonsson et al. 2009), but the question of whether microclasses should be interpreted as 'class' in a Weberian sense – reflecting economic distinction – remains debated. Microclasses could rather reflect non-economic factors, such as social networks (as suggested by the empirical evaluation in Brooks and Svallfors 2010). Regardless of the importance of the economic dimension in each, microclasses, big social classes, and occupational status each reflect social status in different ways.

Measuring social status using surnames

As the general social structure of the Swedish workforce changed, its link to historical institutions also faded. Aristocratic distinction was important in preindustrial nineteenth century Sweden and is reflected in Swedish surname practices. Although only Clark (2012) has so far used some of these distinctions to study social stratification and intergenerational mobility in Sweden, these prestige differences between surname groups have been noted repeatedly by linguists (Brylla 2005, 2009, 2011, 2014; Frändén 2010, 2014, 2017; Hedberg 2019; Nyström et al. 2021; Utterström 1985, 1994).

Surnames contain information on the social status origins of individuals. They are generally inherited over generations and are often informative on prestige of ancestors at the time of adoption. Traditional Swedish surnames appear to be particularly informative on ancestral prestige, as they are explicitly rooted in the pre-industrial system of social stratification (Nyström et al. 2021). Most Swedish surnames used in the period of 1880-1950 fall into distinct groups reflecting their

prestige in the historical system of social stratification (in Swedish: *stånd*, cf. *Stände* in German, see e.g. Carlsson 1949, 1966; Fahlbeck 1892; Weber 1978 [1921]). Preindustrial social stratification of surname groups thus reflect "*stånd*" heritage, or Weberian "social status". Status groups did not necessarily reflect economic distinction but are primarily associated with cultural and social capital. Although such social stratification in the long run also leads to economic distinction among those with high status, status is not dependent on economic resources and is more persistent than for example wealth (Weber 1978 [1921]).

The social stratification reflected by surname groups is for example reflected in concrete power differences as the nobility, clergy, bourgeoisie and farmers each had their own political representatives in the Swedish Diet of Four Estates (ståndsriksdagen) from the mid-fifteenth century until 1866 (e.g. Carlsson 1949).²⁶ In pre-industrial Sweden, patronyms referring to the name of one's father were used among all social classes. This did not change for most of the population until the eighteenth and nineteenth century, although in coastal cities and the north the use of other fixed surnames began already in the late seventeenth century. Adoption of fixed surnames was particularly uncommon before 1900 in the formerly Danish regions in the south of Sweden, which is still evident from the prevalence of patronymic surnames in the south today (Nyström et al. 2021).²⁷ Surname adoption became widespread in aristocratic circles in the seventeenth century, and thereafter spread to other social groups. The emergence of fixed surnames in Sweden was relatively late in a European context. In for example Italy, surnames were commonly used as early as the fifteenth century (see e.g. Barone and Mocetti 2021). Patronyms and names with geographical and occupational reference are common throughout Europe (Debus, Heuser, and Nübling 2014; Heuser, Nübling, and Schmuck 2011).

²⁶ Not all of the Swedish population was represented by these estates, as the 'farmer' estate was exclusively open for landholding farmers (and iron producers - bergsman). Thus, a substantial share of the Swedish population was estateless.

Legally, families were almost fully free to choose and change their surnames until 1901, when the process was formalized. Before 1901, only the use of noble surnames was formally restricted. However, as family names or surnames were adopted with the purpose to signal family belonging, in practice surname change was likely not that frequent. Quantitative accounts on this are lacking. Changing surname was and is often associated with important life-course transitions such as migration, marriage, childbirth and graduation (Brylla 2005, 2011, 2014; Nyström et al. 2021; Utterström 1994). In certain contexts, the lack of legislation on fixed surnames led to high rates of surname change; supposedly only about 10% of prison inmates bearing noble surnames belonged to the nobility (Leibring 2012). This was addressed and having a surname became compulsory in 1915. During much of the twentieth century the possibility to change surname was limited legally. Following new legislation in 1982 and 2016 adopting new names has again become comparatively easy in Sweden. Since the 1990s adopting surnames that signal high social status, such as those resembling nobility names, has become increasingly popular (Brylla 2005; Leibring 2012). Surname change by ethnic minorities has been used as an assimilation strategy historically as well as today (Frändén 2010, 2020).

The adoption of patronyms as surnames was also common among the broad majority of farmers and (non-)farm workers in Sweden.

The first status group with distinct surnames distinguished consists of surnames adopted by the nobility. These are identified as surnames listed by *Riddarhuset* as 'titled' (higher) and 'untitled' (lower) noble lineages, and their usage was formally restricted to paternal descendants of the title holder from 1626 until the 1980s.²⁸ In pre-industrial Sweden noble lineages would be expected to hold high-status occupations, either as a land-owning elite, in the military or within the state apparatus — being strongly overrepresented in the legislative, executive and judiciary power (e.g. Carlsson 1949).

The second surname group distinguished here consists of 'educated' names initially reserved for the 'clergy' of the Church of Sweden. Over time, this group broadened and its names became associated with a broader 'educated' status group; those with higher educational degrees were seen as *ståndspersoner* by their nineteenth century contemporaries (e.g. Fahlbeck 1892). In the analysis, 'educated' names are separated into three distinct subgroups: Latinized (-us) and Greek (-ander) names were commonly adopted during the sixteenth and seventeenth century. Subsequently French-sounding names (e.g. -ell, -ér, -én) became more fashionable and the adoption of such French-sounding names was still common among the educated in the late nineteenth century. Between 1880 and 1950, new bearers entered the group of French-sounding names, while there is little change in the size of the Latinized and Greek-sounding surname groups.²⁹ This 'educated' status group, together with the nobility, formed a pre-industrial aristocracy in Sweden; education was relatively expensive and mostly reserved for children of the existing higher classes (see context section).

The third group of geographic 'bourgeois' surnames includes names originally primarily adopted by the (petty) bourgeoisie (artisans, merchants, and similar). These names generally consist of two geographic elements referring to natural locations such as hills, trees, rivers or plants (e.g. Lindberg), but may also contain

A selection of names from the *Riddarhuset* list with rapidly increasing number of bearers, or high number of bearers throughout, are excluded. Examples of excluded names are common foreign names reserved for a noble lineage in Sweden; migrants were not required to change their 'noble' name upon entry to Sweden. Although many noble surnames have a distinct connotation due to heraldic elements, I define the surname group based on noble heritage rather than name connotation; many noble-sounding names never had noble bearers and many noble names do not have a noble-sounding, heraldic, connotation. In the historical sample I can separate titled nobility (*friherrlig, grevlig* and *kommendör*) from untitled nobility (*adlig*).

²⁹ Surname adaptation was largely unregulated in Sweden up until 1901, when surnames became fixed. It was not until a sequence of legislative changes in 1919, 1920, 1921 and 1922 that adoption of existing surnames became restricted. Only noble surnames were somewhat protected under earlier legislation from 1626/1707 (see further Linde 2003). Even during the 1920s-1950s, adoption of new 'designated' surnames was common (see e.g. Hedberg 2019 and his ongoing work).

heraldic elements or geographical references to the area in which a family lives or used to live. Patronyms (e.g. Eriksson) form a fourth group. During medieval times, virtually all Swedes bore proper patronymic names (father's first name plus son or daughter). These names were abandoned by higher status groups, while they remained in use and became fixed among the broad majority of farmers and (non-) farm workers. In the twentieth century the adoption of fixed family names had become the norm (and was also encouraged in name laws from 1901). The number of families bearing patronyms gradually declined over the course of the 1880-2016 period, both as these families more often than other groups changed surnames and emigrated to North America.³⁰

I observe 1950 ancestor surnames rather than individual surnames for the 1960-2016 population.³¹ This means that I only observe intergenerational transmission of ancestral surname status and not effects of surname connotation. By assigning surname groups through intergenerational links rather than observed names, I avoid any biases in surname status persistence caused by changing of surnames by more mobile individuals for the years 1950-2015.

Remaining surnames not classified belong to two groups; those names which appear in the historical 1880-1950 census data not classified as Roman, nobility, bourgeoisie, or patronymic names are diverse and consist of among others 'soldier', other geographical, German-sounding, French-sounding and other foreign (e.g. Polish, Finnish) or minority (e.g. Sami) names.³² However, besides such minorities,

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³⁰ Between 1880 and 1910, in each decade 4-7% of the Swedish population emigrated to the Americas (gross emigration rate by end of decade population). Between 1910 and 1930, decadal rates of emigration were still over 2%. Transatlantic migration was likely more common among low-skilled and unskilled rural workers, who often bore patronymic names (e.g. Ljungberg 1997). Until 1930, immigration to Sweden consists largely of return migrants from the Americas. It was only during the Second World War that other forms of immigration become non-negligible. Generally, low immigration results in all Swedish surname groups until 1950 mostly being composed of Swedish-born individuals, including the 'rest' category.

³¹ Individuals are assigned to the same surname group as their paternal grandfather, father, or themselves depending on which is the latest generation observed in 1950. Those born after 1950 with no registered father are assumed to belong to the same surname group as their mothers if they have a maternal ancestor in Sweden in 1950.

³² In earlier versions of this paper, another surname group with soldier names was distinguished (e.g. Tapper, Dolk). In the eighteenth and nineteenth centuries, all soldiers received names upon entering an army division. These names were retained by many soldiers and became common as fixed surnames (e.g. Wahlberg 1990a, 1990b). At the same time, it was common for such names to be transmitted between subsequent soldiers inhabiting the same soldier farm – without biological relations. Many soldier names were similar to the group of geographical surnames. However, a subset of such names can be distinguished as these refer to military objects or (un)desirable personality traits in a military context. This group – as patronymic surnames – has low social status historically, but unlike patronymic surnames, soldier names had relatively low numbers of bearers per name. However, as these names can be either family names or location names, I have chosen to exclude them. In line with the literature, also the high share occupied as

this 'rest' category primarily consist of newer and more unconventional high status names adopted during industrialization. I also group together all those since 1960 for whom I do not observe an ancestral surname in 1950. This group expands over time and consists predominantly of immigrant names.

soldiers among men bearing soldier names in the nineteenth century, suggests that these names in many cases were attached to a location ('soldattorp') rather than a family.

Summary of papers³³

Paper I. Social stratification of men and women in Sweden 1880-2015.

In this study, I describe changes in the social structure of the Swedish workforce over the long term by comparing different historical measures of stratification from early industrialization up until today: social class (HISCLASS), occupational status (HISCAM), and microclass – all based on HISCO. Importantly, I describe how these stratification measures combined describe the social structure of men and women and changing gender differences therein over time. Occupational social status is consequential for various life outcomes, but these consequences depend on the relative position of a given occupation in the social structure, which changes over time.

I situate the changing social structure of men and women in its context of economic and institutional development: economic growth, women's labor force participation, occupational diversification, sectoral change, routine vs. relational work, and skill levels among the workforce. To do so, I align occupational coding from nine full count censuses from 1880 until 1990, and occupational registers from 2001-2016 for a consistent mapping of the social structure across 1810-1985 birth cohorts.

Clear class boundaries characterized the social structure in Sweden in the late nineteenth century; and especially the boundary between the non-manual and educated few on the one hand, and the rest of workers – which were most commonly general laborers, domestic servants, and farmers. I show gradual occupational upgrading and gender convergence among working men and women over the past hundred-fifty years, across all dimensions of social stratification. By the twenty-first century the social structure is rather 'gradational'. By this time, Sweden's workforce is composed of a large diversity of occupations which often can be ordered above or below one another in a status hierarchy, both from a social class and occupational status perspective, but with only incremental differences between them compared to the divide in the social structure of the nineteenth century.

While vertical gender differences largely disappear by the 2000s, important horizontal gender differences in the social structure remain. Microclass overlap between genders shows that reduced gender differences are associated with increases in non-routine work among men, earlier dominated by women. Work in the expanding service sector consists increasingly of care work, including food services and housekeeping, for both men and women.

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³³ These are short executive summaries of the individual papers without any references to previous research. For due credit to important contributions, see the actual papers or earlier sections of this introduction.

Occupational upgrading is linked primarily to sectoral change among working men and increases in skill level among working women. Occupational upgrading has been more pronounced for working women than men, especially at the high and low ends of the social structure. This is partly due to the entry of (more experienced) married women into the formal workforce. For men, occupational upgrading has been concentrated among higher social strata, with high-skilled classes growing at the expense of medium-skilled classes, and occupational status mostly increasing above the median — suggesting a polarization. Both with the transition from agriculture to industry, and with the transition from industry to service economy, certain medium-skilled classes were compressed, and high-skilled classes grew. Such polarization is not observed for women.

Paper II. A Schumpeter hotel? Surname status persistence in Sweden 1880-2015.

Conventional social mobility research misses important dimensions of intergenerational persistence. To capture intergenerational persistence of family social status, we need to move beyond parent-child associations in occupation or income. Models that incorporate surname group belonging show that families do not regress to a population mean at the speed implied by parent-child associations. Their mobility is further constrained by their ancestors' social status as operationalized through surname group belonging. Failing to include such group-level processes, summary measures such as intergenerational elasticities in occupational status or income will overestimate the relative importance of individual effort and ability on socioeconomic outcomes.

We study the inheritance of surname status as a group-level process, using full-count population data based on censuses and administrative registers for Sweden between 1880 and 2016. We use surname groups rather than individual surnames as our analyses of the 'informational content' of surnames, the information they provide on social status, show that social stratification by surnames occurs primarily at the level of surname types associated with pre-industrial social strata, rather than at the level of individual lineages – especially before 1950. This is both indicated by the low informational content of individual surnames within most surname groups, and by the high share of the informational content of individual surnames which derives from surname groups.

Surname status persistence, the rate of regression to the mean of surname groups, is almost as high in the modern Swedish welfare state as it was in preindustrial times. The status structure of surname groups converges only at a slow rate, with differences persisting over at least six generations. Structural transformation and the emergence of the welfare state are not associated with lasting increases in surname status persistence. This could be related to the social structure of distinct surname

types; pre-industrial high-status groups are distinguished from the broad majority with common surnames, but among this broad majority little distinction is possible. Welfare states may not equalize opportunities between (broad) elites and the rest.

Exceptionally high surname status inequality in the nineteenth century shows that these pre-industrial social strata formed a highly important dimension in shaping the occupational social structure of that time. Gini coefficients, reflecting the over- or underrepresentation of high- or low-status surname groups in high-status occupations, are as high as 0.8 for elites and 0.4 for the broad lower-status group with an agricultural or working-class surname background (patronyms). By the twenty-first century – ca. six generations later – a substantial part of this inequality has disappeared.

In the late twentieth and twenty-first centuries, persistence is lower than before 1950. The disadvantage of patronyms rapidly disappears as their place at the bottom of the social structure is taken by an increasing population with foreign-born background. Hence, surname status persistence is not only an elite phenomenon, but also reflects the relative status of other social groups.

Paper III. The impact of mothers. Intergenerational mobility in Sweden 1865-2015.

Social mobility studies have traditionally measured parent-child associations using one 'dominant' parent to reflect social origin. However, the institutions of family and work have changed substantially over the past hundred-fifty years, in Sweden and elsewhere. The dominant family type in the late nineteenth century was a patriarchic family production unit. With industrialization this shifted to a male breadwinner model in the early twentieth century, in which mothers and fathers work in separate spheres. During the 1970s, this norm again changed in the favor of dual-earner families, in which both fathers and mothers perform formal work.

As the institutions of family and work changed, intergenerational mobility did too. Patterns and trends in occupational intergenerational mobility look different when both parents are considered to shape social origin together. I study these changes using census and register data covering 1865-1985 Swedish birth cohorts and their parents. The father-child, rank-rank correlation in occupational status was stable as Sweden industrialized and subsequently decreased as Sweden transitioned from a male breadwinner to a dual-earner family type. The impact of mothers' occupational status increased simultaneously, both in the full population and among dual-earner families. That is, not only did mother-child associations increase because more mothers worked, but they also increased among families with working mothers before and after the transition.

In the 1970s, Sweden became a dual-earner society, and among cohorts born since 1960, mothers' and fathers' occupational status became roughly equally important

for daughter's occupational status attainment – unlike before. Mother-son associations in dual-earner society are about half as strong as father-son associations; gender continues to play an important role in intergenerational mobility, with the same-gender parent-child association being stronger than the opposite-gender association. This gendered pattern of intergenerational mobility could be related to gender segregation in the social structure.

In societies dominated by male breadwinner or production unit families, a father's occupational status reflects family social origin rather well. Although I already observe clear differences in the respective roles of fathers and mothers in intergenerational mobility by mothers' formal labor force participation historically, overall mobility trends in the population are reflected well by models only including father's occupational status for cohorts born before ca. 1940. Among later cohorts, this is no longer the case and mobility is overestimated if mothers are disregarded.

Patterns of intergenerational mobility differ by social origin, and this is the case across family types. In male breadwinner families, father-child associations are stronger at the higher end of the social structure across time – although this pattern is less pronounced among 1935-50 birth cohorts than either before or after. In dual-earner families, I observe different patterns among mothers and fathers; fathers matter more in higher-status families, while mothers matter more in lower-status families. Again, 1935-50 birth cohorts form an exception; mother-child associations are higher in higher-status families. This could be related to the social gradient in the transition from male breadwinner to dual-earner families; the transition occurred first in higher-status families.

Parental resources are not independent, but accumulate. I observe multiplicative accumulation of fathers' and mothers' status; given a higher occupational status of one parent, the parent-child association for the other parent is somewhat stronger. This pattern is stronger historically than today and stronger for fathers than mothers. Multiplicative accumulation means that parental status is not simply the sum of fathers and mothers, but that parents interact to shape family social origin. Patterns of multiplicative accumulation are not very strong, so a "pooled" approach to parental social origin – averaging the status of both parents – is likely not too far off in practice. Combined, the findings in this paper suggest that both parents need to be included to describe long-term mobility patterns and trends in contemporary contexts where independent work by women is common.

Paper IV. Intergenerational status persistence in Sweden 1865-2015. The impact of occupational and surname status.

This paper contributes to the literature on long-term changes in intergenerational mobility. Social origin is measured comprehensively as a combination of occupational and surname-based social status – both from mothers and fathers. The

paper aims to link an expanding literature on surname status persistence to the conventional field of intergenerational mobility research studying parent-child associations in socioeconomic status. In contrast to much of the previous literature, and building upon paper two in the dissertation, I interpret surname group belonging as a heritable status dimension at the group-level (such as ethnicity), rather than a direct indicator of family lineages.

I find intergenerational occupational mobility to be surprisingly stable in Sweden over the past hundred-fifty years, with rank-rank correlations around 0.27 – comparable to mobility levels in the US both historically and today (Song et al. 2020). This finding of occupational mobility levels comparable to the US is in line with previous literature on occupational and educational mobility, and contrasts with findings in terms of income mobility – which is higher in Sweden ("mobility paradox").

Pre-industrial surname status forms an important dimension of intergenerational immobility among high-status groups and for high-status attainment; parent-child persistence of occupational status is most pronounced among high-status surname groups, and surname group belonging is consequential for high-status but not for low-status attainment. Long-run mobility trends differ by surname status. Among lower-status surname groups – the majority of the population historically – mobility decreases substantially once the transition away from agriculture is completed. During industrialization, farming origins are not predictive of occupational outcomes in the next generation. Mobility instead increases in the long run among higher-status surname groups, where intergenerational rank-rank correlations were high (0.45) in nineteenth-century Sweden. Intergenerational correlations are similar across surname groups with Swedish origins for late twentieth century birth cohorts.

Most pre-industrial surname groups converge in their mobility levels around the time when comprehensive schooling was introduced, making inequality in educational opportunity a likely cause of surname status inequality. Another possible explanation would be concurrent increases in mother's labor force participation; before this transition, my only indicator of a mother's socioeconomic status is her surname group belonging, which may be more important among non-working mothers.

Although pre-industrial surname groups become largely inconsequential for most of the population by the twenty-first century, mobility patterns continue to differ between those with and without a Swedish surname background, and between those with elite pre-industrial surnames and the rest.

Concluding discussion

Our chances to end up in social positions with high or low status are affected by our family background. This has been known for centuries, and studied empirically since at least the 1920s (Sorokin 1927). It forms the premise for this dissertation. In the dissertation I ask how levels and patterns of intergenerational persistence of social status change over the course of economic and institutional development. That is, from right before the time industrialization took off until the current day. I emphasize different components of social status origin, both at the level of families and wider social groups, and ask how their relative importance changes over time. In a broader perspective, these questions are related to the consequences of intergenerational persistence. Persistent inequalities between social groups whether defined by gender, ethnicity, or pre-industrial social strata – are more tangible at the societal level than intergenerational persistence in individual families. It is difficult to argue that *persisting* inequalities between such groups would be related to individual achievement (meritocratic), and they can therefore lower social trust and undermine social cohesion (Putnam 2000; Rothstein 1998; Savage 2021).

In answering these questions, I limit myself to occupational status as a measure of individual-level social status, and how this dimension of social status interacts with social stratification at the level of social groups: surname group, gender, being Swedish-born, and social class. I find that occupational intergenerational mobility has been surprisingly constant over the past hundred-fifty years (paper three and four, cf. the "constant flux" Erikson and Goldthorpe 1992; Song et al. 2020), with the main change in mobility levels being related to the entry of women into the formal workforce (Ahrsjö et al. 2021).

The distinguished dimensions of social status all play a role in shaping social inequalities: gender through gender segregation of the labor market (paper one, and e.g. Eriksson 2015), and major social stratification by marital status historically (paper three, and e.g. Stanfors and Goldscheider 2017) which to some extent persists today in the form of occupational marriage premia among men (e.g. Bygren and Gähler 2012). Being Swedish-born has become associated with higher status attainment in Sweden in the twenty-first century (especially paper four, and e.g. Behtoui and Neergaard 2010), and bearing a surname reflecting pre-industrial higher social status is associated with higher occupational status attainment across the period of 1880-2016 (paper two and four, and Clark 2012).

These social groups also play a role in shaping intergenerational persistence. The same-gender parent is more important for child status attainment than the opposite-gender parent, at least in dual-earner families (paper three, and e.g. Beller 2009). In male breadwinner society, breadwinner fathers are more strongly associated with child status attainment than dual-earner fathers (paper three, and e.g. Hout 2018).

Surname groups affect intergenerational mobility as well. Parent-child mobility in high-status surname groups is low historically and increases over time, while parent-child mobility is high historically and decreasing over time in the common Swedish lower-status surname group (patronyms, see paper four).

Not only does the occupational status of each parent matter in dual-earner society, but parental status also accumulates: increases in the occupational status of one parent are equally or more strongly associated with increases in the status of the child if the other parent also has high(er) occupational status. The relative importance of fathers and mothers differs across the social structure; fathers matter more for children from high-status origins, while mothers matter more for children from lower status origins (paper three).

Pre-industrial social strata, as reflected by surname groups, shape the status attainment of all children born in Sweden until 1950 and thus reaching occupational maturity until around 1990. Not only the surname group of fathers, but also that of mothers, matters for child status attainment – and to an approximately equal extent. Social distinction of elites, especially the former nobility, persists into the twenty-first century – both in terms of occupational status attainment of their children and marriage patterns (paper four). Surname status 'premia' are mostly relevant among high-status groups and for high-status attainment; intergenerational surname status persistence is higher at the higher end of the social structure (paper four), as persistence of father's occupational status (paper three).

Some forms of intergenerational mobility are thus more likely than others, and particularly those in high-status positions can transmit their advantage to their children, so that these positions are relatively difficult to attain for those from other origins (cf. Esping-Andersen 2015). As the public debate on intergenerational mobility often centers around the possibility for upward mobility ('rags to riches'), such low intergenerational mobility at the top of the social structure may be more consequential for the perception of equality of opportunity than other forms of intergenerational mobility.

Social stratification along some social group lines – gender and surname status – has become less relevant in determining social stratification and intergenerational persistence in Sweden over time. However, even today both surname status and gender still determine stratification and mobility to some extent (paper one to four). Being Swedish-born, in contrast, has become substantially more important in determining social stratification and mobility in Sweden (paper four). Occupation-based social group belonging (social class) became less important in determining intergenerational mobility levels as Sweden industrialized, but has again become increasingly important over recent decades; intergenerational mobility levels differ by parental social origin (paper three).

The patterns and changes in intergenerational persistence described in this dissertation relate to important political and public debates. The form of

intergenerational persistence that has been highlighted most in the public debate, is educational inequality – do children from different background get the same chances to learn competences that can help them to realize their potential (based on their talents and hard work) later in life? Are schools able to compensate for differences in quality in learning environment in the parental household? To a certain extent, schools have been able to compensate for differences in parental background in Sweden as elsewhere, although not fully (e.g. Breen and Jonsson 2007; Meghir and Palme 2005; Pfeffer and Hertel 2015). This ability of schools to realize their equalizing role has in more recent decades been heavily contested in the Swedish public debate.³⁴

I do not measure the mediating role of schools in intergenerational mobility directly, but I do study cohorts of both parents and children born before a substantial expansion of public schooling as well as after. If there existed substantial unequal opportunities that were equalized by education, then we would expect to see the equalizing effect of schooling reflected in increasing occupational intergenerational mobility over these cohorts. Occupational mobility does appear to increase specifically for cohorts growing up before and after the introduction of nine-year universal public schooling (grundskola, introduced 1962) in Sweden (see paper three and 4). However, this change occurs simultaneously with the shift from male breadwinner to dual-earner society, and I can only speculate on the degree to which these caused levels of mobility to change. Moreover, no substantial and long-lasting increases in occupational mobility in Sweden over the past hundred-fifty years are observed. If education is a major equalizer – as is often found in the literature – then the initial equalizing effect of schooling is compensated for in later cohorts either by active parental strategies (e.g. Fiel 2020; Pöyliö et al. 2018), or by increasing intergenerational persistence through other channels.³⁵

Another form of inequality of opportunity that has received much attention in recent decades are inequalities by ethnicity or migrant status. Swedish-born with Swedish-born parents are paid more for the same jobs, are more likely to be a part of the formal workforce, and are less likely to live in segregated neighborhoods with low

³⁴ Only this year (2022), the Swedish public TV channel broadcasted two TV series dedicated to the question on the quality of Swedish schools (*Vem mördade skolan?* [Who murdered the school?] and *Det svenska skolexperimentet* [The Swedish school experiment])), both reflecting on deteriorations in school quality in recent decades. Both programs raise increasing inequality of opportunity as a growing issue in Swedish schools since decentralization and privatization in the 1990s. Already in 2011, Swedish public radio published a series on a similar topic (*Den orättvisa skolan* [The unfair school]). In newspapers with different political affiliations the 'school issue' is also heavily debated (see opinion pieces in SvD 2-4-2022; in DN 8-4-2022; and in Aftonbladet 25-5-2022).

³⁵ See also the debate on the *compositional* effect of educational expansion on social mobility, which would be short-lived, and the *equalizing* effect, which would be more permanent (e.g. Breen and Jonsson 2007). And a debate on measurement error in educational mobility resembling the debate for other forms of intergenerational mobility studied in this dissertation (Fiel 2020).

socio-economic status, worse schooling, and higher crime rates (e.g. Arai and Skogman Thoursie 2009; Behtoui et al. 2019; Behtoui and Neergaard 2010). From a long-term perspective, this Swedish-born advantage is a new problem for Swedish society, as the country developed from a high emigration to a high immigration nation (e.g. Statistics Sweden 2016). Immigrant disadvantages are reflected in this dissertation when I study surname status; those without an ancestor surname in 1950, mostly immigrants or descendants of immigrants, have an increasingly low occupational status in Sweden over the period 1960-2016 (see paper two and four). The disadvantage of foreign-born as a group is largely explained by lower parental occupational status, but also when this group has high parental occupational status they are less likely to see this reflected in their own status attainment than their Swedish-born peers; in recent cohorts intergenerational occupational mobility is substantially lower among those with a Swedish-born background (see paper four).

Finally, intergenerational persistence at the top of the social structure has been highlighted in the public debate as well as the academic literature. Possibly inspired by the popularity of the work on top income inequality by Thomas Piketty (Piketty 2014, 2022), the role of wealth in intergenerational mobility has received much attention in recent years (e.g. Adermon, Lindahl, and Waldenström 2018; Hällsten and Thaning 2021; Pfeffer and Killewald 2018). The introduction of pre-industrial social strata as another social status dimension broadens this debate. Wealth could be an important mechanism in high surname status persistence, especially among high-status surname groups historically (as seen in paper two and four). But surname groups reflect more than money. They reflect political, cultural, social and human capital of high-status groups historically and are inherently more persistent than top wealth or income percentiles. I do not only observe surname status persistence over generations, but I also see surname homogamy across cohorts – especially among high-status groups. The Swedish nobility today can still exchange their social status with wealth on the marriage market (Almenberg and Dreber 2009), indicating that the two dimensions complement each other.

Returning to the overall research question, on changing patterns of intergenerational persistence over the course of economic and institutional development, this dissertation contributes to the larger scientific debates and contemporary society by broadening the field of social stratification and mobility studies. The common focus on one or two dimensions of social stratification, such as gender, ethnicity, or education, does not suffice to understand overall patterns of intergenerational persistence at a societal level. Dimensions of social status interact in complex ways and together shape social stratification and opportunities for subsequent generations. Some dimensions of social status may appear to have disappeared with long-term economic and institutional development towards equality of opportunity, such as pre-industrial social status or multiple-generation migrant origin, but to some extent persist and thereby create unequal opportunity structures.

Future research could expand upon this work in several ways. Importantly, this dissertation has been limited to the use of occupational information in defining socioeconomic status. It is by now clear from the wider intergenerational mobility literature that different dimensions of socioeconomic status complement each other (e.g. Adermon et al. 2021; Breen et al. 2016; Hällsten and Thaning 2021; Vosters and Nybom 2017), and therefore the results found here do not necessarily apply to economic, educational, or other forms of stratification. The relationships between pre-industrial social strata (defined by surname type) and education and wealth would be relevant to study; their relationship with educational attainment would shed light on the role of educational reforms in transforming the opportunity structure from ascription- to achievement-based. The relationship between wealth and pre-industrial social strata would both shed light on patterns of persistence in terms of the wealth distribution, and on the extent to which wealth and pre-industrial social strata were and are linked

Beyond processes of intergenerational persistence, the consequences of social stratification by surname type could be studied more broadly; they could play a role in shaping voting behaviour, attitudes and aspirations, social trust, social networks, or homogamy, endogamy, etc.

Moreover, the surname, gender and family type perspective on intergenerational persistence could be combined with promising new methods in the broader field of intergenerational mobility research. Sibling and extended 'horizontal' family members, such as first- and higher-order cousins, could be studied instead of parent-child pairs. This would include other dimensions of social environment not captured here and abstract from structural and institutional development (e.g., Breen and Jonsson 2005; Karlson and Birkelund 2022). For an even broader understanding of an individual's chances to move up or down on the social ladder, long-term socioeconomic differences in demographic processes should be accounted for; this could be achieved with a prospective rather than retrospective study design (cf. Song 2021; Song and Mare 2015). Over the long term, differences in fertility and mortality could interact in interesting ways with social status origin to shape socioeconomic outcomes of lineages.

The transition in terms of the broader social structure from social inequalities determined by pre-industrial social status, gender, and marital status, towards social inequalities determined by country of birth and social class origin, also deserves further attention.³⁶ While social inequalities by ethnicity, race, and migrant status are already the topic of a broad field of research, surnames could provide a new perspective on such inequalities. Name-changing of ethnic minorities as an

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³⁶ With the increasing importance of social class origin in shaping social inequalities, I here mean the increasing heterogeneity in intergenerational mobility levels by social origin across 1935-1985 birth cohorts – in terms of economic mobility as found in other studies, and in terms of occupational mobility as found in this dissertation.

integration strategy has been studied previously – both for old and new ethnic minorities in Sweden (see e.g. Arai and Skogman Thoursie 2009; Frändén 2010, 2014, 2020). This perspective could be extended to lower social class origins; to what extent is name changing used (successfully) among these groups to achieve upward mobility (cf. Brylla 2005)?

Surnames are often kept unchanged over many generations. Therefore, surnames associated with ethnic minorities distinguish individuals differently than migrant status does – they do not reflect current immigration history but rather ethnicity (or race). Surname types with different ethnic or racial connotations could therefore be used to disentangle social inequalities based on migration status as such – whether first-, second-, or third- generation, from social inequalities based on ethnicity. This would be an interesting way forward to study processes behind, and persistence of, social inequalities based on ethnicity in Sweden today.

References

- Acker, Joan. 1973. 'Women and Social Stratification: A Case of Intellectual Sexism'. *American Journal of Sociology* 78(4):936–45.
- Acker, Joan R. 1980. 'Women and Stratification: A Review of Recent Literature'. Contemporary Sociology 9(1):25–35.
- Adermon, Adrian, Mikael Lindahl, and Mårten Palme. 2021. 'Dynastic Human Capital, Inequality, and Intergenerational Mobility'. *American Economic Review* 111(5):1523–48.
- Adermon, Adrian, Mikael Lindahl, and Daniel Waldenström. 2018. 'Intergenerational Wealth Mobility and the Role of Inheritance: Evidence from Multiple Generations'. *The Economic Journal* 128(612):F482–513.
- Ågren, Henrik. 2017. 'Status, Estate, or Profession?' *Scandinavian Journal of History* 42(2):166–92. doi: 10.1080/03468755.2016.1265853.
- Ahrsjö, Ulrika, René Karadakic, and Joachim Kahr Rasmussen. 2021. *Intergenerational Mobility Trends and the Changing Role of Female Labor*. CEBI Working Paper Series.
- Almenberg, Johan, and Anna Dreber. 2009. 'Lady and the Trump: Status and Wealth in the Marriage Market'. *Kyklos* 62(2):161–81. doi: 10.1111/j.1467-6435.2009.00429.x.
- Arai, Mahmood, and Peter Skogman Thoursie. 2009. 'Renouncing Personal Names: An Empirical Examination of Surname Change and Earnings'. *Journal of Labor Economics* 27(1):127–47.
- Arkiv Digital. 2015. 'Sveriges Befolkning 1950 [Machine Readable Database, Retrieved January 2015]'.
- Barone, Carlo, and Antonio Schizzerotto. 2011. 'Introduction: Career Mobility, Education, and Intergenerational Reproduction in Five European Societies'. *European Societies* 13(3):331–45.
- Barone, Guglielmo, and Sauro Mocetti. 2021. 'Intergenerational Mobility in the Very Long Run: Florence 1427–2011'. *The Review of Economic Studies* 88(4):1863–91.
- Becker, Gary S. 1985. 'Human Capital, Effort, and the Sexual Division of Labor'. *Journal of Labor Economics* 3(1, Part 2):S33–58.
- Becker, Gary S., and Nigel Tomes. 1979. 'An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility'. *Journal of Political Economy* 87(6):1153–89.
- Becker, Gary S., and Nigel Tomes. 1986. 'Human Capital and the Rise and Fall of Families'. *Journal of Labor Economics* 4(3, Part 2):S1–39.
- Behrman, Jere R., and Mark R. Rosenzweig. 2002. 'Does Increasing Women's Schooling Raise the Schooling of the next Generation?' *American Economic Review* 92(1):323–34.
- Behrman, Jere R., and Mark R. Rosenzweig. 2005. 'Does Increasing Women's Schooling Raise the Schooling of the next Generation? Reply'. *American Economic Review* 95(5):1745–51.

- Behtoui, Alireza, Fredrik Hertzberg, Rickard Jonsson, René León Rosales, and Anders Neergaard. 2019. 'Sweden: The Otherization of the Descendants of Immigrants'. Pp. 999–1034 in *The Palgrave handbook of race and ethnic inequalities in education*. Springer.
- Behtoui, Alireza, and Anders Neergaard. 2010. 'Social Capital and Wage Disadvantages among Immigrant Workers'. *Work, Employment and Society* 24(4):761–79.
- Beller, E., and M. Hout. 2006. 'Welfare States and Social Mobility: How Educational and Social Policy May Affect Cross-National Differences in the Association between Occupational Origins and Destinations'. *Research in Social Stratification and Mobility* 24(4):353–65. doi: 10.1016/j.rssm.2006.10.001.
- Beller, Emily. 2009. 'Bringing Intergenerational Social Mobility Research into the Twenty-First Century: Why Mothers Matter'. *American Sociological Review* 74(4):507–28.
- Bengtsson, Erik. 2019. 'The Swedish Sonderweg in Question: Democratization and Inequality in Comparative Perspective, c. 1750–1920'. *Past & Present* 244(1):123–61.
- Berger, Thor, Per Engzell, Björn Eriksson, and Jakob Molinder. 2021. 'Social Mobility in Sweden before the Welfare State'.
- Bernardi, Fabrizio. 2012. 'Unequal Transitions: Selection Bias and the Compensatory Effect of Social Background in Educational Careers'. *Research in Social Stratification and Mobility* 30(2):159–74.
- Bernardi, Fabrizio, and Gabriele Ballarino. 2016. *Education, Occupation and Social Origin: A Comparative Analysis of the Transmission of Socio-Economic Inequalities*. Edward Elgar Publishing.
- Bianchi, Suzanne M., John P. Robinson, and Melissa A. Milke. 2006. *The Changing Rhythms of American Family Life*. Russell Sage Foundation.
- Bihagen, Erik, and Björn Halleröd. 2000. 'The Crucial Aspects of Class: An Empirical Assessment of the Relevance of Class Analysis with Swedish Data Covering the Late Twentieth Century'. Work, Employment and Society 14(2):307–30.
- Bihagen, Erik, and Paul Lambert. 2018. 'Can Class and Status Really Be Disentangled?' *Research in Social Stratification and Mobility* 58:1–10.
- Bihagen, Erik, Roujman Shahbazian, and Sara Kjellsson. 2022. 'Later and Less? New Evidence on Occupational Maturity for Swedish Women and Men'.
- Björklund, Anders, and Markus Jäntti. 2020. 'Intergenerational Mobility, Intergenerational Effects, Sibling Correlations, and Equality of Opportunity: A Comparison of Four Approaches'. *Research in Social Stratification and Mobility* 70:100455.
- Björklund, Anders, Mikael Lindahl, and Erik Plug. 2006. 'The Origins of Intergenerational Associations: Lessons from Swedish Adoption Data'. *The Quarterly Journal of Economics* 121(3):999–1028.
- Björklund, Anders, Jesper Roine, and Daniel Waldenström. 2012. 'Intergenerational Top Income Mobility in Sweden: Capitalist Dynasties in the Land of Equal Opportunity?' *Journal of Public Economics* 96(5–6):474–84.

- Björklund, Anders, and Daniel Waldenström. 2021. Facts and Myths in the Popular Debate about Inequality in Sweden.
- Blanden, Jo. 2013. 'Cross-Country Rankings in Intergenerational Mobility: A Comparison of Approaches from Economics and Sociology'. *Journal of Economic Surveys* 27(1):38–73.
- Blau, Peter M., and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: John Wiley.
- Bolt, Jutta, and Jan Luiten Van Zanden. 2020. 'Maddison Style Estimates of the Evolution of the World Economy. A New 2020 Update'. *Maddison-Project Working Paper WP-15, University of Groningen, Groningen, The Netherlands*.
- Bonke, Jens, and Gøsta Esping-Andersen. 2011. 'Family Investments in Children—Productivities, Preferences, and Parental Child Care'. *European Sociological Review* 27(1):43–55. doi: 10.1093/esr/jcp054.
- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Harvard university press.
- Boyd, Carol J. 1989. 'Mothers and Daughters: A Discussion of Theory and Research'. *Journal of Marriage and the Family* 291–301.
- Bratsberg, Bernt, Knut Røed, Oddbjørn Raaum, Robin Naylor, Markus Ja\" ntti, Tor Eriksson, and Eva O\" sterbacka. 2007. 'Nonlinearities in Intergenerational Earnings Mobility: Consequences for Cross-Country Comparisons'. *The Economic Journal* 117(519):C72–92.
- Brea-Martinez, Gabriel. 2022. 'Materfamilias: The Association of Mother's Work on Children's Absolute Income Mobility, Southern Sweden (1947-2015)'. *EUROPEAN REVIEW OF ECONOMIC HISTORY*. doi: 10.1093/ereh/heac010.
- Breen, Richard. 2004. Social Mobility in Europe. Oxford University Press on Demand.
- Breen, Richard, and Jan O. Jonsson. 2005. 'Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility'. *Annu. Rev. Sociol.* 31:223–43.
- Breen, Richard, and Jan O. Jonsson. 2007. 'Explaining Change in Social Fluidity: Educational Equalization and Educational Expansion in Twentieth-Century Sweden'. *American Journal of Sociology* 112(6):1775–1810.
- Breen, Richard, and Jan O. Jonsson. 2020. 'Sweden, the Middle Way? Trends and Patterns in Social Mobility and Educational Inequality'. in *Education and intergenerational social mobility in Europe and the United States*. Stanford: Stanford University Press.
- Breen, Richard, Carina Mood, and Jan O. Jonsson. 2016. 'How Much Scope for a Mobility Paradox? The Relationship between Social and Income Mobility in Sweden'. *Sociological Science* 3:39.
- Breen, Richard, and Walter Müller. 2020. *Education and Intergenerational Social Mobility in Europe and the United States*. Stanford University Press.
- Brooks, Clem, and Stefan Svallfors. 2010. 'Why Does Class Matter? Policy Attitudes, Mechanisms, and the Case of the Nordic Countries'. *Research in Social Stratification and Mobility* 28(2):199–213. doi: 10.1016/j.rssm.2010.01.003.

- Brunello, Giorgio, and Daniele Checchi. 2007. 'Does School Tracking Affect Equality of Opportunity? New International Evidence'. *Economic Policy* 22(52):782–861. doi: 10.1111/j.1468-0327.2007.00189.x.
- Brylla, Eva. 2005. 'Oxenhielm Men Inte de Svensson. Om Demokrati Och Namnstrukturer. I: Namnens Dynamik. Utvecklingstendenser Och Drivkrafter Inom Nordiskt Namnskick.' Pp. 77–88 in, *Handlingar från den trettonde nordiska namnforskarkongressen i Tällberg 15-18 augusti 2003.*, edited by S. Nyström. Uppsala.
- Brylla, Eva. 2009. Andersson, Pettersson, Lundström och ...Beachman: Om nordiska personnamn i sin europeiska omgivning. Bombus.
- Brylla, Eva. 2011. 'Scandinavian Surname Geography: East Scandinavia'. Pp. 13–20 in *Familiennamengeographie*. Berlin/New York: Walter de Gruyter.
- Brylla, Eva. 2014. 'Surname Choices in Sweden'. P. 85 in *Linguistik der Familiennamen*. Georg Olms Verlag.
- Bukodi, Erzsébet, Marii Paskov, and Brian Nolan. 2020. 'Intergenerational Class Mobility in Europe: A New Account'. *Social Forces* 98(3):941–72. doi: 10.1093/sf/soz026.
- Bukowski, Paweł, Gregory Clark, Attila Gáspár, and Rita Pető. 2021. 'Social Mobility and Political Regimes: Intergenerational Mobility in Hungary, 1949–2017'. *Journal of Population Economics*. doi: 10.1007/s00148-021-00875-w.
- Bygren, Magnus, and Michael Gähler. 2012. 'Family Formation and Men's and Women's Attainment of Workplace Authority'. *Social Forces* 90(3):795–816.
- Carlsson, Sten. 1949. Ståndssamhälle och ståndspersoner 1700-1865: studier rörande det svenska ståndssamhällets upplösning. Lund: Gleerup.
- Carlsson, Sten. 1966. *Den sociala omgrupperingen i Sverige efter 1866*. Stockholm: Almqvist & Wiksell.
- Cherlin, Andrew J. 2012. 'Goode's World Revolution and Family Patterns: A Reconsideration at Fifty Years'. *Population and Development Review* 38(4):577–607. doi: 10.1111/j.1728-4457.2012.00528.x.
- Chetty, Raj, and Nathaniel Hendren. 2018a. 'The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects'. *The Quarterly Journal of Economics* 133(3):1107–62.
- Chetty, Raj, and Nathaniel Hendren. 2018b. 'The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates'. *The Quarterly Journal of Economics* 133(3):1163–1228.
- Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2020. 'Race and Economic Opportunity in the United States: An Intergenerational Perspective'. *The Quarterly Journal of Economics* 135(2):711–83.
- Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. 'Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States'. *The Quarterly Journal of Economics* 129(4):1553–1623.
- Choi, Seongsoo, Inkwan Chung, and Richard Breen. 2020. 'How Marriage Matters for the Intergenerational Mobility of Family Income: Heterogeneity by Gender, Life Course, and Birth Cohort'. *American Sociological Review* 85(3):353–80.

- Chudnovskaya, Margarita, and Ridhi Kashyap. 2020. 'Is the End of Educational Hypergamy the End of Status Hypergamy? Evidence from Sweden'. *European Sociological Review* 36(3):351–65.
- Clark, Gregory. 2012. 'What Is the True Rate of Social Mobility in Sweden? A Surname Analysis, 1700-2012'. *Manuscript, Univ. California, Davis*.
- Clark, Gregory. 2014. The Son Also Rises. Princeton University Press.
- Clark, Gregory, and Neil Cummins. 2014. 'Surnames and Social Mobility in England, 1170–2012'. *Human Nature* 25(4):517–37.
- Clark, Gregory, and Neil Cummins. 2015. 'Intergenerational Wealth Mobility in England, 1858–2012: Surnames and Social Mobility'. *The Economic Journal* 125(582):61–85.
- Clark, Gregory, Neil Cummins, Yu Hao, and Dan Diaz Vidal. 2015. 'Surnames: A New Source for the History of Social Mobility'. *Explorations in Economic History* 55:3–24.
- Clark, Gregory, Andrew Leigh, and Mike Pottenger. 2020. 'Frontiers of Mobility: Was Australia 1870–2017 a More Socially Mobile Society than England?' *Explorations in Economic History* 76:101327. doi: 10.1016/j.eeh.2020.101327.
- Connor, Dylan Shane, and Michael Storper. 2020. 'The Changing Geography of Social Mobility in the United States'. *Proceedings of the National Academy of Sciences* 117(48):30309–17.
- Corak, Miles. 2013. 'Income Inequality, Equality of Opportunity, and Intergenerational Mobility'. *Journal of Economic Perspectives* 27(3):79–102.
- Crettaz, Eric, and Cédric Jacot. 2014. 'Do Family Policies Matter for Educational Outcomes?' *European Societies* 16(5):645–65. doi: 10.1080/14616696.2014.946070.
- Crompton, Rosemary. 2008. Class and Stratification. Polity.
- Davis, Jonathan, and Bhashkar Mazumder. 2018. 'Racial and Ethnic Differences in the Geography of Intergenerational Mobility'. *Available at SSRN 3138979*.
- Debus, Friedhelm, Rita Heuser, and Damaris Nübling. 2014. *Linguistik der Familiennamen*. Georg Olms Verlag.
- Dickens, William T., and James R. Flynn. 2001. 'Heritability Estimates versus Large Environmental Effects: The IQ Paradox Resolved.' *Psychological Review* 108(2):346.
- DiPrete, Thomas A. 2020. 'The Impact of Inequality on Intergenerational Mobility'. *Annual Review of Sociology* 46(1):379–98. doi: 10.1146/annurev-soc-121919-054814.
- DiPrete, Thomas A., and Gregory M. Eirich. 2006. 'Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments'. *Annual Review of Sociology* 32(1):271–97. doi: 10.1146/annurev.soc.32.061604.123127.
- Dribe, Martin, Björn Eriksson, and Francesco Scalone. 2019. 'Migration, Marriage and Social Mobility: Women in Sweden 1880–1900'. *Explorations in Economic History* 71:93–111. doi: 10.1016/j.eeh.2018.09.003.

- Dribe, Martin, Jonas Helgertz, and Bart Van de Putte. 2015. 'Did Social Mobility Increase during the Industrialization Process? A Micro-Level Study of a Transforming Community in Southern Sweden 1828–1968'. *Research in Social Stratification and Mobility* 41:25–39.
- Dribe, Martin, and Christer Lundh. 2005. 'Finding the Right Partner: Rural Homogamy in Nineteenth-Century Sweden'. *International Review of Social History* 50(S13):149–77.
- Dribe, Martin, and Francesco Scalone. 2014. 'Social Class and Net Fertility before, during, and after the Demographic Transition: A Micro-Level Analysis of Sweden 1880–1970'. *Demographic Research* 30:429–64.
- Dribe, Martin, and Christopher D. Smith. 2021. 'Social Class and Fertility: A Long-Run Analysis of Southern Sweden, 1922–2015'. *Population Studies* 75(3):305–23.
- Du Rietz, Gunnar, and Magnus Henrekson. 2015. *Swedish Wealth Taxation (1911–2007)*. 1000. Research Institute of Industrial Economics.
- Durlauf, Steven N., Andros Kourtellos, and Chih Ming Tan. 2022. 'The Great Gatsby Curve'. *Annual Review of Economics* 14(1):null. doi: 10.1146/annurev-economics-082321-122703.
- Edgren, Lars. 2021. Stadens sociala ordning: stånd och klass i Malmö under sjuttonhundratalet. Lund: Historiska institutionen, Lunds Universitet.
- Ekerwald, Hedvig, and Hedvig Ekerwald. 2000. 'Alva Myrdal: Making the Private Public'. *Acta Sociologica* 43(4):343–52.
- Elwert, Annika, and Luciana Quaranta. 2022. 'The Social Care-Taking of the City-Kids. Determinants for Day-Care Attendance in Early Twentieth Century Southern Sweden'. *Lund Papers in Economic Demography* (2022:1).
- Engzell, Per, and Carina Mood. 2021. 'How Robust Are Estimates of Intergenerational Income Mobility?'
- Engzell, Per, and Felix C. Tropf. 2019. 'Heritability of Education Rises with Intergenerational Mobility'. *Proceedings of the National Academy of Sciences* 116(51):25386–88.
- Erikson, Robert. 1984. 'Social Class of Men, Women and Families'. *Sociology* 18(4):500–514.
- Erikson, Robert, and John H. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford University Press.
- Eriksson, B. 2015. 'A link to the past: Linking and evaluating Swedish historical censuses'. *Dynamic Decades. A Micro Perspective on Late Nineteenth Century Sweden (PhD Dissertation)* 72:111–47.
- Eriksson, Karin Hederos. 2015. Occupational Segregation by Sex: The Role of Intergenerational Transmission. Working paper.
- Ermisch, John, Marco Francesconi, and Thomas Siedler. 2006. 'Intergenerational Mobility and Marital Sorting'. *The Economic Journal* 116(513):659–79.
- Erola, Jani, and Elina Kilpi-Jakonen. 2017. Social Inequality across the Generations: The Role of Compensation and Multiplication in Resource Accumulation. Edward Elgar Publishing.

- Esping-Andersen, Gosta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton University Press.
- Esping-Andersen, Gøsta. 2015. 'Welfare Regimes and Social Stratification'. *Journal of European Social Policy* 25(1):124–34. doi: 10.1177/0958928714556976.
- Esping-Andersen, Gosta, and Sander Wagner. 2012. 'Asymmetries in the Opportunity Structure. Intergenerational Mobility Trends in Europe'. *Research in Social Stratification and Mobility* 30(4):473–87. doi: 10.1016/j.rssm.2012.06.001.
- Evertsson, Marie, and Magnus Nermo. 2004. 'Dependence within Families and the Division of Labor: Comparing Sweden and the United States'. *Journal of Marriage and Family* 66(5):1272–86.
- Fahlbeck, Pontus Erland. 1892. Stånd Och Klasser, En Socialpolitisk Överblick. Collin & Zickerman.
- Featherman, David L., F. Lancaster Jones, and Robert M. Hauser. 1975. 'Assumptions of Social Mobility Research in the US: The Case of Occupational Status'. *Social Science Research* 4(4):329–60.
- Feigenbaum, James J. 2018. 'Multiple Measures of Historical Intergenerational Mobility: Iowa 1915 to 1940'. *The Economic Journal* 128(612):F446–81.
- Fiel, Jeremy E. 2020. 'Great Equalizer or Great Selector? Reconsidering Education as a Moderator of Intergenerational Transmissions'. *Sociology of Education* 93(4):353–71.
- Fischer, Claude S., and Michael Hout. 2006. *Century of Difference: How America Changed in the Last One Hundred Years*. Russell Sage Foundation.
- Fischer, Martin, Martin Karlsson, Therese Nilsson, and Nina Schwarz. 2020. 'The Long-Term Effects of Long Terms—Compulsory Schooling Reforms in Sweden'. *Journal of the European Economic Association* 18(6):2776–2823.
- Fjellman, Anna-Maria, Kajsa Yang Hansen, and Dennis Beach. 2019. 'School Choice and Implications for Equity: The New Political Geography of the Swedish Upper Secondary School Market'. *Educational Review* 71(4):518–39. doi: 10.1080/00131911.2018.1457009.
- Frändén, Märit. 2010. "Att Blotta Vem Jag Är": Släktnamnsskick Och Släktnamnsbyten Hos Samer i Sverige 1920–2009'. PhD Thesis, Institutionen för nordiska språk, Uppsala universitet, Uppsala.
- Frändén, Märit. 2014. 'Nittio Och Ett År Av Namninvandring: Något Om Sveriges Invandrade Efternamn'. *Studia Anthroponymica Scandinavica* (31):31–41.
- Frändén, Märit. 2017. 'Hemmingsson Och Thomsson: Lokalt Vanliga Svenska-Son-Namn'. *Studia Anthroponymica Scandinavica* (34):81–99.
- Frändén, Märit. 2020. 'Se Tavallinen Niemi: Finskspråkiga Efternamn i Sverige'. Pp. 11–24 in Där Östersjön är Västersjön. Seal, kus Läänemeri on Idameri: Festskrift till Virve och Raimo Raag. Pühendusteos Virve ja Raimo Raagile. Uppsala: Uppsala universitet.
- Gane, Nicholas. 2005. 'Max Weber as Social Theorist: "Class, Status, Party". *European Journal of Social Theory* 8(2):211–26.

- Ganzeboom, Harry B. G., and Donald J. Treiman. 2003. 'Three Internationally Standardised Measures for Comparative Research on Occupational Status'. Pp. 159–93 in Advances in Cross-National Comparison: A European Working Book for Demographic and Socio-Economic Variables, edited by J. H. P. Hoffmeyer-Zlotnik and C. Wolf. Boston, MA: Springer US.
- Ganzeboom, Harry BG, Paul M. De Graaf, and Donald J. Treiman. 1992. 'A Standard International Socio-Economic Index of Occupational Status'. *Social Science Research* 21(1):1–56.
- Goldin, Claudia. 1979. 'Household and Market Production of Families in a Late Nineteenth Century American City'. *Explorations in Economic History* 16(2):111–31.
- Goldin, Claudia. 1995. 'The U-Shaped Female Labor Force Function in Economic Development and Economic History'. Pp. 61–90 in *Investment in Women's Human Capital and Economic Development*.
- Goldin, Claudia, and Lawrence F. Katz. 2008. *The Race between Education and Technology*. Cambridge, Mass: Harvard University Press.
- Gottfries, Nils. 2018. 'The Labor Market in Sweden since the 1990s'. *IZA World of Labor* (411).
- Grätz, Michael, and Øyvind N. Wiborg. 2020. 'Reinforcing at the Top or Compensating at the Bottom? Family Background and Academic Performance in Germany, Norway, and the United States'. *European Sociological Review* 36(3):381–94.
- Griffiths, Dave, Paul S. Lambert, Richard L. Zijdeman, Marco HD van Leeuwen, and Ineke Maas. 2019. 'Microclass Immobility during Industrialisation in the USA and Norway'. *Acta Sociologica* 62(2):193–210.
- Grönqvist, Erik, Björn Öckert, and Jonas Vlachos. 2017. 'The Intergenerational Transmission of Cognitive and Noncognitive Abilities'. *Journal of Human Resources* 52(4):887–918.
- Grusky, David B., and Ivan K. Fukumoto. 1989. 'Social History Update: A Sociological Approach to Historical Social Mobility'. *Journal of Social History* 23(1):221–32.
- Grusky, David B., and Robert M. Hauser. 1984. 'Comparative Social Mobility Revisited: Models of Convergence and Divergence in 16 Countries'. *American Sociological Review* 19–38.
- Güell, Maia, Michele Pellizzari, Giovanni Pica, and José V. Rodríguez Mora. 2018. 'Correlating Social Mobility and Economic Outcomes'. *The Economic Journal* 128(612):F353–403.
- Güell, Maia, José V. Rodríguez Mora, and Gary Solon. 2018. 'New Directions in Measuring Intergenerational Mobility: Introduction'. *The Economic Journal* 128(612):F335–39.
- Güell, Maia, José V. Rodríguez Mora, and Christopher I. Telmer. 2015. 'The Informational Content of Surnames, the Evolution of Intergenerational Mobility, and Assortative Mating'. *The Review of Economic Studies* 82(2):693–735.
- Güell, Maia, José Vincente Rodríguez Mora, and Chris Telmer. 2007. 'Intergenerational Mobility and the Informative Content of Surnames'.

- Hällsten, Martin. 2013. 'The Class-Origin Wage Gap: Heterogeneity in Education and Variations across Market Segments'. *The British Journal of Sociology* 64(4):662–90.
- Hällsten, Martin, and Martin Kolk. 2020. 'The Shadow of Peasant Past: Seven Generations of Inequality Persistence in Northern Sweden'.
- Hällsten, Martin, and Fabian T. Pfeffer. 2017. 'Grand Advantage: Family Wealth and Grandchildren's Educational Achievement in Sweden'. *American Sociological Review* 82(2):328–60.
- Hällsten, Martin, and Max Thaning. 2021. 'Wealth as One of the "Big Four" SES Dimensions in Intergenerational Transmissions'. *Social Forces*.
- Hammar, Olle, Paula Roth, and Daniel Waldenström. 2021. 'The Swedish Income Distribution, 1968–2016'.
- Hansen, Marianne Nordli, and Maren Toft. 2021. 'Wealth Accumulation and Opportunity Hoarding: Class-Origin Wealth Gaps over a Quarter of a Century in a Scandinavian Country'. *American Sociological Review* 86(4):603–38. doi: 10.1177/00031224211020012.
- Harding, David J., and Martin D. Munk. 2020. 'The Decline of Intergenerational Income Mobility in Denmark: Returns to Education, Demographic Change, and Labor Market Experience☆'. Social Forces 98(4):1436–64. doi: 10.1093/sf/soz108.
- Härkönen, Juho, and Erik Bihagen. 2011. 'Occupational Attainment and Career Progression in Sweden'. *European Societies* 13(3):451–79.
- Härkönen, Juho, Anna Manzoni, and Erik Bihagen. 2016. 'Gender Inequalities in Occupational Prestige across the Working Life: An Analysis of the Careers of West Germans and Swedes Born from the 1920s to the 1970s'. *Advances in Life Course Research* 29:41–51. doi: 10.1016/j.alcr.2016.01.001.
- Hauser, Robert, and David Featherman. 1977. *The Process of Stratification. Trends and Analyses*. New York: Academic Press.
- Hauser, Robert M. 1978. 'A Structural Model of the Mobility Table'. *Social Forces* 56(3):919–53.
- Hauser, Robert M., and John Robert Warren. 1997. 'Socioeconomic Indexes for Occupations: A Review, Update, and Critique'. *Sociological Methodology* 27(1):177–298.
- Heckman, James J. 2006. 'Skill Formation and the Economics of Investing in Disadvantaged Children'. *Science* 312(5782):1900–1902.
- Hedberg, Johan. 2019. 'Efternamnsbyten inget nytt'. Retrieved 24 January 2022 (https://www.isof.se/lar-dig-mer/bloggar/namnbloggen/inlagg/2019-08-04-efternamnsbyten-inget-nytt).
- Helms Jørgensen, Christian, Tero Järvinen, and Lisbeth Lundahl. 2019. 'A Nordic Transition Regime? Policies for School-to-Work Transitions in Sweden, Denmark and Finland'. *European Educational Research Journal* 18(3):278–97.
- Henz, Ursula, and Jan O. Jonsson. 2003. 'Who Marries Whom in Sweden?' Pp. 235–66 in *Who Marries Whom?* Springer.

- Hertel, Florian R., and Olaf Groh-Samberg. 2019. 'The Relation between Inequality and Intergenerational Class Mobility in 39 Countries'. *American Sociological Review* 84(6):1099–1133.
- Hess, Robert D., and Virginia C. Shipman. 1965. 'Early Experience and the Socialization of Cognitive Modes in Children'. *Child Development* 869–86.
- Heuser, Rita, Damaris Nübling, and Mirjam Schmuck. 2011. *Familiennamengeographie:* Ergebnisse und Perspektiven europäischer Forschung. Walter de Gruyter.
- Holmlund, Helena. 2008. Intergenerational Mobility and Assortative Mating: Effects of an Educational Reform. CEE DP 91. 2045–6557. Centre for the Economics of Education.
- Holmlund, Helena. 2022. 'How Much Does Marital Sorting Contribute to Intergenerational Socioeconomic Persistence?' *Journal of Human Resources* 57(2):372–99.
- Hout, Michael. 1983. Analysing Mobility Tables. Sage Beverly Hills, CA.
- Hout, Michael. 2018. 'Americans' Occupational Status Reflects the Status of Both of Their Parents'. *Proceedings of the National Academy of Sciences* 115(38):9527–32.
- Hout, Michael, and Thomas A. DiPrete. 2006. 'What We Have Learned: RC28's Contributions to Knowledge about Social Stratification'. *Research in Social Stratification and Mobility* 24(1):1–20.
- Husén, Torsten. 1989. 'The Swedish School Reform—Exemplary Both Ways'. *Comparative Education* 25(3):345–55.
- Jackson, Michelle. 2007. 'How Far Merit Selection? Social Stratification and the Labour Market 1'. *The British Journal of Sociology* 58(3):367–90.
- Jalovaara, Marika, Gerda Neyer, Gunnar Andersson, Johan Dahlberg, Lars Dommermuth, Peter Fallesen, and Trude Lappegård. 2019. 'Education, Gender, and Cohort Fertility in the Nordic Countries'. *European Journal of Population* 35(3):563–86. doi: 10.1007/s10680-018-9492-2.
- Janssens, Angélique. 2014. Labouring Lives: Women, Work and the Demographic Transition in the Netherlands, 1880-1960. Peter Lang Bern.
- Jonsson, Jan O., and Robert Erikson. 2000. 'Understanding Educational Inequality: The Swedish Experience'. *L'Année Sociologique (1940/1948-)* 345–82.
- Jonsson, Jan O., David B. Grusky, Matthew Di Carlo, Reinhard Pollak, and Mary C. Brinton. 2009. 'Microclass Mobility: Social Reproduction in Four Countries'. American Journal of Sociology 114(4):977–1036.
- Kalleberg, Arne L., and Ted Mouw. 2018. 'Occupations, Organizations, and Intragenerational Career Mobility'. *Annual Review of Sociology* 44(1):283–303. doi: 10.1146/annurev-soc-073117-041249.
- Kalmijn, Matthijs. 1994. 'Mother's Occupational Status and Children's Schooling'. *American Sociological Review* 257–75.
- Karlson, Kristian B., and Rasmus Landersø. 2021. 'The Making and Unmaking of Opportunity: Educational Mobility in 20th Century-Denmark'. *IZA DP* (14135).

- Karlson, Kristian Bernt. 2021. 'Is Denmark a Much More Educationally Mobile Society than the United States? Comment on Andrade and Thomsen, "Intergenerational Educational Mobility in Denmark and the United States" (2018)'. *Sociological Science* 8:346–58. doi: 10.15195/v8.a17.
- Karlson, Kristian Bernt, and Jesper Fels Birkelund. 2022. 'Family Background, Educational Qualifications, and Labour Market Attainment: Evidence from Danish Siblings'. *European Sociological Review* jcac031. doi: 10.1093/esr/jcac031.
- Kerr, Clark, John T. Dunlop, Frederick H. Harbison, and Charles A. Myers. 2000. 'Chapter 100: Industrialism and Industrial Man'. Pp. 954–65 in *Social Stratification, Class, Race, & Gender in Sociological Perspective*. Taylor & Francis Ltd.
- Killewald, Alexandra, Fabian T. Pfeffer, and Jared N. Schachner. 2017. 'WEALTH INEQUALITY AND ACCUMULATION'. *Annual Review of Sociology* 43:379–404. doi: 10.1146/annurev-soc-060116-053331.
- Kolk, Martin, and Martin Hällsten. 2017. 'Demographic and Educational Success of Lineages in Northern Sweden'. *Population and Development Review* 491–512.
- Kong, Siyang, Ineke Maas, and Marco HD van Leeuwen. 2020. 'Like My Mother before Me: Gender and Cross-Gender Effects on Status Attainment during Modernization'. *Research in Social Stratification and Mobility* 69:100541.
- Kornrich, Sabino, and Frank Furstenberg. 2013. 'Investing in Children: Changes in Parental Spending on Children, 1972—2007'. *Demography* 50(1):1–23.
- Korupp, Sylvia E., Harry BG Ganzeboom, and Tanja Van Der Lippe. 2002. 'Do Mothers Matter? A Comparison of Models of the Influence of Mothers' and Fathers' Educational and Occupational Status on Children's Educational Attainment'. *Quality and Quantity* 36(1):17–42.
- Korupp, Sylvia E., Karin Sanders, and Harry BG Ganzeboom. 2002. 'The Intergenerational Transmission of Occupational Status and Sex-Typing at Children's Labour Market Entry'. *European Journal of Women's Studies* 9(1):7–29.
- Lambert, P., and D. Griffiths. 2018. Social Inequalities and Occupational Stratification: Methods and Concepts in the Analysis of Social Distance. Palgrave Macmillan.
- Lambert, Paul S., Richard L. Zijdeman, Marco HD Van Leeuwen, Ineke Maas, and Kenneth Prandy. 2013. 'The Construction of HISCAM: A Stratification Scale Based on Social Interactions for Historical Comparative Research'. *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 46(2):77–89.
- Laurison, Daniel, and Sam Friedman. 2016. 'The Class Pay Gap in Higher Professional and Managerial Occupations'. *American Sociological Review* 81(4):668–95.
- Le Grand, Carl, and Michael Tåhlin. 2013. 'Class, Occupation, Wages, and Skills: The Iron Law of Labor Market Inequality'. in *Class and stratification analysis*. Emerald Group Publishing Limited.
- Leeuwen, MHDV, Ineke Maas, and Andrew Miles. 2002. *HISCO: Historical International Standard Classification of Occupations*. Leuven: Leuven University Press.
- Leibring, Katharina. 2012. 'Is Your Name a Good Investment?: Socio-Economic Reasons for Surname Changes in Sweden'. Pp. 273–80 in *Onomastic goes business: Role and relevance of brand, company and other names in economic contexts*. Berlin: Logos Verlag Berlin.

- Lewis, Jane, and Gertrude Åström. 1992. 'Equality, Difference, and State Welfare: Labor Market and Family Policies in Sweden'. *Feminist Studies* 18(1):59–87.
- Lindahl, Mikael, Mårten Palme, Sofia Sandgren-Massih, and Anna Sjögren. 2014. 'A Test of the Becker-Tomes Model of Human Capital Transmission Using Microdata on Four Generations'. *Journal of Human Capital* 8(1):80–96.
- Lipset, S. M., and Hans Zetterberg. 1959. 'Social Mobility in Industrial Societies'. in *Social Mobility in Industrial Society*. London: Heinemann.
- Ljungberg, Jonas. 1997. 'The Impact of the Great Emigration on the Swedish Economy'. *Scandinavian Economic History Review* 45(2):159–89.
- Ljungberg, Jonas, and Anders Nilsson. 2009. 'Human Capital and Economic Growth: Sweden 1870–2000'. *Cliometrica* 3(1):71–95.
- Long, Jason, and Joseph Ferrie. 2013. 'Intergenerational Occupational Mobility in Great Britain and the United States since 1850'. *American Economic Review* 103(4):1109–37.
- Luke, Nancy. 2021. 'Gender and Social Mobility: Gender Attitudes and Women's Labour Force Participation'. in *Social Mobility in Developing Countries*. Oxford: Oxford University Press.
- Lundberg, Jacob, and Daniel Waldenström. 2018. 'Wealth Inequality in Sweden: What Can We Learn from Capitalized Income Tax Data?' *Review of Income and Wealth* 64(3):517–41. doi: 10.1111/roiw.12294.
- Lundh, Christer. 2004. 'Life-Cycle Servants in Nineteenth Century'. *Domestic Service and the Formation of European Identity: Understanding the Globalization of Domestic Work, 16th-21st Centuries* 71.
- Maas, Ineke. 2015. 'Gregory Clark, The Son Also Rises. Surnames and the History of Social Mobility (Princeton: Princeton University Press, 2014. Pp. Xii+ 364. 132 Figs. 42 Tabs. ISBN 9780691162546 Hbk.\pounds 19.95)'. *Economic History Review* 68(4):1481–82.
- Maas, Ineke, and Marco HD Van Leeuwen. 2016. 'Toward Open Societies? Trends in Male Intergenerational Class Mobility in European Countries during Industrialization'. *American Journal of Sociology* 122(3):838–85.
- Magnusson, Lars. 2000. An Economic History of Sweden. Routledge.
- Marks, Gary Neil. 2008. 'Are Father's or Mother's Socioeconomic Characteristics More Important Influences on Student Performance? Recent International Evidence'. *Social Indicators Research* 85(2):293–309.
- Mclanahan, Sara. 2004. 'Diverging Destinies: How Children Are Faring under the Second Demographic Transition'. *Demography* 41(4):607–27. doi: 10.1353/dem.2004.0033.
- Meghir, Costas, and Mårten Palme. 2005. 'Educational Reform, Ability, and Family Background'. *American Economic Review* 95(1):414–24.
- Meraviglia, Cinzia, and Harry BG Ganzeboom. 2008. 'Mothers' and Fathers' Influence on Occupational Status Attainment in Italy'. *POLENA [Political and Electoral Navigations)* 2(1):29–65.
- Modalsli, Jørgen. 2017. 'Intergenerational Mobility in Norway, 1865–2011'. *The Scandinavian Journal of Economics* 119(1):34–71.

- Molinder, Jakob. 2021. 'Historical Roots of the Dual-Earner Model: Women's Labour Force Participation in Sweden, 1870-1960'.
- Mood, Carina. 2017. 'More than Money: Social Class, Income, and the Intergenerational Persistence of Advantage'. *Sociological Science* 4:263–87.
- Morgan, Stephen L., David B. Grusky, and Gary S. Fields. 2006. *Mobility and Inequality:* Frontiers of Research in Sociology and Economics. Stanford University Press.
- Munk, Martin D., Jens Bonke, and M. Azhar Hussain. 2016. 'Intergenerational Top Income Persistence: Denmark Half the Size of Sweden'. *Economics Letters* 140:31–33. doi: 10.1016/j.econlet.2015.11.038.
- Nekoei, Arash, and David Seim. 2018. 'How Do Inheritances Shape Wealth Inequality? Theory and Evidence from Sweden'.
- Nilsson, Åke. 2004. Efterkrigstidens Invandring Och Utvandring. Statistiska centralbyrån.
- Norrby, Göran. 2005. 'Adel i Förvandling: Adliga Strategier Och Identiteter i 1800-Talets Borgerliga Samhälle'. PhD Thesis, Acta Universitatis Upsaliensis.
- Nyberg, Anita. 1994. 'The Social Construction of Married Women's Labour-Force Participation: The Case of Sweden in the Twentieth Century'. *Continuity and Change* 9(1):145–56.
- Nyberg, Anita. 2012. 'Gender Equality Policy in Sweden: 1970s–2010s'. *Nordic Journal of Working Life Studies* 2(4):67–84. doi: 10.19154/njwls.v2i4.2305.
- Nyström, Staffan, Eva Brylla, Märit Frändén, Mats Wahlberg, and P. Vikstrand, eds. 2021. 'Namn och namnforskning: Ett levande läromedel om ortnamn, personnamn och andra namn. Version 2 (2021-02-25).'
- Oecd and Ocde. 2018. Catching Up? Country Studies on Intergenerational Mobility and Children of Immigrants. Éditions OCDE / OECD Publishing.
- Ohlsson, Henry, Jesper Roine, and Daniel Waldenström. 2020. 'Inherited Wealth over the Path of Development: Sweden, 1810–2016'. *Journal of the European Economic Association* 18(3):1123–57. doi: 10.1093/jeea/jvz038.
- Olivetti, Claudia, and M. Daniele Paserman. 2015. 'In the Name of the Son (and the Daughter): Intergenerational Mobility in the United States, 1850-1940'. *American Economic Review* 105(8):2695–2724.
- Olivetti, Claudia, M. Daniele Paserman, and Laura Salisbury. 2018. 'Three-Generation Mobility in the United States, 1850–1940: The Role of Maternal and Paternal Grandparents'. *Explorations in Economic History* 70:73–90.
- Palme, Sven Ulric. 1947. *Stånd och klasser i forna dagars Sverige*. Stockholm: Kooperativa förbundets bokförlag.
- Paulston, Rolland G. 1966. 'The Swedish Comprehensive School Reform: A Selected Annotated Bibliography'. *Comparative Education Review* 10(1):87–94.
- Pfeffer, Fabian T. 2018. 'Growing Wealth Gaps in Education'. *Demography* 55(3):1033–68. doi: 10.1007/s13524-018-0666-7.
- Pfeffer, Fabian T., and Florian R. Hertel. 2015. 'How Has Educational Expansion Shaped Social Mobility Trends in the United States?' *Social Forces* 94(1):143–80.

- Pfeffer, Fabian T., and Alexandra Killewald. 2018. 'Generations of Advantage. Multigenerational Correlations in Family Wealth'. *Social Forces* 96(4):1411–42. doi: 10.1093/sf/sox086.
- Pfeffer, Fabian T., and Nora Waitkus. 2021. 'The Wealth Inequality of Nations'. *American Sociological Review* 86(4):567–602.
- Piketty, Thomas. 2014. 'Capital in the 21th Century'.
- Piketty, Thomas. 2022. *A Brief History of Equality*. Cambridge, Massachusetts: Belknap Press of Harvard University Press.
- Plug, Erik. 2004. 'Estimating the Effect of Mother's Schooling on Children's Schooling Using a Sample of Adoptees'. *American Economic Review* 94(1):358–68.
- Pöyliö, Heta, Jani Erola, and Elina Kilpi-Jakonen. 2018. 'Institutional Change and Parental Compensation in Intergenerational Attainment'. *British Journal of Sociology* 69(3):601–25. doi: 10.1111/1468-4446.12293.
- Pöyliö, Heta, and Johanna Kallio. 2017. 'The Impact of Education and Family Policies on Intergenerational Transmission of Socioeconomic Status in Europe'. *Social Inequality Across the Generations* 204–24.
- Prandy, Kenneth, and Paul Lambert. 2003. 'Marriage, Social Distance and the Social Space: An Alternative Derivation and Validation of the Cambridge Scale'. *Sociology* 37(3):397–411.
- Putnam, Robert David. 2000. *Bowling Alone: The Collapse and Revival of American Community*. Revised and updated. New York: Simon & Schuster.
- Reeves, Aaron, Sam Friedman, Charles Rahal, and Magne Flemmen. 2017. 'The Decline and Persistence of the Old Boy: Private Schools and Elite Recruitment 1897 to 2016'. *American Sociological Review* 82(6):1139–66.
- Rivera, Lauren A. 2012. 'Hiring as Cultural Matching: The Case of Elite Professional Service Firms'. *American Sociological Review* 77(6):999–1022.
- Roemer, John E. 1998. 'Equality of Opportunity'. in *Equality of Opportunity*. Harvard University Press.
- Roine, Jesper, and Daniel Waldenström. 2008. 'The Evolution of Top Incomes in an Egalitarian Society: Sweden, 1903–2004'. *Journal of Public Economics* 92(1):366–87. doi: 10.1016/j.jpubeco.2007.06.012.
- Roine, Jesper, and Daniel Waldenström. 2009. 'Wealth Concentration over the Path of Development: Sweden, 1873–2006*'. *The Scandinavian Journal of Economics* 111(1):151–87. doi: 10.1111/j.1467-9442.2008.01558.x.
- Rosaldo, Michelle Zimbalist, Louise Lamphere, and Joan Bamberger. 1974. *Woman, Culture, and Society*. Vol. 133. Stanford University Press.
- Rosenfeld, Rachel A. 1978. 'Women's Intergenerational Occupational Mobility'. *American Sociological Review* 36–46.
- Rothstein, Bo. 1998. *Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State*. Cambridge: Cambridge Univ. Press.
- Sandel, Michael J. 2020. The Tyranny of Merit: What's Become of the Common Good? Penguin UK.

- Santavirta, Torsten, and Jan Stuhler. 2021. 'Name-Based Estimators of Intergenerational Mobility'.
- Savage, Mike. 2021. The Return of Inequality: Social Change and the Weight of the Past. Harvard University Press.
- Savage, Mike, Fiona Devine, Niall Cunningham, Mark Taylor, Yaojun Li, Johs Hjellbrekke, Brigitte Le Roux, Sam Friedman, and Andrew Miles. 2013. 'A New Model of Social Class? Findings from the BBC's Great British Class Survey Experiment'. *Sociology* 47(2):219–50.
- Schlicht, Raphaela, Isabelle Stadelmann-Steffen, and Markus Freitag. 2010. 'Educational Inequality in the EU: The Effectiveness of the National Education Policy'. *European Union Politics* 11(1):29–59. doi: 10.1177/1465116509346387.
- Schneider, Daniel, Orestes P. Hastings, and Joe LaBriola. 2018. 'Income Inequality and Class Divides in Parental Investments'. *American Sociological Review* 83(3):475–507. doi: 10.1177/0003122418772034.
- Schön, Lennart. 2012. An Economic History of Modern Sweden. Routledge.
- Schwartz, Christine R. 2013. 'Trends and Variation in Assortative Mating: Causes and Consequences'. *Annual Review of Sociology* 39(1):451–70. doi: 10.1146/annurevsoc-071312-145544.
- Shachar, Ayelet. 2009. *The Birthright Lottery: Citizenship and Global Inequality*. Harvard University Press.
- Siegel, Alberta Engvall, and Elizabeth Ann Curtis. 1963. 'Familial Correlates of Orientation toward Future Employment among College Women.' *Journal of Educational Psychology* 54(1):33.
- Solon, Gary. 2018. 'What Do We Know so Far about Multigenerational Mobility?' *The Economic Journal* 128(612):F340–52.
- Solt, Frederick. 2019. 'The Standardized World Income Inequality Database V1-V7'.
- Song, Xi. 2021. 'Multigenerational Social Mobility: A Demographic Approach'. *Sociological Methodology* 51(1):1–43. doi: 10.1177/0081175020973054.
- Song, Xi, and Robert D. Mare. 2015. 'Prospective Versus Retrospective Approaches to the Study of Intergenerational Social Mobility'. *Sociological Methods & Research* 44(4):555–84. doi: 10.1177/0049124114554460.
- Song, Xi, and Robert D. Mare. 2017. 'Short-Term and Long-Term Educational Mobility of Families: A Two-Sex Approach'. *Demography* 54(1):145–73.
- Song, Xi, Catherine G. Massey, Karen A. Rolf, Joseph P. Ferrie, Jonathan L. Rothbaum, and Yu Xie. 2020. 'Long-Term Decline in Intergenerational Mobility in the United States since the 1850s'. Proceedings of the National Academy of Sciences 117(1):251–58.
- Sorensen, Annemette. 1994. 'Women, Family and Class'. *Annual Review of Sociology* 20(1):27–45.
- Sørensen, Annemette. 2006. 'Welfare States, Family Inequality, and Equality of Opportunity'. *Research in Social Stratification and Mobility* 24(4):367–75. doi: 10.1016/j.rssm.2006.09.001.
- Sorokin, Pitirim A. 1927. Social Mobility. New York.

- Stadin, Kekke. 2004. Stånd Och Genus i Stormaktstidens Sverige. Nordic academic press.
- Stanfors, Maria. 2007. *Mellan arbete och familj: ett dilemma för kvinnor i 1900-talets Sverige*. Stockholm: 08 tr.
- Stanfors, Maria. 2014. 'Women in a Changing Economy: The Misleading Tale of Participation Rates in a Historical Perspective'. *The History of the Family* 19(4):513–36.
- Stanfors, Maria, and Frances Goldscheider. 2017. 'The Forest and the Trees: Industrialization, Demographic Change, and the Ongoing Gender Revolution in Sweden and the United States, 1870–2010'. *Demographic Research* 36:173–226.
- Statistics Sweden. 1969. *Historisk Statistik För Sverige. Del 1. Befolkning 1720-1967 [Historical Statistics of Sweden. Part 1. Population 1720-1967]*. Second edition. Stockholm: AB Allmänna Förlaget.
- Statistics Sweden. 2011. 'Bakgrundsfakta: Yrkesregistret Med Yrkesstatistik En Beskrivning Av Innehåll Och Kvalitet'. Retrieved 18 March 2022 (https://www.scb.se/hitta-statistik/statistik-efter-amne/arbetsmarknad/sysselsattning-forvarvsarbete-och-arbetstider/yrkesregistret-med-yrkesstatistik/pong/publikationer/bakgrundsfakta-yrkesregistret-med-yrkesstatistik-en-beskrivning-av-innehall-och-kvalitet/).
- Statistics Sweden. 2016. 'Från Finland till Afghanistan Invandring Och Utvandring För Födda i Olika Länder Sedan 1970 [From Finland to Afghanistan Immigration and Emigration for Those Born in Various Countries since 1970]'. *Demografiska Rapporter* 2016(1).
- Statistics Sweden. 2021. 'Immigration and Emigration by Sex and Country of Birth 1970-2020 and Projection 2021-2070'.
- Statistics Sweden. 2022. 'Utbildningsnivå För Befolkningen Efter Kön Och Åldersgrupp 2021 [Educational Attainment of the Population by Sex and Age Group 2021]'.
- Stevens, Gillian, and Monica Boyd. 1980. 'The Importance of Mother: Labor Force Participation and Intergenerational Mobility of Women'. *Social Forces* 59(1):186–99.
- Stuhler, Jan. 2018. 'A Review of Intergenerational Mobility and Its Drivers'. *Publications Office of the European Union, Luxembourg*.
- Tåhlin, Michael. 2007. 'Class Clues'. European Sociological Review 23(5):557–72.
- Thaning, Max, and Martin Hällsten. 2020. 'The End of Dominance? Evaluating Measures of Socio-Economic Background in Stratification Research'. *European Sociological Review* 36(4):533–47. doi: 10.1093/esr/jcaa009.
- Thomsen, Mette Kjærgaard. 2015. 'Parental Time Investments in Children: Evidence from Denmark'. *Acta Sociologica* 58(3):249–63. doi: 10.1177/0001699315572159.
- Tönnies, Ferdinand. 1966. 'Estates and Classes'. in *Class, status, and pwer: social stratification in comparative perspective*. Glencoe: Free Press.
- de Toqueville, Alexis. 2006. 'Chapter V: How Democracy Affects the Relation of Masters and Servants'. in *Democracy in America, Volume 2, Democracy in America. Translated by Henry Reeve.* www.gutenberg.org.

- Torche, Florencia. 2015. 'Analyses of Intergenerational Mobility: An Interdisciplinary Review'. *The ANNALS of the American Academy of Political and Social Science* 657(1):37–62.
- Torche, Florencia, and Alejandro Corvalan. 2018. 'Estimating Intergenerational Mobility with Grouped Data: A Critique of Clark's The Son Also Rises'. *Sociological Methods & Research* 47(4):787–811.
- Tranby, Eric. 2006. 'Bringing the State in: A Commentary on Welfare States and Social Inequality'. *Research in Social Stratification and Mobility* 24(4):405–11. doi: 10.1016/j.rssm.2006.10.003.
- Treiman, Donald J. 1970. 'Industrialization and Social Stratification'. *Sociological Inquiry* 40(2):207–34.
- Treiman, Donald J. 1977. Occupational Prestige in Comparative Perspective. Academic Press.
- Utterström, Gudrun. 1985. Släktnamn: tillkomst och spridning i norrländska städer = [Family names]: [origin and distribution in towns in Norrland]. Umeå: Nyheternas tr.
- Utterström, Gudrun. 1994. 'Släktnamn i Sverige För Hög Och För Låg. En Historisk Betraktelse'. Pp. 36–44 in *Ortnamnssällskapets i Uppsala årsskrift*. Uppsala: Uppsala universitet.
- Van Leeuwen, Marco HD, and Ineke Maas. 2011. *HISCLASS: A Historical International Social Class Scheme*. Universitaire Pers Leuven.
- Vosters, Kelly. 2018. 'Is the Simple Law of Mobility Really a Law? Testing Clark's Hypothesis'. *The Economic Journal* 128(612):F404–21.
- Vosters, Kelly, and Martin Nybom. 2017. 'Intergenerational Persistence in Latent Socioeconomic Status: Evidence from Sweden and the United States'. *Journal of Labor Economics* 35(3):869–901.
- Wagner, Sander, Diederik Boertien, and Mette Gørtz. 2020. 'The Wealth of Parents: Trends over Time in Assortative Mating Based on Parental Wealth'. *Demography* 57(5):1809–31.
- Wahlberg, Mats. 1990a. Svenska Soldatnamn: En Forskningsöversikt. Almqvist & Wiksell [distributör].
- Wahlberg, Mats. 1990b. 'Swedish Soldiers' Names. Official Surnames given in the Swedish Army 1682-1901'. Pp. 460–67 in *Proceedings of the XVIIth International Congress of Onomastic Sciences*. Vol. 2.
- Waldfogel, Jane, and Elizabeth Washbrook. 2011. 'Early Years Policy'. *Child Development Research* 2011:1–12.
- Watson, Walter B., and Ernest AT Barth. 1964. 'Questionable Assumptions in the Theory of Social Stratification'. *Pacific Sociological Review* 7(1):10–16.
- Weber, Max. 1978a. 'Class, Status and Party'. in *The Economy and the Arena of Normative and De Facto Powers, Economy and Society*. Berkeley: University of California Press.
- Weber, Max. 1978b. 'Status Groups and Classes'. in *Conceptual Exposition*, *Economy and Society*. Berkeley: University of California Press.

- Weeden, Kim A., and David B. Grusky. 2005. 'The Case for a New Class Map'. *American Journal of Sociology* 111(1):141–212.
- Wennström, Johan. 2020. 'Marketized Education: How Regulatory Failure Undermined the Swedish School System'. *Journal of Education Policy* 35(5):665–91. doi: 10.1080/02680939.2019.1608472.
- Westberg, Johannes. 2019. 'Basic Schools in Each and Every Parish: The School Act of 1842 and the Rise of Mass Schooling in Sweden'. Pp. 195–222 in *School Acts and the Rise of Mass Schooling*. Springer.
- Widerberg, Karin. 1980. Kvinnor, Klasser Och Lagar 1750-1980. LiberFörlag.

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Patterns of Persistence

INTERGENERATIONAL MOBILITY AND SWEDEN'S SOCIAL STRUCTURE 1865-2015

In all times, societies have known social hierarchies and boundaries between individuals and groups with distinct social characteristics. The extent to which such hierarchies and boundaries are consequential for life outcomes and persist over time differs between societies. These changes over generations in the social structure, and the social, economical, and institutional developments that shape them, are the topic of this dissertation. I study social mobility – to what extent occupational status in one generation resembles occupational status in the parental generation. I do this in a changing context of educational attainment and welfare state provisions, as Sweden transitioned from an agricultural to an industrial and later service-based economy. Using longitudinal data based on full-count censuses and modern registers, I study cohorts born in Sweden from 1810 until 1985, and parent-child pairs with children born since 1865.

In contrast to mothers in Sweden today, previous generations of women often did not perform formal work outside of the household, or at least not while being a mother to young children. I explicitly situate social stratification and mobility in this context of changing institutions of family and work. I start by studying the changing social structure of men's and women's work, different empirical representations thereof, and their relationship to this changing context. I demonstrate how changes in the institutions of family and work imply changes in intergenerational mobility, with mothers becoming more and fathers less important. Before the dual-earner family, the father's occupational status represents family origin well. Gender continues to shape intergenerational mobility as the same-sex parent affects child status attainment more than the opposite-sex parent. Parental social origins do not act independently but accumulate to shape children's occupational status attainment.

In two of the papers in this dissertation, I use Swedish pre-industrial social status as reflected by different surname types in conjunction with occupational status to study patterns of persistence in the social structure. I demonstrate that surnames primarily reflect social groups rather than individual lineages. I also show that surname status inequality is very high historically and persists across time, with slow rates of regression to the mean. Surname groups and occupation-based social groups interact to shape patterns of persistence. I demonstrate that, historically, occupational mobility was low for high-status groups, and high for low-status groups, and that these groups converge over time to the mobility levels observed across the population today. I show how mobility patterns differ by social origin also in other ways; historically as well as today, a mother's occupational status matters more at lower social origins, while a father's occupational status matters more at higher social origins.



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