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ARISTOCRATIC WEALTH AND INEQUALITY IN A CHANGING SOCIETY: SWEDEN, 1750–1900

The role of the European nobility and their ability to retain their political and economic power are part of the debate on the modernization of Europe’s economy. This paper contributes to the literature by exploring the wealth of the Swedish nobility as the country evolved from an agrarian to an industrial economy. We use a sample of 200+ probate inventories of nobles for each of the benchmark years 1750, 1800, 1850 and 1900. We show that the nobility, less than 0.5 per cent of the population, was markedly dominant in 1750: the average noble was 60 times richer than the average person, and the nobles held 29 per cent of all private wealth. 90 per cent of the nobles were richer than the average person. By 1900 the advantage of the nobles’ wealth had declined; the group held only 5 per cent of total private wealth. At the same time, stratification within the nobility had increased dramatically. One group of super-rich Swedish nobles, often large land owners from the high nobility, possessed the biggest fortunes, but a large minority of nobles were no richer than the average Swede.

Keywords inequality, wealth, Sweden, nobility, economic stratification, social groups

In Eric Hobsbawm’s analysis, the dual revolutions – the French and the Industrial – in the second half of the eighteenth century led step by step to a ‘triumph of the new bourgeois society’. In this triumph, the industrial bourgeoisie in Sweden took over the role of society’s pre-eminent group, which the nobility had played in all European societies throughout the early modern period. Nobles were increasingly side-lined by commoners in the accumulation of wealth, as well as in politics and the control of the state.1

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Hobsbawm’s view of a decisive bourgeoisie take-over has been contested. Arno Mayer argues that up to the First World War, Western European societies were still typical of the ancien régime, dominated by the aristocracy in terms of politics as well as wealth and cultural prestige. Ever since, the debate on the ‘persistence of the old regime’ and the alleged dominance of the aristocracy into the early 20th century has been lively. One important aspect is the wealth of the nobility. We know that this group had a very strong economic position in eighteenth-century European societies, holding a very large share of the total wealth. The question then is how political changes reduced the economic position of the nobility, and how far the nobles succeeded in managing their wealth and putting it into productive use in the era of industrialization.

We study the case of Sweden from 1750 to 1900, building on 200+ probate inventories of Swedish nobles for each of the benchmark years 1750, 1800, 1850 and 1900. The probate inventories provide detailed information about every piece of property owned and its value, from estates to utensils and clothes. This allows an in-depth analysis of the economics of the Swedish nobility in the crucial period from 1750 to 1900: how much they owned, and what they owned. Since wealth is a source of social prestige, cultural standing and political power, our empirical focus on wealth is expected to yield new insights into the nobility’s status during a period of rapid and extensive societal change, both political and economic.

Background: status and privileges of the Swedish nobility
In Sweden, the nobility’s position was confirmed in the Alsnö Ordinance (Alsnö stadga) of 1280, which stipulated that those who supplied the Crown with heavily armed horsemen would be exempt from tax. The basic feudal economic structures, with subordinate peasants paying land rents to their lords, had evolved in the previous century. Noble status meant tax-exemption, and was at this point not hereditary, but it became so during the late Middle Ages. In 1626 the nobility was formalized when the House of Nobility (Riddarhuset) was created.

The nobility has always been a small fraction of Swedish society, never above one per cent of the population. This was a good deal less than in Poland and Spain, where the aristocracy occupied 6–8 percent and 12–13 percent, respectively, or even Britain and France where 1–1.5 percent of the population were nobles. In 1600 Sweden had only around 50 noble families, but extensive ennobling, often related to military service, took place in the seventeenth and eighteenth centuries. The practice slowed down after the 1790s and ended in 1907. In 1750, when our study begins, the nobility consisted of 9000 persons, which translates into a little less than 0.5 of the then population of 2 million (without Finland).

In the eighteenth and nineteenth centuries nobles had several privileges. We may divide them into two types: one related to the ownership of land, together with the local power associated with landholding, and the other attracting more general political privileges. In 1550, nobles held about 20 per cent of all arable land, which by 1658 had increased to 65 per cent, after which land reforms from 1680 to 1700 reduced the share to between 33 and 40 per cent. The Noble Rights Act of 1723 confirmed that the state should never interfere with what noblemen did with their land or their tenants; just as in England, the landowners enjoyed wide-ranging freedoms. The Act
also confirmed the customary right of certain high nobles to appoint the minister of their parish, and also to collect and use the church and crown tithes in many parishes in the south. While seigneurial or private justice held less sway in Sweden than in other European countries, the Act did include the right of landlords to flog their subordinates.\textsuperscript{7} The nobles’ land around the manor (säteri) and the subject tenants’ land up to ten kilometres’ distance from the manor were tax exempt. Until 1789, with few exceptions, only nobles could control such land. The highest occupations in public service were exclusive to nobles. During the period of the Four Estates Parliament, from 1668 to 1865, the House of Nobility was one of the four estates, along with the clergy, the burghers and the peasants. The nobility was by far the most powerful of them all, with many more representatives than the other estates, and the distribution of power in the governing of Sweden from the early sixteenth century to the mid-nineteenth century can be described as dyadic, the initiative swinging between the Crown and the nobility. Even after representation reform in 1865–66, which abolished the Estates parliament and installed a two-chamber parliament, the nobility was very much overrepresented in the political elite.\textsuperscript{8} Thus, when our empirical investigation begins in 1750, Swedish nobles were a privileged group both in the sense of a wealthy landed upper class, and a political entity.

The nobles and the challenge of modernization

Much research has been devoted to assessing how European aristocracy faced the challenges of the ‘dual revolution’. France, with its political revolution, is a paradigmatic case. 1789 was once seen as the year when the bourgeoisie dethroned the French nobility, but during the last few decades, this analysis has fallen out of fashion. David Higgs claims that only a minority of the French nobles ‘did suffer grievous losses’, while most noble families ‘preserved the bulk of their wealth’. Those nobles who were compensated for the confiscation of their land could buy government bonds with their new cash, and then live on the yield. Those who kept their land could actually benefit from the revolutionary reforms because the abolition of tithes gave them more than they had lost in seigneurial dues.\textsuperscript{9} Nobles elsewhere, such as in Sweden, may not have faced a literal political revolution such as the French, but they did face the fundamental social changes associated with the industrial revolution. Belgium is an illustrative case: it underwent heavy industrialization in the nineteenth century. The share of landed property in the nation’s wealth decreased from 60 per cent in 1846 to 20 per cent in 1913; given the association between nobles and landed property, this raises questions about the nobles’ status. However, Samuel Clark’s investigation shows that industrialization and urbanization actually favoured the nobles, since the growing urban population, which was unable to produce its own food, pushed up demand for agricultural products. This caused food prices and land values to increase, benefiting noble land owners. While the nobles in Belgium lost most of their political privileges, they benefited economically from the growth of the market.\textsuperscript{10} In Prussia, the landowning nobles after the mid-nineteenth century likewise benefited from market growth for agricultural produce, and moved forward with large consolidated demesnes and a shift to capitalist agriculture. The Prussian nobles also famously continued to play an outsize role in politics until World War One.\textsuperscript{11} Likewise, in Britain more recent research on the high
The aristocracy stresses this group’s glorious survival into the early twentieth century; their status was founded on massive wealth, especially through great landholdings, as well as a high degree of political power. (The low nobility may not have fared so well.)

Unlike these cases, Danish historiography maintains that the post-1789 period was rather a period of noble decline. Denmark, which in the mid-eighteenth century had a very oppressive form of feudalism, in the 1780s and 1790s implemented anti-feudal reforms which are remembered as the ‘peasant emancipation’. Almost all the peasant farmers eventually became freeholders; rather small manorial demesnes remained, but were now worked by crofters and waged labour. With the abolition of the absolute monarchy in 1848 the nobility was also dethroned from its exclusive state offices.

More radically than in most European countries, it was by law stated that their privileges were no more. The story of the Danish aristocracy’s decline, from its heydays in 1523–1660 (‘the Reign of the Nobility’) was finalized in 1919, when the entailed estates were legally dissolved and their owners had to sell huge parts of their remaining landed property, including demesnes, to peasant farmers.

Following Jerome Blum, we can say that the European nobility, facing the end of the old order, embarked on different pathways into the twentieth century. Some went into business, conjoining the higher strata of the bourgeoisie in a process of inter-penetrating the two upper classes. Other men of rank deprived of much or even all of their income by this emancipation, could not maintain a noble way of life and shifted to middling bourgeois standards and occupations. Yet others found this unworthy and despite poverty clung to their ancestral acres. For Sweden, we can investigate the different trajectories of the nobility and how they were distributed after 1750.

The Swedish nobility and the challenge of the dual revolution

Previous research on the Swedish nobility has tended towards a declinist view of the nobles’ fate in the era of the dual revolution. Essentially, three arguments have been put forward. One is that the position of the nobility was undermined by political reforms. A second is that the nobility was demographically brittle, and suffered large-scale downward mobility during the long nineteenth century. The third claims that the nobles were bad businessmen, lacking the right capitalist mentality, and often squandered their fortunes. In all three scenarios, c. 1789–1900, the nobles lose out in relative terms.

The historian Sten Carlsson has especially advocated the political argument He discusses two reforms: the opportunity opened in 1789 and 1809 for commoners to buy tax-exempt land, previously monopolised by the nobility, and the accessibility to commoners of the highest ranks of public service in 1809. On both counts, later research has tempered Carlsson’s interpretation. The land reforms de-feudalized landowning but did not directly harm the nobles’ interests. The historian Christer Winberg shows the two reasons for this: that the nobles recognized that the reforms in no way forced them to sell land, while the right to sell it to anyone would raise its price, to the benefit of its current holders; and that land could be sold not only for immediate profit, but also to consolidate local land holdings by buying other land with a different tax status. This strategy was de facto used. Carlsson shows that by 1850 the nobles had sold around half of the tax-exempt land to commoners, but he does not add that the nobles at the same time significantly expanded their ownership of other types of land.
He furthermore interprets the opening up of the highest ranks in the public services as the outcome of middle-class struggle against the nobility. However, later research has found that the nobles, in practice, dominated the higher offices after 1809 as well as before; while they lost their formal monopoly, they kept their advantages in terms of education, connections and cultural capital.\textsuperscript{16}

The foremost proponent of the demographic argument is the historian Ingvar Elmroth. He built a large database of noblemen and used their titles to analyze their social mobility. However, his conclusion that the nobles suffered large-scale downward social mobility and were middle-class by 1900 is marred by methodological problems. The failure to consider the age of the nobles, their stage in the life cycle and the strongly custom-bound use of nobles’ titles, have made his conclusions seem over-blown.\textsuperscript{17}

The third argument on the nobles’ decline is that of economic incompetence. The issue is controversial, but according to some of the literature, the nobles’ values and general orientation were not conducive to running a business in post-feudal society. For example, in the latest overview of the history of the Swedish nobility, it is claimed that noble landowners were put out of competition in the late nineteenth century by cheap American grains and that noble-owned metal works likewise were put out of business between 1890 and 1920, because they could not handle capitalist competition. Likewise, Kisti Niskanen has compared the estate management of the Baron and Prime Minister J.A. Gripenstedt with that of the arch-bourgeois Oscar Ekman, and claimed that Gripenstedt’s management was traditional and reactionary, while Ekman’s was professional.\textsuperscript{18} We may note that the accusation of a lack of capitalist rationality among the nobles has often been made in the general European literature too, but has lost ground in the last twenty years or so.\textsuperscript{19} In the Swedish literature too there has been a turn to appreciating the capitalist nous of the nineteenth-twentieth-century noble estate owners.\textsuperscript{20} We will come back to this argument.

Two recent studies of the Swedish nobility contradict Hobsbawm’s declinist view. Göran Norrby in his dissertation shows the resilience and adaptability of the nobility in the ‘bourgeois society’ of the nineteenth century: how nobles continued to dominate high society, high culture, the upper echelons of public service and the military, as well as occupying a privileged position in business up to the First World War. Norrby’s investigation on the changes to the nobility covers much ground, but he explicitly disregards the issue of wealth, stating that data were lacking. In this paper we remedy this lack by using probate inventories. Likewise, the economic historian Gregory Clark recently analysed long-run social mobility in Sweden on the basis of surnames. He shows that nobles, identified as those with noble surnames, are still very much overrepresented in elite positions and among those with high incomes.\textsuperscript{21}

As we have seen, the European as well as the Swedish bodies of research are contradictory on the fate of the nobility from the mid-eighteenth century on, during the massive societal and economic changes that we, following Hobsbawm, call ‘the dual revolution’. We next describe the data that we will use to address this issue.

\textbf{Studying wealth with probate inventories}

In this study, we exploit the fact that in Sweden probate inventories for the wealth of the deceased were made mandatory in 1734. They were used for the division of the estate among its heirs, for resolving outstanding debt issues, and as the basis for a 0.25
The per cent tax which funded poor relief. For these reasons, the proportion of the population whose wills were probated was very high.22 The probate inventory was made under the auspices of the courts. Since the nobility had its own courts (Göta hovrätt, Svea hovrätt and from 1821 also Hovrätten över Skåne och Blekinge), their probate inventories are available in the archives of these courts.

We have data for four benchmark years: 1750, 1800, 1850 and 1900. The period studied encompasses the earliest point at which a national sample of inventories is possible, c. 1750 and stretches to 1900 to link to previous studies on wealth inequality. The benchmark years are normal years, in the sense that they did not experience severe harvest failures or increased mortality for other reasons.23 For 1750, we collected the probate inventories of all the nobles probated that year, and for the other three years we collected the same number of inventories as we had for 1750.24 The year of death was normally the same or the year before the recorded year. Because information is sometimes missing, the number of inventories we can use is 209 in 1750, 215 in 1800, 229 in 1850, and 227 in 1900. In order to compare the performance of the nobility with that of the rest of the population and put them in the proper context, we also use c. 4000 probate inventories for commoners in our four benchmark years. Together, the 5000+ inventories for nobles and commoners form a dataset that reflects the entire social structure of the country.25

Swedish probate inventories, from the international perspective, are detailed and rich. For example, there is no problem of lacking real estate details, as in the British counterparts. We have classified the property held into four types: rural real estate, urban real estate, claims and investments, and movables. Rural real estate consists mainly of farm land, farms and estates, but also the flour mills, sawmills and brick kilns that quite a few nobles had on their estates.26 The urban real estate category is straightforward: real estate in cities and towns. Claims and investments is the category in which we put outstanding loans as well as the ownership of companies or of securities of different kinds, which tended to be stocks or bonds. The movables category includes cash, furniture, clothes and the like. To determine net wealth, we summarize the value of these four categories, and subtract any debts.27 In other words, our wealth concept is comprehensive.

We supplemented the information in the probate inventories with certain other necessary demographic variables. Age at death was collected from the Church’s death books. To know if the family of our nobles was titled or untitled and old or new nobility, we collected information on the date of ennoblement and class of nobility of the noble families from Elgenstierna’s genealogical mapping of the entire Swedish nobility.28 We defined old nobility as those families who were noble when the House of Nobility (Riddarhuset) was established in 1626, and consequently new nobility as any family ennobled after that. We coded titled nobles – families with the status of count or baron – as high nobility, and untitled nobility as low nobility. Commoners who were married to nobles and therefore were probated as nobles are coded according to their partners’ rank, and nobles from families not introduced at the House of Nobility (‘unintroduced’) are coded as low nobility.

In order to use probate inventories to indicate the wealth structure of the living population, two major adjustments are needed. One must be made for the age of the population due to the underrepresentation of the young among those who die in a given year. We use the standard method, which is inverse mortality multipliers constructed from
age-specific mortality rates. The other adjustment is made for social groups, in that poorer groups were less likely to be probated. The nobility is the most over-represented group in our full sample and keeping the number of individuals from this class fixed, we replicate the individuals in each group n number of times, with n such that the class after the expansion is correctly represented. Table 1 shows the nobility starting sample by seniority and rank and the shares as they appear after the adjustment.

As in the original sample, the adjusted one has a higher share of low than of high nobility. There are roughly twice as many of new as of the old nobility. In the last four rows of each year we also show the overlap between the ranks and the seniority of the noble families. In our empirical analysis, we use the adjusted sample to compute descriptive statistics of the population that aim to describe the characteristics of the living population.

### The wealth of aristocrats

Table 2 compares the average wealth of the nobility and that of the other social classes. In 1750 a noble person owned on average 60 times more than the average Swede. 150 years later the same figure drops to 19 times more. The share of private national wealth held by the nobility in 1750 was roughly 29 per cent of the whole, whereas it was

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**TABLE 1.** Nobility sample by rank and seniority, 1750–1900.

| Year | No. | Share unadj. | Share adj. | No. | Share unadj. | Share adj. |
|------|-----|--------------|------------|-----|--------------|------------|
| 1750 |     |              |            | 1800|               |            |
| Commoners (married to nobles) | 25  | 11.96        | -          | 18  | 8.37         | -          |
| Unintroduced nobility        | 3   | 1.44         | -          | 5   | 2.33         | -          |
| Low nobility                 | 137 | 65.55        | 74.29      | 152 | 70.70        | 85.33      |
| High nobility                | 44  | 21.05        | 25.71      | 40  | 18.60        | 14.67      |
| Total                        | 209 | 100          | 100        | 215 | 100          | 100        |
| of which introduced nobles   | 181 | 86.60        | -          | 192 | 89.30        | -          |
| Old nobility (<1625)         | 31  | 17.13        | 33.57      | 26  | 13.54        | 28.56      |
| New nobility (>1625)         | 150 | 82.87        | 66.43      | 166 | 86.46        | 71.44      |
| Total                        | 209 | 100          | 100        | 215 | 100          | 100        |
| 1850 |     |              |            | 1900|               |            |
| Commoners (married to nobles) | 34  | 14.85        | -          | 52  | 22.91        | -          |
| Unintroduced nobility        | 1   | 0.44         | -          | -   | -            | -          |
| Low nobility                 | 146 | 63.76        | 73.56      | 113 | 49.78        | 77.38      |
| High nobility                | 48  | 20.96        | 26.44      | 62  | 27.31        | 22.62      |
| Total                        | 229 | 100          | 100        | 227 | 100          | 100        |
| of which introduced nobles   | 194 | 84.72        | -          | 175 | 77.09        | -          |
| Old nobility (<1625)         | 36  | 18.56        | 38.70      | 27  | 15.43        | 29.86      |
| New nobility (>1625)         | 158 | 81.44        | 61.30      | 148 | 84.57        | 70.14      |
| Total                        | 229 | 100          | 100        | 227 | 100          | 100        |
only 5 per cent in 1900. The other social classes which had major shares of national wealth in 1900 were the peasant farmers (28 per cent) and the bourgeoisie (57 per cent). We can thus say that the economic dominance of the nobility waned from 1750 to 1900, but that they were still an economically privileged group in 1900, being on average 19 times wealthier than the average citizen.

The nobles’ relative advantage declined mostly because the wealth of other groups grew faster than theirs, not by a decline in their absolute wealth. In nominal terms, a nobleman’s wealth increased 12-fold over these 150 years, and the average worker’s 14 times, while both the bourgeois and the peasant farmer increased their wealth approximately 60 times.

However, some interesting issues of reduced real wealth can also be found, namely, between 1750 and 1800. The consumption basket underlying the historical consumer price index for this period is 35.5 per cent grain (mostly rye), and grain prices grew very rapidly during the second half of the eighteenth century. In 1900 prices, the average amount of private wealth decreased from 1297 kr in 1750 to 1003 kr in 1800, and then increased to 3395 kr in 1900. The fall in real wealth from 1750 to 1800, 22.7 per cent, may be compared with the falling real GDP per capita of 12.2 per cent according to Krantz and Schön, and falling (silver) real wages for Stockholm by 11 per cent in 1750–1800, found by Söderberg. However, this period was also the one when the potato made its break-through in Sweden. Excluding this from the consumer basket for the CPI overstates the fall in living standards from 1750 to

### TABLE 2. Wealth by social group and their shares of population, 1750–1900 (average wealth = 1).

|        | 1750         | 1800         |        | 1850         | 1900         |
|--------|--------------|--------------|--------|--------------|--------------|
|        | Average     | Share of    | Share of | Average     | Share of    | Share of    |
|        | wealth      | wealth       | pop.    | wealth      | wealth       | pop.        |
| Nobility | 59.6     | 29           | 0.4     | 21.7      | 8            | 0.4         |
| Bourgeoisie | 3.1     | 20           | 6.5     | 5.3       | 37           | 7.0         |
| Peasant farmers | 0.7   | 33           | 49.9    | 1.0       | 45           | 45.5        |
| Workers and lower middle class | 0.4 | 18           | 43.4    | 0.2       | 10           | 47.2        |
| Total   | 1          | 100          | 100     | 1          | 100          | 100         |
| Nobility | 29.4     | 10           | 0.3     | 19.3      | 5            | 0.3         |
| Bourgeoisie | 4.0     | 31           | 7.8     | 5.1       | 57           | 11.2        |
| Peasant farmers | 1.3   | 49           | 38.1    | 1.0       | 28           | 27.4        |
| Workers and lower middle class | 0.2 | 10           | 53.8    | 0.2       | 10           | 61.1        |
| Total   | 1          | 100          | 100     | 1          | 100          | 100         |
Furthermore, Hoffman et al. point out that socio-economic groups in early modern society had quite different consumer baskets from each other. For the wealthy groups, such as the nobility, grains were not nearly as large a part of the consumer basket as for the poorer groups. Therefore, the grains-driven increase in the CPI gives a negative bias in estimating the change in nobles’ living standards from 1750 to 1800. Rye prices increased by 765 per cent in those years, but beef ‘only’ by 160 per cent, wool 256 per cent, linen yarn 204 per cent, and the daily wage for a male agricultural labourer, 286 per cent. Thus, the nobles, with their more diversified consumer basket, were less hit by price increases between 1750 and 1800 than the lower groups were. This issue is a highly relevant issue for further research.

A further aspect of the results is the possible undervaluation of the assets. Economic historians in particular have claimed that land, and to a lesser extent movables and livestock, were undervalued until the 1860s. After an 1862 regulation of taxation values, land became harder to underestimate. Claims and debts, however, were not undervalued. It is impossible to be sure whether or by how much the assets of the individuals in the current dataset were ‘undervalued’ in relation to market prices. But if we hypothetically follow Isacson’s results for one parish in Kopparberg County, this undervaluation was larger for land than for other assets, and more or less non-existent after 1862. This would mean that we (a) overestimate the growth in wealth from 1850 to 1900, and (b) underestimate the wealth, especially that of landlords, in 1800 and 1850. Since the nobility owned a disproportionate amount of land, adjusting for the valuation issue would strengthen our results, in the sense that the nobility were in fact even richer. It would also increase the difference between the land-owning and non-landowning nobles before 1900.

The decreasing gap between the nobility and other social groups between 1750 and 1900 is not the whole story. Table 3 shows that inequality within the nobility increased significantly during the period. The Gini increased from 0.80 in 1750 to 0.87 in 1900, and the share of noble wealth held in this period by the ten per cent wealthiest nobles grew from 70 to 82 per cent. To trace this development, it’s illuminating to examine the extremes within the nobility. First we look at the three richest nobles each year, and their professions and

| TABLE 3. Inequality within the nobility, 1750–1900 |
|-----------------------------------------------|
| 1750                                           | 1800                                           |
| Gini                                           | Gini                                           |
| 0.80                                          | 0.74                                          |
| .72–.88                                       | .69 – .79                                     |
| Top 1%                                        | Top 1%                                        |
| 30.1%                                         | 16.1%                                         |
| 13.2%–46.9%                                   | 7.1%–25.0%                                    |
| Top 10%                                       | Top 10%                                       |
| 70.0%                                         | 57.8%                                         |
| 58.2%–81.9%                                   | 49.5%–66.1%                                   |
| 1850                                           | 1900                                           |
| Gini                                           | Gini                                           |
| 0.88                                          | 0.87                                          |
| .83 – .94                                     | .84 – .91                                     |
| Top 1%                                        | Top 1%                                        |
| 36.7%                                         | 28.2%                                         |
| 23.2%–50.2%                                   | 19.2%–37.2%                                   |
| Top 10%                                       | Top 10%                                       |
| 80.9%                                         | 81.9%                                         |
| 71.2%–90.6%                                   | 74.9%–88.9%                                   |
the composition of their wealth. Then we consider the relatively poor nobles, those who died with less wealth than the average in the population, maybe even with negative net wealth. In 1750, the three richest nobles in the dataset are Johan Sack, Eleonora Wachtmeister and Malte Ramel. Sack was 35 times richer than the average noble, Wachtmeister 12 times richer, and Ramel 11 times. Sack had the rank of captain in the army, but the title does not say much about his actual social status: as well as other types of wealth, he also owned six landed estates, at his death entailed as Bergshammars fideikommiss. He was a Baron, married to a Countess. Wachtmeister was a Baroness married to a Count, and rural real estate was 57 per cent of her fortune. Ramel, who was of low nobility but married to a Countess, is another example of a non-informative title. In the probate inventory, he was called herr (mister), but he was a major landowner, rural real estate being 80 per cent of his wealth; as Elgenstierna’s mini-biography says, he ‘lived without doing service’ (levde utan tjänst). Going to the bottom of the distribution, thirteen of our 209 nobles in 1750 died with negative net wealth; they typically had little money and slightly larger debts. Of these thirteen, eleven were untitled, one was a Count and one a Baroness. Another nine people had lower wealth than the average for the total (adjusted) population at the time.

In 1800, the wealthiest nobles were Baron Fredrik Åkerhielm (51 times wealthier than the average noble), Baron Hans Ramel (12), and Johan Hacker, unintroduced nobility (8). Åkerhielm and Ramel were major landowners, with land more than 90 per cent of their gross wealth. Hacker was very different, for almost all his wealth was in the shape of claims and investments; unlike the other two who lived on their estates, he resided in Stockholm, and was a jurist (assessor). 20 of our 215 nobles in 1800 died with more debts than assets, and another 36 nobles had lower wealth than the average Swedish person.

In 1850, Count Colonel Carl Piper was the richest, 35 times richer than the average for the nobles. Two-thirds of his wealth was in rural real estate, its backbone entailed as Piperska fideikommisset, but he had significant investments in other businesses and he was also a court functionary. One part of his immense wealth should probably be attributed to his judicious marriage to a countess whose father was, like Piper himself, close to the King. The second richest in 1850 was Baron Adam Reuterskiöld, who was also a large landowner and had married a woman from a wealthy titled family. Most of his wealth was in the rural sector but Reuterskiöld presents an example of a land owner who used his land for more than farming; while about half of his wealth was in land, about 40 per cent was in his iron works, Rånäs bruk. The third richest was Baroness Jeanette Riddarstolpe who was born a commoner, the daughter of a high-ranking bureaucrat, but who married into the nobility. Just like Reuterskiöld, she owned not only land but also an iron works. 52 of the 229 nobles in our 1850 sample died with negative net wealth, and another 31 had less wealth than the average person in the population.

In 1900, Baron Otto Ramel was the richest. He had a fascinating career: a higher education degree in agriculture (at Ultuna), a banker, Member of Parliament and courtier. But his wealth lay firmly in agriculture, taking up 87 per cent; he inherited an entailed estate; it is noteworthy that the Ramel family was also represented in the top three in 1750. The second richest was Thure Thuresson Gyllenkrok who also had an entailed estate in southern Sweden; 84 per cent of his wealth was in rural real estate. The third richest was Axel Adelswärd who owned a major entailed estate, which included a major copper
works (Åtvidaberg). Ramel was 28 times richer than the average noble, Gyllenkrok 21 times, and Adelswärd 19 times. Among the 229 nobles, 27 were probated to have negative wealth, and another 64 were poorer than the average Swede.

To sum up, in 1900 40 per cent altogether of our sampled nobles were poorer than the average Swede, whereas 150 years earlier this share had been only 14 per cent. The economic elite within the nobility over this period retained or even strengthened their position. From 1750 to 1900, the Swedish nobility’s road bifurcated: a large minority took the direction of mediocre economic standards, while a smaller group fortified its position as an ultra-wealthy elite within the elite. We might also notice that a judicious choice of marriage partners was part of the strategy of the elite within the elite: very large landed fortunes were consolidated by inter-marriage between wealthy titled families.

Who were the elites within the nobility? In Swedish historiography the titled nobility is considered wealthier than the low nobility, although this has never been set out in figures. Moving on in the analysis, we break down the average wealth of the nobility into the average wealth of the low and high and of the old and new. The averages for each year, shown in Table 4, are normalized to 1. To account for what may be a high dispersion of the wealth distribution, for each year we also show the median wealth, which is less affected by outliers.

In 1750, the high nobility was about three times richer than the low nobility. There was no great difference between the old and the new (post-1626) nobles. In 1900, the advantage of the high nobility vis-à-vis the low was even larger, since they owned about five times more than their untitled counterparts. A bit surprisingly, the new nobility in 1900 on average was about twice as wealthy as the old nobles.

Landed estates or the stock market?
In the year 1900, at the age of 84, the vice district judge and law clerk Thure Freidenfelt died in Stockholm. Like his wife Götha, born Ekenstam, he came from a family in the low nobility. The value of their probates was, in Swedish kronor, cash 97, gold and silver 528, movables 2,519, bank savings 3,080 and stocks 61,797. The latter were spread, with shares in six companies: a bank, a canal company, an ironworks, a tube mill, a railway company and a milk company. This was quite a fortune, although not uncommon in size for the nobles. As a comparison, an average male worker in manufacturing and mining in 1900 had a yearly wage of 947 kronor. The year before Charlotte Lewenhaupt, born Gyldenstolpe, died at the age of 67 at the Sjöholm mansion 140 kilometres west of Stockholm. She was widowed after the death of the Count (also a Major and Chamberlain of the Crown Prince) and herself came from a family in the high nobility. The gross value of the probates was distributed as (SEK) cash 53, gold and silver 12,508, movables 28,425, stocks 33,300 and rural real estate 276,700.

The contrast between these two families is striking; while the the low nobles Freidenfelts held no real estate, but a considerable amount of shares, the high noble Lewenhaupt’s owned vast landed estates with a mansion, a demesne and tenant farmers. 79 percent of their fortune came from rural real estate, while 92 percent of the Freidenfelts’ fortune came from stocks. How typical were the Freidenfelts and the Lewenhaupt’s of the low and high nobility, respectively? (We can also think about Jacob Hacker and the other two wealthiest nobles whom we found in 1800, as discussed above.) Looking at the wealth composition of the whole nobility, the shares from 1750 to 1900 are relatively stable. Rural real estate represented
### TABLE 4.  Wealth by rank and seniority, average and median, 1750–1900 (total = 1).

|                | 1750 Average | 1750 Median | 1800 Average | 1800 Median | 1850 Average | 1850 Median | 1900 Average | 1900 Median |
|----------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Low nobility   | 0.64         | 1.00        | 0.82         | 0.85        | 0.33         | 0.74        | 0.54         | 0.75        |
| High nobility  | 2.04         | 1.31        | 2.04         | 2.05        | 2.86         | 6.39        | 2.59         | 4.20        |
| Old nobility   | 0.94         | 1.00        | 0.86         | 1.06        | 0.94         | 0.74        | 0.50         | 0.75        |
| New nobility   | 1.03         | 1.22        | 1.06         | 0.95        | 1.04         | 1.20        | 1.21         | 1.00        |
about half, followed by almost a quarter each of movables and investments. Urban real estate was never more than 5 percent. The high rank nobles were on average richer than the low rank nobles in all years and for all types of wealth, and as we have seen in Table 4, became increasingly rich until 1900.

The relative strengthening of the high nobility may have been caused by a general increase in their wealth, or conversely linked to the increase of one particular type of wealth. Figures 1 and 2 show the composition of wealth for low and high nobles. The low nobility had a relative increase, from 23 to 53 per cent, of claims and investments. Rural real estate went from 50 to 30 per cent while the rather small share represented by urban real estate doubles from 3 to 6. Movables decreased in value by half. A very different pattern for the high nobility is shown in Figure 2, suggesting that claims and investments decreased by one-third while rural real estate went from 37 to 69 per cent,
dominating the wealth structure at the end of the period. Urban real estate shows the opposite pattern to that in the low nobility while movables decreased by half.

It appears that the low nobility transitioned from being a fairly strong land-owning class, mostly based in the countryside and with a relatively small share of investment in their portfolio, to a more urbanized class. The high nobility in contrast continued to be very strong in rural real estate. This shows the partiality of the claim in a strand of the literature that the nobility turned into a state-serving estate at the end of the seventeenth century: a part of the nobility was without land, but the great magnates were still an important part of this class. Jerome Blum argues that it was especially the landed European nobles who went into capitalist enterprises, but our results show the opposite: it was the less landed low nobility that, in this respect, became bourgeoisified, while the higher aristocracy stuck to their land.40

One question to address is where this big increase in the share of rural real estate for the high nobility could have originated. Was it the result of buying more land, or of the land they owned growing in value? Since population, and, not least, urban population, grew very rapidly in our period of investigation, agricultural land grew in value, as pointed out in the Swedish context by Ulf Jonsson.41 In the USA, farm land prices quadrupled from 1850 to 1914.42 Table 5 shows the development of land prices in our sample, in kronor per mantal. The mantal, the most important measure of landholding in Sweden during our period, was not precisely a measure of a fixed area, but rather a fiscal unit and a measure of the size of a farm that a family could live off.

Land prices from 1800 to 1850 increased more than twice in percentage terms compared to the CPI, and ten times more from 1850 to 1900. The amount of land held by the median landowner was quite stable in this period, from 3.31 mantal in 1800 to 3.05 mantal in 1900. The mean size, however, increased from 5.98 in 1800 to 6.38 in 1850 and 10.56 in 1900. This divergent development of the median and the mean indicates that during our period the spread within the group of noble landowners increased. The property of the small landowners among the nobility showed no mobility: the 25th percentile held merely 1 mantal — akin to the property of a wealthy farmer — in both 1800 and 1900. At the same time the 75th percentile increased its ownership from 4.41 mantal in 1800 to 7.00 in 1850 and 10.28 mantal in 1900. The land wealth of the top of the top ranks also increased according to our — admittedly small — sample. In 1800, the largest landowner in terms of acreage was the untitled noble Christian Ehrenborg with 55 mantal, followed by a baron with 39 mantal and a countess with 26 mantal. In 1900, Count Thure Bielke held a stunning 90 mantal, a Baron 66 mantal, and in third place, a Count held 34 mantal. Overall, the growth in the value of land must have been very important for landowners’ wealth in this period; one did not need to buy more land to enjoy more landed wealth in money terms.

It has been suggested that the major landowners in Sweden, although they belonged to the top economic strata, were quite insignificant when it came to financing industrial investments in the period 1830–1913.43 The argument is that the nobles instead used their capital to invest in agriculture, their traditional line of business. Our results confirm this interpretation if they are applied to the top group among the nobles but not to most of them. The members of the low nobility, as in the cases of Johan Hacker and Thure Freidenfelt discussed above, were indeed involved in investments, probably because they were not given the option to buy the large (and more profitable) estates owned by the high nobility.

Furthermore, our findings of the continued importance of large noble landowners in 1900 contradict the view of nobles as economically naïf and losing in economic
status during the nineteenth century. Instead, we support the 'optimistic' view of the nobles' capitalist rationality. The entry of North America and Russia to the international grain markets in the 1870s and 1880s posed a challenge to Swedish estates, which were often grain producers. However, the continuing importance of noble large landowners in 1900 indicates that estates could cope with the challenge. Grain tariffs were imposed in 1888, and landowners redirected production into sugarbeet, dairy and meats. Noble estate owners were still thriving in 1900, and had gained immensely from increased agricultural productivity and increasing prices for food and land.

Concluding remarks
Much of the previous research has presented the Swedish nobility as suffering 'pauperization' after 1789, transforming into a 'middle class', and letting their fortunes dribble away due to a culture which put no premium on economic rationality. We have presented the first comprehensive estimates of the wealth of the Swedish nobility, and can claim that this picture is at least partly misleading. The results show that Swedish nobles were indeed very wealthy in relation to other social groups. In 1750 the average noble person owned 61 times more than the average Swede. By 1900, this multiple had fallen to 19: an important decline in the differences, but still a respectable distance between nobles and commoners. However, this multiple hides that the fact that the nobles become more economically differentiated during the period. Whereas in 1750 about 90 per cent of the nobles were richer than the average Swede, in 1900 almost 40 per cent were poorer than the average. It is then true that a large minority of the nobility did suffer a downward social trajectory from 1750 to 1900. However, most of the nobles were still comparatively wealthy, and a significant minority of them belonged to the country’s economic and political elite. These were great landowners, dominant in local society, and quite a few of them owned mines, iron works, copper works and the like. In this sense, the strength and economic importance of the Swedish nobility has been underestimated in previous research. Although we do not have systematic data for the present time, we know that in the early twenty-first century 31 of the 50 biggest holders of arable land in Sweden still belonged to the old nobility. The nobility – at least part of it – has remained an important economic force in Sweden, far after its presumed demise in the ‘bourgeois’ long nineteenth century.

### Table 5

| Year | Land price, mean (kr) | Land price, median (kr) | CPI 1914 = 100 | Land (mean) change | CPI change |
|------|-----------------------|-------------------------|----------------|-------------------|-------------|
| 1800 | 2,039                 | 1,333                   | 23,368         |                   |             |
| 1850 | 9,721                 | 7,332                   | 63,946         | 377%              | 146%        |
| 1900 | 39,188                | 33,675                  | 78,086         | 303%              | 29%         |

Note. Land price is given in kr per mantal. We have found the mantal information for 74 noble landowners in 1800, 38 in 1850, and 42 in 1900. In 1750, the probate inventories often do not report the mantal for agricultural holdings. CPI is from Rodney Edvinsson and Johan Söderberg, "A Consumer Price Index for Sweden, 1290-2008", *Review of Income and Wealth* 57 (2011): 270-292.
It is tempting, if problematic, to speculate why the economic advantage of the nobility has been so underestimated in previous social history research on modern Sweden, which exhibits a starkly contrasting antinomy. In different strands of literature, such as agrarian history and political history, individual noblemen are quite often presented as leading figures in the modernization of Sweden, as individuals of great willpower, intelligence and material resources. But when the nobility as a class is considered as a whole, the writers (at least until Norrby) have tended to dismiss any idea of their lasting superiority in material and social power. The lasting presentation of the nobility as economically irrelevant by the mid-nineteenth century, marked by un-capitalist attitudes and the erosion of wealth, is probably due to the strength of the national myth of a society dominated by peasant farmers with a long history of egalitarianism. Our results on the wealth of the Swedish nobility instead support the view of noble land-owners as competent and rational, and the view of Norrby and Clark that in fact the nobility was still an upper class in 1900. Unlike the situation in Denmark, but much the same as in Prussia and Britain, a significant share of the Swedish nobility had mastered the vast economic and political transformations of the eighteenth and nineteenth centuries and was still occupying the highest levels of the social and economic structure in 1900.

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Notes
1. Hobsbawm, Eric, The Age of Revolution: Europe 1789–1848 (London: Abacus, 1978), 16.
2. Mayer, Arno, The Persistence of the Old Regime: Europe to the Great War (New York: Pantheon Books, 1981). All later overviews of the nobility in Europe have had to relate to Mayer’s analysis in some way; Dewald, Jonathan, The European Nobility 1400–1800 (Cambridge: Cambridge University Press, 1996), xiv–xv, 4, supports
it, while Lieven, Dominic, *The Aristocracy in Europe, 1815–1914* (Basingstoke: Macmillan, 1992), 243, finds it unconvincing.

3. W. M., Rubinstein, ‘Introduction’, In *Wealth and the Wealthy in the Modern World*, edited by W. M. Rubinstein, (London: Croom Helm, 1980), 9–45.

4. On feudalism, see Lindkvist, *Plundring, skatter*; on the development of the Swedish nobility see A. F., Upton, ‘The Swedish Nobility, 1600–1772’, In *The European Nobilities in the Seventeenth and Eighteenth Centuries. Volume two: Northern, Central and Eastern Europe*, edited by H.M. Scott, (London and New York: Longman, 1995), 11–40.

5. For the European comparison see M. L., Bush, *Rich Noble, Poor Noble* (Manchester and New York: Manchester University Press, 1988).

6. Landownership up to 1700 is from Myrdal, Janken, *Jordbruket under feodalismen 1000–1700. Det svenska jordbrukets historia band 2* (Stockholm: Natur och Kultur/ LT: sförlag, 1999); 334ff. The unrestricted rights of owners are discussed by Gary, Kathryn and Mats Olsson, ‘Business as Usual: Nobility and Landed Estates in Sweden’, *Essays in Economic & Business History 35*, no. 1 (2017): 151–73.

7. Upton, ‘The Swedish Nobility’, stresses the relative lack of seignorial justice; for a darker picture see Smedberg, Staffan, *Frälsebonderörelser i Halland och Skåne 1772–1776* (Uppsala: Scandinavian University Books, 1972).

8. For the dyadic structure see Anderson, Perry, *Lineages of the Absolutist State* (London: Verso, 2013), 185; Lindkvist, Thomas and Maria Sjöberg, *Det svenska samhället 800–1720: Klerkernas och adlens tid* (Lund: Studentlitteratur, 2003). For noble over-representation see Norrby, Göran, *Adel i förvandling: Adliga strategier och identiteter i 1800-talets borgerliga samhälle* (Uppsala: Department of History, 2005).

9. A great overview of the revisionists’ perspective is in Doyle, William, *The Origins of the French Revolution*. 2nd ed. (Oxford: Oxford University Press, 1988). Higgs’s argument is in Higgs, David, *Nobles in Nineteenth-Century France: The Practice of Inegalitarianism* (Baltimore and London: Johns Hopkins University Press, 1987); for the quotations here see pp. 41, 51, 53.

10. Clark, Samuel, ‘Nobility, Bourgeoisie and the Industrial Revolution in Belgium’, *Past and Present* 105 (1984): 140–75.

11. Wehler, Hans-Ulrich, *Das Deutsche Kaiserreich 1871–1918* (Göttingen: Vandenhoeck & Ruprecht, 1973); Stern, Fritz, ‘Prussia’, In *European Landed Élites in the Nineteenth Century*, edited by David Spring, (Baltimore and London: Johns Hopkins University Press, 1977), 45–67; Berdahl, Robert M, *The Politics of the Prussian Nobility: The Development of a Conservative Ideology, 1770–1848* (Princeton: Princeton University Press, 1988); Nipperdey, Thomas, *Germany from Napoleon to Bismarck, 1800–1866* (Dublin: Gill & Macmillan, 1996), 135–50.

12. On the British high nobility Cannadine, David, *The Decline and Fall of the British Aristocracy* (New Haven and London: Yale University Press, 1990); on the low nobility Mingay, G.E., *The Gentry: The Rise and Fall of a Ruling Class* (London and New York: Longman, 1976).

13. Johansen, Hans Christian, *En samfundsorganisation i opbrud 1700–1870, Dansk social historie 4* (Copenhagen: Gyldendal, 1979), 118–19; Jespersen, Knud, ‘Danmarks riges adel – En trued art. Tråkk af debatten om adelsbegrepet 1790–1934’, In *Folk og erhverv, tilegnet Hans Chr. Johansen*, edited by Anders Monrad Møller (Odense, 1995), 115–27, 121.
14. Berdahl, Robert M, *The Politics of the Prussian Nobility: The Development of a Conservative Ideology*, 1770–1848 (Princeton: Princeton University Press, 1988), 424.

15. For the background see Gadd, Carl-Johan, *Den agrara revolutionen 1700–1870. Det svenska jordbruks historia*, band 3 (Stockholm: Natur och Kultur/LT: förlag, 2002), 95–98. Carlsson’s argument is in Carlsson, *Ståndssamhälle och ståndspersoner*, 113; the counter-argument is in Winberg, Christer, *Grenverket. Studier rörande jord, släktskapssystem och ståndsprivilegier* (Stockholm: Institutet för rättshistorisk forskning, 1985), 164–82, 200. See also Norrby, *Adel i förvandling*, 317. The data on the sale of land are in Carlsson, *Ståndssamhälle*, 179, and the counterargument is shown in Norrby, *Adel i förvandling*, 74–75, 86, 314–17, and in Ulväng, *’Betydelsen av’.*

16. Norrby, *Adel i förvandling*, 305, shows that nobles kept a strong position in the bureaucracy.

17. Elmroth, *Från överklass till medelklass*. When calculating social mobility from father to son, Elmroth failed to consider the role of war-related mortality and the age of death, so that all the sons who died young automatically seem to have been socially mobile downward, while they may in fact have been on a strong career trajectory before it was cut short. Furthermore, Elmroth’s use of titles as an indicator of social status is a problem, since the nobles’ use of titles was in a genre of its own, with only loose connection to their actual economic status. Doing army service was part of a noblemen’s lifestyle even after the very war-intensive period before 1719, and they often used their military title long after they left the army. Nobles could rise in the ranks very quickly, and often left the army at the age of 30 or 35, but would still use the title they had received in different social circumstances 40 or 50 years later. This means that very wealthy landowners in the nineteenth century could go by titles such as ‘captain’, which in Elmroth’s social status scheme translates into quite low status compared to the generals and admirals of the seventeenth century, but really means only that the military became less important as a means of livelihood for the nobility from the seventeenth to the nineteenth century. Similarly, the very rich might also go by nondescript titles such as ‘mister’ (herr); thus, Elmroth’s title-oriented approach is not reliable. The complex use of military titles is discussed by Larsson, *’Att studera titlar’*. Norrby, *Adel i förvandling*, pp. 90ff discusses specifically nobles clinging to their military titles.

18. The nobility’s lack of competitiveness is claimed by Eriksson, *Svenska adelns historia*, 409. Norrby, *Adel i förvandling*, Ch. 6, partly embraces it. The comparison of Gripenstedt and Ekman is in Niskanen, *Godsägare, småbrukare och jordbrukets modernisering*.

19. Dewald, *The European Nobility*; O’Brien and Heath, ‘English and French Landowners’; Wasson, *Aristocracy and the Modern World*, 38–42.

20. Jonsson, Ulf, ‘Den jordägande aristokratin och moderniteten I Europa under 1800- och början av 1900-talet – En spänningsfylld och motsägelsefull relation’, *Historisk Tidskrift* 117, no. 2 (1997): 655–84; Olsson, Mats, *Storgodsdrift. Godsekonomi och arbetsorganisation i Skåne från dansk tid till mitten av 1800-talet* (Stockholm: Almqvist & Wiksell, 2002); Ulväng, Göran, *Herrgårdarnas historia: Arbete, liv och bebyggelse på uppländska herrgårdar* (Uppsala: Hallgren & Björklund, 2008).

21. Norrby, *Adel i förvandling*. His argument about the lack of wealth data is on p. 316. See also Clark, Gregory, *The Son Also Rises: Surnames and the History of Social Mobility*
The nobles’ economically rational turn away from the path of a military career in the 19th century is discussed by Norrby, *Adel i förandling*, 215.

22. Even though the problem still stands that the poor are under-represented; see Markkanen, ‘The Use of Probate Inventories’. This, however, is not much of a problem in this paper since practically all the nobles’ wills were probated.

23. See Appendix in Dribe et al. ‘Famine’ and Table 2.1 in Statistics Sweden, *Befolkningsutvecklingen*.

24. It is commonly known that there is a social bias in the registration of inventories, at least for the 18th century where people from lower social strata are often under-represented. This does not seem to be the case within the nobility; we have compared the number of inventories we have for each year to the calculated number of deaths among the nobility for the same years (the number of nobles from Carlsson, *Ståndssamhälle*, multiplied by the crude death rate from Statistics Sweden, *Befolkningsutvecklingen*) and the numbers are so close that it indicates almost complete coverage. For 1750 we have 209 inventories compared to a calculated 234, for 1800 215/227, for 1850 229/244, and for 1900 227/218.

25. The dataset for commoners consists of 25 inventories per benchmark year from 32 randomly selected rural districts (härader/tingslag) and 8 randomly selected cities, i.e. 1 000 inventories per year. The entire dataset is described in detail, and used to assess the evolution of overall wealth inequality in Sweden, in Bengtsson et al., ‘Wealth Inequality’.

26. Since the inventories were made after someone died, it happened of course that real estate sometimes had at this point already been shifted to the children of the deceased. When real estate ‘disappears’ from the inventory in this way, it was mostly manifested in the form of claims to a son or a daughter, which is thus found in the net wealth of the estate. In cases where the wealth of one of the spouses is reported separately, this has also been included in the net wealth of the estate, even if any part of the property has been entailed, and thus not brought to value in the probate in the ordinary sense.

27. For the content of British probate inventories see Lindert, ‘An Algorithm’. As mentioned above, one of the purposes of Swedish probate inventories was to resolve debts, so they are quite reliable in catching this category, and for this reason, they are also used by financial historians: Lindgren, Håkan, “The Modernization of Swedish Credit Markets, 1840–1905: Evidence from Probate Records”, *The Journal of Economic History* 62 (2002): 810–32.

28. Elgenstierna, Gustaf, *Den introducerade svenska adels ättartavlor*, 9 volumes (Stockholm: Norstedts, 1925–1936). Elgenstierna’s research, which maps person for person of every noble family introduced at Riddarhuset, has been digitalized at http://www.adelsvapen.com/genealogi.

29. On weighting, see Solon, Gary, Steven J. Haider and Jeffrey M. Wooldridge, ‘What are We Weighting For?’, *The Journal of Human Resources* 50 (2015): 301–16. On adjusting for age when using probate inventories, see, e.g., Piketty, Thomas Gilles Postel-Vinay and J-L. Rosenthal, ‘Wealth Concentration in a Developing Economy: Paris and France, 1807–1994’, *American Economic Review* 96 (2006): 236–56. Note that in our analysis, people below the age of 20 are not included. A methodological reason is that we had only a few data points for children, who were rarely recorded in probate inventories. A theoretical reason is that children in
general were rarely entitled to own wealth and would have little relevance in the analysis.

30. 1800 is the year that causes some concern here, because it presents an unusually low number of the high nobility. This result could be due to the overrepresentation of the low nobles among the younger age classes in the starting sample. This glitch may affect the shares of the total wealth of the nobility, making the results for 1800 not reliable. Although this is not ideal, we decided not to adjust for nobility rank at this stage and focused our analysis instead on the average wealth and the shares of different sources of wealth within groups, leaving the share of total wealth out of the analysis.

31. The CPI that we use is from Edvinsson, Rodney and Johan Söderberg, ‘A Consumer Price Index for Sweden 1290–2006’, In Historical Monetary and Financial Statistics for Sweden: Exchange Rates, Prices and Wages, 1277–2008, edited by Rodney Edvinsson, Tor Jacobson and Daniel Waldenström, (Stockholm: Ekerlids, 2010), 412–52. For GDP per capita see Krantz, Olle and Lennart Schön. ‘New Swedish Historical National Accounts since the 16th Century in Constant and Current Prices’. Lund Papers in Economic History 140, Lund University, 2015. For real wages in Stockholm see Söderberg, Johan, ‘Long-term trends in real wages of labourers’, in Historical Monetary and Financial Statistics for Sweden: Exchange Rates, Prices and Wages, 1277–2008, edited by Rodney Edvinsson, Tor Jacobson and Daniel Waldenström, (Stockholm: Ekerlids, 2010), 453–78; see also Gadd, Den agrara revolutionen, 345.

32. For the composition of the consumer basket for the CPI see Edvinsson and Söderberg, ‘A Consumer Price Index,’ Table 8.3, p. 433. On the potato, see Gadd, Den agrara revolutionen, pp. 255–57.

33. For discussion of differential impacts of price increases, see Hoffman, Philip T., David S. Jacks, Patricia A. Levin and Peter H. Lindert, ‘Real Inequality in Europe since 1500’, The Journal of Economic History 62 (2002): 322–55; The prices here are from Jörberg, Lennart, A History of Prices in Sweden 1732 – 1914. Volume I: Sources, Methods, Tables (Lund: CWK Gleerup, 1972), 633–711.

34. Isacson, Maths. Ekonomisk tillväxt och social differentiering 1680 – 1860: Bondeklassen i By socken, Kopparbergs län. Diss., Uppsala, 1979, who studies one parish in Kopparberg county from 1680 to 1860 finds (pp. 139–40, 219–25) for the nineteenth century that farms’ market values were about 50 per cent above the values in the inventories, and that market values for moveables were about 33 per cent higher. But credit was correctly valued in the inventories. Erikson, Marja. Krediter i lust och nöd: skattebönder i Torstuna härad, Västmanlands län, 1770 – 1870. Diss., Uppsala, 2018, studies one hundred of them in Uppland county and finds (pp. 129–134) that farms were valued about 50 per cent higher on the market than in the probate inventories c. 1770–1815. After 1815 the difference was about 10–20 per cent. Gadd, Carl-Johan. Järn och potatis: Jordbruk, teknik och social omvandling i Skaraborgs län 1750–1860. Diss., Gothenburg, 1983, for five parishes in Skaraborg county in the eighteenth century found that cows were undervalued by 30 per cent and that grain was slightly undervalued in the eighteenth century, but not at all after 1800 (p. 71).

35. We have also done the corresponding calculations with the estate data from the years 1873–77 used by Roine and Waldenström, ‘Wealth Concentration.’ These data are reported in three classes: nobles, urban, and rural. The number of nobles varies from 118 to 161 per year. This means that calculating the top...
1 per cent share within the nobility from these data is not very meaningful, since the top 1 per cent then consists of 1–2 people. However average wealth, the Gini coefficient and top 10 per cent share may be compared. The Gini coefficient within the nobility varies between 0.75 and 0.82, which is lower than our estimates of 0.88 in 1850 and 0.87 in 1900. The 1873–77 estimates are biased downwards since the data are not reported individually, as they are in our probate inventories, but rather within rather broad brackets. We follow Roine and Waldenström (2009) in assuming that all individuals within the brackets have the same wealth; naturally, this underestimates inequality. Our estimates of the top 10 per cent’s share of the wealth within the nobility from 1873 to 1877 varies between 56 and 72 per cent, which may be compared to our main estimates, based on our probate inventories dataset, of 81 per cent in 1850 and 82 per cent in 1900. Again, inequality is underestimated with the 1873–77 tax data. The great variations between the years also indicate that the tax data sample is too small for a study of the nobility. With these data the average wealth of nobles varies between 163,956 kr (in 1873) and 79,720 kr in 1874 and then 100,734 kr in 1875. Again, the instability of the estimates indicates that the estimates are not reliable, because of the small sample.

In our entire dataset of nobles and commoners, these are also the three richest in 1750: in fact, the first commoner on the ‘rich list’ comes only in 11th place. He was an iron works owner. The second commoner in the list is a Stockholm-based merchant, in 22nd place. In 1800, the first commoner in the rich list is in 18th place: she was the wife of a priest. In 1850, the six richest were all nobles but the seventh was a Stockholm-based merchant. The only other commoner in the top 20 was also a merchant, in Härnösand. In 1900 the wealthiest commoner comes in ninth place: a Norrköping-based merchant. There are three other commoners in the top 20, all of them factory owners, two based in Stockholm and one in Norrköping. Of course, we have a deliberate over-sampling of the nobles, so they are very likely to dominate.

36. Norrby, Adel i förvandling, 25.
37. Bagge, Gösta, Erik Lundberg, and Ingvar Svennilson, Wages in Sweden 1860-1930. Part One: Manufacturing and Mining (London: P.S. King, 1933), 48.
38. Englund, Peter, Det hotade huset: Adliga föreställningar om samhället under stormakstiden (Stockholm: Atlantis, 1989), 12–14; Magnusson, Lars, Sveriges ekonomiska historia (Stockholm: Rabén Prisma, 1997), 204.
39. Blum, Jerome, The End of the Old Order in Rural Europe (Princeton: Princeton University Press, 1978), 424.
40. Jonsson, ‘Den jordägande aristokratin’, 658.
41. Lindert, ‘Long-Run Trends’. See also Clark, ‘Nobility, Bourgeoisie’, on the Belgian case. Very little has been done on this issue in Sweden. Svensson, Agrara entreprenörer, Appendix 7, has estimated the price of a farm in southern Sweden from 1800 to 1870. For the period 1800–1850 he finds a price increase of 321 per cent, slightly lower than our estimate but basically showing the same trend. From 1850 to 1870 he finds that farm prices grew by 168 per cent. Owning a landed estate was generally good economic business, increasingly so during the 1800s, and big estates seem to have been more profitable than smaller ones: Olsson, Storgodsdrift.
42. The investment argument was made by Gårdlund, Svensk industrifinansiering, 157.
44. For a discussion of the nobles’ role in agrarian development, see Behre, ‘Frihetstiden och gustavianska tiden’. For the lightheaded nobles of the social history literature see Carlsson, Ständsamhälle; Elmroth, Från överklass; Norrby, Adel i förvandling, ch. 6.

45. Olsson, Storgodsdrift; Ulväng, Herrgårdarnas historia.

46. On Prussia, Wehler, Das Deutsche Kaiserreich, 45, 53–55. Eriksson, Svenska adelns historia, 409, claims that Swedish nobles were outclassed in competition. As Ellis Wasson, Aristocracy, 52–53, points out, the over-estimation of the bad consequences of the 1870s and 1880s for noble estate owners is typical of the nobility literature; beyond some colourful anecdotes, most noble landowners got through the crisis. On the effects of the Swedish tariffs, see Bohlin, “Income Distributional Consequences’.

47. Olsson and Svensson, in ‘The Landlord Lag’, compare yields on peasant farms and estates. They show that estates could have lower output per acre than small and more intensively worked family farms, but higher labour productivity.

48. In the order in which they are referenced: Carlsson, Ständsamhälle och ståndspersoner; Elmroth, Från överklass till medelklass; Norrby, Adel i förvandling; Eriksson, Den svenska adelns historia.

49. But our results chime well with the recent study by Clark, Son Also Rises, Ch. 2, that social mobility in Sweden has been overestimated and that the nobility is still a distinctively privileged group.

50. Statistics from Jordbruksverket. 2004 was the last year that the agricultural subsidies from the European Union were based on the simple area of arable land. A list of the top 50 recipients of farm subsidies, for any year, would basically look the same.

51. For agrarian history see Behre, 'Frihetstiden', 228–33; for political history, Nilsson, Elitens svängram.

52. For a critical discussion, see Hilson, ‘A Consensual Democracy’.

53. Jonsson, ‘Den jordägande aristokratin’; Olsson, Storgodsdrift; Ulväng, Herrgårdarnas historia; Norrby, Adel i förvandling; Clark, Son Also Rises.

54. France: Higgs, Nobles in Nineteenth-Century France. Prussia: Berdahl, Politics of the Prussian Nobility. Britain: Cannadine, Decline and Fall.

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