



LUND UNIVERSITY

The wealth of the Swedish peasant farmer class 1750–1900

Composition and distribution

Bengtsson, Erik; Svensson, Patrick

2018

Document Version:
Other version

[Link to publication](#)

Citation for published version (APA):

Bengtsson, E., & Svensson, P. (2018). *The wealth of the Swedish peasant farmer class 1750–1900: Composition and distribution*. (Lund Papers in Economic History. General Issues; No. 177).

Total number of authors:
2

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Lund Papers in Economic History



No. 177, 2018

General Issues

The wealth of the Swedish peasant farmer class 1750–1900: Composition and distribution

Erik Bengtsson & Patrick Svensson

Lund Papers in Economic History
ISRN LUSADG-SAEH-P--18/177--SE+26

© The author(s), 2018

Orders of printed single back issues (no. 1-65)
Department of Economic History, Lund University
Postal address: P.O. Box 7083, S-220 07 Lund, Sweden
Telephone: +46 46 2227475
Telefax: +46 46 131585

Full-text electronic issues (no. 58, 60, 61, 66--)
www.ekh.lu.se

Lund Papers in Economic History are published by the Department of Economic History, Lund University, Sweden. This series replaces the former series under the title *Meddelande från ekonomisk-historiska institutionen, Lunds universitet*. The change of name reflects the orientation of the series towards an international readership. The series is multilingual, but the majority of the working papers appear in English.

Lund Papers in Economic History include papers in the following topic areas:

General Issues

Development Economics

Education and the Labour Market

Population Economics

Lund Papers in Economic History are published as occasion arises, not at fixed intervals. Printed issues are distributed to libraries. From 1999 and onwards, full-text electronic issues are also available on www.ekh.lu.se. Those who would be interested in receiving information by email on new issues of **Lund Papers in Economic History** are requested to send an email message to Lund.Papers@ekh.lu.se.



LUND
UNIVERSITY

The wealth of the Swedish peasant farmer class 1750–1900: Composition and distribution*

Erik Bengtsson[♣] and Patrick Svensson[♣]

Abstract

Using about 1,730 probate inventories, this paper studies the wealth of peasant farmers in Sweden for the years 1750, 1800, 1850 and 1900. The Gini coefficient for the farmers' wealth grew from 0.46 in 1750 to 0.73 in 1900. Average wealth grew rapidly, tripling over the nineteenth century. Looking in greater depth at four local areas (Kullings, Sjuhundra, Lagunda, and Bara hundreds), we show that over the period the diversity of farmers' wealth grew, as did their financial sophistication; borrowing and lending patterns became more complex and the use of banks and other institutions grew while personal financial transactions became rarer. Farmers who lived close to the major grain markets in Stockholm and the mining district Bergslagen were wealthier than others, as were farmers on fertile plains and, in 1900, those living in coastal areas. Increased market access by 1900 – in terms of cities and foreign demand – meant that farmers well-placed in terms of geography and infrastructure benefited much more than farmers on what became the periphery, as regional inequality within the farmer class increased. Over the nineteenth century land prices increased much more in some areas than in others, but in the country as a whole they rose steeply.

Keywords: inequality, wealth, Sweden, peasant farmers, rural society, living standards, probate inventories

JEL codes: N00, N33, N53, Q1

* This paper was presented at the conference of the Social Science History Association, Chicago, in November 2016; the Economic History Society annual conference, London, 31 March–2 April 2017; a workshop in Uppsala in June 2017 and at the Rural History conference in Leuven, in September 2017. We are grateful to all the participants and especially to Håkan Lindgren, our discussant in Uppsala, for comments. Work on the paper has been financed by grants from Handelsbankens forskningsstiftelser and the Swedish Research Council.

[♣] Department of Economic History, Lund University, and Economic History Unit, Gothenburg University. erik.bengtsson@ekh.lu.se

[♣] Department of Urban and Rural Development, Swedish University of Agricultural Sciences, and Department of Economic History, Lund University. patrick.svensson@slu.se

1. Introduction

The peasant farmer (in Swedish: *bonde*) is a uniquely important figure in Swedish history-writing and self-understanding. While the modernization of agriculture in Britain from the seventeenth century on entailed a concentration of ownership and polarization between agrarian owners and workers (Allen 1992), in Sweden the agrarian revolution was to a large extent carried out by peasant farmers (Svensson 2001; Wiking-Faria 2009). Thus, that staple of discussion in English agrarian history, “the disappearance of the small landowner” (e.g. Beckett 1984; Thompson 1994), is a non-issue for Swedish historians. Before 1850, about 90 per cent of Swedes lived in the countryside, and four fifths of the rural families in 1750 held some land (Gadd 2000). In other words, the peasant farmers were a key group in society.

Much attention has been devoted to the rise in living standards of the peasant farmer class, in the broad sense. The broadest discussion concerns the role of farmers in the development of agriculture and agricultural production, with growing surpluses and the distribution of produce (Herlitz 1974; Gadd 1983; Köll 1983; Gadd 2000). This involves a discussion of productivity on peasant-operated farms compared with that on estates, where recent research emphasizes that the peasants were indeed productive (Svensson 2001; Wiking-Faria 2009). But many historians have instead focused on stratification within the farmer group. This has been built on local studies in particular (Herlitz 1974; Martinius 1977; Isacson 1979; Morell 1980; Olausson 2004; Lindström 2008). Most of these studies have started out with the assumption of an initially equal peasantry and have increasingly found inequalities, although the timing of this development has differed in different regions.

The living standards of farmers have also been in focus for more purely economic reasons. An influential interpretation of Swedish industrialization after c. 1750 claims that it was driven by rising living standards and consumption in the agrarian sector, rather than by exports to Britain and other European countries (Schön 1979). In this interpretation, the farmers’ standard of living becomes a key variable in understanding new consumption patterns and new markets for consumer goods.

A third strand of the literature on the living standards of farmers focuses more specifically on the cultural and social aspects of their consumption (i.e. Lilja, Murhem, and Ulväng 2007; Tengroth Ulväng 2007). This literature asks such questions as: did farmers imitate city dwellers and burghers or other higher social groups in their consumption, or were their tastes more peculiar to the group? Literature of this kind focuses on the specific types of

belongings, such as textiles or iron tools, and thus becomes close to the literature of material culture (cf. Hallén 2003).

From all these perspectives, it is useful to examine the living standards of peasant farmers in Sweden during the eighteenth and nineteenth centuries. The major contribution of the present paper is that we study the Swedish peasant farmer class as a whole, using a nationally representative sample. Our data include 400+ probate inventories for farmers for each of the benchmark years 1750, 1800, 1850 and 1900. The data include all types of wealth, not only land but also personal items such as clothing, furniture and tools. We analyse the overall development as well as the regional distribution, and we also have an especially detailed sample of 120 active farmers from four well-located areas in 1800 and 1900. Using the detailed sample we can make a very fine-grained analysis of all the types of wealth.

2. Peasant farmers and their society, c. 1750–1900

The peasant farmers in Sweden constituted a social class defined by their cultivation of taxed land and their non-noble status. The peasant farmers who owned their land or were tenants under the crown had their own political representation in the then Swedish parliament (the Diet of the Estates), whereas the lower social groups in the countryside were represented through the peasant farmers. Tenants of the nobility were considered to be represented by their manorial landlords.

2.1 The agricultural revolution and the move to commercial agriculture

In 1700, about one third of arable land was owned by independent farmers (freeholders)¹, one third by the nobility (which took up about 0.5 per cent of the population), and one third by the Crown (Gadd 2000, pp. 16–17). About 85 per cent of the land was worked by peasant farmers, so a large share of the peasant farmer class was tenant farmers rather than freeholders. From 1719 to 1770 and again after 1789, tenants of the crown had the right to buy from the crown the land that they worked (Heckscher 1941, p. 217); this greatly increased the share of freeholders in the peasant farmer group. From 1789 they also got the right to buy certain parts of noble land, a right extended in 1809 to encompass all noble land. In 1845, the

¹ How far freeholders actually owned their land in the early 18th century is still under debate. Herlitz (1974) claims that in practice they were as dependent upon their social superiors as tenants were, since all surplus from production was absorbed by taxes and rents. He further argues that this changed during the 18th century since the tax and rent share of output fell (cf. Winberg 1985, pp. 7–8). Gadd (2000, p. 71) also points to limitations in the farmers' property rights in terms of hunting and forestry, as well as the sale of land. Winberg (1985) provides a very valuable study of the individualization of property rights in the 18th and 19th centuries.

freeholders' share of ownership of land had increased to about 60 per cent.² The nobility's share had decreased to 17 per cent, while non-noble landlords owned 12 per cent. After significant "privatizations", the Crown retained only 11 per cent (Gadd 2000, p. 204). As in 1700, of course, the peasant farmers tilled more land than the 60 per cent that they owned: Gadd estimates this to have been 80 per cent of the whole.

Besides the purchase of land, decreasing tax rates in the eighteenth century also improved the living standards of farmers. The amount of land tax was fixed in relation to a given piece of land, and this meant that, with growing production, the proportion paid in tax declined (Herlitz 1974; Gadd 2000:197–198; Olsson 2005). It also meant that the value of agricultural land increased. The decreasing tax rate can be seen as one pre-condition for the agricultural revolution. Others were the possibility for tenants under the crown to buy their farms and become freeholders and the legislation permitting peasant farmers to apply for enclosure, thereby ending the era of the open-field system (e.g. Gadd 2000; Svensson 2006). Regarding the economics of peasant farming, the most important debate for our period is how active the peasant farmers were in the so-called agrarian revolution, when farm productivity increased. This happened in Sweden from c. 1750 to 1850 (Gadd 2000). In the Swedish context, the debate has largely focused on the degree to which the landowning nobility led the way to improved farming methods and productivity. The older "from above" view saw the nobility as very much the leaders of development, as initiators of supposedly important reforms, such as enclosures, and with returns to scale from the production on the manorial demesnes. The most recent research, however, stresses rather the entrepreneurial spirit of the peasant farmers and the gradually higher productivity of their farms than that of the manors (Svensson 2006; Wiking-Faria 2009; Olsson and Svensson 2016). We might have expected rapidly growing wealth from 1750 to 1900, but for our paper the interesting question arises whether the farmers participated as effectively as the nobles in this "agrarian revolution" – regionally, by type of locality (forest versus plains) as well as individually.

(The paragraph builds on Morell 2001, pp. 84-108), it can be said that in the second half of the nineteenth century, especially its final quarter, Swedish agriculture became commercialized. Cities grew and exports grew, and with growing demand, farmers could expand their production for sale and increasingly free themselves from subsistence-based production. With the influx of cheap American and Russian grains in the 1870s, there was a significant move towards dairy farming. A key task of this paper is to capture the

² The measure referred to here is "mantalssatt jord", where *mantal* is a tax assessment of land, see Gadd 2000:204.

development of farmers' wealth and their within-class inequality in this very dynamic period of Swedish agriculture.

2.2 Stratification and inequality

The single most influential study of rural stratification in Sweden in the 18th and 19th centuries is probably Christer Winberg's (1975) study of population growth and proletarianization in Western Sweden. Winberg's focus is not on inequality within the farmer group, but rather on the growth of the proletarian and semi-proletarian groups located below the farmers in the rural class hierarchy. Using Wohlin (1909), he shows that while in 1750 four fifths of rural families owned at least some land, in 1870 this was true for only one half of these families. Between 1750 and 1870 the number of farmer families increased by about one fifth, but the number of proletarian and semi-proletarian families almost quintupled. In eighteenth century Sweden, being a rural servant was a phase in the life-cycle of farmers' children until they were old enough to inherit a farm or buy one. During the nineteenth century, however, the excess of population in relation to farms, and the rising price of farms, meant that the rural servant remained one for life (Lundh 1999; Gadd 2000, p. 80).

There are several other studies of stratification within the peasant farmer class; the problem is that they are limited to very local designs. The exception is Nils Wohlin (1912), who used poll-tax registers and registers of taxation values to assess the stratification within the peasant farmer class for Sweden (except the most northern part) from 1750 to 1900. It is not possible to compare 1750 with later years, because the sources are not the same, but from 1810 to 1900 the inequality of landholding grew substantially and continuously in Sweden, mainly due to the increasing numbers of very small landholdings.³ Since the 1970s there has been a stream of local studies which, as Sjöberg (2003) remarks, find increased differentiation over time. Among them we have Isacson (1979) on one parish in a protoindustrial area of central Sweden (Dalarna) from 1680 to 1860 with equalization during the eighteenth century and then growing inequality after 1800; Ågren (1992) who found proletarianization and differentiation, including the development of a class of wealthy farmers, in one agrarian district and one mining district in Dalarna from 1650 to 1850; Martinus' (1977) argument that major peasant farmers started to distance themselves from ordinary peasants in about 1830; and Olausson (2004) on western Wermland from the 17th century to the mid-19th century, starting with relatively large inequality even in the seventeenth century, which

³ Even for this period, it is a little unclear what sources are used and whether the years are fully comparable. See Winberg 1975:180.

increased in the 18th century and continued from 1800 yet more rapidly, with the growth of proletarian and semi-proletarian groups. An exception to the tendency to find growing inequality is Lindström (2008), who studies a mid-Swedish parish from 1620 to 1820 and finds marked stratification, with wealthy farmers dominating the local community, but no actual increase in inequality within the class of landed peasants.

For Scania, the most southern province of Sweden, a study on both distribution of land and differences in actual production is at hand (T. Bengtsson, Olsson, and Svensson 2011). Looking at 36 parishes from around 1700 up to 1935, using poll-tax registers for land and flexible tithes for production, its authors find that during the 18th century land distribution was becoming more equal but inequality in production also grew somewhat. In the nineteenth century, after the enclosures, inequality rose, both in terms of land and in terms of production. Other studies of the same region have shown wide differences in the development of production that reflect natural conditions and property rights (Olsson and Svensson 2010). It was above all in the fertile plains that production grew most rapidly and among the peasant farmers it was the freeholders who experienced the greatest increase in production. This resulted in a growing inequality not only in land but also in income between certain groups of peasant farmers.

3. Data and methodology

As notes above, the main limitation of most previous studies is that they are detailed studies of smaller localities. This has shed much light on Swedish rural society, but the problem is that that they do not lend themselves easily to conclusions about the whole country. Unlike them, this paper samples localities all over the country in order to derive conclusions that cover the entire class of Swedish peasant farmers.

3.1 To use probate inventories

Our source is probate inventories. Probate inventories were made mandatory in Sweden in 1734 and were used to divide the estate among heirs, repay debts, and to pay a small estate tax (0.25 per cent) that contributed to poor relief (cf. Kuuse 1974; Markkanen 1978; Lindgren 2002). Because of these manifold uses, there were strong incentives to probate the deceased. In international comparisons, the Swedish probate inventories are very rich. They include all types of wealth, from real estate to loans to clothes and other minor properties. (For studies of

Swedish farmers using probate inventories, see Kuuse 1970; Isacson 1979; Gadd 1983; Erikson 2018.)

The probate inventories are archived by rural judicial district, *härad* or *tingslag*. There were 282 such districts in Sweden and we have a sample of 32 of them. They were randomly sampled after a basic geographical stratification by population: we had 17 districts from the populous south (Götaland), 9 from middle Sweden (Svealand), and 6 from the less populous north (Norrland). We determined benchmarks from 1750, 1800, 1850 and 1900. In these years, we extracted 25 random probate inventories from the relevant districts; when there were too few inventories in the chosen year we completed the sampling by taking inventories from adjacent districts, so that we had in the end 100 inventories for each district-pair in the sample. To do this, we used inventories from 8 towns for the same years (100 inventories for each town) and inventories for the nobility which were held in separate registers. In total, the sample consists of almost 5,000 inventories.

All the sampled individuals were classified in a class schedule based on their title and occupation (found either in the probate inventories or in church death books); in total sixteen social groups based on their titles and/or occupations. We then merged these into four main groups: the nobility, the bourgeoisie, the peasant farmers, and the workers and lower middle class.⁴ This paper focuses on the peasant farmer group. This meant that in total the sample included 522 farmers in 1750, 452 farmers in 1800, 387 farmers in 1850, and 369 farmers in 1900. Often these people are called “bonde” (farmer) in the sources (probate inventories, death books) but sometimes they have other titles: commonly, “married man”, “widower”, “wife”; when they do, we have inferred the social status from other economic information in the sources. Farmers could also be called “ex-soldier” or in allusion to the tasks they performed in local society: “church warden”, “local judge”. They could also be called “proprietor”, “tenant”, “cultivator”, etc. Overall, “bonde” was common at the beginning of the period, transitioning to a many instances of “proprietor” in 1900, very closely corresponding with what we know about the changing language about farmers in this period (Aronsson 1992, p. 312).

In the Swedish literature, the most discussed methodological issue in using probate inventories is the practice of evaluation (cf. Erikson 2018, p. 48). For real estate, taxation

⁴ These are (1) Nobility, (2) Factory owners, (3) Clergy, (4) Persons of rank, (5) Teachers and students, (6) Bourgeoisie, (7) Farmers, (8) Rural artisans, (9) Tradesmen, (10) Crofters, (11) Health care workers, (12) Soldiers, (13) Other in towns, (14) Cottagers, (15) Workers in factories, (16) Servants/labourers. We then merge these into four main groups: Nobility (1), Bourgeoisie (2+3+4+5+6+9), Peasant farmers (7), and Workers and lower middle class (8+10+11+12+13+14+15+16).

values were used, and the taxation values sometimes lagged market values. For 1750 this should not be an issue, but when market values rose significantly during the nineteenth century, the taxation values did not keep up with them. A major reform took place in 1861-62 and then the taxable value of rural real estate more than doubled overnight. Lindgren (2017) in a recent paper argues, from a comparison of taxation values and auction prices, that the market prices for rural real estate around 1850 were twice that of the taxable value. For urban real estate it had never been much of a problem and after the 1861-62 reform the issue disappeared. Waldenström (2017, Appendix pp. 13-14, Table B2) discusses the same issue in his calculation of Swedish national wealth. He suggests a sales-to-taxable-value price ratio for farms of 1.5 in 1810, 1.45 in 1850 and 1.2 in 1900. We also use this adjustment, which seems reasonable.⁵

3.2 The composition of the häradar

The key natural-geographic divide for historical studies of Swedish agricultural history is the distinction between forest-dominated areas and plains-dominated areas (cf. Gadd 1983; Hoppe and Langton 1994; Wiking-Faria 2009). With more productive soil, the plains areas, found in the very south and in a band from the great Lake Vänern eastwards across Lake Vättern to the east coast and around Lake Mälaren east to Stockholm, typically produced grain. Noble owners were more common there, particularly in the south and in the Mälaren area. Forest-dominated areas had less productive soil and animal products and handicrafts were more important for its agrarian groups (Gadd 2000, pp. 23–42). The 37 districts⁶ in the dataset include both plains and forested areas, and from all parts of the country. From the most fertile plains, the Västgöta plains, Östgöta plains, Scania and the areas around Stockholm, we have the Kullings district on the Västgöta plains, Skärkinds on Östgöta plains, Bara in Scania, and Lagunda in Uppland. We also have several districts with less fertile soil, which are much more forested, such as Hova in northern Västergötland, Vista in northern Småland, and so on.

⁵ We have also done the calculations using Lindgren's proposed adjustment upwards by 100 per cent in 1850. This does not make much difference to estimates of inequality (e.g. Tables 1, 2), but does smooth out the growth of wealth 1800–1900 (Tables 3, 4), so that more of it occurs from 1800 to 1850.

⁶ 37 instead of the original 32, as a result from using adjacent ones in the early period as well, to get enough probate inventories for each area in each year.

3.3. Method

Predictably, the old and the wealthy are over-represented in probate inventories (cf. Lindgren 2002). For this reason, in our quantitative analysis, the inventories are adjusted to the age and social structure of the living population. This is done by finding the ages of all deceased persons in the death registers, and through using newly estimated social structures of Sweden for all benchmark years (see E. Bengtsson et al. 2018b). These are then cloned by age and social status to reach a representative sample for the Swedish population.

4. Analysis: wealth and its distribution, 1750–1900

4.1 *Inequality within the peasant farmer class*

Table 1 shows wealth inequality by social group for our four benchmark years. Inequality within the peasant farmer class is low in 1750 with a Gini coefficient of 0.46. From then on it increases heavily: to 0.58 in 1800, 0.67 in 1850 and 0.73 in 1900.

Table 1. Within-class inequality and total inequality, Sweden 1750–1900

| | 1750 | 1800 | 1850 | 1900 |
|--------------------------------|------|------|------|------|
| Nobility | 0.75 | 0.70 | 0.87 | 0.87 |
| Bourgeoisie | 0.78 | 0.82 | 0.89 | 0.90 |
| Peasant farmers | 0.46 | 0.58 | 0.67 | 0.73 |
| Workers and lower middle class | 0.70 | 0.63 | 0.70 | 0.73 |
| Total | 0.76 | 0.80 | 0.84 | 0.89 |

Source: Probate inventory database; see Bengtsson et al (2018b) for discussion. Sample adjusted for age and social group. Dependent variable is net wealth. Rural real estate values are adjusted upwards by 50 per cent in 1800 and 1850 and 20 per cent in 1900, following the discussion in section 3; the same adjustment is used in Tables 2–4.

Is this low or high inequality? Gadd (2011, p. 122) describes the Swedish peasantry in 1800 as “relatively homogenous” in economic terms. Of course, the term “relatively homogenous” is slippery – relative to what? The country which has produced a very great deal of quantitative research on rural stratification in the nineteenth century is the United States, which like Sweden had a very significant peasant farmer class, in some regions at least. Atack and Bateman (1981) have found a Gini coefficient of 0.63 for the rural part of the northern United States in 1860. Unfortunately they did not elaborate how much of this inequality consisted of inequality between farmers and how much depended on differences between propertied and non-propertied groups. Yang (1984) estimates Gini coefficients in 1860 for

free farmers in the South and North of the US; for the South, he found a Gini coefficient of 0.48 while for the North it varied between 0.46 and 0.56, depending on the wealth definition used.⁷ Soltow (1971) finds a Gini coefficient among farmers in Wisconsin in 1860 of 0.69. To sum up, the distribution of wealth within the peasant farmer class in Sweden in 1750 and 1800 was roughly at the same level as among farmers in the United States in the mid-19th century. In 1850, however, within-class inequality was higher in Sweden. (As in the US of course, the total picture of rural inequality and landholding inequality looks quite different if we do not consider farmers only, but also plantation owners/estate owners at the top and landless workers at the bottom of the social structure.) Maybe we should not be surprised that Swedish farmers were less equal than their counterparts in the US, given the “frontier” nature of agriculture in the Western part of the US. Unfortunately, it is very difficult to get wealth inequality estimates for farmers in other European countries during the period investigated.⁸

There are good reasons to believe that there were significant regional differences. In Table 2 below we see the Gini coefficient per broad region: Götaland (the south), Svealand (middle Sweden) and Norrland (the north).

In 1750, Svealand’s farmers, including those in the Stockholm region, were a more unequal group than their colleagues to the north and to the south. They were also wealthier, which accords well with Söderberg’s (1993) emphasis on the greater degree of market activity in eastern Sweden, the central area of Svealand. Until 1900, however, inequality increased very rapidly in the north and the south, and by 1900 Götaland held the farmer class with most inequality. By then, farmers in Svealand were still wealthier than their peers in Götaland and Norrland but the former had closed in and diminished the gap substantially. Overall rural wealth was also highest in this southern part of the country. The early stratification process and the relative stagnation correspond closely with the East-Swedish pattern discussed among others by Söderberg (1993). For rural society overall, it seems that inequality stagnates when overall wealth does so and that wealth grows faster as inequality increases, as many theories of historical inequality would argue (Van Zanden 1995; Milanovic, Lindert, and Williamson 2011).

⁷ Galenson and Pope (1989, p. 16) find for Appanoose County in rural Iowa in 1860 that the lower half of the population of households held only 13 per cent of total wealth while the top decile held 38 per cent. In Trempeleau County, Wisconsin, the lower half had 18 per cent and the top decile 39 per cent, while in some Vermont townships the numbers were 14 and 38, respectively.

⁸ Most of the English debate is about dispossession, enclosures and whether English farmers owned any land at all. Finlay’s (2001) overview of newer German agrarian history says nothing about quantitative inequality estimates.

Table 2. Inequality and wealth by region for peasant farmers and for all rural residents

| Panel A. | | | | Panel B. |
|-----------------------------|---------------------------------------|--------------------------------------|--------------------------------------|---|
| Peasant farmers only | | | | Country-wide |
| | Götaland | Svealand | Norrland | All peasant farmers <i>Freeholders</i> |
| 1750 | 0.46 (0.41–0.51) 268 kr. N=317 | 0.62 (0.36–0.87) 515 kr. N=125 | 0.41 (0.34–0.47) 362 kr. N=79 | 300 kr. 356 kr. |
| 1800 | 0.58 (0.55–0.62) 401 kr. N=244 | 0.64 (0.58–0.71) 497 kr. N=134 | 0.58 (0.50–0.66) 295 kr. N=70 | 449 kr. 643 kr. |
| 1850 | 0.67 (0.63–0.71) 656 kr. N=212 | 0.69 (0.63–0.75) 715 kr. N=118 | 0.58 (0.51–0.66) 605 kr. N=51 | 719 kr. 1041 kr. |
| 1900 | 0.74 (0.67–0.81) 1786 kr. n=210 | 0.68 (0.57–0.79) 2143 kr. N=89 | 0.68 (0.59–0.77) 1273 kr. N=70 | 1450 kr. 2080 kr. |
| All rural residents | | | | All rural residents |
| 1750 | 0.67 (0.64–0.70) 305 kr. | 0.73 (0.70–0.75) 572 kr. | 0.49 (0.47–0.50) 275 kr. | 0.68 (0.67–0.70) 377 kr. |
| 1800 | 0.72 (0.72–0.73) 303 kr. | 0.73 (0.72–0.74) 402 kr. | 0.51 (0.50–0.51) 246 kr. | 0.70 (0.70–0.71) 319 kr. |
| 1850 | 0.77 (0.77–0.78) 477 kr. | 0.80 (0.79–0.80) 532 kr. | 0.77 (0.76–0.78) 408 kr. | 0.78 (0.78–0.78) 480 kr. |
| 1900 | 0.83 (0.83–0.84) 810 kr. | 0.79 (0.78–0.80) 733 kr. | 0.78 (0.77–0.78) 711 kr. | 0.81 (0.81–0.82) 770 kr. |

Note. Calculations for peasant farmers on raw data; country-wide estimates are on data adjusted for age and social class. 95 per cent confidence intervals in parentheses. Wealth in 1800 prices using the consumer price index (CPI) from Edvinsson and Söderberg (2010). In 1800 5.7 kronor translated into one London pound £ (Edvinsson 2010).

4.2 The development of real wealth

Previous results have shown that in 1750, farmers on average had 70 per cent of the wealth of the average Swede. In 1800 the average peasant farmer had absolute parity with the average Swede, in 1850, 30 per cent more wealth, and in 1900 parity once again (Bengtsson et al 2018b). So, in a sense this class constituted typical Swedes (as regards average, not median), while the nobility in 1750 were 60 times richer than an average Swede (19 times richer in 1900), and the workers and lower middle class had 20 to 40 per cent of the wealth that an

average Swede had. The figures indicate that there was a rise in the position of the peasant farmers, relative to the movement of the other classes, at least from 1750 to 1800 and 1850, and then a relative fallback to 1900 when the wealth of the bourgeoisie grew very rapidly. Our results in Panel B of Table 2 show the development of farmers' wealth from 1800 to 1900 in real prices. Wealth for the average farmer grew by 60 per cent from 1800 to 1850 and then doubled from 1850 to 1900, increasing by 101 per cent. For freeholders, wealth grew by 62 per cent from 1800 to 1850, and by 99.8 per cent from 1850 to 1900.⁹

Overall rural real estate, i.e. land and buildings, was an important part of the wealth of the farmer group. In 1750, the farms represented on average 14.7 per cent of the farmer's wealth, and this grew over time, to 36.2 per cent in 1800, 42.2 per cent in 1850 and 39.3 per cent in 1900. This calculation, however, includes tenants with zero value in rural real estate. So one reason for rural real estate to be a growing share of assets is, as discussed above, the increase in the proportion of peasant farmers becoming freeholders through buying their farms from the crown, or, after 1809, buying noble land. Looking only at those who owned land, it was 38.5, 62.0, 70.3 and 68.1 per cent in the four benchmark years respectively. Another reason for the growing share of wealth attributed to rural real estate is that the prices of land increased when the market for land, and the demand for agricultural products, expanded. Previous research shows that land prices per *mantal* (the judicial unit) grew by 377 per cent from 1800 to 1850 and 303 per cent from 1850 to 1900 while the consumer price index "only" grew by 146 per cent and 29 per cent respectively (Bengtsson et al 2018c, Table 5). Furthermore, even though the freeholders constituted a large part of the peasantry, legal frameworks and inheritance practices before the late eighteenth century restricted the land market. From this time on and above all during the early nineteenth century a more developed market appeared (Dribe and Lundh 2005; Svensson 2013).

Clearly, then, real wealth increased and part of this was connected to land. Now, in Swedish historiography the peasant farmers played a role in the emerging home-based early industrialization through specializing in agriculture and buying industrial products, e.g. textiles and iron tools (Schön 2012). To be able to say something on this we need to decompose wealth further. One way is to look at the wealth consisting of movables, which

⁹ One could argue that we are mixing apples and oranges by looking at the farmer class as a whole, i.e. including young people maybe in the servant phase of life and old retired people along with active farmers. Using the Waldenström adjustments, 1800 prices, and only looking at people of 25–59 years of age, the average wealth for all farmers is 452 kr in 1800, 735 kr in 1850 and 1505 kr in 1900. For freeholders: 625 kr, 992 kr, and finally 2021 kr. In other words, adjustment makes very little difference, and for the freeholders, average wealth actually fell slightly.

include both textiles and tools. It seems that the real value of movables increased on average by 40 per cent between 1800 and 1850 and by two and a half times in the period 1850 to 1900. So, the increase was somewhat slower than for rural real estate but followed the same pattern. These results confirm and extend previous findings on the investment by peasant farmers in specific items. Both for western and southern Sweden, regional studies have shown that the farmers invested in means of transport (e.g. better wagons containing iron parts) during the agricultural revolution (Gadd 1983; Bergenfeldt, Olsson, and Svensson 2013). The increased use of iron among the peasant farmers has also been found in a study of Per Hallén (2003). To explore this further, we will zoom in on certain regions and hundreds.

5. A regional and local focus on farmers' wealth

5.1 Regions

It may be assumed that the increase in real wealth was larger in certain geographical areas than in others. Two regions that stand out in this respect are the plains and the areas adjacent to large cities and commercial trade, the former due to their natural conditions, permitting surplus production and therefore increasing income (cf. Olsson and Svensson 2010): the latter due to demand and commercial structures. Furthermore, Morell (2001, 84–108) stresses that the profitable export of butter from the 1880s was led by the southern parts of the country; the transition to dairy farming was evident in Norrland also, but there it was more often production for the local markets. Kuuse's (1970) study of the mechanization of Swedish agriculture 1860–1910 shows that this process was much faster in Uppland county, close to Stockholm and in the southern Malmöhus county than in the inland forested region of Kronoberg county.

In accordance with this, we divided the sample into six different regions: (a) farmers on the plains, who would have benefited from the high quality of the soil; (b) farmers close to Stockholm and Bergslagen, the mining district, which was an important market for food products, who would have had the best local markets for their produce; (c) farmers in inland Sweden close to small towns; (d) farmers in coastal areas; (e) farmers in northern Sweden, who might suffer from the unfriendly climate (Gadd 2000, pp. 39–42); and finally (f) farmers in wooded areas.¹⁰ Table 3 shows the net value and movables for farmers in our six regions in

¹⁰ The plains hundreds are Kullings, Skärkinds, Ale, Valkebo and Bara, all in the southern part of Sweden. The Stockholm & iron hundreds are Sjuhundra, Norrbo, Söderbärke, Våla, Folkare, Simtuna and Lagunda, all in the Stockholm region and central region. The inland hundreds are Vista in the south, Sundbo and Kils in Svealand, and Bygdeå in the north. The coastal hundreds are Bjäre, Östra, Himle, Faurås, Inlands Torpe and Inlands Södre in the south and on the west coast. The northern hundreds are Arvidsjaur, Piteå, Enångers, Delsbo and Våla, all

1800, 1850 and 1900. Obviously the confidence intervals are very broad since the sample for each region is small, but we believe that the estimates still are interesting. They should be seen as indicative, pointing forwards for further research.

Table 3. Net value and value of movables for farmers by region

| | Plains | Sthlm/Iron | Inland | Coastal | North | Woods | All |
|------------------|------------|-------------|------------|------------|------------|------------|-------------|
| Net value | | | | | | | |
| 1800 | 508 | 534 | 329 | 312 | 277 | 476 | 413 |
| | (347-668) | (343-725) | (241-417) | (244-401) | (165-389) | (366-586) | (359-468) |
| | N=59 | N=91 | N=66 | N=88 | N=50 | N=77 | N=448 |
| 1850 | 463 | 752 | 657 | 574 | 605 | 883 | 668 |
| | (207-720) | (468-1036) | (289-1024) | (392-755) | (354-858) | (602-1164) | (561-774) |
| | N=55 | N=79 | N=50 | N=83 | N=39 | N=65 | N=381 |
| 1900 | 1898 | 2440 | 1714 | 1513 | 1423 | 1621 | 1775 |
| | (595-3201) | (1133-3746) | (770-2658) | (383-2645) | (692-2155) | (999-2244) | (1351-2198) |
| | N=61 | N=57 | N=55 | N=79 | N=50 | N=56 | N=369 |
| Movables | | | | | | | |
| 1800 | 200 | 210 | 162 | 140 | 199 | 150 | 176 |
| | (164-237) | (164-256) | (130-193) | (97-183) | (149-249) | (125-175) | (160-192) |
| 1850 | 243 | 297 | 56 | 185 | 380 | 265 | 240 |
| | (132-355) | (205-389) | (-230-344) | (140-230) | (196-566) | (197-333) | (189-291) |
| 1900 | 658 | 1107 | 333 | 882 | 468 | 546 | 678 |
| | (309-1009) | (-83-2298) | (126-540) | (244-1522) | (253-683) | (321-771) | (440-917) |

Note: This covers all peasant farmers. SEK in 1800 prices. 95 per cent confidence intervals in parentheses.

As regards net wealth, the peasant farmers in the plains and the Stockholm area were indeed richer than their counterparts in other areas. However, surprisingly, the woodland farmers were almost as rich in 1800. And in 1900 the wealth of the inland farmers was not far from that among the farmers in the plains. Significantly, however, regional differences may be due to differences in land ownership and tenure. In certain districts, as in southern Sweden and central Sweden, the nobility owned large parts of the land and hence most peasant farmers were tenants, whereas in other parts freeholders dominated. Since rural real estate is a source

in the north. The forest hundreds are Norra Vedbo, Hova, Kinds, Ydre and Kinnevalds, all in the southern parts of the country.

of wealth, but not an indication of wealth accumulation derived from the consumption and potential demand for industrial products, we also look at movables.

In 1800, the plains and the Stockholm area had the highest level of wealth as measured by movables, and so, surprisingly, had northern Sweden. Here there are relatively large differences in the development over time; farmers in the Stockholm area and particularly in coastal districts showed the greatest increase of wealth in movables. In 1900, the farmers in the Stockholm area were the wealthiest in terms of movables, followed by coastal farmers, and those in the plains. This points to communications and trade as important factors in the peasant farmer's acquisition of movables but, of course, also, in part, to the possibilities of generating a surplus in agriculture. All six of our coastal hundreds are in the south of Sweden, five on the west coast and one on the east coast. The five on the west coast all had good connections by sea with the growing markets of the fast expanding industrial cities of Gothenburg and Malmö. At the beginning of the nineteenth century farmers from this area were known as very poor (Löfgren 1977); they migrated seasonally for work to the plains in the very south, or to the herring fisheries on the west coast (Utterström 1957, pp. 151-177). With urbanization they evidently benefited from growing markets. More surprising is a relatively strong development during the 19th century among the forest area farmers. One possible factor is the development of forest-based industry (planks, pulp, paper) in the second half of the nineteenth century (Schön 2012).

However, as can be seen from Table 3, the variation within each region is very wide, connected to the within-inequality in the peasant-farmer class. This makes the averages discussed above less certain and they should be treated with some caution. Still, the overall development of the regional differences, and the direction in wealth accumulation both between regions and over time fits well with the general economic development in the regions found in previous studies (Utterström 1957; Söderberg 1993).

To summarize: there were important regional differences in farmers' wealth and in their marketization. In 1900, coastal farmers in the South had on average movables valued at 89 per cent more than their Northern counterparts had. The same year, the movables among plains farmers were almost twice as valuable (98 per cent) as the ones belonging to the inland farmers. This indicates rising wealth and rising inclusion in the consumption revolution among certain parts of the farmer class. In the very interesting locally focused previous literature on farmers' wealth (Isacson 1979; Gadd 1983; Lindström 2008), this dimension is missing by design. Of course the regional inequality matters in a different way – it does not affect local power relations, which previous research has been rather interested in. But it is

interesting as one aspect of total inequality, and helps us understand why the overall estimates of inequality, such as in Table 1, increased so much (cf. Bengtsson et al. 2018c).

5.2 The development in four wealthy hundreds

There are then clear regional differences in wealth accumulation and to move further into what this accumulation consisted of, we chose to look in more detail at the development in four hundreds (*härader*), which, due to their location and natural geography, could be expected to be expansive. Lagunda, north-west of Stockholm on the road between the towns of Uppsala and Enköping, is one of the hundreds representing the region close to the capital and lies between this and the highly commercialized mining area of Bergslagen. The second hundred is Sjuhundra härad, close to Stockholm, but north-east along the coastal way. The third hundred, Kullings, is on the western plains, close to the Gothenburg market. Finally, Bara hundred is in the south on one of the most fertile soils of the country and close to the city of Malmö, with the largest outward grain-shipping harbor in Sweden. For these four hundreds, we added to the original sample of peasant farmers to make a total of 30 inventories from active farmers¹¹ for each hundred in each of the years 1800 and 1900, covering the period of the agricultural revolution and the first industrial one. The share of land being noble, and therefore not eligible for ownership by a peasant farmer in 1800, is highest in Sjuhundra with 80 per cent, followed by Bara with around 50 per cent and in Kullings and Lagunda at around 40 per cent. This is reflected in our sample, where the number of farmers owning their farm was 12 in Sjuhundra in 1800 and 15 in 1900, 8 in Bara in 1800 and 22 in 1900, 24 in Kullings in 1800 and 24 in 1900 and 21 in Lagunda in 1800 and 25 in 1900. In other words, Lagunda and Kullings were freeholder-dominated areas, while in Sjuhundra and to some extent Bara the nobility owned most of the land. Land distribution was partially affected by this but also by land productivity and the organization of agricultural laborers. In the east Sweden hundreds (Lagunda and Sjuhundra) there was a large share of farmers with substantial landholdings as well as those with medium sized landholdings but almost no smallholders. This did not change much from 1800 to 1900. Agricultural workers lived mainly on crofts or were landless. In the case of Kullings, land was extremely equally distributed on medium-sized farms in 1800 but over time a growing share of smallholders emerged. In 1800 most farmers in Bara had large or medium-sized farms but in 1900 the share of smallholders had grown substantially and made up most of the farmers. This was due to

¹¹ We define an “active” farmer in the probate inventories as one who had draught animals as well as tools at the time of his/her death.

two reasons: that high soil productivity allowed for the splitting of farms; and that agricultural labor to a large extent worked on very small farms, non-subsistence, forcing them to supplement their income by wage labor (Wohlin 1911). Finally, although all four hundreds were situated on the plains the share of arable land differed, due to natural conditions and soil quality. In Bara 76 per cent of the land was arable whereas this share was 53 in Lagunda, 22 in Sjuhundra and 21 in Kullings (BiSOS 1895). In the overall sample the share was 23.

This restricted sample is much more detailed and will thus help us understand the nuts and bolts of the transformation in the nineteenth century farming economy. For these hundreds, we break down the general category of “movables” into something much more fine-grained. We look specifically at the role of cash, gold, silver, brass, copper (including liquor burning equipment), tin, iron, wooden products, bed linen, clothing, utensils, furniture, tools, books, animals, farming tools, and a residual category.

Table 4 shows basic facts about the 120 farmers. Over the nineteenth century mean wealth grew by 429 per cent in Lagunda, 393 per cent in Sjuhundra, 1273 per cent in Kullings and 755 per cent in Bara. The wealth levels should be compared to the national average for farmers, of 449 SEK in 1800 and 1450 SEK in 1900.¹² In 1800, Lagunda and Bara were about par with the national average, Sjuhundra was 37 per cent richer, and Kullings was much poorer. But in 1900, Sjuhundra and Kullings were about twice as wealthy as the national average, Lagunda 70 per cent richer, and Bara almost three times richer. This indicates the increasing regional disparity in the Swedish farmer class over this period of rapid agrarian growth, in line with the regional differences shown in Table 3. One factor which seems to lie behind this divergence is the development of land prices. Land prices grew significantly in nineteenth-century Sweden; E. Bengtsson et al. (2018a, Table 5) report what amounts to an increase in the price per *mantal* from 2,039 kr to 13,522 kr in 1800 prices, or a real increase of 563 per cent. In Lagunda and Sjuhundra, land prices grew slower than this (in Sjuhundra from a level above the national average), but in Kullings and Bara they grew much, much faster.¹³ This should be related to the fact that Kullings was in the vicinity of Gothenburg, and was

¹² The farmers' wealth here can be compared to Sundbärg's (1910, Table 67) wealth per person data. According to Sundbärg, average (taxed) real estate wealth per person in Sjuhundra in 1907 was 827 kr, in Lagunda 1229 kr, in Kullings 693 kr, and in Bara 1734 kr.

¹³ The general trend, based on the results in Table 4, is in accordance with the development shown in Wohlin (1911, tabellbilaga G) for the hundreds. Here taxed property values 1813-1900 increase by 217% in Sjuhundra, by 223% in Lagunda, by 536% in Kullings and by 728% in Bara. The reason we get very large increases in mean land prices for Kullings and Bara is the fact that market values are not proportional to the *mantal* concept, or to the size of land; smaller units have a higher value per *mantal* and as discussed above farms were split in these hundreds and smallholders formed the majority of farmers there in 1900 (see Svensson 2001, pp. 62-66 and 261-263 for a discussion on land prices and size of farms).

connected in the 1860s by railroad to this city and harbor, and that Bara was between the fast-growing towns of Lund and Malmö. The Stockholm region already had high levels of market integration in the early nineteenth century (e.g. Erikson 2018), but the western plains including Kullings lacked them; market integration came later there. The value of animals increased about 5-6-fold in all four hundreds.¹⁴

Table 4. Development of farmer wealth in four hundreds, 1800–1900

| | | Mean wealth (median) <i>Freeholders</i> | Mean movables <i>Freeholders</i> | Average share movables | Average share real estate <i>Freeholders</i> | Mean land price, per <i>mantal</i> Growth % | Average animal value, <i>share</i> | Average financial value, <i>share</i> |
|-----------|------|--|--|------------------------------|---|--|---|--|
| Lagunda | 1800 | 470 (216) 574 | 255 267 | 56 % | 40 % 56.6 % | 1 326 (n=12) | 95 kr 24 % | 49 kr, 5 % |
| | 1900 | 2458 (950) 2807 | 1353 1234 | 40 % | 55 % 66.5 % | 7 762 (n=24) 485 % | 616 kr 18 % | 235 kr, 5 % |
| Sjuhundra | 1800 | 614 (269) 1273 | 236 302 | 69% | 23 % 57.2 % | 2 537 (n=10) | 78 kr 29 % | 127 kr, 8 % |
| | 1900 | 3028 (872) 5612 | 1025 968 | 60 % | 32 % 64.9 % | 9 271 (n=15) 265 % | 501 kr 32 % | 412 kr, 7 % |
| Kullings | 1800 | 220 (130) 310 | 134 127 | 66 % | 26 % 56.1 % | 782 (n=8) | 56 kr 28 % | 44 kr, 7 % |
| | 1900 | 3022 (1286) 3564 | 654 711 | 31 % | 56 % 70.6 % | 13 674 (n=21) 16 485 % | 251 kr 14 % | 939 kr, 12 % |
| Bara | 1800 | 477 (218) 875 | 362 412 | 78 % | 16 % 59.5 % | 3 667 (n=3) | 132 kr 33 % | 83 kr, 6 % |
| | 1900 | 4081 (1680) 5203 | 1174 1027 | 35 % | 53 % 71.9 % | 49 630 (n=20) 12 534 % | 553 kr 16 % | 524 kr, 13 % |

Note. 30 farmers for each hundred. All level variables are in 1800 prices.

¹⁴ There are regional differences in the kinds of animals they held. In Kullings the cattle held a larger share, while horses were more important in Bara. This difference is in line with what Gadd (2000, p. 170) says about the western plains.

The category of movables is very wide, in that it includes consumer goods such as bed linen and furniture as well as what amounted to capital goods for the farmers: tools, animals, wagons, ploughs and harrows and the like, and grain. A division of movables into household goods and capital (or producer) goods shows that the former category's share of farmers' wealth declined steeply from 1800 to 1900. In 1800 the share was 20 per cent in Lagunda, 29 per cent in Sjuhundra, 25 per cent in Kullings, and 31 per cent in Bara; in 1900 it had fallen to 9, 13, 10 and 8 per cent respectively. The share of capital goods held up better in the Stockholm area but fell in the south and west: from 33 to 31 per cent in Lagunda, from 39 to 47 in Sjuhundra, 41 to 21 in Kullings, and 48 to 25 in Bara. That it decreased in Kullings and Bara is of course related to the immense growth of land prices there. The farmers' stock of tools and farming machinery did however become richer and more advanced.¹⁵ The shares are low compared to those computed for Kent and Cornwall 1600-1749 by Overton (n.d.), who finds levels of around 40 per cent. But for Hertfordshire, Lincolnshire and Worcestershire 1550-1749, Overton finds that the value of capital goods (defined as furnaces, harrows, ladders, malt-mills, ploughs and gear, and spinning wheels) increases more than that of consumer goods (cf. Overton 2000).

The wealth of the farmers diversified in this period. Not one of the 120 had a bank account in 1800 – loans were informal – but in 1900 more than a third of them had savings in banks: three farmers in Lagunda, eight in Sjuhundra, 13 in Kullings and 17 in Bara. In 1800 metal items and bed linen played an important role¹⁶, but their importance had fallen by 1900. Glass and porcelain were non-existent in 1800 but common in 1900.¹⁷ Furniture also became more important in 1900. The share who owned (registered) books fell from 18 to 11 in Lagunda and from 16 to 11 in Sjuhundra, but increased from 1 to 7 in Bara, and from 5 to 16 in Kullings.

Table 5 shows the stock of animals in our four hundreds in 1800 and 1900. The number of horses stagnated or decreased over the century, while the number of cows increased in each hundred except Kullings, where the number was already very high. This highlights the reduced need for draught animals with improved plows and harrows, and the increase in dairy

¹⁵ Notably, in the inventory of one of the active Bara farmers, the 42-year-old tenant Anders Persson, the standard category of "ploughing tools" (*åkerredskap*) was complemented by the novel category of "machinery" (*maskiner*). This included a seeder (*såningsmaskin*) and a thresher (*tröskverk*).

¹⁶ The relatively high value of the bed linen accords well with Gadd's (2000, p. 64) point that expensive bed linen worked as eye-catching status consumption in Sweden's eighteenth century agrarian society.

¹⁷ Rosén (2004, p. 245) finds that in the eighteenth century most people in Halland had only wooden vessels, while the wealthy also had tin cups, etc. During the nineteenth century, porcelain starts to appear in the probate inventories there.

production. In Sjuhundra in 1900, 20 of 27 investigated farmers owned threshers. Only one owned a mower (*slåttermaskin*) but this was more common in Lagunda. Threshers were widespread in Bara, too, as were harvesters (*skördemaskin*) and sowing machines (*såningsmaskin*). Horse rakes (*hästräfsa*) were common in the mid-Swedish hundreds as well as in Bara. The declining number of animals is in line with Gadd's investigation (1983, pp. 119-120) over the 1750-1850 period, where the number of oxen in his West Swedish investigation area halved from about 4 to about 2 over a hundred years, and the number of sheep decreased from 9.8 to 6.8. Beyond increased mechanization, another reason for the decreasing size of animal stock was the growth in size, strength and yield per animal (cf. Olsson 2005, pp. 129-130). Despite the fact that the number of animals decreased, the value of the animals increased – for the horses by five to eight times in our four hundreds. This indicates the increasing strength of each animal, as well as the increased profitability for the agricultural produce. Threshers were the most common machine, followed by mowers, horse rakes; this accords rather well with Kuuse's (1970, pp. 49-50) findings for Uppland in 1890 and 1910. It also reflects the desire to save labor during increased competition in this area with industry, targeting the most labor-intensive tasks in agriculture: harvesting and threshing (Morell 2011, pp. 195-197). The farmers in our sample were better equipped than the farmers from the relatively poor region of Kronoberg in Kuuse's (pp. 51-52) sample, where almost no farmers owned harvesters, and threshers and horse rakes also were uncommon; only threshers were common among the Kronoberg farmers.

Table 5 shows that Swedish farmers grew wealthier over the nineteenth century but not necessarily by getting larger farms and more animals. Instead, increased land values (cf. Table 4) because of (a) growing productivity (cf. Olsson and Svensson 2010) and (b) more market demand from cities and the export sector meant that ordinary farmers by 1900 could be quite well off. At the same time, inequality grew rapidly in the rural sector, both because of proletarianization (Table 2, Panel B) and, within the farmer class, because of the growth of very small farms and because of the lagging growth in the peripheral regions.

Table 5. Stock of animals in 1800 and 1900

| | | Mean # Median # Value | | | | | |
|-----------|------|-----------------------------|-------|-------|------|-------|------|
| | | Horses | Fä | Sheep | Pigs | Geese | Hens |
| Sjuhundra | 1800 | 3.0 | 5.2 | 7.0 | 4.3 | | 1.4 |
| | | 3 | 5 | 6 | 4 | | 0 |
| | | 31.5 | 32.2 | 7.1 | 6.5 | | 0.1 |
| | 1900 | 3.5 | 9.7 | 3.5 | 1.8 | | 8.0 |
| | | 3 | 7 | 3 | 1 | | 8 |
| | | 257.0 | 250.7 | 14.1 | 25.7 | | 3.2 |
| Lagunda | 1800 | 3.5 | 7.0 | 6.9 | 6.8 | 2.0 | - |
| | | 3.5 | 6 | 5 | 5 | 0.5 | |
| | | 41.7 | 37.7 | 7.4 | 7.2 | 0.7 | |
| | 1900 | 2.9 | 11.8 | 2.4 | 2.9 | - | 21.1 |
| | | 2.5 | 8.5 | 1.5 | 2 | | 15.5 |
| | | 235.1 | 312.6 | 14.2 | 47.5 | | 5.4 |
| Bara | 1800 | 6.0 | 5.1 | 7.8 | 8.0 | 3.5 | - |
| | | 6 | 5 | 8 | 7 | 3 | |
| | | 62.3 | 46.2 | 10.7 | 11.5 | 1.6 | |
| | 1900 | 2.5 | 9.0 | 3.1 | 4.4 | 0.6 | 9.2 |
| | | 2 | 6 | 2 | 2 | 0 | 0 |
| | | 236.3 | 238.7 | 14.2 | 28.2 | 0.3 | 2.2 |
| Kullings | 1800 | 1.6 | 8.4 | 9.8 | 2.9 | - | - |
| | | 1 | 8 | 7.5 | 2 | | |
| | | 14.5 | 33.1 | 3.9 | 1.4 | | |
| | 1900 | 1.6 | 5.3 | 2.2 | 1.4 | - | 7.0 |
| | | 1 | 4 | 2 | 1 | | 6 |
| | | 93.8 | 131.1 | 8.5 | 23.8 | | 2.1 |

Note. Values in 1800 SEK.

6. Conclusions

Economically, Swedish peasant farmers were a rather homogenous and equal group in 1750. During the next 150 years, however, stratification within the group increased. Farmers became more wealthy everywhere, but the growth in living standards was unequally distributed over the country. Those who benefited more than others were farmers in locations close to the major cities, harbors and railroads, and farmers on more productive soil. With the growing demand for agricultural products in cities and abroad, farmers who were well-placed

in terms of natural conditions and in terms of geography and infrastructure benefited immensely. This regional difference has been missed by the previous, very locally focused literature.

We have illustrated the uneven wealth accumulation by a close study of farmers in four well-off hundreds. This in-depth study has shown the importance of the great growth of land values, connected to the increasing demand for agricultural produce, and the increased productivity connected to stock-raising and early mechanization. Here we must consider that the number of farmers with exceedingly small farms grew considerably in the nineteenth century. According to Wohlin (1912, pp. 788-799), the share of farms with less than 1/8 *mantal* for middle and southern Sweden was 25.5 per cent in 1840 and 35.9 per cent in 1865; the share grew further in the last third of the century. This increased inequality within the farmer class, and created a class of hybrid farmer-workers who had to work for wages (in saw-mills, building roads etc.). But in certain regions, one could probably also live off smaller farms with increased productivity and profitability per unit.

For further research, one key task is to map wealth accumulation and distribution in some poorer regions. In our in-depth study, we deliberately focused on four wealthy areas, to grasp the process of wealth accumulation where it was most acute. Studying poorer, more remote areas – such as those labeled “inland”, “forest” or “north” in the regional study here – in the nineteenth century, and especially over the second half of it, with the approach used here would yield new insights into the fate of the farmer class in this very dynamic period. The static focus on the farmer class per se used in this study should then also ideally be combined with a focus on entry into and exit from the farmer class, i.e. mobility to the cities and social mobility into the proletarian and semi-proletarian groups (as in Winberg 1975). The aggregate focus of most of this paper prevents us from going into such detail, but new local/regional studies could make use of this national study for context and combine its macro insights with the sensitivity to the local and fine-grained analysis made possible by a more local design. It would then be interesting to know whether the share of farmers in the population shrank more rapidly where farmers’ wealth accumulation was slower than in other areas, if social mobility downwards was more common, and if emigration was more common. This study has provided a piece of the puzzle in understanding the well-being and personal economics of the Swedish farmer class over the 1750–1900 period, but certainly more studies are needed.

References

- Allen, Robert C. (1992), *Enclosure and the Yeoman* (Oxford: Clarendon).
- Aronsson, Peter (1992), 'Bönder gör politik: Det lokala självstyret som social arena i tre smålandssocknar, 1680–1850', Doctoral dissertation in history (Lund University).
- Atack, Jeremy and Fred Bateman (1981), 'Egalitarianism, Inequality, and Age: The Rural North in 1860', *Journal of Economic History*, 41 (1), 85-93.
- Beckett, J.V. (1984), 'The Pattern of Landownership in England and Wales, 1660-1880', *The Economic History Review*, 37 (1), 1-22.
- Bengtsson, Erik, Anna Missiaia, Mats Olsson, and Patrick Svensson (2018a), 'Aristocratic Wealth and Inequality in a Changing Society: Sweden, 1750–1900', *Scandinavian Journal of History*, published online 12 June 2018.
- (2018b), 'Wealth Inequality in Sweden, 1750–1900', *The Economic History Review*, 71 (3), 772-94.
- Bengtsson, Tommy, Mats Olsson, and Patrick Svensson (2011), 'Inequality and Economic Development in Sweden, 1700-1930: A Microeconomic Approach', (Lund: Lund University).
- Bergensfeldt, Fredrik, Mats Olsson, and Patrick Svensson (2013), 'Wagons at work, or a transport revolution from below: the case of southern Sweden, 1750–1850', *The Agricultural History Review*, 61 (1), 63-82.
- Dribe, Martin and Christer Lundh (2005), 'Retirement as a Strategy for Land Transmission: a Micro Study of Pre-industrial Rural Sweden', *Continuity and Change*, 20 (2), 165-91.
- Edvinsson, Rodney (2010), 'Foreign Exchange Rates in Sweden 1658–1803', in Rodney Edvinsson, Tor Jacobson, and Daniel Waldenström (ed.), *Exchange Rates, Prices, and Wages, 1277–2008* (Stockholm: Ekerlids), 238-90.
- Edvinsson, Rodney and Johan Söderberg (2010), 'The Evolution of Swedish Consumer Prices, 1290–2008', in Rodney Edvinsson, Tor Jacobson, and Daniel Waldenström (ed.), *Historical Monetary and Financial Statistics for Sweden: Exchange rates, Prices and Wages, 1277–2008* (Stockholm: Ekerlids förlag), 412–52.
- Erikson, Marja (2018), 'Krediter i lust och nöd: Skattebönder i Torstuna härad, Västmanlands län, 1770–1870', Doctoral thesis in Economic History (Uppsala University).
- Gadd, Carl-Johan (1983), 'Järn och potatis: jordbruk, teknik och social omvandling i Skaraborgs län 1750-1860', Doctoral dissertation (Gothenburg University).
- (2000), *Den agrara revolutionen 1700-1870* (Det svenska jordbrukets historia, III; Stockholm: Natur och Kultur/LT förlag).
- (2011), 'The agricultural revolution in Sweden, 1700-1870', in Janken Myrdal and Mats Morell (ed.), *The Agrarian History of Sweden: 4000 BC to AD 2000* (Lund: Nordic Academic Press), 118-64.

- Galenson, David W. and Clayne L. Pope (1989), 'Economic and Geographic Mobility on the Farming Frontier: Evidence from Appanoose County, Iowa, 1850–1870', *NBER Working Paper Series on Historical Factors in Long-run Growth*, 4 (Cambridge, MA: National Bureau of Economic Research).
- Hallén, Per (2003), 'Järnets tid: Den svenska landsbygdsbefolkningens järninnehav och järnkonsumtion 1750–1870', Doctoral dissertation in Economic History (Gothenburg University).
- Heckscher, Eli (1941), *Svenskt arbete och liv: Från medeltiden till nutiden* (Stockholm: Bonniers).
- Herlitz, Lars (1974), 'Jordegendom och ränta: Omfördelningen av jordbrukets merprodukt i Skaraborgs län under frihetstiden', Doctoral dissertation in economic history (Gothenburg University).
- Hoppe, Göran and John Langton (1994), *Peasantry to Capitalism: Western Östergötland in the Nineteenth Century* (Cambridge: Cambridge University Press).
- Isacson, Maths (1979), 'Ekonomisk tillväxt och social differentiering 1680–1860: Bondeklassen i By socken, Kopparbergs län', Doctoral dissertation (Uppsala University).
- Kuuse, Jan (1974), 'The Probate Inventory as a Source for Economic and Social History', *Scandinavian Economic History Review*, 22 (1), 22-31.
- Köll, Anu-Mai (1983), 'Tradition och reform i västra Södermanlands jordbruk 1810-1890: Agrar teknik i kapitalismens inledningsskede', Doctoral dissertation (Stockholm University).
- Lilja, Kristina, Sofia Murhem, and Göran Ulväng (2007), 'Auktionshandeln i stad och på landsbygd: Varucirkulation i Enköping med omnejd under 1700- och 1800-talen', in Christer Ahlberger and Pia Lundqvist (ed.), *Varans vägar och världar: Handel och konsumtion i Skandinavien ca 1600-1900* (Skrifter från Historiska institutionen i Göteborg, 9; Gothenburg: Department of History).
- Lindgren, Håkan (2002), 'The modernization of Swedish credit markets, 1840-1905: Evidence from probate records', *Journal of Economic History*, 62 (3), 810-32.
- (2017), 'Om fastighetsvärderingar i svenska bouppteckningar under 1800-talet', *Paper presented at the Swedish Economic History Meeting, Stockholm, 12-14 October 2017* (Stockholm: Stockholm School of Economics).
- Lindström, Jonas (2008), 'Distribution and Differences: Stratification and the System of Reproduction in a Swedish Peasant Community 1620–1820', Doctoral dissertation (Uppsala University).
- Lundh, Christer (1999), 'The Social Mobility of Servants in Rural Sweden, 1740–1894', *Continuity and Change*, 14 (1), 57–89.
- Löfgren, Orvar (1977), *Fångstmän i industrisamhället : en halländsk kustbygds omvandling 1800-1970* (Lund: Liber).

- Markkanen, Eero (1978), 'The use of probate inventories as indicators of personal wealth during the period of industrialization: the financial resources of the Finnish rural population, 1850-1911', *Scandinavian Economic History Review*, 26 (1), 66-83.
- Martinius, Sture (1977), *Peasant Destinies: The History of 552 Swedes Born 1810-12* (Stockholm: Almqvist & Wiksell).
- Milanovic, Branko, Peter H. Lindert, and Jeffrey G. Williamson (2011), 'Pre-industrial Inequality', *The Economic Journal*, 121, 255-72.
- Morell, Mats (1980), 'On the Stratification of the Swedish Peasant Class', *Scandinavian Economic History Review*, 28 (1), 15-32.
- (2001), *Jordbruket i industrisamhället: 1870-1945* (Stockholm: LTs förlag).
- Olausson, Peter (2004), 'Rikedom, makt och status i bondesamhället: Social och ekonomisk skiktning i västra Värmland från 1600-talet till 1800-talets mitt', Doctoral dissertation (Karlstad University).
- Olsson, Mats (2005), *Skatta dig lycklig: Jordränta och jordbruk i Skåne 1660-1900* (Hedemora: Gidlunds).
- Olsson, Mats and Patrick Svensson (2010), 'Agricultural growth and institutions: Sweden 1700-1860', *European Review of Economic History*, 14 (2), 275-304.
- (2016), 'The landlord lag – productivity on peasant farms and landlord demesnes during the agricultural revolution in Sweden 1700-1860', *Scandinavian Economic History Review*, 64 (1), 55-71.
- Overton, Mark (2000), 'Prices from Probate Inventories', in Tom Arkell, Nesta Evans, and Nigel Goose (ed.), *When Death Do Us Part: Understanding and Interpreting the Probate Records of Early Modern England* (Oxford: Leopard's Head Press), 120-43.
- (n.d.), 'Household wealth, indebtedness, and economic growth in early modern England', (University of Exeter).
- Rosén, Christina (2004), 'Stadsbor och bönder: Materiell kultur och social status i Halland från medeltid till 1700-tal', Doctoral dissertation in archaeology (Lund University).
- Schön, Lennart (1979), *Från hantverk till fabriksindustri: Svensk textiltillverkning 1820--1870* (Lund: Arkiv).
- (2012), *An Economic History of Modern Sweden* (London: Routledge).
- Sjöberg, Maria (2003), 'Marknad, bönder och kön: En fråga om likhet och skillnad', *Historisk tidskrift*, 123, 299–315.
- Soltow, Lee (1971), *Patterns of Wealthholding in Wisconsin since 1850* (Madison, MA and London: University of Wisconsin Press).
- Sundbärg, Gustav (1910), *Ekonomisk-statistisk beskrifning öfver Sveriges olika landsdelar* (Emigrationsutredningen, Bilaga V: Bygdestatistik; Stockholm: P.A. Norstedt & söner).

- Svensson, Patrick (2001), 'Agrara entreprenörer. Böndernas roll i omvandlingen av jordbruket i Skåne ca. 1800-1870', Doctoral dissertation in Economic History (Lund University).
- (2006), 'Peasants and Entrepreneurship in the Nineteenth-Century Agricultural Transformation of Sweden', *Social Science History*, 30 (3), 387-429.
- (2013), 'Land market, property rights, and agricultural transformation in Southern Sweden, 1680-1870', in G. Béaur, P. R. Schofield, C-M. Chevet, and M-T. Perez Picazo (ed.), *Property Rights, Land Markets, and Economic Growth in the European Countryside (Thirteenth – Twentieth Centuries)* (Turnhout: Brepols Publishers), 455-73.
- Söderberg, Johan (1993), *Civilisering, marknad och våld i Sverige 1750-1870: En regional analys* (Stockholm Studies in Economic History, 18; Stockholm: Almqvist & Wiksell International).
- Tengroth Ulväng, Marie (2007), 'Bondehushåll i förändring: Kläder som uttryck för socioekonomisk ställning i 1800-talets Härjedalen', in Christer Ahlberger and Pia Lundqvist (ed.), *Varans vägar och världar: Handel och konsumtion i Skandinavien ca 1600-1900* (Skrifter från Historiska institutionen i Göteborg, 9; Gothenburg: Department of History), 57-74.
- Thompson, F.M.L. (1994), 'Introduction', in F.M.L. Thompson (ed.), *Landowners, Capitalists, and Entrepreneurs: Essays for Sir John Habakkuk* (Oxford: Clarendon), 1–22.
- Utterström, Gustaf (1957), *Jordbrukets arbetare: Levnadsvillkor och arbetsliv på landsbygden från frihetstiden till mitten av 1800-talet. Första delen* (Stockholm: Tiden).
- Waldenström, Daniel (2017), 'Wealth-income Ratios in a Small, Developing Economy: Sweden, 1810–2014', *Journal of Economic History*, 77 (1), 285-313.
- Van Zanden, Jan Luiten (1995), 'Tracing the Beginning of the Kuznets Curve: Western Europe during the Early Modern Period', *Economic History Review*, 48 (4), 643-64.
- Wiking-Faria, Pablo (2009), 'Freden, friköpen och järnplogarna: drivkrafter och förändringsprocesser under den agrara revolutionen i Halland 1700–1900', Doctoral dissertation (Gothenburg University).
- Wohlin, Nils (1909), *Den jordbruksidkande befolkningen i Sverige 1751–1900* (Emigrationsutredningen, bilaga IX; Stockholm: P. A. Norstedts & söner).
- (1911), *Emigrationsutredningen bilaga XII: Jordstyckningen* (Stockholm: Norstedts).
- (1912), 'Den svenska jordstyckningspolitiken i de 18:e och 19:de århundradena jämte en öfversikt af jordstyckningens inverkan på bondeklassens besutenhetsförhållanden', Doctoral dissertation (Stockholms högskola).
- Yang, Donghyu (1984), 'Notes on the Wealth Distribution of Farm Households in the United States, 1860: A New Look at Two Manuscript Census Samples', *Explorations in Economic History*, 21, 88–102.
- Ågren, Maria (1992), 'Jord och gäld: Social skiktning och rättslig konflikt i södra Dalarna ca 1650–1850', Doctoral dissertation (Uppsala University).