The living standards of the labouring classes in Sweden, 1750–1900: evidence from rural probate inventories*

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Abstract

We present new estimates of the living standards among the rural labouring classes in Sweden from 1750 to 1900. Starting with a database of more than 1,000 probate inventories of rural, landless and semi-landless people from the years 1750, 1800, 1850 and 1900, we study the development for crofters in particular. In a sub-sample of 120 probate inventories we map in great detail the material items of the crofter households, focusing especially on two categories: the means of production (animals and agricultural tools) and consumption goods. The crofters held over time fewer means of production but more consumption goods: glass, porcelain, mirrors, and clocks become more common. However, the decrease in means of production indicates a greater dependence on wage labour, rising land prices made it more difficult to become a farmer, and housing standards stayed poor. The study shows the usefulness of probate inventories to study labouring people's living standards.

The development of the living standards of the labouring classes is among the most important debates in economic history, and the debate continues to be very lively today.¹ The purpose of this paper is to study working-class living standards in Sweden from 1750 to 1900. We want to know who obtained the fruits of economic development; whether the living standards of the lower classes improved with the so-called agrarian revolution of rising agricultural output after 1750 and how the labouring classes' living standards evolved in an era of industrialization, urbanization and emigration to America, all of which all took off after 1870.

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¹ For example John Hatcher and Judy Stephenson, 'Introduction', in Hatcher and Stephenson (eds), Seven centuries of unreal wages: The unreliable data, sources and methods that have been used for measuring standards of living in the past (2018), pp. 1–14. We focus on the rural lower classes and especially the group of crofters, i.e. people who were tenants of small areas of land, not enough to subsist on; instead they worked in various ways for the landowner (corvée labour) and for other employers. Studying crofters in detail is relevant since the Swedish population was 90 per cent rural in 1800, and 80 per cent in 1900.² By 1800 the crofters as a class formed a larger share of the population than the total of urban dwellers. The methodology chosen has been to study probate inventories, i.e. lists (with valuations) of the goods owned and bequeathed by the deceased. This has more typically been used to study middle-class people, but as Muldrew has observed in England, while it is true that the poorer classes were less likely to be probated than the wealthier, in absolute numbers their probate inventories are a rich source for the working classes too.³ We also show, comparing church death books with the probates, that the proportion of lower-class people who were probated was surprisingly high in Sweden. We have gathered about 1,000 inventories for the rural landless and semi-landless that date from our four benchmark years: 1750, 1800, 1850 and 1900.

Our approach to the probate inventories starts with estimates of the evolution of living standards, building on the way that the crofters' 'real wealth' – i.e. net wealth deflated by a consumer price index – develops over time. However, we believe that this approach has flaws, due to the difficulties of constructing historical CPIs, as well as the assumption that people bought, rather than produced, food. Therefore, the main purpose of the paper is to take a more 'item-oriented' approach to the inventories.

The contribution of the paper, then, is twofold. The first – empirical – contribution of the paper is to give a partly new picture of Swedish working-class living standards from 1750–1900. The second contribution is methodological: to show what a household economy approach based on probate inventories can add to the real wages-dominated literature on historical living standards. The aim is to combine the comparability of the 'real wage' or, in our case, 'real wealth' approach, with the realism of a more granular, item-oriented approach. While our empirical study is concerned with Sweden, a relatively peripheral case in the literature on historical living standards, it has methodological and analytical implications for the general debate.

Ι

The leading methodology in research on historical living standards is the study of real wages, namely, the money wage of a group of workers (typically building workers in long-run studies) deflated by the price of grain, or by a more complex basket of goods. This parsimonious approach has great advantages because it facilitates comparisons of living standards between countries and over time, as in Allen's influential approach.⁴

² This according to the official statistics: SCB (Statistiska Centralbyrån), *Historisk statistik för Sverige. Del 1. Befolkning* 1720–1967 (1969), p. 46. By this definition, only established cities and towns count as 'urban', which underestimates the level of urbanization in 1900, since new industrial towns emerged over the nineteenth century. The degree of urbanization in 1900 was nevertheless low.

³ On the middle class see for example Lorna

Weatherill, Consumer behaviour and material culture in Britain, 1660–1760 (1988). Craig Muldrew, Food, energy and the creation of industriousness: Work and material culture in agrarian England, 1550–1780 (2011), p. 13.

⁴ Robert C. Allen, 'The Great Divergence in European wages and prices from the Middle Ages to the First World War', *Explorations in Econ. Hist.* 38 (2001), pp. 411–47.

The real wage approach has great strengths and has since the 1980s dominated research, but it also has some recognized problems.⁵ One is that we very rarely have information both on wage rates and on *available hours for working*.⁶ Of course, a good hourly rate is not of much help if it rewards only a few hours. The availability of work varies over time and it is difficult to control for this when studying wages as indicators of living standards. Another problem is that the wage sources used most often apply to adult male workers, and it is difficult to draw conclusions on actual living standards if one does not have the relevant information about the work and pay of women and children.⁷ The wage data also cannot comprehend the importance (or not) of opportunities for by-employment. In the Swedish context, the investigation by Gary, for example, suggests that construction work between 1500 and 1800 was markedly seasonal and for a family to survive such work must have been combined with other income/subsistence sources. Several employments and other income sources were standard for the Swedish pre-industrial working classes.⁸

In this regard probate inventories, assessing all the items held by a household, have an advantage in that they present a 'composite' estimate of living standards: the final outcome of men's, women's and children's work, for wages, for in-kind payment or production for domestic consumption.⁹ The probate inventory presents the outcome of all these endeavours, in terms of a household's collected items, a quite direct measure of material living standards, and capturing the composite result of formal wage labour and other types of work is an attractive feature of the probate inventory as a source.¹⁰

What is positive about using probate inventories to study labourers' living standards is that their weaknesses as sources are converse to those of wage studies. One main drawback of using probates is they cannot be used to study short-term fluctuations in welfare: for this purpose, wages are to be preferred. Furthermore, probates are biased towards the old; we partly remedy this by paying especial attention to those who died while still of working age. But that the respective strengths and weaknesses of the real wage and the probate-based approaches are so different, means that it should be fruitful to use both approaches. We thus build on previous wage-based studies, component-based studies and demographic studies of living standards in Sweden and contribute with a probate-based approach.¹¹

⁵ Emma Griffin, 'Diets, hunger and living standards during the British Industrial Revolution', *Past and Present* 239 (2018), pp. 71–111; pp. 71–2 discusses the recent dominance of the approach. See John Hatcher, 'Seven centuries of unreal wages', in Hatcher and Stephenson (eds), *Seven centuries*, pp. 15–70, for a critical discussion.

⁶ Judy Stephenson, 'Working days in a London construction team in the eighteenth century: evidence from St Paul's Cathedral', *EcHR* 73 (2020), pp. 409–30; Sara Horrell, Jane Humphries and Jacob Weisdorf, 'Family standards of living over the long run, England, 1280–1850', *Past and Present* 250 (2021), pp. 88–9.

⁷ Cf. Kathryn Gary, *Work, wages and income: remuneration and labor patterns in Sweden, 1500–1850* (Lund University, 2018), pp. 28–32; Horrell, Humphries, and Weisdorf, 'Family standards'.

⁸ Gary, Work, pp. 69-75; Carl-Johan Gadd, Den

agrara revolutionen, 1700–1870 (2000), pp. 86–91; Jonas Lindström, 'Labouring poor in early modern Sweden? Crofters and lodgers in Västmanland in the 17th century', *Scandinavian J. Hist.* 44 (2019), pp. 403–29; Jonas Lindström, Rosemarie Fiebranz, and Göran Rydén, 'The Diversity of Work', in Maria Ågren (ed.), *Making a living, making a difference: Gender and work in early modern European society* (2017), pp. 25–52.

⁹ Cf. Mark Overton, Jane Whittle, Darron Dean and Andrew Hann, *Production and consumption in English households*, 1600–1750 (2004).

¹⁰ Cf. Jan De Vries, *The Industrious Revolution: Con*sumer behavior and the household economy, 1650 to the present (2008), pp. 29–30.

¹¹ Wages: Johan Söderberg, 'Long-term Trends in Real Wages of Labourers', in Rodney Edvinsson, Tor Jacobson and Daniel Waldenström (eds), *Exchange*

Relative prices and living standards

Another problem in the historical living standards debate that we want to address is the issue of prices and deflators. Hoffman, Jacks, Levin and Lindert point to the fact that different classes consume different things and so their consumption basket deflators should vary: while poor consumers are hurt badly if the prices for staple foods go up, it is less of a problem for nobles or the wealthy who anyway consume higher quality and more diverse food. For this reason, they argue, inequality grew even more in Europe from 1500 to 1815 than we suppose if we look only at nominal inequality, because during this period the prices of grain grew faster than the prices of luxury goods. From 1815 to 1914 the opposite was true.¹² It is not only nominal incomes, but also prices, which affect living standards – and relative prices change over time. Such a point has been made in probate-based studies of England and New England, both finding that falling relative prices of consumption goods meant that actual higher material living standards, or at least ownership of more goods, could appear in deflated monetary terms ('real') as falling wealth.¹³

An important aspect of this problem is the difference between people who produced their own food and people who had to buy it in the market. For grain-producing peasants, rising grain prices would not have been a problem – rather the opposite. However, the lower-class households in the analysis by Hoffman *et al.* are all buyers, not producers, of grain. According to their collected household budgets, a rural worker in France in 1832 spent 49 per cent of his income on bread, and labourers in the Netherlands in the eighteenth century 30 per cent.¹⁴ For Swedish conditions, where urbanization was late and the separation of lower-class people from access to land was gradual, these assumptions seem less valid. The Swedish economy was also only weakly monetized; Lindström and Mispelaere in their study of seventeenth-century mining and agrarian workers find that only 10–60 per cent of wages were paid in cash.¹⁵ They also find that labourers often grew grain and kept cattle. Studies of the nineteenth century also show that important shares of Swedish workers' wages were paid in kind, and that workers often had access to some land. Mats Larsson in his study of Bredsjö iron works found that the cash share of wages for labourers was 38 per cent in 1830, 22 per cent in 1850, 15 per cent in 1870 and only in 1890 became a majority share, 66 per cent.¹⁶ Iron production did not go on

Note 11 continued

Rates, Prices, and Wages, 1277–2008 (2010), pp. 453–78; Gary, Work. Component-based: Bo Gustafsson, Den norrländska sågverksindustrins arbetare, 1890–1913 (1965). Demographic: Martin Dribe, Mats Olsson and Patrick Svensson, 'The agricultural revolution and the conditions of the rural poor, southern Sweden 1750–1860', EcHR 70 (2017), pp. 483–508.

¹² Philip T. Hoffman, David S. Jacks, Patricia A. Levin and Peter H. Lindert, 'Real Inequality in Europe since 1500', *J. Econ. Hist.* 62 (2002), pp. 322–55.

¹³ Carole Shammas, *The pre-industrial consumer in England and America* (1990), pp. 96–8, found for England from the late sixteenth to the late seventeenth century, that prices of consumer goods such as textiles fell heavily. Gloria L. Main and Jackson T. Main, 'Economic growth and the standard of living in southern New England, 1640–1774', *J. Econ. Hist.* 48 (1988), pp. 27–46, found the same for Connecticut and Massachusetts from 1640 to 1774.

¹⁴ Hoffman *et al.*, 'Real Inequality', pp. 326–7.

¹⁵ Jonas Lindström and Jan Mispelaere, 'Vad fick 1600-talets arbetare i lön?', *Historisk Tidskrift* 135 (2015), pp. 432–63. On grain and cattle cf. Muldrew, *Food*, *energy*, on England.

¹⁶ Mats Larsson, Arbete och lön vid Bredsjö bruk: En studie av löneprinciper och lönenivåer för olika yrkeskategorier vid Bredsjö bruk 1828–1905 (1986), pp. 103–5. For the more skilled hyttarbetare cash was more than half of the wage all years but 1870 but in-kind payment all year around before the 1890s, so it was important for the workers to have access to some subsistence production. Workers typically grew potatoes, and before the 1890s often had a more rounded subsistence production, including owning animals.¹⁷

Given the remarks above, there are good reasons to believe that the labouring classes in Sweden during the eighteenth and nineteenth centuries survived by combining several different versions of labour (in the household and in the labour market; subsistence and for sale), and that the monetary value of these people's wages misses many dimensions of their living standards. For this reason, we provide the first study of Swedish working-class living standards based on probate inventories. Studies of historical living standards based on probate inventories focus on the ownership of material goods.¹⁸ We discuss the evolution of consumption goods ownership, as well as production goods, to understand the material living conditions of rural labourers.

Π

The period from 1750 to 1900 was one of thorough transformation in the Swedish economy. The period from *c*.1750 to 1870 is typically labelled the 'agricultural revolution', with growing productivity in agriculture, the breakaway from the Malthusian trap, and the combination of a growing population and rising living standards per capita.¹⁹ As in Britain, it was not only a process of growing productivity, new crops, techniques and tools, but also a social transformation. In 1750, four fifths of households in the Swedish countryside were landholding peasant-farmer households, owners or tenants; by 1850, however, this share had fallen to a half.²⁰ The living standards of farmers rose impressively, especially during the nineteenth century, but it appears that class differences in wealth and social standing between the land-holding and

Note 16 continued

was still 23% in 1840 and 9% in 1890, so not unimportant (Larsson, p. 106). What is perhaps even more telling in our context is that even in this archetypical location of industrialization - iron production - since production was so energy intensive and demanded so much firewood (as well as food), actually a large share of the employees - loosely defined - of the works were the crofters, who were 24 of 42 employees in 1830, 33 of 85 in 1861, and 35 of 97 in 1893 (Larsson, pp. 51, 62-4, 69; Eva Svensson, Sara Bodin, Hans Hulling and Susanne Pettersson, 'The crofter and the iron works: The material culture of structural crisis, identity and making a living on the edge', International J. Historical Arch. 13 (2009) pp. 183-205, study crofters at another iron works). For smiths employed at the three iron works studied by Göran Rydén, Hammarlag och hushåll: om relationen mellan smidesarbetet och smedshushållen vid Tore Petrés brukskomplex 1830-1850 (1991), cash was between 42% and 66% of the wage in the 1840s. 'Cash' in this context, Rydén points out, was a flexible concept which also covered rights to fetch goods at the company store. Rydén, pp. 231-5.

¹⁷ Larsson, *Arbete och lön*, pp. 67–9, 113–15. The memoirs of the later socialist leader Karl Kilbom, *Ur mitt livs äventyr* (1953), pp. 27–31, who grew up at an iron works with a father who was a smith, provides an individual narrative of the same kind of mixed house-hold economy.

¹⁸ Cf. Weatherill, *Consumer behaviour*; Shammas, *Pre-industrial consumer*; de Vries, *Industrious Revolution*; Muldrew, *Food, energy*, Ch. 4; Sheilagh Ogilvie, Jeremy Edwards and Markus Küpker, 'Economically relevant human capital or multi-purpose consumption good? Book ownership in pre-modern Württemberg' (Cambridge Working Paper in Economics, 1655, 2016).

¹⁹ Gadd, *Den agrara revolutionen*; Mats Olsson and Patrick Svensson, 'Agricultural growth and institutions: Sweden 1700–1860', *European Rev. Econ. Hist.* 14 (2010), pp. 275–304. On Britain see Mark Overton, *Agricultural Revolution in England: The transformation of the agrarian economy*, 1500–1850 (1996).

²⁰ Christer Winberg, *Folkökning och proletarisering: kring den sociala strukturomvandlingen på Sveriges landsbygd under den agrara revolutionen* (University of Gothenburg, 1975).

	Peasant farmers	Crofters	Cottagers and lodgers	Contract workers
1750	186,569	27,891	20,033	
1800	199,654	64,644	44,367	
1850	206,929	96,810	89,215	17,025
1900	264,242	72,252	54,238	41,900

TABLE 1. Agrarian class structure: numbers of households, 1750-1900

Source: Builds on data in Janken Myrdal and Mats Morell (eds), The agrarian history of Sweden: 4000 BC to AD 2000 (2011), Statistical appendix.

the proletarian or semi-proletarian classes grew.²¹ Table 1 shows key facts about the number of agrarian households between 1750 and 1900 in the following categories: farmers, crofters, cottagers, and contract workers.

In this paper, we study crofters especially. There are at least two reasons for studying crofters. One is simply that it was a big group: in 1800, there were more crofter households than the total of urban households.²² The second is that even though they have been described in social terms as the upper portion of the landless, in terms of wealth, their living standards were average, compared to those of the labouring classes – cottagers, contract workers and day labourers – overall.

First, we should give some concrete details about the crofters. Crofts were single-family residences on someone else's land – a farmer's, a village's or a nobleman's – where a crofter family could combine several types of work. They had a degree of subsistence production, large or small, but also provided labour (or, in the later period, money rent only) to the landowner, and possibly also did other outwork or wage labour.²³ In this sense, they are representative of the complex combination of work and survival strategies of the Swedish and European pre-industrial working classes. In the early eighteenth century, a typical croft had about 0.4 to 1.2 hectares of land and one or a few cows. 'The croft resembled a very small farm', says Gadd, and the crofters were a 'half proletarian' group, socially between the farmers and the pure rural proletariat.²⁴ They had no say, as landowners did, in village governance, and official society treated them to some extent as outsiders, but they were not the poorest of the poor.

A local study from southern Sweden 1766–1894 found that crofters stayed on their croft on average for 11 years while a study of two estates in eastern Sweden found that typically the

²¹ Farmers: Erik Bengtsson and Patrick Svensson, 'The wealth of the Swedish peasant farmer class (1750–1900): composition and distribution', *Rural Hist.* 30 (2019), pp. 129–45. Inequality: Erik Bengtsson, Anna Missiaia, Mats Olsson, and Patrick Svensson, 'Wealth Inequality in Sweden, 1750–1900', *EcHR* 71 (2018), pp. 772–94.

²² Assuming a household size of 4–5, applying this to the number of households in Table 1, and compared to the number of urban residents according to the SCB, *Historisk statistik*.

²³ On crofters as workers, see Gustaf Utterström, Jordbrukets arbetare: Levnadsvillkor och arbetsliv på

landsbygden från frihetstiden till mitten av 1800-talet (1957), pp. 786–825.

²⁴ Gadd, *Den agrara revolutionen*, p. 88. The subjective side of the inbetween-ness of the crofters is captured by the author Moa Martinson, *Kyrkbröllop* (1950), p. 222, when she in her autobiography describes her childhood around 1900, and says that crofters for example would invite rural artisans to coffee but never contract labourers. See also Christina Rosén, 'Torpare och materiell kultur', in Stig Welinder (ed.), *Torpens arkeologi* (2007), pp. 61–78, on the status of crofters.

contract termination time was 1.5 years, and for the crofters, therefore, tenant rights were very weak.²⁵ Furthermore, the contracts contained vague formulations to the effect that crofters could be evicted for insubordination and the like. After 1870 fixed contracts became more common and they were typically for 7–10 years. Typically, crofters owned their croft, i.e. the little house, but not the land it stood on. So when it was time to move they had to dismantle the house and rebuild it elsewhere. As this indicates, housing standards were poor.

Conclusions on crofter living standards from previous intense local studies differ, and it seems reasonable that conditions varied over the country, over time, and between smaller and larger crofts and better and worse contracts, but it seems clear that crofters were poorer than farmers, if not always desperately poor.²⁶ In our study with inventories from all over the country and over 150 years, we can give a more comprehensive view.

III

In Sweden, it became mandatory in 1734 to make a probate inventory at death, for several reasons: to facilitate the inheritance process, to see that outstanding debts were repaid, and to calculate a small tax. Swedish probate inventories are very detailed in that they include all types of assets and goods – real estate, clothing, animals, household utensils, and so on. For this reason they have been used by many researchers, on topics such as credit markets and debts, the mechanization of Swedish agriculture, and the clothing practices of farmers and other social groups.²⁷ The probate inventory was made for the household of the deceased person – it lists not only his or her belongings but all the household assets, even though personal items such as clothing may be listed specifically under headings such as 'spouse's clothing'. Because of their comprehensive nature, they are very well suited to studying complex household economies such as those of crofters, building on various combinations of wage labour, corvée labour and subsistence production.

We may speculate that an important reason why writers on historical living standards use probate inventories comparatively rarely is that in England and Wales, a paradigmatic case for economic historians everywhere, probate frequency after the 1720s tailed off, thus precluding

²⁵ South: Christer Lundh, 'Husmän och torpare vid Duveke gods 1766–1894', in Christer Lundh and Kerstin Sundberg (eds), *Gatehus och gatehusfolk i skånska godsmiljöer* (2002), pp. 118–19. East: Ulf Jonsson, *Jordmagnater, landbönder och torpare i sydöstra Södermanland* 1800–1880 (1980), p. 53.

²⁶ Jonsson, *Jordmagnater*, p. 55, in a study of east-central Sweden is the most optimistic while Johan Söderberg, *Agrar fattigdom i Sydsverige under 1800-talet* (1978), in a study from the south has more pessimistic conclusions. Carl-Johan Gadd, *Järn och potatis: jordbruk, teknik och social omvandling i Skaraborgs län 1750–1860* (1983), pp. 117, 120, in a study from western Sweden finds that crofters lost out compared to farmers between the 1750s and 1850s and that polarization within the crofter group increased. Per Hallén, Överflöd *eller livets nödtorft* (2009), pp. 67–74, described a crofter inventory from 1800 as not 'poor, rather it had all the basics', but lacking silver and other finer items which farmers had.

²⁷ Credit markets: Håkan Lindgren, 'The modernization of Swedish credit markets, 1840-1905: Evidence from probate records', *J. Econ. Hist.* 62 (2002), pp. 810-32. Mechanization: Jan Kuuse, *Från redskap till maskiner: mekaniseringsspridning och kommersialisering inom svenskt jordbruk 1860-1910* (1970). Clothing: Marie Tengroth Ulväng, 'Bondehushåll i förändring: Kläder som uttryck för socioekonomisk ställning i 1800-talets Härjedalen', in Christer Ahlberger and Pia Lundqvist (eds), Varans vägar och världar: Handel *och konsumtion i Skandinavien ca 1600–1900* (2007), pp. 57–74. studies of industrialization and living standards with this source.²⁸ For Sweden this problem does not exist; on the contrary, probate coverage goes from rather poor in the 1730s and better in the second half of the eighteenth century to very good in the nineteenth century.²⁹ We will return later on to the discussion of probate frequency and whether it may affect our results. Here, we would just add that the received wisdom probate frequency in Sweden is that they very much skewed to the wealthy, but that we can show that its coverage is surprisingly good for labouring people too.³⁰

The probate inventories come from the Bengtsson *et al.* dataset of about 5,000 probate inventories for 1750, 1800, 1850 and 1900.³¹ This builds on a random sample of 32 rural districts and 8 towns from all over the country; here we focus on the rural sector. Occupational titles are taken from the probate inventories and crofters are classified according to their Swedish title, *torpare*, whereas other rural labourers have titles such as for example worker (*arbetare, arbetskarl*), day labourer (*dagkarl*), contract labourer (*statare, statkarl*), small-size cottager (*backstugusittare*), lodger (*inhyses*), and servants (*dräng, piga*). To compare living standards over time, we have translated older currencies into the equivalent of the *riksdaler riksmynt/kronor* used after 1862.³² We then transform all values into 1800 prices by adjusting for price changes according to a historical consumer price index. Below, we discuss the issues with this type of adjustment.

IV

We begin with a typical 'monetary', 'real wage' or 'real wealth' approach to living standards, i.e. we study the development of real wealth, as conventionally defined, over time. According to Table 2, living standards for rural semi-proletarian and proletarian households fell from 1750 to 1800, stayed relatively flat to 1850, then drastically improved from 1850 to 1900. It is striking that mean wealth for the rural proletariat in 1850 is half of what it was in 1750 – this in an age of agrarian revolution. Although the output growth may have mostly translated into higher incomes for the landholding class it also meant improved labour opportunities for the landless strata.³³ But the finding that living standards fell between 1750 and 1800 is supported by Gadd, who invokes real wages (which of course face the CPI problems discussed here) and the heights of soldiers as evidence.³⁴

- ²⁸ Cf. Shammas, *Pre-industrial consumer*, pp. 18–19.
- ²⁹ Gadd, Järn och potatis, pp. 56–9.

³⁰ The view of skewed representation is presented by for example Maths Isacson, *Ekonomisk tillväxt och social differentiering 1680–1860: Bondeklassen i By socken, Kopparbergs län* (1979); Lindgren, 'Modernization'.

³¹ Bengtsson *et al.*, 'Wealth inequality'. The probate inventories database is available from the authors upon request. For overall discussion of the original sampling see the original paper. Probate inventories were sampled from 32 local judicial districts (härader, tingslag, domsagor) archived in various archives all over the country. The probate inventories have been digitalized and are available from Arkiv Digital, https://app. arkivdigital.se. ³² In the 1750 sample, estates are valued in *daler kopparmynt* (dkm) or *daler silvermynt* (dsm); dkm is translated into kr by division by 18, and dsm by division by 6. Riksdaler banco is often used in 1800 and 1850; this is translated into kr by multiplication by 1.5. See the discussion of currencies in Rodney Edvinsson, 'The multiple currencies of Sweden-Finland, 1534–1803', in Rodney Edvinsson, Tor Jacobson and Daniel Waldenström (eds), *Historical monetary and financial statistics for Sweden: Exchange rates, prices and wages, 1277–2008* (2010), pp. 133–237.

³³ On output growth cf. Olsson and Svensson, 'Agricultural growth'. On the landless see Dribe, Olsson and Svensson, 'Agricultural revolution'.

³⁴ Gadd, Den agrara revolutionen, p. 345.

		1750	1800	1850	1900
Rural labourers, including crofters	Mean	126.6	67.2	59.8	139.3
	Median	66.3	41.6	28.1	52.9
	Sample size	137	265	340	331
Crofters only	Mean	99.8	66.4	56.3	137.7
	Median	56.6	53.8	34.6	83.9
	Sample size	37	96	123	87

TABLE 2. Wealth of probated rural labourers, 1750–1900 (kronor)

Note: All wealth in 1800 prices, as average for 1795–1805. The consumer price index used comes from Rodney Edvinsson and Johan Söderberg, 'The Evolution of Swedish Consumer Prices, 1290–2008', in Rodney Edvinsson, Tor Jacobson and Daniel Waldenström (eds), *Historical monetary and financial statistics for Sweden: exchange rates, prices and wages, 1277–2008* (2010), pp. 412–52. We have also made alternative deflated calculations using the silver prices (also from Edvinsson and Söderberg) instead of the CPI. The relative price of silver is quite high in 1750 and falls over time, so with this deflator, real wealth improves throughout our period, 1750–1800. This is not very informative and to a large degree reflects the silver price. For discussion of the relative price of silver, see Rodney Edvinsson and Johan Söderberg, 'Prices and the growth of the knowledge economy in Sweden and Western Europe before the industrial revolution', *Scandinavian Economic Hist. Rev.* 59 (2011), pp. 262–4.

The improvement over time is more marked in the mean than in the median, which indicates lower living standards in 1900 than in 1750 for the rural working class overall. Part of the issue here is probably that the Swedish historical CPI is quite grain-heavy and does not fully account for the shift by the lower classes from grains to potatoes from the early 1800s onward.³⁵ It can also be the case that many items consumed by the working classes fell in price over the period, thus giving lower 'real' (CPI-adjusted) wealth even if material standards might have improved.³⁶ Alternatively, material standards for the working-class strikingly deteriorated during the period. Below, we compare 'real' wealth with actual items owned, but first let us go into slightly more detail on the distribution within the crofter group.

Table 3 shows the distribution of net wealth in 1800 prices for crofters: not only the mean and the median, but also the wealth at the tenth, 25th, 75th and 90th percentiles. Crofters in the tenth percentile in a year belong to the poorest ten per cent of the crofters: 90 per cent of crofters are wealthier. And conversely, crofters in the 75th percentile are in the 'upper middle class' of crofters: richer than 75 per cent of their peers, but poorer than 25 per cent. The values in Table 3, then, indicate the spread within the crofter group for each of our four years. As we might have expected from the literature review, the differences are rather large.³⁷ Even though

³⁵ On potatoes cf. Gadd, *Den agrara revolutionen*, p. 256; Thor Berger, 'Adopting a new technology: potatoes and population growth in the periphery', *EcHR* 72 (2019), 869–96. The relative price of grain increased markedly during the eighteenth century and until the mid-nineteenth century, when it started to decrease. See Rodney Edvinsson and Johan Söderberg, 'Prices and the growth of the knowledge economy in Sweden and Western Europe before the industrial revolution', *Scandinavian Econ. Hist. Rev.* 59 (2011), p. 257.

³⁶ As in Main and Main, 'Economic growth'.

³⁷ Jonsson, *Jordmagnater*; Söderberg, *Agrar fattigdom*; Gadd, *Järn och potatis*.

	Mean	Median	P10	P25	P75	P90	Sample size
1750	99.8	56.6	27.6	45.2	99.1	210.3	37
1800	66.4	53.8	15.0	23.1	86.8	131.9	96
1850	56.3	34.6	-11.8	10.8	88.5	156.3	123
1900	137.7	83.9	-2.8	19.4	220.6	357.2	87

TABLE 3. Median, poor and wealthy crofters, 1750–1900 (kronor).

Note. All wealth in 1800 prices, as average for 1795-1805. Consumer price index as for Table 2.

one cannot be a crofter and be wealthy, there is a variation within the group from being dirt poor to being a kind of 'prosperous' labourer.³⁸

The numbers in Tables 2 and 3 are very abstract. What did it mean to have a net wealth of around the mean in 1800? Let us take as an example Sissa Hansdotter, who passed away as a 48-year-old in 1800 in south-eastern Sweden. Her assets were worth 98 riksdaler (rdr), and she had debts of 27 rdr; her net wealth of 71 rdr was slightly better than the crofter average of this year. Her inventory included a gold ring (1.32 rdr), several silver items, liquor-making instruments (3 rdr), six plates of porcelain and some other things of the same material (very low values), and a decent set of bed-linen (13 rdr). She furthermore had several tablecloths, curtains, and quite a few items of clothing (very low values). The list of items made of iron is fairly long, as is the list of wooden goods. She had five cows (10.16 rdr), two horses and a few sheep. As we will see, this number of animals was not completely unusual for this time, but would become more unusual for a crofter over the nineteenth century.

Guided by the stratification in Table 3, we made an in-depth analysis of probate inventories from thirty 'typical' crofter households for each year, crofters who were at the poor end of the group, those who were at the median, and those who were relatively well-off. The reason why we wanted to choose crofters representative of the wider group in terms of wealth is that even though we studied only 120 crofter households in the in-depth study, we know that in wealth terms they stand for a much larger sample – the 1,000 proletarian and semi-proletarian households discussed above (see Table 2). We have also strived to choose working-age households, since the aged households often have got rid of items related to the running of the croft. We will pursue this analysis in two steps. First, in Table 4 we summarize the ownership trends in terms of 40 categories of items, from gold and silver to pewter, glass, wooden vessels, wagons, ploughs, and various kinds of animals.³⁹ This table contains a massive amount of information but is included for reference; we will elaborate more precise discussions below.

³⁸ To borrow an evocative phrase from Whittle's review of Muldrew, *Food, energy*: Jane Whittle, 'Prosperous labourers?', *Hist. Workshop J.* 76 (2013), 311–18. One source of variation is life stage. This has been much discussed in the probate inventories literature – cf. Lindgren, 'Modernization', pp. 819–20. However, our calculations, not reported here, show that, for the crofters, the life course pattern is actually not very stark. They do not accumulate very much over the life cycle, and do not go into debt to buy land in the way that farmers did (cf. Bengtsson and Svensson, 'Wealth'). We do, however, take care mainly to study crofters of working age.

³⁹ The classification is inspired by Rosén, 'Torpare och materiell kultur'.

	· · · · · · · · · · · · · · · · · · ·								
	Mean					Median			
	1750	1800	1850	1900	1750	1800	1850	1900	
Gold	0.1	0.2	0.3	0.2	0	0	0	0	
Silver	0.8	1.5	0.6	0.6	0	0	0	0	
Pewter	0.9	3.1	1.7	0.2	0	3	1	0	
Stone and brass	0.9	0.8	0.9	0.5	0	0	0	0	
Copper	1.3	3.0	3.3	3.9	1	2	3	4	
Tin-plate	0.8	0.3	0.7	2.1	0	0	0	1	
Personal clothes	11.4	20.4	11.7	12.0	7	19	11.5	12	
Linen	3.2	3.1	1.4	3.4	2.5	0	1	3	
Bedding	7.4	8.7	5.6	5.0	7	7.5	5	4	
Iron kitchenware	3.4	4.4	5.9	5.6	4	3.5	5.5	4.5	
Glass	1.1	1.7	2.1	2.8	0	1	2	2	
Porcelain	1.6	2.2	1.6	5.4	0	1	1	4	
Casks and barrels	24.2	21.3	9.4	8.5	21	17.5	9	6	
Furniture	4.2	5.8	7.4	9.5	3.5	5	7	8.5	
Clocks	0.1	0.6	1.0	1.3	0	1	1	1	
Mirrors	0.1	0.1	0.3	0.8	0	0	0	1	
Books	1.0	1.6	1.5	0.8	0	1	1	0	
Iron tools	14.8	19.5	10.4	8.8	12.5	18	11	8	
Wooden tools	0.8	1.8	4.3	3.3	0	0	3	3	
Looms	0.6	0.8	0.9	0.7	1	1	1	1	
Spinning wheels	0.6	0.7	0.7	0.9	0	0	0	1	
Textiles			1.7	0.7			1	0	
Wagons and carts	1.1	1.1	1.4	1.6	1	1	1	1	
Sleighs and sledges	1.9	1.3	0.9	1.4	1.5	1	0	1	
Other wagon parts	1.4	0.6	0.9	1.0	1	0	0	0	
Ploughs	0.2	0.2	0.5	0.7	0	0	0	1	
Arder	1.0	0.8	0.5	0.5	1	0	0	0	
Harrows	0.5	0.6	0.6	1.3	0	0.5	1	1	
Other agr. tools	1.3	3.9	1.0	3.6	1	2	0	3	
Cattle	4.0	3.1	1.9	2.8	3	3	2	2	
Horses	0.8	0.8	0.3	0.3	1	1	0	0	
Sheep	4.9	3.4	2.2	1.4	5	4	1.75**	0	
Pigs	2.7	0.5	0.7	0.5	3	0	0	0	
Poultry	0.3	0.1	0.3	4.1	0	0	0	0	
Geese	0.5	0.6	0.0	0.0	0	0	0	0	
Goats	0.8	0.1	0.0	0.1	0	0	0	0	

TABLE 4. Number of items held by crofters (N=120) by category, 1750–1900

		Mean				Median			
	1750	1800	1850	1900	1750	1800	1850	1900	
Crops*	0.7	0.5	1.0	1.4	0	0	0	1	
Miscellaneous	0.8	3.0	6.6	7.1	0	1	6	5	
Cash*	0.1	0.1	0.0	0.2	0	0	0	0	
Claims*	0.6	0.6	0.9	0.9	0	0	1	0	

TABLE 4. continued

* For cash the number indicates the number of crofters that have cash; for claims and crops the number indicates the number of claims or crops regardless of size of claim or crop.

** It might seem strange that one household owned one and three quarters of a sheep. But it did happen that crofter households shared ownership of animals, and of agricultural tools – cf. the 0.5 median harrow in 1800.

The next step is to analyse the development of two main categories of items. The first is household goods, consumption items that we study as indicators of wealth or a comfortable living standard. The second is production goods, items used in various types of production. It is important to separate the two kinds of goods as the household consumption goods are indicators of the material standard of living and comfort, while the sets of production goods rather tell us how the crofters combined various forms of labour to make a living.

Table 5 shows the share of crofters, of the 30 for each year studied in detail, who held certain types of consumption goods. As we can see, cash was unusual: a few had cash in 1750 and 1800, not a single crofter had cash in 1850, and only 17 per cent of them in 1900. Few had gold items, with a small increase from 1750 to 1800 and remaining constant thereafter. Silver was more common across the whole period. Some categories existed in all households. This is the case with for example kitchenware, personal clothes, some types of bedding, and furniture. No trend is discernible for these items; most crofters had at least some of these things both in 1750 and in 1900. The only exception is linen but linen and bedding are sometimes listed together and hard to separate; for 1750 and 1800 the figures would be 87 and 97 per cent respectively if taken together.

Other consumption items became more common over time. Glass, porcelain, mirrors, clocks and books are examples of this. These are items that were expensive in the eighteenth century, particularly clocks, but where prices fell relatively and a mass market emerged for these consumption goods. One estimation has found that the consumption per capita of industrial-made consumption goods in Sweden grew elevenfold in the nineteenth century, and Ahlberger found for three rural areas in southern Sweden that porcelain plates were almost non-existent in 1750 but quite common in 1850.⁴⁰ Utensils related to coffee drinking also became significantly more common, while tea still was uncommon in 1850.

Whereas consumption goods tell a story of living conditions, and to some extent income or at least consumption power, the productive assets provide information on the crofter

⁴⁰ On aggregate consumption, see Olle Krantz and Lennart Schön, *Om den svenska konsumtionen under 1800och 1900-talen: Två uppsatser* (1984), pp. 8–9. On porcelain, and coffee and tea, see Christer Ahlberger, *Konsumtionsrevolutionen, I: Om det moderna konsumtionssamhällets framväxt 1750–1900* (Humanistiska fakulteteten, Göteborgs universitet, 1996), pp. 84–8 and pp. 90–104, respectively.

	1750	1800	1850	1900
Cash	7	7	0	17
Gold	7	13	17	13
Silver	33	43	33	30
Pewter	40	77	53	7
Stone and brass	40	37	47	33
Personal clothes	87	97	93	100
Linen	57	37	63	97
Bedding	77	90	97	93
Iron kitchenware	97	100	97	93
Glass	47	57	83	87
Porcelain	47	63	67	87
Clocks	7	57	87	90
Mirrors	7	10	30	60
Furniture	100	90	97	100
Books	30	63	70	50

TABLE 5. Share of crofter households with consumption goods, by category, 1750–1900 (per cent)

Note: This is based on 120 crofter households reflecting poor, average and rich crofters at each year (see text) and the share expresses households that have at least one item in said category.

households' self-provision and earning. Table 6 shows the evolution of crofters' access to production goods. The first category, agriculture, is an estimation of whether the crofter household provided themselves through farming, indicated by the ownership of three key farm assets, (a) a draught animal (oxen or horse), (b) a plough or ard plough (*årder*), and (c) crops. Holding all three equals one in the indicator; if they held two of these three, it counts as 0.5. Looking at this category, we see stability over time: the average is about 0.4 and the median is 0.5. A similar measure is owning the means of production, which is Gadd's way of classifying a croft or a farm as proletarian or not.⁴¹ This is coded as a 1 if the household held two of the three categories, (a) draught animals (b) cow, and (c) plough or ard plough. Here the median is a 1 in every year, which indicates that in every year, the typical crofter household had at least a cow and a plough. In terms of the average for this category, however, it decreases slightly, from 0.85 and 0.84 in 1750 and 1800 to 0.62 and 0.68 in 1850 and 1900. This is an indicator of some proletarianization among the crofters. A deeper indicator of this development is visible in Table 4: that the number of animals in the typical crofter household decreased over time. While the typical (median) crofter household in 1900 had at least one cow, Table 4 shows that the average number of cows and oxen decreases from 4.0 in 1750 to 2.8 in 1900, while the average number of horses goes down from 0.8 to 0.3, sheep from 4.9 to 1.4 and pigs from 2.7 to 0.5. Another way of illustrating this is by looking at animal products, measured as having

	1750		18	1800		1850		900
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Agriculture	0.37	0.5	0.39	0.5	0.40	0.5	0.42	0.5
Animal products	0.83	1	0.55	0.5	0.55	0.5	0.52	0.5
Hunting	0.00	0	0.05	0	0.10	0	0.03	0
Fishing	0.10	0	0.05	0	0.20	0	0.03	0
Spinning	0.30	0	0.29	0	0.28	0	0.33	0.5
Weaving	0.43	0.5	0.66	0.5	0.45	0.5	0.38	0.5
Forging	0.03	0	0.05	0	0.10	0	0.03	0
Carpentry	0.03	0	0.47	0	0.50	0.5	0.27	0
Means of production	0.85	1	0.84	1	0.62	0.5	0.68	1

TABLE 6. Production goods among crofters, 1750–1900

Note: Each household is assigned 0, 0.5 or 1 depending on possession or not of certain items. To score 1 you need for agriculture a draught animal, a plough or arder, and crops; for animal products a cow, a pig, and a churn; for spinning a spinning wheel and textile material, for weaving a loom and textile material. If one item is missing, the household is assigned 0.5. For some categories it is either 0 or 1: for hunting a rifle or not, for fishing fishing gear or not, for forging or carpentry specialized tools or not. Finally, for means of production we follow Gadd, *Järn och potatis*, assigning 1 if the household had at least two out of three of a draught animal, a cow, a plough or an arder, and 0 otherwise.

at least a cow, a pig, and tools for processing milk. Here there is a downward trend over time among the crofters. The only type of animal which becomes more widely held is poultry, from an average of 0.3 in 1750 to 4.1 in 1900 – and this may have resulted from the under-reporting of hens in the early period.⁴² However, the category of wagons and agricultural tools shows no real trend over time: if we take the interchangeable plough and ard plough together, the average number of items in this category is stable at 1.2 in 1750 as well as 1900. Owning a harrow becomes more common over time.

What about other types of production? A minority of the crofters had hunting rifles and/ or fishing equipment. Spinning was common. We have classified spinning as a '1' when a household had both a spinning wheel and materials, and a '0.5' when only a spinning wheel. The average is around 0.3 every year while the median 1750–1850 is 0, but 0.5 in 1900, indicating that a substantial share of the households had spinning wheels. Weaving tools were even more common (40 per cent in 1750 and 1900). Both these categories were quite stable over time, while the share who had carpentry tools grew.

Thus, many croft households supported themselves by a multitude of activities. Farming was one, supplemented by weaving and spinning. The probates also reveal that some of the crofters were specialized in carpentry and a few in working as blacksmiths. This could be a supplement to small-scale agricultural production but also an alternative way of supporting the household; for example, in 1800 half of those with specialized carpentry tools had no indication of farming as a means of provision.

⁴² As discussed by Gadd, Järn och potatis, pp. 69-70.

As a summary of the overall development, we suggest 'proletarianization without pauperization'. By 1900 the crofters have fewer animals than their 1750 or 1800 counterparts, but more consumer goods. Their animal holdings declined over this period, and so they must have become more dependent on corvée labour and on wage labour. Research on some estates have found increasing demesne production in the second half of the nineteenth century, and as wage labour became more expensive when competition with industry for labour set in, corvée labour from crofters could be a very attractive option for estate owners.⁴³ With smaller crofts, crofters could keep less animals, and worked more with means of production owned by others, not appearing in crofter probate inventories.⁴⁴

We have above emphasized the importance of relative price changes in historical studies of living standards. Given the prevalence of relative price shifts, it is crucial to examine not only changes in actual ownership of items, but also the values/prices of the items, to give a rounded view of living standards. For example, when we combine the two types of indicators, item count and values, we get an idea of how large a sacrifice of other consumption was entailed in, for example, buying a plough or more consumption goods. We know from previous research that land prices grew more rapidly than the CPI over the nineteenth century, and that the relative price of industrial goods fell from 1825 to the late 1890s, with increasing speed after 1870.45 We have divided the values of the probate inventories into six categories. The first two are obvious: consumption goods and production goods, as discussed in detail above. To these we add cash, savings and debts owed to the deceased, real estate (including value of crofter contracts), and an 'other' category. The results are shown in Table 7. The shares both for consumption goods and means of production decrease over time. It makes sense that the share for means of production decreases, given that, as we have seen, the crofters' ownership especially of animals decreased over time.⁴⁶ However, the fact that the share for consumption goods also decreased, while actual ownership of porcelain, glass, books, mirrors, clocks and other consumption goods grew, indicates that the relative prices for such consumption goods fell over time.⁴⁷ It became cheaper to achieve some sorts of material comfort, like porcelain and glass, textiles and furniture, in the croft.

⁴³ Mats Olsson, 'Storföretaget Vittskövle 1500–1950', in Mats Olsson, Sten Skansjö and Kerstin Sundberg (eds) Gods och bönder från högmedeltid till nutid: Kontinuitet genom omvandling på Vittskövle och andra skånska gods (2006), pp. 158–9; cf. also Lars Nyström, Potatisriket: Stora Bjurum 1857–1917: Jorden, makten, samhället (2003), pp. 79–84

⁴⁴ Walter Elgeskog, *Svensk torpbebyggelse från 1500talet till laga skiftet: En agrarhistorisk studie* (1945), pp. 403–5, 426, finds that the total number of crofts in the Sunnerbo area (a forested area in southwest Sweden) was rather constant from 1815 to 1910, but that there is a lot of flux in the composition of crofts: 1800 crofts disappeared while 1700 new crofts were created. This happened in relation to enclosures as well as other land sales and reorganizations. Such flux could facilitate the disappearance of larger crofts and the appearance of smaller ones; Elgeskog does remark that some larger crofts during the enclosures became independent farms (*hemman*) while others became consolidated into existing or newly established farms.

⁴⁵ Land: Bengtsson and Svensson, 'Wealth', pp. 138–41. Consumption goods: Krantz and Schön, *Om den svenska konsumtionen*, p. 11.

⁴⁶ Mats Morell and Martin Söderhäll, 'Smallholders' and large estates' reaction to changed market conditions 1860–1910', *Scandinavian Econ. Hist. Rev.* 67 (2019), p. 322, show that the relative price of cows to rye grew by 130% from 1858 to 1910.

⁴⁷ As discussed by Krantz and Schön, *Om den svenska konsumtionen*; and Ahlberger, *Konsumtionsrevolutionen*.

	1750	1800	1850	1900
Means of production	44.4	35.4	35.3	32.0
Consumption goods	28.2	32.1	24.7	19.6
Real estate	9.9	10.1	10.5	27.4
Claims	3.4	6.3	14.0	11.4
Cash	0.2	1.0	0.4	1.2
Various	14.0	15.2	15.2	8.1

TABLE 7. Values of the crofter probate inventories divided into categories (average share)

Note: The figures presented are the average shares of total gross wealth of the 120 crofters we studied in detail, taken up by the category at hand, e.g. consumption goods or real estate. The category 'consumption goods' is defined as gold, silver, pewter, glass, porcelain, clothing, linen, bed linen, iron items from the kitchen, clocks, mirrors, furniture, and books. The category 'means of production' is defined as wagons, harvest items, animals, and crops.

Beyond production and consumption goods, Table 7 shows two important developments. One is that the share of savings and debts owed to the deceased grows in total value, on average, from 3.4 per cent in 1750 to 14 per cent in 1850 and 11.4 per cent in 1900. This is driven by two changes. One is the use of bank accounts for savings (in 1900, 11 of the 30 crofters had bank accounts), the other is claims on indebted individuals. The median for debts owed to the deceased and bank accounts is still zero in 1900, so at least half of the crofters still had no debts owed to them or bank accounts, but for those who had, they were an important share of assets. The other important development in crofter assets is that the average share of asset values captured by 'real estate' grows from around 10 per cent in 1750-1850 to 27 per cent in 1900. As we have stressed, the crofters themselves did not own land. But they owned their buildings, and by 1900 they could also hold lease contracts that themselves were allocated a value. To take one example, Karin Nilsdotter in Delsbo in 1900 had the contract for a parish croft, and the contract was valued at 400 kr, a not insignificant sum for a crofter at this time, while the real estate category for Kristina Bengtsdotter in Kullings in the same year was a cottage valued at 350 kr, a barn valued at 75 kr, a wood shed valued at 10 kr, and a cellar house (*källarhus*) valued at 10 kr. At a time when a typical price for a horse was around 200 kr,⁴⁸ this was not a lot of money, but as a share of the total value in crofter probate inventories, it was non-negligible.

The pattern of proletarianization without pauperization among our crofters around 1900 may be illustrated with Anna Brita Nilsdotter, who was 49 years when she died in October 1899 in the village of Värhuvud in the west of Sweden, leaving behind her widower Anders and their three underage children. This crofter family did have two cows, so they were not completely

⁴⁸ This is based on 60 farmer probate inventories from Bara and Kullings *härader*, studied in Bengtsson and Svensson, 'Wealth'. See especially Table 5, but there the values are deflated in 1800 prices. See also Kuuse, *Från redskap*, pp. 122–3, who, also based on probate inventories, reports a price level of 100 to 290 kr (depending on farm size and region, and of course also on the condition of the horse) in 1890 and 165 to 415 kr in 1910.

proletarianized; they also had eight hens. The value of the hens was very low, but the value of the cows was substantial, larger than the croft house and barn taken together. This indicates the transience of the crofters' housing, and the associated low quality of the housing, but also that animals were expensive. The household items included a copper cauldron (4 kr), two coffee pots (1 kr), some iron kitchen items (4.15 kr), and some kitchen items of wood including some for baking and butter making (1.75 kr). The furniture consisted of a table, a cupboard, seven chairs, a clock, a mirror, and a bookshelf. The pieces of furniture had very low values, indicating that they were probably home-made. Her clothing included a winter coat (vinterpaletå), a summer cardigan (sommarkofta), a black dress, and four cotton skirts. Here we see not only clothing of the traditional wool and linen, but also cotton, imported and bought. She had not only a woollen skirt and a wool scarf, but also a lace scarf (valued six times higher than the woollen one). She had three headscarves (huvudduk), and some linen. Only one pair of boots is mentioned, valued at 0.25 kr. The buildings were listed as one old house (manbyggnad gammal) worth 15 kr and one old barn (ladugård), with very low values – the barn was worth as much as the bedding in the house. Anna Brita Nilsdotter would not have been atypical of crofters at the end of the nineteenth century: access to some food production of their own (the two cows and eight hens), but not on any substantial scale – no draught animal, for example – and so reliant on combining work on their own croft with labouring for others, corvée labour and wage labour.

V

One worry is that the results are driven by the changing representation of crofters in the probate inventories. If probate frequency increased over time so that in 1750 and 1800 only the most well-off crofters were probated, while in 1900 all were, then we will get a bias in our results whereby the 1750 and 1800 crofters look artificially richer than they actually were. Adjusting for such intra-group heterogeneity is difficult.⁴⁹

One way to deal with the heterogeneity is to see whether the likelihood of a deceased crofter being probated increases significantly over time. If so, then we would expect that poorer crofters in the early years were not probated, and that we get a bias if we compare probated crofters in 1750 with those probated in 1900 without taking account of the change in the probate process. To check for such possible problems, we have taken an in-depth look at six districts (*härader*), encompassing 40 parishes, that are included in our full dataset. These six areas cover some very different social and economic structures: Simtuna is located in the central Swedish mining area, Skärkind is a relatively well-off and well-connected area on the main road from Stockholm to southern Sweden, Enånger is a northern area, Östra is a poor coastal area in the southeast, Bara is a wealthy plains area in the south, and Inlands Torpe is a poor coastal area in the west. The Simtuna judicial district encompasses six parishes, Skärkind five parishes, Enånger three parishes, Östra ten parishes, Bara 14 parishes and Inlands Torpe two parishes, and we have gone through the death books for each parish to

⁴⁹ The canonical discussion of this issue is Peter H. Lindert, 'An Algorithm for Probate Sampling', *J. Interdisciplinary Hist.* 11 (1981), pp. 662–4.

			Cre	ofters	Overall			
		Dead	Probated	Probate frequency (%)	Dead	Probated	Probate frequency (%)	
Simtuna Hundred	1750			n.a.	209	67	32.1	
	1800	12	8	66.7	163	112	68.7	
	1850	15	11	73.3	134	83	61.9	
	1900	29	20	69.0	212	161	75.9	
Skärkind Hundred	1750	12	5	41.7	119	28	23.5	
	1800	27	15	55.6	120	55	45.8	
	1850	14	5	35.7	51	30	58.8	
	1900	24	18	75.0	136	81	59.6	
Östra Hundred	1750			n.a.	156	32	20.6	
	1800	13	10	77.0	268	102	38.0	
	1850	44	25	56.8	378	141	37.3	
	1900	90	52	57.7	626	317	50.6	
Enångers Tingslag	1750	33	16	48.5	130	65	50.0	
	1800	24	12	50.0	103	56	54.4	
	1850	20	18	90.0	75	70	93.3	
	1900	40	28	70.0	162	125	77.2	
Inlands Torpe	1750			n/a	206	60	29.1	
	1800			n/a	125	58	46.4	
	1850	20	11	55.0	148	67	45.3	
	1900	4	3	75.0	74	59	79.7	
Bara Hundred	1750	20	6	30.0	226	51	22.6	
	1800	29	21	72.4	105	44	41.9	
	1850	37	20	54.1	156	71	45.5	
	1900	14	6	42.9	199	131	65.8	

TABLE 8. Probate representation in six hundreds, 1750–1900

Note: Only residents of the hundreds in question of 20 years of age or older are counted. Probate inventories were to be made within three months after death, but in reality they could be drawn up until one year later. They are not archived in completely chronological order, neither after the date of death nor after the date of the inventory. Instead they are archived after the judicial assembly (*ting*) in which they were registered. The *ting* was held two to three times a year. That they are partly jumbled means that for each benchmark year, our probates are typically drawn from two adjacent years: 1749–50, 1799–1800, 1849–1850, and 1899–1900. For this reason, the probate frequency test in every case involves two years: we look for probates for all those deceased in the two-year pair as above. We go through the probate inventories for both years and also at least one more (1751, 1801, 1851, 1901) to ascertain that we have found all the relevant probates, since probates could be registered with a lag. While probates usually contained titles or occupations of the deceased, the early death books sometimes did not. For Simtuna, Östra, and Inlands Torpe we have therefore only occupations for those probated in 1750 but not for the rest of the deceased which make a frequency for crofters impossible to calculate.

Sources: For *Skärkind*, sources are church death books from the parishes Skärkind, Gistad, Gårdeby, Östra Ryd and Yxnerum, and probate inventories from Skärkind häradsrätt (district court). For *Östra*, the church death books

TABLE 8. continued

from the parishes Augerum, Jämjö. Kristianopel, Lyckeby, Lösen, Ramdala, Rödeby, Sturkö, Tjurkö and Torhamn, and probate inventories from Östra häradsrätt. In Östra, the missing probates in 1750 results in this year's being represented by the years 1768-69. For Simtuna, the church books from the parishes Altuna, Enåker, Frösthult, Norrby, Simtuna, and Tärna. We exclude the parishes Västerlövsta and Nora since part of them lie outside the hundred, which complicates the comparison. The probate inventories are from Simtuna häradsrätt for 1750-1850 and from Västmanlands Östra domsagas häradsrätt for 1900. We have not found death books for Frösthult after 1894, so the 1900 study builds on the death books from the five other parishes. For Bara there are missing death books for some of the parishes in three of the studied years. In 1750 and 1800 the parishes of Lyngby, Lomma and Kyrkheddinge are wholly or partly missing, leaving us with 15 parishes studied. In 1900, death books from Knästorp and Kyrkheddinge are missing so these parishes are not included in the 1900 calculations. The parishes included are: Genarp, Lyngby, Lomma, Brågarp, Görslöv, Mölleberga, Nevishög, Tottarp, Uppåkra, Bara, Bjärshög, Hyby, Burlöf, and Skabersjö. Furthermore, for '1750', death books for the years 1751-53 are used. However, the hundred grows large over time in terms of population so for '1800' only the year 1798 is used and in '1900' only the dead in the year 1899 are counted. Finally, for Enånger: This hundred is rather small in the beginning of the period and probates are missing for 1750. Hence, we study the death books for 1760-69 for the '1750' point and the years 1799-1804 for the '1800' point. For '1850' the years 1849 and 1850 are used. Source is Enångers tingslags häradsrätt and the death books from Enånger and Njutånger parishes.

match the deceased with those probated. In total, this calculation builds on 4201 deceased adults, of which 521 were crofters. It should be noted that much of the picture in the previous literature of a steadily increasing frequency of probate over time has been disproportionally influenced by Isacson's findings for one single parish in north-central Sweden.⁵⁰ In the present paper the test is reproduced for 40 parishes. Table 8 reports our results: the number of dead (adults) from the church death books, and the number of probates, for crofters and overall, for our four benchmark years.

The results are reassuring. Between 1800 and 1900, when we find the rather large shift – proletarianization without pauperization – the probate frequency for crofters follows no linear trend; rather, the development is quite diverse across the six areas. In Inlands Torpe, where we cannot identify people by profession before 1850, there is as expected an increase in crofter probate frequency from 1850 to 1900, but in Enånger and Simtuna the frequency decreases from 1850 to 1900, In Skärkind it decreases from 1800 to 1850 and increases from 1850 to 1900, while in Östra and Bara the frequency actually peaks in 1800. The main conclusion we draw from Table 8 is that there are major regional variations in probate frequency, and in the trends of probates, but no linear increase in the likelihood of probate among the lower classes. We find no reason to believe that the results of the paper are driven by a changing representation of the crofter group in the probate records.⁵¹ However, the results in Table 8 point to important regional/local differences which should be considered in future research.

⁵⁰ Isacson, *Ekonomisk tillväxt*. Cf. discussion in Gadd, *Järn och potatis*, pp. 56–7.

⁵¹ See also Willner's study of five parishes in south eastern Sweden (Kronoberg county). His study indicates that probate frequency was high also for lower classes. For rural workers 20–59 years old with heirs, the probate frequency was just above 60 percent in the 1770s, rose to around 80 percent around 1810, and was relatively constant for a hundred years, until a final further increase 1880–1910, with a level of over 90 percent at the end. Sam Willner, *Rural living standards and inequality: A case study from southern Sweden 1780–1919* (Lund Papers in Economic History, 219, 2021), Fig. 1 and discussion on pp. 16–19. This paper throws new light on the evolution of the living standards of the labouring classes. The divergence between actual material holdings in 1750 to 1800, and the marked drop in real (CPI-deflated) wealth, gives us cause to think again about the problems of historical consumer price indices, and how to think about working-class living standards in contexts where much labour is not rewarded by a money wage, and labourers partly produce their own food.⁵² We have shown that crofters owned fewer means of production in 1900 compared to 1750 or 1800, but that the relative prices of animals increased while the relative prices of consumption goods fell, which made it 'cheaper' to get more consumption goods such as porcelain, furniture, mirrors and clocks. We would argue that the information one can get from probate inventories, about the ownership of animals, grain, tools and other productive goods, as well as household goods, can contribute an important dimension to a debate on living standards which has to a large degree become dominated by the real wage approach.

Our results should not be interpreted to suggest that everything was rosy for the crofters. Inequality still increased in the rural sector. According to the Bengtsson et al. dataset, the farmer/crofter wealth ratio was 2.5 in 1750, 4.6 in 1800, 5.1 in 1850 and 10.9 in 1900. Much of this was driven by land prices, which rose rapidly especially after 1850.53 This inflated the estimated wealth of farmers. It also meant, in a dynamic perspective, that it became more and more difficult for a crofter or rural proletarian to advance into the freeholder class. Decades of hard work were by 1900 not rewarding enough to allow a farm to be bought. Exit from agriculture tout court, to the cities and to industry, was the more rational route for the rural underclasses.⁵⁴ We must also admit that this paper has looked at the crofters only. According to the probate inventory database they were not markedly richer than the group of rural workers and servants (in fact, for 1850 and 1900 the probated values of the latter group were superior), but the growth of the contract labourers as a group after 1850 probably still pushed the living standards of the average underclass rural household downwards. This highlights the need for historical studies of living standards to focus, like the literature on the real wage, on the incomes of one particular group, but also to discuss the relative weight of this group and how it changes over time. Interestingly, the partial 'proletarianization' we have mapped for the crofters probably made them more dependent upon wages around 1900, which makes the real wage approach more appropriate at that point in time. In Magnuson's telling phrase, the late nineteenth century and early twentieth century was an era of 'uneven monetarization'.⁵⁵ The crofters became more involved in the monetary economy from the late 1800s onwards; we have seen that holding cash became more common, as did savings bank accounts.

We must also remember that in an unequal society, crofters' living standards in the early 1900s were still comparatively low. The crofter cottages were better furnished and would smell

⁵² Here we follow the contribution of Muldrew, *Food*, *energy*.

and Kerstin Sundberg (eds), *Gatehus och gatehusfolk i skånska godsmiljöer* (2002), p. 185.

⁵⁵ Mark Magnuson, A Swedish dilemma: Aging during the search for a national insurance, 1884–1913 (2018).

⁵³ Bengtsson *et al.*, 'Wealth Inequality'; Bengtsson and Svensson, 'Wealth'.

⁵⁴ Cf. Henrik Svensson, 'Torpens försvinnande och samhällsomvandlingens geografi', in Christer Lundh

of coffee more often than they had 50 years before, but there were still serious structural problems for the crofters' living standards. When the investigative journalist Lubbe Nordström travelled around the whole country in 1938 to judge the development of living and especially housing standards in what was then an aspiring welfare society, he was frequently appalled by the housing of crofters. To an old friend he bumped into in the city of Norrköping, surrounded by historically agricultural land, the otherwise mainstream author exclaimed: 'I'm becoming a Bolshevik!'⁵⁶ This was in response to the 'stench of [his] experience' from the backward housing standards of the lower classes, especially agrarian workers: the houses were built directly on the soil, without foundations, damp, draughty, disease-ridden. The continuously poor housing standards for crofters are also an important reason for not getting too carried away by the improvement in 'real wealth' from 1850 to 1900. Crofters' stocks of consumer goods improved, but the fundamentals of the housing situation probably did not improve much. With no ownership of the land that the croft stood on, and no certain long-run tenants' rights, the crofters' buildings probably did not improve much over time.⁵⁷

Another factor in living standards which has not been considered here is that of health and life expectancy. Browsing through the church death books of this period, one is struck by the very high death rates for new-born babies in Sweden, not least those in crofter families. On this point, living standards did improve in the second half of the nineteenth century. Public health knowledge and interventions improved in Sweden from the 1870s on, and the increased employment of qualified midwives lowered infant as well as mothers' mortality.⁵⁸ This would have been a major improvement of crofters' living standards too.

There are several ways forward from this paper. As Hanson Jones commented, real wage estimates are never 'as real as we would like them to be'.⁵⁹ To corroborate wider and more comparable quantitative estimates, more granular, detailed approaches such as the one taken here would help to advance our understanding of historical living standards. Another further research project would be to investigate the living standards of other working-class groups using probate inventories. To understand the development of working-class living standards overall, we need to consider more sub-groups than the crofters. The Swedish literature on probate inventories has often said that these disproportionately represent the wealthier segments of the population; admittedly they do, but it is also true, as Muldrew says à propos of England, that the absolute number of inventories is so great that they are useful for studying the labouring classes too.⁶⁰ This would be a promising way forward.

⁵⁶ Lubbe Nordström, *Lort-Sverige* (Kooperativa förbundets bokförlag, 1938), p. 70.

⁵⁷ Cf. Jonsson, *Jordmagnater*; Lundh, 'Husmän och torpare'.

⁵⁸ Volha Lazuka, Defeating disease: Lasting effects of public health and medical breakthroughs between

1880 and 1945 on health and income in Sweden (2017), pp. 14–17.

⁵⁹ Alice Hanson Jones, 'Wealth and growth of the Thirteen Colonies: Some implications", *J. Econ. Hist.* 44 (1984), p. 253.

⁶⁰ Muldrew, Food, energy, p. 13.