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# POVERTY AND TAX EXEMPTIONS IN MID-NINETEENTH-CENTURY FINLAND

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## **ABSTRACT**

The topic of this article is the nature and social character of Finnish rural poverty during the early stages of industrialization. Specifically, I analyze households exempted from two separate taxes in order to locate and study the rural poor. Contrary to several previous considerations deeming taxation sources unreliable in poverty studies, it is shown that under controlled settings tax exemption information does display promising features. These include a high exemption percentage of households without adult male members, small average household size of the tax exempted and a clear concentration of the exemptions on the lower rural social classes. My findings also highlight the fact that conclusions on the usability of the exemption information depend heavily on the selection of the tax studied. Taxes levied at individual level were not necessarily dependent on the households' economic status, and similarly household level taxes may have been independent of the inhabitants' social and economic conditions. On average, the exemption rates are in line with several accounts from pre-industrial Western Europe.

## **INTRODUCTION**

In this article, I study the extent and social characteristics of the Finnish rural poor using household level micro-data. Through problematization of methodology and theory, an attempt is made to assess the contemporary concepts of poverty and deprivation by focusing on one often used poverty measure, tax exemption. Using data from rural Finland in 1865, I examine the nature of tax exemptions and the social standing of their recipients, seeking answers to the following questions: 1.

Who were defined as poor in pre-industrial societies? 2. How uniformly is poverty presented in the various fiscal sources? 3. Is tax exemption a valid instrument for measuring poverty? Answering these questions serves to quantify and generalize what attributes were deemed important in defining an individual or a household as poor in the Nordic pre-industrial agricultural context.

In his seminal study Seebohm Rowntree defines poor as those whose incomes fall below the minimum required “for the maintenance of merely physical efficiency” (Rowntree 1901, 86). Contemporary to this study, the Finnish J. W. Rosenberg stated in his doctoral thesis that poverty is “lack of means of sustenance, resulting in inability to take care of life’s basic needs” (Rosenborg 1863, 6). Both of these nineteenth-century scholars define poverty in a manner reminiscent of today’s capability failure, an idea most importantly put forward by Amartya Sen (1981). This stance accentuates that individual welfare has to be understood in the context of capabilities, involving various functionings—people’s achievements, what they manage to do or be, and what they can *potentially* achieve when the freedom to choose between different ways of living is acknowledged (Sen 1981, 1–8; Kuklys and Robeyns 2005, 10).

According to McIntosh (1998), pre-industrial poverty was largely defined through one’s (in)ability to work, which highlights the traditional dichotomy of the supporters and those supported (see also Vikström 2006, 227; Pulma 1994, 49, 56–59; Kilpi 1913, 1915). This was reflected in pre-industrial characteristics almost uniformly associated with poverty throughout Europe: sickness and incapacity were two of the most important variables attached to inclusion in the poor censuses (King 2002, 51–54). Accentuating this, Jütte (1996, 21, 24) emphasizes that even though tax exemption and poor census inclusion criteria varied, the role of sickness and old age was commonly accepted (see also Engberg 2006, 37).

By virtually any modern standard the pre-industrial world was wretchedly poor, although the very application of these modern conceptions of poverty in historical instances has aroused considerable debate. In England, estimates of the extent of the pre-industrial poverty varied from “a third to a half [of the population]” (Beier 1983, 5) to accounting it as a “massive and permanent element” (Wrightson 1982, 148), whereas more positive estimates still yielded poverty rates between 15 and 25 percent (Hoskins 1957; Lindert and Williamson 1983). Arkell (1987) downgraded these estimates: according to his revised figures, British pre-industrial poverty extended to about “one quarter” in general, and about 15 percent of the population lived in the destitution of absolute poverty (47).

According to Swedish tax exemption figures, depending on the geographic region, some 10 to 30 percent of the Swedish adult population were exempted from the lowest of personal taxes during the 1800s (Söderberg 1978; Lundsjö 1975). Juxtaposing these figures with official Swedish poor-relief rates yields results aligning with the general consensus that fiscal sources (i.e., tax exemptions) tend to suggest higher historical poverty levels than what can be obtained from poor-relief censuses (Jütte 1996, 47; Engberg 2006, 39): only a few percent of the Swedish population were entitled to poor relief during the 1800s (Bengtsson 2004, 138–42). In Finland the proportion of the population eligible for poor relief was roughly similar, about 3 percent in 1865, ranging from some 2 percent in the southern parts of the country to 6.3 percent in the province of Oulu (Kilpi 1913, 1915).

This paper introduces further evidence from Finland to the discussion. The structure is as follows: in the next section, I present the context of nineteenth-century rural Finland and review the literature concerning the living standards of different rural social groups. The third section presents some international literature on the usage of tax exemption data in poverty studies, and the fourth section presents the source material and necessary source history in order to assess the sources critically. In the fifth section regression models are run in order to explain the emerging patterns of exemption. The sixth section brings the discussion into conclusion.

### **SOCIAL STRUCTURE AND LIVING STANDARDS IN 1860s RURAL FINLAND**

Finland remained an undeveloped agrarian country right until the early 1900s. Scarcity of production factors, excessive dependence on agriculture in adverse climatic conditions and low connectivity to European trade are generally considered to explain the absence of growth and the low level of average income in Finland in comparison to the rest of the Nordic countries. Late industrialization meant that during the mid-1800s Finland fell behind the other Nordic countries in economic terms. Finnish gross domestic product (GDP) per capita in 1820 was 12 percent lower than that in Sweden, which in turn had about half of the GDP per capita of the leading economic power of the world at the time, the United Kingdom. The Finnish disparity to Sweden and to the rest of the Scandinavia grew during the 1800s: by 1870 the Finnish GDP per capita was 15 percent, by 1900 20 percent lower than that in Sweden (The Maddison-Project 2013; see also Eloranta, García-Iglesias, Ojala, and Jalava 2006, 27). The Finnish urbanization rate exceeded 10 percent only as late as the early 1890s, reflecting the predominance of the

agricultural sectors of society. Similarly, up to 75 percent of the labor force was tied to agricultural livelihoods until the late 1800s (Vattula 1983; Hjerppe 1988). Because of the persistence of rural living, the macro-social structure in Finnish society changed relatively little during the nineteenth century.

	Gentry	Freeholder Peasants	Whole Farm Renters, etc.	Croft Farmers	Rural Laborers	Farm Servants	Lodgers
Percentage of total population	2.0	38.4	4.0	21.0	15.9	5.4	4.6
Total number (in thousands)	36	694	72	378	286	97	83

Table 1. Social structure in rural Finland in 1865. Source: Modified from Rasila (2003). Note: Only the most prominent rural social groups presented. Percentages calculated from rural population (c. 1,840,000). Urban population constituted 6.7 percent of the total population.

Traditionally, Finnish social and agricultural historians have claimed that the single most crucial divide in the agrarian society lay between the rural landowners and the rest of the agricultural population, and Haatanen (1968), for example, states that “let it be a cottage or a piece of land . . . telling poor from poorer” (40). The landowning group can be divided into different cadastral categories (see, e.g., Gadd 2000; Jutikkala 2003), but it has been typologically customary to treat the landowners as a monolithic group forming the highest of the agricultural classes. Its actual composition varied from landowning nobility to small-scale independent farmers. The rural gentry, consisting of the nobility and high ranking officials, were typically landowners, even if the proportion of those actually engaging in agriculture was low (Soininen 1974, 28–29; Wirilander 1974, 119–24; Jutikkala 2003, 447). The size of the uppermost social segment was small: of the 1.8 million people living in Finland at the time, only 2 percent (including children) can be considered to have been part of the gentry (see Table 1). The considerably more visible group among the landowning segments were the freeholder peasants. The Finnish freeholder peasants cultivated the land they owned or over which they had legal control. In the taxation registers, the landowners can be located using the *mantal* subscription. *Mantal* was the major assessment for taxation in Finland until the 1900s (Huuhka 1999, 65–75; Lappalainen 2006, 161–63). Like the English *hide*, it was conceptually the amount of land needed to support a peasant family; thus it was a unit of land assessment for purposes of taxation. The acreage constituted by a *mantal* varied according to, for instance, geographical location and the quality of the land, but generally, the freeholder peasant farms’ *mantal* rates rarely exceeded one, while manorial demesnes

could be assigned substantially larger mantal rates (Olsson and Svensson 2010, 283).

The remainder of the farmer population constituted the rental class. The so-called whole farm renters (Finnish: *lampuodit*) rented a mantal farm in its entirety. A significantly larger and more prominent in the rental class were the crofters (Finnish (=f.): *torpparit*, Swedish (=s.): *torpare*), who cultivated some section of a mantal farm. The lowest of groups within the rental population were the cottagers (f. *mäkitupalaiset*, s. *backstugusittare*) who, unlike crofters, had no real arable land but instead small plots for staple crops. The wealthiest of the rental farmers have traditionally considered being on par in economic terms with many of the freeholder peasants, some being even wealthier. At the lower end, it is difficult to draw a sharp boundary between the cottagers and crofters, especially as there were cottagers owning their housings and crofters cultivating extremely scarce lands.

The so-called life-cycle service (e.g., Moring 2003) was typical throughout the Nordic countries. The most significant feature in this system was that young unmarried sons and daughters signed up by the year to work as farm laborers. For the contract year, these people were employed full-time and received the bulk of their wages in kind. With the increase in downward social mobility during the 1800s, a growing proportion of people remained as farm laborers even after marrying and starting a family (f. *muonamiehet*, s. *statare*). Their tenures as farm laborers became lifelong instead of constituting merely a phase in their lives. The lowest segment of the rural society was constituted by the lodgers (f. *itselliset*, s. *inhysesjon*), a highly heterogeneous group of people, the majority of whom lived in small huts or spent an unsettled life traveling from one house to another and mainly working as seasonal laborers on farms. A clear distinction between cottagers and lodgers is difficult to make: for example, in the rural municipality of Leppävirta in eastern Finland, in the early 1900s lodgers were considered to include all those with a house or room of their own to live in, but with no distinct acreage to cultivate (Haatanen 1968, 45; for examples of the lodger group and its economic situation see Anu Koskivirta's article in this issue).

It is important to note that the social class division as presented in the pre-industrial fiscal sources is mainly indicative. Three critical points are worth highlighting:

1. The legislation concerning the rural underclass was reformed in the early 1850s, which increased the number of people subject to so-called legal guardianship and placed landless population segments with no permanent source of income under the supervision and employment of the

landowning classes (see the Introduction to this issue). In practice, however, few landowners needed these new laborers. Instead of these people being entered in the taxation records with their actual social class, the legislation was often circumvented by registering them as farm laborers and crofters in the tax registers (Pulma 1994, 61).

2. Terms used to denote different social groups most likely had regional variation, and therefore the concepts used in the registers did not unambiguously indicate the actual ownership and social status (see, e.g., Rosenberg and Selin 1995, 118).

3. Not all those people listed as belonging to a household were necessarily actual residents; households were partly compiled for taxation purposes and may not reflect the actual prevailing family structures.

The division described above reflects the generally accepted ordering within the Finnish agricultural sphere. There are, however, relatively few studies trying to assess rural welfare beyond these formal categories. On the basis of probate inventories, Markkanen (1977) places gentry and freeholder peasants well above the rest of the rural population segments in terms of wealth (see also Rosenberg and Selin 1995, 119–20). The only available uniform source to assess income levels between social groups in the 1860s Finland is the income tax (*suostuntavero*) collected from 1865 to 1885. The lower income boundary for the mildly progressive tax was set at 500 Finnish *markka* (marks), which has been considered being quite high, duly corresponding to 2.7 times GDP per capita. The taxation information has raised very little interest and because of this we lack detailed studies on social group specific incomes (however, see, e.g., Jutikkala 1991; Kaarniranta 2001; see also SVT IV: 1). Some rough data have been published, and these would suggest that a majority of farmers and practically all the gentry were indeed taxed (Jutikkala 1991; Pitkänen 1992); that is, their yearly income exceeded the lower limit of 500 marks.

In a society close to subsistence level, with low wage level and with low adaptation rate of monetary economy, income is rather difficult to operationalize as a welfare measure. A comparative benchmark is needed. Vihola (1994) has presented information on the yearly wages of male and female farm laborers in southwest Finland in the 1860s. A wage paid in kind consisted of grain, dairy products, meat, and fish, but an additional monetary wage was also provided. On average, a male laborer received a yearly income of 250–300 marks, women about 70 percent of

this. Thus in a farm laborer's household the yearly income might range between 430 and 520 marks. Because of the common history of Sweden and Finland, the 1845 Swedish wage recommendation for a *statare*, a farm laborer with a family, is a practical point of comparison (Gadd 2000, 226). When converted into Finnish prices at the 1865 price level using the market price scales published in Vattula (1983), we end up with a yearly household income of about 450 marks. A later Finnish assessment is provided by Vennola (1909), suggesting, during the period 1907–1908, a yearly income of 922 Finnish marks for a male agricultural laborer with a family. When this is back-projected with real wage index provided by Heikkinen et al. (1987) to 1865, we end up with yearly income of about 480 marks.

To shed light on this, income tax registers of the parish of Saarijärvi in Central Finland were inspected as an example. Of the 436 households taxed in 1865, 78.2 percent were freeholders and 12.6 percent were crofters. Only two households of rural laborers with family were taxed (0.5 percent) and only one lodger household. Thus it would appear that normally the lowest of the agricultural social classes dropped below the 500 marks of yearly income. According to Haatanen (1968, 43), laborers with family occasionally received higher wages, reflected in their appearance in the income tax registers. Taken together, however, these considerations suggest that even if we are able to gauge the annual income with some confidence for certain social groups, the income tax registers represent much too high yearly incomes to be useful in a study interested in the lower end of the income distribution.

#### **METHODS: USING TAX EXEMPTIONS IN POVERTY STUDIES**

Currently available poverty statistics for nineteenth-century Finland are insufficient for describing the extent and nature of actual rural poverty. Income tax registers fail to include the lowest end of the income distribution, local poor-relief registers are too exclusive and include only the most clear-cut cases of poverty, and usage of contemporary social groups as they are presented in various fiscal sources risks enforcing historical stereotypes and disregarding intra-class variation in economic conditions. Finnish social and economic history has made scarce use of tax exemption data, scrutinized here in greater detail.

Poverty and tax exemptions not only have a long historiographical linkage (dating as far back as Gregory King), but taxation data have been favored in studies of this sort for a variety of reasons in their own right, most importantly because tax records are generally compiled systematically, which is helpful in the construction of

large data sets. Although tax exemptions could be easy to operationalize as a welfare measure, the dichotomous nature of their (assumed) information (poor/not-poor) may yield an overly simplistic picture of a heterogeneous rural reality.

Had the exemption criteria been transparent and the procedure clearly documented, the tax exemption data could easily be turned into a measure of social structure and welfare. Unfortunately this rarely is the case. The grounds for tax exemption were typically discretionary even *de jure*; in other words, very few taxes were so clearly based that the contemporary state could actually exercise “total” control over the contributors. If not sex-based (as even age could be contentious, e.g., Sirén 1999, 176), the most explicit of bases (such as income levels in income taxation) could hardly be more than estimates and agreements by both parties, the tax authority and the taxpayer. The extent to which these peculiarities have been considered to pose real problems varies from one research setup to another. Jütte (1996) has considered that strict concepts deduced from economic theory and modern poverty measurements are “unrealistic and lack a consistent historical perspective” and that measuring historical poverty “must proceed within the context of contemporary sources and not within a general theory of basic needs [...]” (45, 46).

Macro(-economic) studies in particular have often been less sensitive to the local aberrations of the fiscal sources. In the Swedish case, Lundsjö (1975) and Söderberg (1978) used directly the inability to pay the smallest of personal taxes (the hospital tax, *s. kurhusavgift*) as an indication of poverty. According to Söderberg, the exemption from the hospital tax “constitutes a precise operational definition” for rural poverty (1978, 13). Lundsjö makes the reservation that while the whole group of the exempted may not be considered deprived, the genuine poor of interest have to be included “among the exempted” (1975, 48). A more recent Swedish application of a similar approach is that by Engberg (2006), who asserts that the poor were those “whose economic situation was so bad that they could not pay even the most basic taxes,” even though she also points out that it is difficult to draw any sharp boundaries between different types of poverty presented in different sources (32, 48). Taking a more cautious approach, Castenbrandt (2012) considered the Swedish local poor-relief registers far more applicable in measuring poverty than tax exemption records (160–62). A combination of sources was used by Schellekens (1995), who strives to locate “poor low-class households” with the poll tax and poor-relief records in eighteenth and early nineteenth-century Holland.

In addition to the question whether the tax exempted were actually poor, four contextually important source-critical issues encountered by research using

taxation data are recognized. First, because of the modern perspective, taxpaying is often seen as a personal endeavor. This view disregards the possibility that someone else may be paying taxes that the historian may consider to be subjective (with reference to wage arrangements, see, e.g., Wilmi 2003, 230; Sirén 1999, 177–78).

Second, studying the taxpaying ability of a household and its eligibility for poor relief through a single measure overlooks the phenomenon of an overlapping poverty explored among others by Arkell (1987) and King (2002). Arkell argues that different definitions were applied to people unable to pay different kinds of taxes, whereas King points out that in seventeenth century Bolton, England, there was a substantial proportion of the population not paying taxes and still not appearing in the poor-relief registers (Arkell 1987, 32–38; King 2002, 48–50; see also Hoskins 1957, 202; and Johanna Annola's article in this issue). It has also been observed that late-seventeenth century British poor censuses omitted a significant number of families with large numbers of children, which were not considered poor enough to be included (King 2002, 54), highlighting what Engberg labels "living on the edge" (Engberg 2006).

Third, taxation records are likely to be skewed to include upper income groups and subject to deficiencies at the lower end for a variety of reasons. It is important to acknowledge that tax registers display contemporary perspectives concerning a sort of institutionalized social status thus partially reflecting expected ability to pay taxes instead of actual ability. King argues that social ties (i.e., "local social citizenship") to the community were important for people to be listed in the poor-relief registers. This aligns with Arkell's interpretation of the nature of the "deserving poor" (King 2002, 54; Arkell 1987; Vikström 2006, 227). The old Finnish tax legislation also reflects this phenomenon: people not paying taxes could effectively be categorized in two ways, those included in tax registers but exempted and those not included at all. Thus people like vagrant beggars are generally not recorded in the registers, and this contributes to an underestimation of the full extent of poverty and makes the data deficient at the very lowest end (Sirén 1999, 177; Vikström 2006, 232). Jütte (1996) has added that the majority of taxation records from the pre-industrial period reflect the wealth rather than the yearly income of taxpayers and thus the exempted should not automatically be considered to have zero income (46). To make things more complicated, taxation registers may also display errors resulting from moral hazard embedded in the implementation of taxation: for example, in the old Swedish law poll tax collectors (*mantalsskrivar*) were entitled to keep 1 percent of the taxes collected, possibly increasing the willingness to include poor people among the taxed

(Lext 1967, 249).

Fourth, while poverty has often been an explicitly stated criterion for tax exemption, generally no effort has been made to assess whether or not the contemporary *concept* of poverty varied between regions and subsequent socioeconomic contexts—whether or not people with similar characteristics were treated identically and independent of the region of residence. In the English context, Arkell states that although England had a nationwide establishment of poor relief, decisions on who were helped and who were not were often made inconsistently and generally in an attempt to match local resources to local poverty (Arkell 1987, 39; see also Lees 1998, 29–30). Arkell argues that poor-relief and tax-exemption data provide information concerning poverty serious enough to be deemed locally as in need of alleviation (Arkell 1987, 39; Engberg 2006, 52–53), or, as Vikström (2006) puts it, at least being given priority (225).

If the tax legislation was vague, it is tempting to believe that local communities exercised their own judgement and used their experience in classifying an individual as poor. As Engberg (2006) puts it, “[i]n the absence of formal criteria to determine who was entitled to exemption [...], the decision seems to have been a matter solely for the local fiscal authorities” (37–38). Kuusterä (1989) has emphasized that the formal legislative frames of Finnish state taxation remained largely intact throughout the era of Russian rule (1809–1917) (147) and this relative stagnation of the tax legislation may have emphasized local conventions in the application of the tax code. On the basis of the seventeenth-century British sources, King (2002, 51) suggests similarly a slow adaption to the formalizing poor-law system. Engberg (2006, 43) shows clear discontinuities resulting from the Swedish tax reforms in the nineteenth century.

In light of these accounts, it would seem reasonable to believe that local sources tell more about local administrative decisions and conceptions concerning poverty than about the actual poverty level in society (Lees 1998; Jütte 1996, 46). Shortcomings such as these have led Jütte to argue for using taxation data mainly to order regions in relation to one another (Jütte 1996, 47). King (2002) has pointed out that the process of the eradication of regional peculiarities is relatively unknown (43), which brings about the crucial need for a regionally comparative study of tax exemptions: no one region or even several are representative enough if exemption criteria varied extensively between regions (see also Goose 2001, 45). Although laborious, the task is not as problematic as suggested by Jütte, who concludes that we should give up the idea of estimating the national extent of poverty from local

sources (see also Arkell 1987, 45; Jütte 1996, 50; Goose 2001, 58), as the following sections endeavor to demonstrate.

## **SOURCES AND DATA**

In order to understand the logic of exemptions and their association with poverty, I have undertaken a quantitative assessment of their nature and have studied the exemption processes of two different direct state taxes, one levied on the household, one on the individual, both recorded in annually compiled poll tax registers. The usage of exemptions from two different taxes will not only reveal patterns and similarities, but may also unearth inconsistencies shedding light on the contemporary conceptions of economic well-being.

In international comparison, it is justified to say that Finnish poll tax registers have reasonably extensive coverage. According to valuations conducted by Kaukiainen (1979), poll tax registers are fairly incomplete before the 1820s, but after that they seem to converge in information with general population registers, which are considered reliable. Using the municipality of Lohja as an example, Kaukiainen shows that poll tax registers display a deficit of 7 percent in comparison to population registers in 1830, but of only 2.5 percent in 1850 (Kaukiainen 1979; see also Jutikkala 1957; Palm 1993, 90–91). Kilpi (1913) shows that at the level of the whole country poll tax registers lacked about 19 percent of people included in the church registers in 1805, but only 5.8 percent and 4.9 percent in 1830 and 1860 respectively (110). These figures are in stark contrast, for example, to British hearth tax lists, which have been estimated to lack up to 40 percent of the actual population, leading Husbans (1984) to warn that hearth tax exemption figures “will not throw much light on poverty and pauperization” (46–47).

Orrman (1980) states that the Finnish poll tax registers are far more complete in the years following legislative reforms and tend to deteriorate over time (see also Jutikkala 1957). This forms the crucial reason for using a relatively late sample in this study. As the data used are collected from poll tax registers after a major reform (1865), it is reasonable to believe that the data not only record contemporary conditions in rural Finland fairly accurately (i.e., include the majority of Finns), but also that the tax exemption code had been simplified and homogenized sufficiently in order to use the taxation registers to assess the living standards and social status of exempted social groups.

The person-specific tax used in this study is the poll tax (*f. henkiraha*, *s. mantalspenningar*), the first legislation dating back to 1609 (*s. hjonelagspenningar*, in 1622

s. *qvarntulls mantalpenningar*), originally targeting people older than twelve, although in 1652 the lower age limit was raised to fifteen and an upper age limit of sixty-three years was introduced. These age limits lasted until a reform in 1865, when the lower limit was raised to sixteen, the upper remaining unchanged (Imperial Statute, 20.2.1865; Von Bonsdorff 1833, 582–99; Lext 1967, 43–47; Orrman 1980; for similar content of Dutch poll tax registers, see Schellekens 1995, 200–201). The reform also abolished the majority of earlier bases for exemption, several of which had a distinct feature of “social steering”; people (for example, soldiers, industrial owners, and urban migrants) were granted exemption as a concession after services to the community. The nobility were exempted from all forms of taxation during the early modern era. Inability to work was vaguely incorporated in 1660, and in 1693 the subject’s poverty was acknowledged for the first time, but with no exact criteria defining when a poor person was entitled to exemption (Jutikkala 1957, 159–61; Orrman 1980; Sirén 1999, 171–73). After 1865 the only legal reasons for exemption included particular age groups (under 16, over 63), the number of children (three or more under the age ten or five or more under the age of sixteen), or a person’s status as a care-giver of a sick or elderly relative. Some special groups (such as low ranking military personnel) also retained the right to exemption. Poverty remained a stated ground for exemption, but still without an explicit definition. All those exempted for reasons other than age were listed in poll tax registers under the category “*för andra laga orsaker*” (for other reasons), comprising a wide array of people from nobles with many children to the poor and disabled living in shanties. Those men not exempted were obliged to pay an annual tax of two Finnish marks; women paid one mark. This corresponded to 14.6 and 7.3 liters of rye at 1865 taxation prices, respectively (Vattula 1983, 437).

Independent rural households were obliged to maintain local judiciaries, a liability funded through two separate annual taxes (f. *laamannin- ja tuomarinvero, käräjäkapp*, s. *lagmans- och härads höfdingeräntan, tingsgästningspengar*), both of which were levied on a household according to similar criteria. These obligations were composed of some of the oldest taxes levied in the Kingdom of Sweden, first enacted in 1602 and adjusted through the centuries. The exemptions were detailed in 1741 and remained effective until the late 1800s. As with the poll tax, the exemptions focused mainly on the upper social strata but also on certain rental farmers cultivating gentry lands. In 1743 poverty was acknowledged as a cause for exemption, being tied to the inclusion in poll tax registers, and the unit of taxation, that is, an independent household (*rök*), was tied to a livelihood from agriculture. In the third

decade of Russian rule, 1829, the exemption legislation came to distinguish certain rural social groups which were by definition exempted from the obligation to pay. The formal reasoning behind their exclusion was that they were not recognized as being independent households in the strictest sense (von Bonsdorff 1833, 614–20). The last pieces of legislation effective in 1865 were codified in 1858, and they also stipulated that the first part of the household tax was twenty-five kopeks of silver and the second some twenty liters of grain (Imperial Statute, 12.4.1858. Technically tax was four *kappas* of grain, one kappa being equivalent to c. 5.5 liters). The latter followed a long tradition: after varying legislation, in 1773 it was determined that the household tax had to be paid in kind, in grain. Several taxpayers wanted to pay the tax in money, which was seemingly easier to obtain and featured lower opportunity costs than grain. The fact that paying in grain caused problems suggests that getting an exemption was related to a household's (scarce) agricultural output. According to contemporary perception, the exemption was difficult to obtain and the tax collection practices were often criticized. Complaints were filed especially because household tax was levied on households regardless of whether the inhabitants were eligible for public poor aid or had already been granted exemption from another tax (Nevanlinna 1907, 499–501; *Uusi Suometar* 24.10.1872, 1.11.1872).

The 1858 household tax reform separated the tax obligation and agricultural livelihood and simultaneously increased the number of rural households liable to pay the tax. The size of the tax remained the same after the poll tax reform of 1865, when at the same time the first part of the household tax (f. *laamannin- ja tuomarinvero*, s. *lagmans- och härads höfdingeräntan*) was abolished. On macro level, the 1865 tax reform effectively widened the tax base and subsequently cut taxes from certain groups at the lowest end of the income distribution.

The empirical section of this article is based on household-level micro-data gathered from the poll tax register of 1865. Only heads of household (frequently men) were systematically listed in the Finnish poll tax registers. Wives and children were also relatively often mentioned by name, but others (such as servants) only sporadically. Because of this practice, comprehensive individual level data are extremely difficult to construct, and therefore the statistical unit I use is a household. The household level measurement is followed as part of a wider tradition (e.g., Arkell 1987, 45), which makes the results suitable for international comparison, but also because household level has been considered to be a better statistical unit in the measurement of individual entitlements to welfare (Sen 1997, 386; see however Devereaux 2001, 252–54).

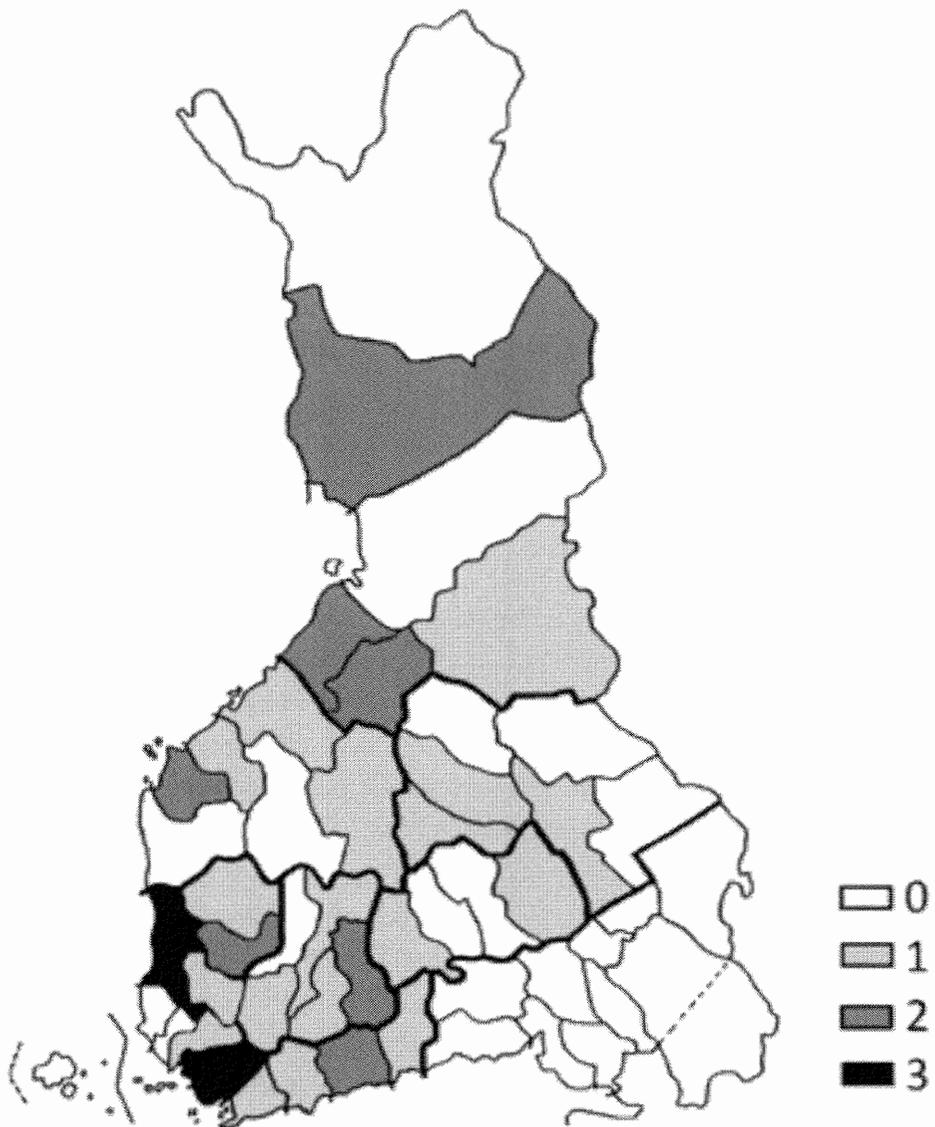
Because of the laborious nature of the data collection task, in the first stage 50 parishes were randomly selected, from each of which data concerning 50 households were gathered. The Province of Viipuri in the southeast and the northernmost district of Lapland were not included in the sampling population for reasons of data availability. Nine parishes had to be excluded as a result of data restrictions. This left 41 randomly assigned parishes and a cross-section of 2,050 households (see Map 1). The 50 households gathered from each parish were selected in listing order starting from the beginning of each register. As these registers were compiled so that villages were listed in alphabetical order within each parish, and households according to their addresses, there is no reason to believe that this procedure would yield a biased sample in the sense that we would end up with biased data because we selected the households from villages with initials at the start of the alphabet.

Some additional data elimination had to be done. Of the households selected, 229 (11.1 percent of the total sample) were excluded because of reasons of data quality (mainly because the taxation information was not provided), which left a total of 1,821 households, corresponding to 11,428 inhabitants (approx. 0.7 percent of the total population in the region studied). A control analysis was conducted with the whole sample included and no qualitative differences were found in the results presented, which underscores the quality of the original sources and robustness to possible outliers.

Table 2 (below) presents tax exemption percentages deduced from the household data in comparison to the whole sampling population; the total number of people and households is easy to obtain for the information is summed up in the registers. No systematic differences are evident, the main exception being the eastern Finnish province of Kuopio, where the sample yielded fairly low exemption estimates. Overall, however, the exemption rates deduced from the micro sample and the actual population rates correlate highly ( $r_{\text{poll tax}} = 0.79$ ;  $p = 0.033$ ,  $r_{\text{household tax}} = 0.87$ ;  $p = 0.012$ ) with modest qualitative differences.

### **MODELING EXEMPTIONS**

Two kinds of dependent variables are used in the following regression analysis: (1) If a household was exempted from household tax ( $n=452$ ) and (2) If a household accommodated an adult (i.e., between ages 15 and 63) exempted from poll tax ( $n=413$ ). Both of these variables score dichotomous values 1, if the household was exempted/there was an adult exempted, otherwise 0.



Province	Household sample		Whole country	
	Poll tax exemption rate (%)	Household tax exemption rate (%)	Poll tax exemption rate (%)	Household tax exemption rate (%)
Uusimaa	4.5	19.4	5.4	35.4
Turku and Pori	9.6	25.0	9.9	22.9
Häme	7.4	51.0	9.4	44.0
Mikkeli	14.1	14.4	13.2	13.4
Kuopio	13.5	2.2	22.8	9.9
Vaasa	10.0	13.7	8.8	15.4
Oulu	16.0	27.6	16.6	34.2

Table 2. Comparison of household sample and the total sampling population. Sources: Household micro data, poll tax registers (1865).

*Note: As, e.g., in Söderberg (1978, 14), the denominator used in poll tax exemption rate is the adult population, here those between ages 15 and 63. The number of households is gathered from poll tax registers.*

Figure 1 (below) plots tax exemptions by selected social group where the social status information was available (72 percent of cases were assigned to the six groups presented here). It features two distinct trends: (1) Exemption from household tax decreases as a function of land control and (2) Exemptions generally became rarer as a function of land control. Only 6 percent of all freeholder estates (hereafter also including the gentry) were exempted from household tax, while 31 percent of the rest of the rural households were exempted. The poll tax exemption is considerably more typical among freeholders, with about 20 percent of households accommodating at least one exempted adult. Close to 75 percent of freeholders and slightly over 62 percent of croft farmers were not exempted from either of the two taxes.

The two a priori poorest of the social groups, cottagers and lodgers, are also evident in the tax exemption figures. Close to 45 percent of cottager households and almost 30 percent of lodger households were exempted from both taxes. Even if tax exemptions seem generally more common among the farm servants with family, their households were typically exempted only from the household tax.

The initial social group-specific exploration confirms some preliminary considerations about the social stratification prevailing in rural Finland. In order to shed further light on the social characteristics of the tax exempted, logit-estimated logistic regression analyses were run explaining the event of gaining exemption from the taxes. These results are presented in Table 3. Regional control dummies, fixed

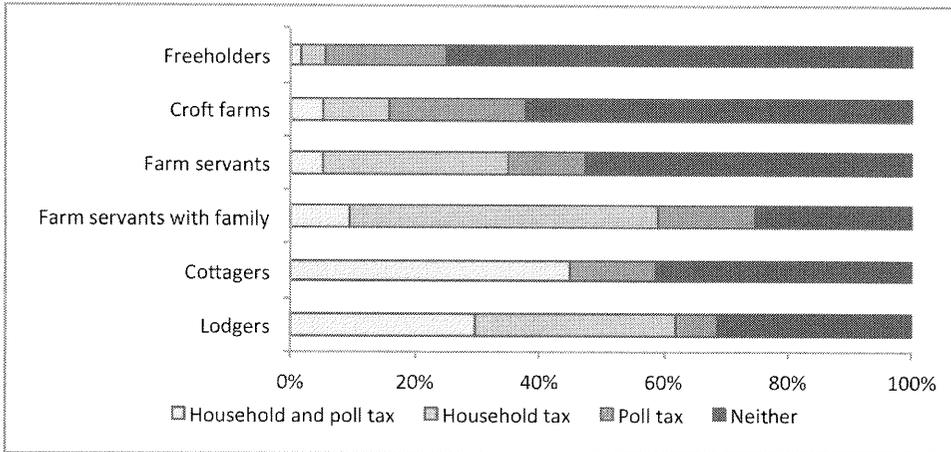


Figure 1. Exemption percentages from the taxes studied by social group. Source: Household micro data.

effects, were introduced on province-level in order to capture the region-specific sources of variation, such as differences in climate, soil, social structure, economic activity, and taxation practices. Moreover, the crop failures at the beginning of the 1860s (Pitkänen 1993, 54–55) could be suspected of affecting at least the short-term regional patterns of tax exemptions.

*Social groups.* The first variables introduced to logit models were the social groups displayed in Figure 1. As can be seen in Table 3, in the case of household tax exemption, the ordering of the social groups is similar regardless of the control variables: freeholders and croft farmers are the most likely not to receive exemption. Farm servants with family were the most likely group to be granted exemption, preceded by farm servants without family and lodgers.

If we compare these results to the a priori assumption deduced from the earlier literature mentioned above, it seems that the order of the lodgers and farm servants with family is reverse; lodgers have traditionally been considered to constitute the lowest of the rural social classes. The reason for the observed ordering is threefold. First of all, it may be that lodger households more typically cultivated a plot of land (even a small one) and thus practiced some form of farming livelihood, whereas farm servants mainly received their wages from their employers. Such wage arrangements could contribute to interpretations about whether or not farm laborers were considered to form an independent household obligated to pay the tax. Secondly, it was stipulated in the law that laborers and rental farmers of certain categories of the rural gentry were entitled to exemption. Farm servants with

family concentrated in the southern parts of Finland, where the largest of the gentry's estates were also located. This could mean that these servant households were often set on land entitling them to an exemption, which suggests that the poverty connectivity of the household tax exemption may be obscured by differences in the land tenures and in the employment contracts. Thirdly, the lodger group is admittedly more heterogeneous than that of farm servants. The rural social grouping was conducted on the basis of rural land ownership and labor conventions, which left vast numbers of people outside these categories. This opens up the possibility that the lodger group as it appears in tax registers includes people and households that were relatively well off.

In the case of the poll tax, the social classes yield ambiguous results: both the lower and the upper social classes had households where at least one person was exempted from poll tax for reasons other than age. In order to understand this result, we have to keep in mind that the dependent variable measures whether the poll tax registers listed at least one exempted person residing in the household in question. The poorer households most likely were poor not only in terms of agricultural output (reflected in the household tax exemption) but also on the individual level. Wealthier households, on the other hand, were able to accommodate and employ especially lodgers who were unable to set up a household of their own. This property suggests that poll tax exemption can effectively pinpoint households with stratified socioeconomic structure but these households do not necessarily have to be poor. The interpretation is strengthened by the fact that the effect persists after it has been controlled for number of children and poll taxed men, both more abundant in the upper social groups.

*Demographic composition.* Finnish surveys of the poll tax records of the pre-industrial era have generally concluded that information on women's social position and even their numbers is poorer than that on men (Piilahti 2007, 41; Happonen 2009, 37; Miettinen 2012, 80–81). The pattern of excess female representation in poor-relief registers is widespread throughout pre-industrial Europe (Jütte 1996, 40; Vikström 2006, 227–28) and, according to Jütte, a distinct structural feature of the poverty of people roughly between the ages of thirty and fifty was a rather high proportion of widows and other women-headed households with children. Engberg (2006) has reported similar results from Sweden (41).

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	Household tax exemption					Poll tax exemption				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Freeholder	-2.42 (0.24) <sup>a</sup>	-2.40 (0.25) <sup>a</sup>	-2.38 (0.25) <sup>a</sup>	-1.75 (0.29) <sup>a</sup>	-1.77 (0.29) <sup>a</sup>	0.25 (0.16)	-0.06 (0.17)	-0.08 (0.18)	0.88 (0.22) <sup>a</sup>	0.91 (0.23) <sup>a</sup>
Croft farm	-0.87 (0.17) <sup>a</sup>	-0.86 (0.17) <sup>a</sup>	-0.85 (0.17) <sup>a</sup>	-0.70 (0.18) <sup>a</sup>	-0.72 (0.19) <sup>a</sup>	0.58 (0.16) <sup>a</sup>	0.48 (0.17) <sup>a</sup>	0.48 (0.17) <sup>a</sup>	0.99 (0.20) <sup>a</sup>	1.01 (0.20) <sup>a</sup>
Farm servants	1.35 (0.42) <sup>a</sup>	1.36 (0.42) <sup>a</sup>	1.37 (0.43) <sup>a</sup>	0.94 (0.44) <sup>b</sup>	0.97 (0.44) <sup>b</sup>	-0.07 (0.55)	-0.09 (0.55)	-0.10 (0.56)	-0.93 (0.59)	-0.99 (0.59) <sup>c</sup>
Farm servants with family	2.54 (0.35) <sup>a</sup>	2.53 (0.35) <sup>a</sup>	2.58 (0.35) <sup>a</sup>	2.93 (0.37) <sup>a</sup>	2.90 (0.37) <sup>a</sup>	0.64 (0.33) <sup>*</sup>	0.76 (0.33) <sup>b</sup>	0.78 (0.34) <sup>b</sup>	1.38 (0.40) <sup>a</sup>	1.27 (0.41) <sup>a</sup>
Cottagers	0.59 (0.39)	0.59 (0.38)	0.62 (0.39)	0.34 (0.42)	0.33 (0.43)	1.12 (0.38) <sup>a</sup>	1.17 (0.39) <sup>a</sup>	1.17 (0.38) <sup>a</sup>	0.92 (0.46) <sup>b</sup>	0.91 (0.47) <sup>c</sup>
Lodgers	1.47 (0.21) <sup>a</sup>	1.46 (0.21) <sup>a</sup>	1.48 (0.21) <sup>a</sup>	1.14 (0.23) <sup>a</sup>	1.14 (0.23) <sup>a</sup>	0.87 (0.21) <sup>a</sup>	0.98 (0.21) <sup>a</sup>	0.99 (0.21) <sup>a</sup>	0.32 (0.24)	0.26 (0.24)
Children under age 15 >2 in the household		-0.04 (0.26)	-0.07 (0.26)	-0.27 (0.28)	-0.29 (0.28)		0.43 (0.20) <sup>b</sup>	0.42 (0.20) <sup>b</sup>	0.42 (0.22) <sup>b</sup>	0.43 (0.22) <sup>b</sup>
Number of boys under age 15		-0.01 (0.08)	0.02 (0.08)	0.05 (0.09)	0.05 (0.09)		0.13 (0.06) <sup>b</sup>	0.13 (0.06) <sup>b</sup>	0.14 (0.06) <sup>b</sup>	0.14 (0.06) <sup>b</sup>
Number of girls under age 15		-0.02 (0.08)	-0.01 (0.08)	0.04 (0.09)	0.04 (0.09)		0.12 (0.06) <sup>b</sup>	0.12 (0.06) <sup>b</sup>	0.11 (0.06) <sup>c</sup>	0.11 (0.06) <sup>c</sup>
Elderly household			0.52 (0.35)	-0.60 (0.36) <sup>c</sup>	-0.52 (0.38)					
People over age 64 in the household			0.03 (0.17)	-0.11 (0.18)	-0.11 (0.18)			0.09 (0.14)	-0.23 (0.15)	-0.23 (0.15)
Female household				1.78 (0.21) <sup>a</sup>	1.69 (0.24) <sup>a</sup>				2.96 (0.21) <sup>a</sup>	2.89 (0.22) <sup>a</sup>
Male household				0.50 (0.28) <sup>c</sup>	0.50 (0.28) <sup>c</sup>				-0.81 (0.42) <sup>c</sup>	-0.84 (0.42) <sup>b</sup>
Widow				-0.39 (0.37)	-0.38 (0.37)				-0.37 (0.36)	-0.35 (0.36)
Number of poll taxed men				-0.02 (0.09)	-0.03 (0.09)				0.12 (0.06) <sup>b</sup>	0.12 (0.06) <sup>b</sup>
Exemption from poll tax					0.16 (0.19)					
Exemption from household tax										0.21 (0.27)
Province dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
N	1821	1821	1821	1821	1821	1821	1821	1821	1821	1821

Table 3. Logit-estimated logistic regression analysis results for tax exemptions.

<sup>a</sup> Indicates statistical significance at the 1%, <sup>b</sup>at the 5%, <sup>c</sup>at the 10% level. Standard errors in parentheses. Note: The dependent variable is dichotomous ("household was exempted"/ "was not exempted" - 1/0) and the estimated coefficients show the effect of the variable on the probability of being tax exempted. The actual probability is calculated from exponential distributions' cumulative distribution function (e.g., Stock and Watson 2003, 307–8).

The introduction of the dummy variable “Female household,” which designates households without an adult male, considerably lowers the estimated effect of the social classes (especially lodgers), farm servants with family being an exception: their estimated effect increases with the introduction of the variable. The households headed by women were remarkably often exempted from both of the taxes: 58.4 percent of these were exempted from household tax, 53.3 percent had at least one adult exempted from poll tax (as an example of such a case, see Annola’s article in this issue). The corresponding percentages in the sample for the rest of the households are considerably smaller: 16.1 percent and 15.0 percent.

Contrary to the increased probability of exemption of female-headed households, the same does not apply to households without an adult woman. This is designated as the “Male household” variable. The estimated effect is weakly positive in the case of household tax exemption but negative in the case of poll tax. The *number* of tax paying men per household did, however, increase the probability of poll tax exemption. There are considerable differences between social classes in the average number of adult men per household. On freeholder farms there were on average 3.2 tax paying men, whereas lodger households only had 0.6 tax paying men on average. The number of adult men is suggested to capture the socioeconomic status of a household in greater detail than does simple division by social group. As was the case with the freeholder estates, the number of poll taxed men seems to designate the *possibility* that the household accommodated someone exempted from the poll tax, that is especially poor lodgers. This may stem from the possibility that the number of poll tax paying men indicates the labor demand of the household and thus its larger economic output.

The “Widow” variable did not yield significant results: a household headed by a widow did not increase its probability of exemption. Adding to this, even if supporting an elderly relative was a poll tax exemption criterion based on law in Finland, it does not seem to coincide with an increased probability of exemption. This may be the result of the ineffectiveness of the particular piece of legislation, or it may show the relative rarity of such a relation. The limitations in the data have to be considered here, too: the data do not allow us to distinguish between residence and support of the elderly in a household. Furthermore the “Elderly household” variable, which designates households where all the adults are over 63 years old, was only weakly associated with household tax exemption. This leads us to conclude somewhat confidently that old age does not seem to be an important determinant of the fiscal poverty analyzed here.

*The number of children.* The association between the number of children and the household's welfare has been an especially debatable topic. On the basis of Swedish data, Lilja and Bäcklund (2013) have argued that children provided households with cheap and flexible labor, leading them to conclude on a positive association between the number of children and the household's welfare. According to Markkola (1994), income brought in by children was an important part of urban working-class households' budgets during the late nineteenth century in Finland, and using French data Fauve-Chamoux (1993) could find no evidence for a negative relationship between the number of children in a household and its living standards. In my data, the number of children does correlate positively with the probability of exemption from poll tax, but not from household tax. The households which were exempted from household tax were considerably smaller than those paying the tax: the mean household size of the household tax exempted was 3.95 and 7.04 for others ( $p < 0.001$ ). This difference is largely a result of differences in the number of under 15-year-olds in households ( $p < 0.001$ ), whereas the difference in the number of people over 63 was smaller ( $p = 0.0145$ ). The finding concurs with previous Finnish assessments concerning age at marriage and mean household sizes of different social classes: according to Moring (2003) and Kaukiainen (1979), the lowest of Finnish social classes tended to have small mean household size. This resulted from high age at first marriage, which in turn contributed to fewer births.

The relationship between number of children and exemption from poll tax is the opposite. This is hardly surprising: the number of children constituted an exemption criterion in law. The tax registers do not, however, allow for exact age-level differentiation, and therefore we cannot precisely detect different poll tax exemption criteria (three or more children under the age ten or five or more children under the age of sixteen). Furthermore, we cannot establish whether those under fifteen years of age registered in a certain household were actually the children of the householders—we only know that they resided there. These source restrictions reduce the effectiveness of the estimation.

The fact that we observe no association between the number of children and household tax exemption suggests that children did not contribute decisively to the household's ability to pay the tax. This contrasts with findings on Dutch data. Schellekens suggests that 8-to-15-year-old daughters especially caused an economic burden on the family because they had few work opportunities (Schellekens 1995; see also Vikström 2006, 228). Both Moring (2003, 83) and Kaukiainen (1979, 22) have suggested that Finnish women were actually in a better position than men in

rural labor markets because of the range of tasks in which they could be employed (see also Wilmi 2003; Rahikainen 2006).

*Other variables.* The qualitative results were robust to the introduction and removal of province dummies. The removal of the dummies lowered the estimated effects, but did not alter any of the statistical significances in the case of the household tax. In the case of the poll tax, lodger households exhibited an increased risk of exemption when province dummies were not included, although only at the 10 percent level. Taken together, the results are roughly identical regardless of whether the regional controls are taken into account or not.

In an uncontrolled bivariate setting, the two exemptions were strongly associated. This effect, however, vanishes with the introduction of social control variables. These results suggest that households were not characterized with a general “taxpaying ability.” Paying the tax or applying for an exemption may have been decided one tax at a time. This has been suggested in the earlier literature with the idea of “overlapping poverty.”

## CONCLUSIONS

When scrutinizing pre-industrial welfare in and beyond Finland, scholars often have to face the fact that on the basis of the data currently available we cannot attach income levels to every household. This concerns especially the lower section of income distribution. In order to measure and understand historical poverty, we therefore have to approach welfare indirectly.

In this article we used exemptions from two different taxes to study the social characteristics of the households considered poor in fiscal terms. Even if it may seem close to tautological, it needs to be emphasized that using of different taxes for these purposes yields different results. Exemption from household tax follows quite closely the a priori social demarcation lines, poll tax exemption on the other hand is less dependent on the household’s social status. These results suggest that taxes levied on individual level were not necessarily dependent on the households’ economic status, and similarly household level taxes may have partially been independent of the inhabitants’ social and economic conditions.

Of the two taxes studied, the household tax is undoubtedly more useful as a poverty indicator, though not exactly a perfect measure. This is because, first of all, household tax is related to land tenure contracts which, even if indicative, are not necessarily connected to a household’s welfare. Secondly, while those exempted include the majority of the rural underclass, notable sections of the rural gentry are

also included. On macro level, however, the size of the gentry was small enough not to confound the regional aggregate rates (Table 1).

The results presented here suggest a clear connection between household tax exemption and lowest social groups. In this respect these findings concur with those from Sweden as presented by Vikström (2006, 232–33). As the lowest of social groups produced staple crops practically only for subsistence purposes, it is not surprising that the household tax (paid in grain) has a clear socioeconomic gradient. This contrasts with some of the previous considerations suggesting that tax exemptions were local interim solutions to occasional deprivation—the household tax exemption is clearly structural. The conclusion about the nature of household tax is in line with Goose’s (2001) and Spufford’s (1962) conclusions about the English hearth tax that it “can be used [ . . . ] to indicate relative social status [but] cannot be taken as a general guide to levels of wealth, even if it does faithfully reflect the shape of local social structures” (Goose 2001, 58, 59) and “may be used as a guide to status and wealth in general, [but] it may not safely be used in any individual example” (Spufford 1962, 58).

In addition to the social group connectivity, the following can be concluded on Finnish poverty on the basis of the tax exemption data analyzed here:

1. Regardless of whether we used social groups or tax exemptions as a measure, households considered to be poor had considerably smaller mean household sizes. This was a result of a smaller number of under-aged children but also of the smaller number of adult men.
2. Households without an adult male, that is, those headed by a woman, were very often exempted from taxes even when social group was taken into account.
3. The extraction of regional control variables did not affect the statistical significance of variables designating law-based exemption criteria or those reflecting social ordering. It thus seems that Finland was relatively homogenous with respect to tax legislation, which contradicts some assessments inclined to favor heterogeneous, locally constructed conventions.
4. The two tax measures used here are conditionally independent. That is, after controlling for a variety of social characteristics, exemption

from one tax is not associated with an increased probability of exemption from another. This shows that these exemptions featured the overlapping poverty phenomenon, as suggested on the basis of English evidence for instance by Arkell (1987) and King (2002).

From a methodological point of view, the results presented here are in contrast to Lees's (1998) account that the "best that scholars can do today is to estimate an order of magnitude for the problem [regional differences and extent of poverty] and note large-scale variations over time" (45–46). Although the source critical dilemmas are far from resolved, it is reasonable to argue that, at least in the Finnish case, carefully used taxation records do have relevance in the assessment of poverty. While this relevance may be distorted by obscurities in regional practices and loopholes in the legislation, there is more to taxation than meets the eye, much of which does indeed serve as a reasonable source for assessing pre-industrial poverty.

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