From Famine and Civil War to Welfare State.
Income Inequality in Finland from 1865 to 2015

Petri Roikonen*  

Preliminary version, do not cite without permission.

Abstract

Although a growing body of literature has investigated the impacts of economic shocks on inequality in the 20th century, long-term studies on the effects of such shocks and the subsequent periods of recovery are still rare. This paper contributes to this discussion by presenting a new consistent series of before- and after-tax income inequality in Finland from 1865 to 2015.

This study shows that the modest income level restricted the inequality to lower levels before industrialization. The rise of income level during the latter part of the 19th century gave a room for higher inequalities. However, the link between productivity and inequality disappeared with the advent of the civic society and independence (1917). In overall, the income inequality decreased during the first part of the 20th century, which was mainly result of economic shocks (e.g. civil war, depressions, WWI & WWII). Furthermore, the institutional framework transformed from the estate society to the welfare state during the research period. Partly due to the advent of the welfare state, from the 1960s until the late 1980s, inequality decreased significantly further. Finally, after the recession in 1990s, inequality increased until 2001.

Keywords: Income inequality, Finland, top shares, income distribution, social history, social classes, economic history, taxation.

JEL Classification: C81, D31, D33, H2, N33, N34

* Contact: PhD Candidate Petri Roikonen, petri.roikonen@helsinki.fi  
Economic and Social History, Faculty of Social Sciences, University of Helsinki 
P.O. Box 54, Snelmanninkatu 14 A  
FI-00014, University of Helsinki, Finland
Introduction

During the recent decades, the research on the long-term developments of inequality has received growing attention and it is certainly took one’s stand in the centre of economic debates (Boushey, DeLong, & Steinbaum, 2017; Piketty, 2014, 2015). Even though there have been studies based on a variety of sources (e.g. Scheidel 2017; Milanovic et al. 2011; Milanovic 2016) the shortage of homogenous long-term series remains a problem. This study aims to contribute to this discussion by exploring the case of Finland from 1865 to 2015.

Finnish research on income inequality has thus far focused on the period from the 1960s to the present. There are, however, several studies on pre-1960s development: for instance, Jäntti et al. (2006 and 2010) have described the development of Finnish income inequality starting from 1920, and Hjerpppe and Lefgren (1974) have in their pioneering historical study examined income inequality from as far back as 1881. In addition, Roine and Waldenström (2015) have provided rough estimates on the top income shares in the 1860s–80s. Furthermore, Roikonen and Heikkinen (2018) have studied income inequality between 1865 and 1934. However, previous estimates are not consistent throughout the studied period and inequality has mainly been measured before taxes and transfers. Thus, the aims of this study are as follows: 1) construct before-after tax income inequality series during the research period using a novel dataset and present cross-country comparisons (e.g. top shares), and 2) discussion about the factors behind the development.

The case of Finland provides a historically interesting context on the development of inequality. Since most of the existing long-term studies have focused on countries that had surpassed Finland’s income level in the 1860s already several centuries previously (Roikonen & Heikkinen, 2018). Furthermore, the period from 1865 to 2015 is extraordinary containing the development process from the famine to the high-income

---

1 In Finland, there is some studies that are concentrated on certain regions or certain types of inequalities (e.g. Nummela & Laitinen, 1987).
welfare state. This period consists several shocks and periods of growth, namely famine (1867–68), reaching the threshold for modern economic growth and industrialization (from the 1870s), WWI, independence and the ‘bloody’ Finnish Civil War (1917–18), the Great Depression, WWII, and the ‘golden years’ of economic growth as well as the economic crisis of the 1990s and its aftermath. The existing theories on the determinants of inequality are discussed here in this light. Thus, the Finnish case makes an interesting contribution to discussions on the Kuznets curve (Kuznets, 1955), the role of economic and political shocks (e.g. Scheidel 2017; Alfani & Grada 2017), the connection between capital and income (Piketty 2014), the inequality possibility frontier (Milanovic et al. 2011; Milanovic 2016) and the role of the welfare state (Lindert, 2004; Riihelä & Suoniemi, 2017).

Preliminary results indicate that the small size of ‘the cake’ before industrialization restrained the inequality. However, the economic growth during the latter part of the 19th century gave a room for higher inequalities. This link between productivity and inequality disappeared with the advent of the civic society and independence (1917). In overall, the income inequality decreased during the first part of the 20th century, which was mainly result of economic shocks (e.g. civil war, depressions, WWI and WWII). Furthermore, the Finnish institutional framework changed from the estate society to the welfare state during the research period, which had significant effect on economy, policies and society as whole. Partly due to the advent of the welfare state, from the 1960s until the late 1980s, inequality decreased. Finally, after the recession in 1990s, inequality increased until 2001.

This paper is organised as follows. First, I introduce the data and methods utilised, and clarify some limitations of the data. Next, I present preliminary results, which are followed by sections that discusses the factors behind the development in 1865-2015. These estimates were compared with the results from other countries, especially from Sweden, Norway, Denmark, U.S., Great Britain, France, Germany and the Netherlands (WID 2018).²

Since recent developments in income inequality differ greatly in these countries, it is especially interesting to compare the supposedly ‘equalitarian’ Finland with other Nordic, Anglo-Saxon and Central European countries. Finally, I conclude the paper.

**Data and methods**

The main sources utilized in this study are national state income taxes (1865, 1871, 1876, 1880), communal income taxes (1898-99, 1904), state tax on highest incomes (1916), state income tax (1920-2004). The taxes were not collected every year, but the data is relatively uniform and has a high rate of coverage (see Roikonen & Heikkinen 2018; Jäntti et al. 2006, 2010). The data is mainly income bracket data. Also, the data is extended consisting non-taxed population from the dozen years. In addition, household surveys (1966–85) and income distribution statistics (1987–2015) are exploited as well.

I argue that the Finnish tax data is relatively good data compared to many other countries. First, the taxes were public information in the 19th century as well as in the present times. Second, the number of votes in municipal level elections were determined by the wealth and income taxes paid in the 19th century. Third, during the 19th century the tax rates were really low. However, the data suffers many similar problems as recognized in other countries as well (e.g. the changing concept of taxable income, composition of the tax units, tax evasion, and the incomes of the missing).

This study describes the development by relative inequality measures (e.g. top shares) that employing a common methodology used already by Kuznets (1955) and reactivated and elaborated upon by e.g. Piketty (2014) and Blanchet et al. (2017). First, a synthesized sample of observations was created using the nonparametric method (WID), as introduced by Blanchet et al. (2017). The method reconstructs individual income observations based on grouped distributional data, which in turn is based on the inverted Pareto coefficients \([b(p)]\), where \(b(p)\) is the ratio between average income above rank \(p\) and

---

the p-th quantile \(Q(p)\). The WID method uses interpolation techniques by piecewise fifth-degree polynomials defined at each interval \([x_k, x_{k+1}]\). This type of approach has proven more accurate than other widely used methods, especially if the number of income brackets is small.

\[
b(p) = \frac{E[X|X > Q(p)]}{Q(p)}, \text{where } 0 < p < 1
\] (1)

**Limitations of the Data**

The income concept is taxable income, which was close to disposable income between the years 1865-1916. On the other hand, income concept was close to factor income from 1920 afterwards. Also, there were changes considering deductions, companies, number of income brackets in the data, capital incomes etc. (see Appendix 1 & 2). See Roikonen and Heikkinen (2018) paper for full data descriptions between the years 1865-1934.

The concept of the tax units changed during the research period as follows: household 1865-1934, individual 1935-42: couples and adults 1945-75, and individual 1975-2004. The changing concept of the tax units caused drastically differences in the share of the population in the statistics: many time the lowest threshold remained the same when the tax unit changed (Fig. 1). Thus, the top income shares provides more constant series compared with Gini coefficients during the research period.

**Figure 1.** [Here]

One of the most crucial problems when using tax data to study inequality has to do with estimating the incomes of non-taxed households or total income of the household sector.

---

4 In addition, these interpolations and extrapolations are restricted in certain ways (see Blanchet et al. 2017)

5 The estimations were compared to real micro data from the U.S. (1962–2014) and France (1970–2012). The comparison was made using the following commonly utilized methods: (1) the constant Pareto coefficient; (2) log-linear interpolation; (3) the mean-split histogram; and, (4) the piecewise Pareto coefficient. They included as a starting point in their analyses only four Lorenz curve points \((p_1 = 0.1, p_2 = 0.5, p_3 = 0.9, p_4 = 0.99)\). The generalized Pareto interpolation did surprisingly well at forecasting the top shares (70%, 25%, 5%): the mean percentage gap between the estimated and observed values was below 0.01% (Blanchet et al. 2017).
Previous studies have used two alternative methods to estimate the total incomes of households: 1) as a percentage of GDP (e.g., Roine and Waldenström 2008); or, 2) by estimating the incomes of the non-taxed households using other relevant data (e.g., Aaberge et al. 2016). This study utilizes the latter method because of the relevant complementary data; moreover, the real total incomes of the household sector are difficult to capture from the national accounts.

The average incomes of the missing was set 72% of the lowest income bracket in 1865-1934. The assumption was based on complementary data: the income survey 1903, wages 1865-, approximations made by the tax officials (1885) (see Roikonen & Heikkinen 2018, forthcoming). Furthermore, the average incomes of the missing was set 50% of the lowest income bracket in 1935-59 and 1967-2004, which based on the taxation in 1959-66 when the total adult population are in the statistics (inc. the non-taxed). Nevertheless, it is good to bear in mind that the people outside of the data was relatively small after 1950s.

**Preliminary results**

The preliminary results indicate that the growth periods until before the WWI were related to increasing inequality, whereas economic shocks decreased inequality. The starting point for the period under study was the great famine of 1867–68, when Finland can be characterized as an agrarian society. This period was followed by the early decades of economic growth, which accelerated from the 1890s onwards and ended with the economic and political shock of WWI, independence in 1917 and the brutal Civil War (1918). Finland recovered from these shocks in the 1920s, but the 1930s and 1940s were again turbulent decades (e.g. the Great Depression, WWII). After WWII, Finland experienced the ‘golden decades’ of economic growth and urbanization, which widened the income gaps. From the early 1960s, the establishment of the welfare state seemingly decreased the inequalities. However, Finland suffered a severe recession in the early 1990s, which, on the contrary to the earlier shocks, the top income shares remained relatively similar levels. Nevertheless, the inequality one again grew during the rapid economic growth period until 2001.

**Figure 2.** [Here]
The explanations for the rise and fall of income inequality in general and for the period under study here in particular are numerous, but they can be summarized based on the following four factors: 1) the level of income (e.g., Kuznets 1955; Milanovic et al. 2011), 2) shocks (e.g., Piketty 2014; Scheidel 2017), 3) capital (e.g., Piketty 2014), and 4) institutions (e.g., Atkinson 2015; Lindert 2004). In the following section, I discuss these drivers of income inequality in Finland during the research period.

The Factors behind the Development, 1865-2015

Inequality in Poor Country and the Size of ‘the Cake’

The idea of maximum possible inequality offers one explanation for increasing inequality during the early stages of growth. When average income is close to the subsistence level, then the most extreme levels of income inequality are (almost) impossible because any surplus above the subsistence level constrains the levels of inequality: higher levels of inequality mean that the poorest people will starve to death (Milanovic et al. 2011; Milanovic 2016). Thus, a low average income level results in an inequality possibility frontier, but later advances in productivity enable higher income differences. The extraction rate measures the ratio of the actual Gini coefficient to the theoretical maximum.

The maximum and actual Gini coefficients as well as the extraction rate for Finland in the years 1865–1934 are all displayed in figure 3. Note that economic growth pushed the inequality possibility frontier upwards after the famine of 1867–68, the last peace-time famine in Western Europe, which can be considered the ultimate proof of the proximity of a subsistence minimum in Finland.

Figure 3. [Here]

The Kuznets curve theory has a close relationship with the idea of maximum inequality. According to Kuznets (1955), income inequality increases together with the development of a society. The assumption is that the improvements in productivity differ between urbanized and rural areas, which causes greater income differences. In addition, the
increasing influence of the urban population, where the average incomes as well as the income differences are higher, will increase inequality. According to Roikonen and Heikkinen (2018), Finland experienced the upward part of the Kuznets curve in the years 1870–1913, which was strengthened by eras of increased globalization and greater liberalization politics. In addition, the rate of return of the capital remained considerably higher in contrast to economic growth, which, together with an overabundance of unskilled agricultural workers, generated a rising contrast between the haves (landowners, owners of industry, grand merchants, and high-ranking state officials) and the have-nots (landless persons).

The Role of Shocks

Finland’s population decreased by 6% because of the famine in 1867-68: the poorest social groups experienced excessive mortality rates and a decline in the number of births due to the fact that food was unequally distributed (Häkkinen & Peltola, 2005; Voutilainen, 2016). Thus, this shock reduced income differences in the cruelest of possible ways.⁶

The period of rising inequality was followed by a decline in the years 1914–24. Finland experienced a huge economic and political shock in 1917–18, the effects of which echoed long into the interwar period. Finland, which had been an autonomous Grand Duchy of the Russian Empire from 1809 to 1917, gained its independence in late 1917 after the collapse of the Russian Empire. Within only a few months, political conflicts escalated into a revolution and a bloody civil war (Heikkinen 2017, pp. 66). Inequality has been characterized as one of the “structural” reasons—besides political and ideological factors—leading to the civil war, which has been interpreted as a war between, roughly speaking, the landowners and the landless (Nummela 1990, pp. 201–202). The civil war, together with the loss of export markets, resulted in a massive drop in GDP: in 1918, the GDP was one third the level of

---

⁶The reducing effect of the shock is in line with the findings presented in the existing literature (see, e.g., Scheidel 2017).
1913—a drop that was one of the highest in Europe. The Finnish GDP recovered to its pre-war level only in 1922 and the GDP per capita level in the next year, but the manufacturing sector’s share of the GDP did not recover until the end of the 1930s (Heikkinen 2017, pp. 67–69; Hjerpe 1989).

After the first two years of WWI, inflation sped up to run at double-digit rates from 1915 onwards, resulting in a ten-fold price level increase in the early 1920s compared with 1913. The high rate of inflation was a shock to capital, since it depreciated the value of bank deposits and obligations. Obviously, the relative “winners” during the periods of high inflation were the farmers and those without any bank deposits (Roikonen & Heikkinen, 2018).

The role of shocks has been emphasized especially by Piketty (2014, 2015) and Scheidel (2017), and the evidence suggests that the decline in income inequality in the first part of the 20th century was predominantly caused by the shocks to wealth and capital incomes (e.g., Piketty and Saez 2006). In figure 4, the international comparisons show relatively large differences between countries, however, the effect of shocks to inequality are evident.

Figure 4. [Here]

Capital

The concentration of wealth has been harder to capture compared with income inequality indices. In overall, the wealth inequality followed similar patterns than income inequality in the 20th century, however, there were also significant differences (figure 5). For example, there was insignificant changes in wealth concentration in the USA during the last decades, which is drastically different from the top income shares. Nevertheless, the effect of the shocks on capital during the World Wars seems to be one of the factors behind the story.

Figure 5. [Here].

The capital shares felled sharply during the phases of diminishing inequality, on the other hand, when the inequality increased the capital shares tend to increase (figure 6). However, the capital shares can be misleading in obvious reason: it does not tell you anything about
the distribution, it tells you only about aggregate total. For example, it is well known that labour incomes were converted to capital incomes due to tax changes especially during 1990s (Jäntti et al., 2010).

**Figure 6.** [Here].

**The Changing Roles of Policies and Institutions**

Many studies (e.g., Piketty 2014; Morrison 2000, pp. 251–252) have emphasized that the institutional framework of the eighteenth and nineteenth centuries upheld inequality since the privileged classes benefitted from having preferential economic rights and possibilities. The institutional setting of Finland at the beginning of our research period, the 1860s, was that of an estate society placing restrictions on people’s ability to move, study, work, or act as entrepreneurs (Kekkonen, 1987; Voutilainen, 2016). For landless persons, the chances of obtaining land of their own to cultivate were relatively small (Voutilainen 2016, pp. 206).

In this respect, a fundamental change occurred in Finland in the 1860s–1880s: the old economic restrictions were abolished and freedom of trade became common policy (Kekkonen, 1987). Furthermore, at least in central Finland, the structure of the wealthiest households diversified in the late 19th century more than previously: the dominant role of the nobility and other great landowning social groups in society became more limited. The richest members of society also included large merchants, owners of industry, and high-ranking state officials (Markkanen 1977, pp. 191–201). For example, the evidence from France supports these findings: industrialization benefitted manufacturers, large merchants, and bankers, while it did not benefit to the same extent the lower middle class (civil servants, professionals) or the aristocracy (Morrison 2000, pp. 247–248). It seems, thus, that the abolition of institutional restrictions in Finland increased rather than diminished income inequality in the short run.

During the WWI the public finances were in dire straits due to the exceptional war years. After the civil war (1918), as Finland became a democratic sovereign state, officials
faced more pressure to change redistributive policies compared to the nineteenth century. Already in 1915, they had imposed a provisory income tax with a top marginal income tax rate of over 50%. However, the top marginal tax rate decreased to 20% in 1920, when a permanent income tax was established (Wickström, 1985; OSF IV B 1, pp. 1–11). Another example of “the new politics” was the partitioning of land. A law passed in 1918 prescribed that sharecroppers could redeem their leased land (Peltonen, 1992). Since the price was set at the levels of the year 1914, sharecroppers benefitted from the inflation, being able to redeem their lots at a low real price (Rasila 1970, pp. 361–366). In addition, the state cleared and supported the acquisition of new land. More than 100,000 landless peasants obtained their own land to cultivate as a result (Saaritsa 2008, pp. 10–11).

The social expenditures, investment to education and taxation surely had effect on inequality during the interwar years, however, starting from the early 1960s the redistribution of incomes widened drastically (figure 7). This pattern continued until the early 1990s; even when Gini’s measured in factor incomes increased, the gross and disposable income inequality remained the same or slightly lowered. However, during the recession in the early 1990s unemployment rose significantly that caused factor income inequality to peak, but the welfare state held the gross and disposable inequalities relatively similar level. Between the years 1994-2000, the factor inequalities remained practically the same, however, the gross and disposable inequalities rose drastically. This was due to the changes in taxation and social transfer system (see Riihelä & Suoniemi, 2017).

Figure 7. [Here]

Globalization forces and skill-biased technological change

There is a lot of studies that put the globalization forces and skill-biased technological change to the centre when describing the rise of inequality in the recent decades. The case of Finland, however, does not support the story. Although, Gini’s measured in the factor incomes has increased starting from the year 1976, the rise are taking place only in the early 1990s due to the unemployment (figure 7). Next, inequality has remained relatively similar levels during the 21th century. Finally, the timing and scale of increasing inequality between
countries has varied significantly (figure 4). It can be concluded that forces of globalization and skill-biased technological change are not, at least, major forces behind the trends of inequality in Finland.

**Conclusions**

This study presented a new series on income inequality in Finland for the years 1865–2015 and discussed the factors behind the trends. Preliminary results indicate that the low income level before industrialization restrained the inequality. However, the economic growth during the latter part of the 19th century gave a room for higher inequalities. This link between productivity and inequality disappeared with the advent of the civic society and independence (1917). In overall, the income inequality decreased during the first part of the 20th century, which was mainly result of shocks on capital (e.g. civil war, depressions, WWI and WWII). Furthermore, the Finnish institutional framework changed from the estate society to the welfare state during the research period, which had significant effect on economy, policy and society as whole. Partly due to the advent of the welfare state, from the 1960s until the late 1980s, inequality decreased. Finally, after the recession in 1990s, inequality increased until 2001.

The study is the first comprehensive exploration of income inequality in Finland from the 1860s to the 2010s. Thus, it leaves many topics open for further examination. To develop a full picture of the development of income inequality, additional studies will be needed that, for example, obtain new data points for the years between 1860 and the 1920s and study income inequality between and within different social groups as well as between rural and urban populations. Furthermore, the long-term developments in labor, wealth, inequality between regions, and land rents could enlighten our understanding of the drivers and aspects of inequality.

As these results indicate, income inequality is a complex phenomenon, one which can rarely be explained by just one theory. However, this study has highlighted the role of economic growth in a poor country, different type of shocks, and the changing institutions and policies that helped pave the way for a more equal society.
### Appendix


<table>
<thead>
<tr>
<th></th>
<th>State income tax</th>
<th>Municipal income tax</th>
<th>High income tax</th>
<th>Income and property tax</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>1865, 1871, 1876, 1880</td>
<td>1898–99, 1904</td>
<td>Highest income of the years 1912–15, and 1916</td>
<td>1920–22, 1924, 1926, 1929, 1931, 1934</td>
</tr>
<tr>
<td><strong>Tax unit</strong></td>
<td>Household</td>
<td>Household</td>
<td>Household</td>
<td>Household</td>
</tr>
<tr>
<td><strong>Companies</strong></td>
<td>Included (dividends) / in 1880 profits.</td>
<td>Separate tabulations (excl. 1904).</td>
<td>Separate tabulations.</td>
<td>Separate tabulations.</td>
</tr>
<tr>
<td><strong>Income estimates</strong></td>
<td>Tax boards and tax payers’ notification</td>
<td>Tax boards and tax payers’ notification</td>
<td>Tax boards and tax payers’ notification</td>
<td>Own notification</td>
</tr>
<tr>
<td><strong>Tax units (% of all households)</strong></td>
<td>18.8–31.2</td>
<td>65.8–76.0</td>
<td>0.8</td>
<td>56.9–79.4</td>
</tr>
<tr>
<td><strong>Number of income brackets</strong></td>
<td>7</td>
<td>Rural: 19–20, urban: 16</td>
<td>micro data</td>
<td>over 40</td>
</tr>
<tr>
<td><strong>Income concept</strong></td>
<td>C. disposable income</td>
<td>C. disposable income</td>
<td>C. disposable income</td>
<td>Market income</td>
</tr>
<tr>
<td><strong>Dividends</strong></td>
<td>No. Dividends are included if company did not pay income taxes.</td>
<td>Cities: No. Rural: Yes.</td>
<td>Yes</td>
<td>Mainly yes. Not included: partnership company</td>
</tr>
<tr>
<td><strong>Inheritances</strong></td>
<td>Included if inherited from outside the “family”</td>
<td>Included if inherited from outside the “family”</td>
<td>Included if inherited from outside the “family”</td>
<td>No</td>
</tr>
<tr>
<td><strong>Profit from sales</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Foreign income</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Housing income</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Deductions</strong></td>
<td>All transfers paid to the State, Municipality or Church.</td>
<td>All transfers paid to the State, Municipality or Church (pensions included in urban areas)</td>
<td>All transfers paid to the State, Municipality or Church (exc. pensions)</td>
<td>Only paid pensions.</td>
</tr>
<tr>
<td><strong>Expense allowance</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Interest of the loans</strong></td>
<td>Yes (cities). No (urban areas)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td>No</td>
<td>No</td>
<td>Part of the investments</td>
<td>No</td>
</tr>
<tr>
<td><strong>Family composition</strong></td>
<td>Deductions from agriculture incomes produced by children (excl. 1865)</td>
<td>Deductions from agriculture incomes produced by children</td>
<td>Deductions from agriculture incomes produced by children</td>
<td>Deductions for children (below 15 years of age).</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Not included</strong></td>
<td>Non-profit corporations, insurance companies (excl. 1865), inhabitants of Lapland</td>
<td>Non-profit corporations (incl. state corp.), Russian officials (urban)</td>
<td>Non-profit corporations (incl. state corp.), many types of officials’ extra remunerations</td>
<td>Non-profit corporations. Possible deductions from higher living costs (area based) or illness</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>Introduction of modern income and property taxation</td>
</tr>
<tr>
<td>1924</td>
<td>State taxation of agricultural property standardised with the norms of municipal taxation</td>
</tr>
<tr>
<td>1927</td>
<td>Deduction for expensive localities applied for the first time</td>
</tr>
<tr>
<td>1931</td>
<td>First deductions for some (mortgage) bonds introduced</td>
</tr>
<tr>
<td>1935</td>
<td>Individual taxation of spouses introduced (earlier: joint taxation)</td>
</tr>
<tr>
<td>1935, 1938</td>
<td>1935: Surtax for unmarried taxpayers introduced (‘Bachelor’s Tax’, +20% to both income and property tax)</td>
</tr>
<tr>
<td></td>
<td>1938: Surtax for procurement of basic supplies for the defence forces (+20%)</td>
</tr>
<tr>
<td>1940, 1942</td>
<td>1940: Property transfer tax</td>
</tr>
<tr>
<td></td>
<td>1942: Income tax increased temporarily by 50% and property tax by 100%, Surtax for procurement of basic supplies for the defence forces</td>
</tr>
<tr>
<td>1943</td>
<td>New law on taxation of income and property: Re-introduction of joint taxation of spouses</td>
</tr>
<tr>
<td></td>
<td>New tax classes: tax payers with children have gentler progression</td>
</tr>
<tr>
<td></td>
<td>Prepayment for earned income Introduced</td>
</tr>
<tr>
<td>1945</td>
<td>Second property transfer tax</td>
</tr>
<tr>
<td>1949-1961</td>
<td>Spouses presented as separate income units in the statistics in 1949-1961: they are considered as one unit in the sections for taxes (joint taxation)</td>
</tr>
<tr>
<td>1950</td>
<td>Deposits, bonds issued by the Finnish government and their interests exempted from taxation (hence also from the Statistics of Income and Property)</td>
</tr>
<tr>
<td>1962</td>
<td>Starting in 1962, spouses are presented as separate income units (both income, capital and taxes on them) in the statistics even though they are jointly taxed on earned income until 1975 according to the law</td>
</tr>
<tr>
<td>1958, 1964</td>
<td>Sailor taxation introduced in 1958 and reformed in 1964</td>
</tr>
<tr>
<td>1968</td>
<td>Income from agricultural property: obligation to report profits, taxation not based solely on rigid formulas anymore</td>
</tr>
<tr>
<td></td>
<td>Act on business taxation: taxation of businesses relaxed</td>
</tr>
<tr>
<td></td>
<td>Act on balancing of losses: deduction of losses over the course of some years</td>
</tr>
<tr>
<td>1969</td>
<td>Tax register is transferred on an IT System, making the statistics more reliable though less comparable with earlier years</td>
</tr>
<tr>
<td>1973</td>
<td>Apartment income for apartment owners introduced (3% of the taxable value)</td>
</tr>
<tr>
<td>1975</td>
<td>New act on taxation of income and property</td>
</tr>
<tr>
<td>1976</td>
<td>Spouses no longer taxed jointly on earned income; Unitary progressive income tax scale for all taxpayers re-introduced</td>
</tr>
<tr>
<td>1986</td>
<td>Sailor taxation abolished</td>
</tr>
<tr>
<td>1990</td>
<td>Joint taxation of spouses for capital income abolished</td>
</tr>
<tr>
<td></td>
<td>Corporate tax credit system on dividends and interests paid after December 31st 1989</td>
</tr>
<tr>
<td>1991</td>
<td>Withholding tax on interests</td>
</tr>
</tbody>
</table>
1993 | Major tax reform:
Progression of capital income taxation abolished; taxation of earned income less affected
Unemployment insurance payment and pension payment introduced
Income from forestry now taxed based on sales, not on fixed formulas
1995 | Joint taxation of spouses on property abolished

Sources: Statute books 1920-2004.

Tables

Figures

Figure 1. The share of the population in the statistics (%).

Sources: Author calculations, see text. Note: household 1865-1934; individual 1935-42; couples and adults 1945-75; individual 1975-2004.
Figure 2. Top 1% share in Finland, 1865-2004.

Sources: Author calculations, see text. * Only state taxes included.
Figure 3. The Inequality Possibility Frontier and Estimated Gini coefficients, 1865–1934.

Sources: Author calculations, see text. Sources: Authors’ calculations, methodology proposed by Milanovic et al. 2011 and Milanovic 2016. Note: The subsistence minimum was estimated based on the level of consumption for housing, heating, and foodstuffs by two poor families in 1887 (Lilius, 1888). The family size was corrected to fit the average household. The calculated subsistence level was extended to other years by using the cost of living index (Heikkinen 1997, 2017). The subsistence level was compared with the GDP per household (OSF, history series; Hjerppe 1989).

\[ G_m = \frac{\mu - s}{\mu}, \]  
where $G_m$ = the "maximum" Gini, $\mu$ = the GDP per household, $s$ = the subsistence minimum.

\[ I = \frac{G}{G_m}, \]  
where $I$ = the inequality extraction ratio, $G$ = the estimated Gini, $G_m$ = the "maximum" Gini.
Figure 4. Top 1% share in Scandinavia (a) and in the Middle Europe and Anglo-Saxon countries (b).

Sources: Finland (author calculations, see text), Germany 1876–1880 (Dumke, 1991), USA 1870–1910 (Lindert and Williamson 2016, p. 173), other (WID database).
Figure 5. Top one percent’s share of total private wealth, 1860–2014.

Source: Roine and Waldenström 2015; France (Garbinti, Goupille-Lebret, & Piketty, 2017).
Figure 6. The Capital Shares in Finland, 1900-2015.

Sources: Bengtsson and Waldenström 2017.
Figure 7. Gini coefficients for factor, gross and disposable incomes in Finland, 1966-2015 (household, OECD-equivalence scale).

Sources


Lääninhallitus. Läänen revidoitujen tilien arkisto.


References


