Abstract

The 19th and the early 20th century saw the emergence of a large number of studies of the economic situation of working men and their families. In many cases the surveys targeted families of a particular composition, so called normal families. The results were used for calculations of average earnings of occupational or social groups, standards of living and living conditions. These studies have also been the base for the calculation of distribution of the earnings of different family members.

The aim of this paper is to question the validity of the normal family as an accurate representative of the working class family in the past. The intention is also to query calculations using short term earnings of males in a specific family setting as representative of the distribution of earnings within working class families, and to raise the question about how well they depict the contribution of women to the household economy.

Key words: Women, family work, economy

Mujeres, familia, trabajo y bienestar en Europa en el siglo XIX. Estudios de presupuestos, la familia nuclear y el ganador de pan

Resumen

El siglo XIX y principios del XX vio el surgimiento de un gran número de estudios sobre la situación económica de los trabajadores y sus familias. En muchos casos, las encuestas iban dirigidas a familias de una composición particular, por lo que se llamaron familias normales. Los resultados se utilizaron para el cálculo de los ingresos medios de los grupos ocupacionales o sociales, y los estándares en las condiciones de vida. Estos estudios también han sido la base para el cálculo

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a University of Helsinki
de la distribución de los ingresos de los diferentes miembros de la familia.
El objetivo de este trabajo es cuestionar la validez de la familia normal como correcta representante de la familia de clase trabajadora en el pasado. La intención es también poder consultar cálculos utilizando las ganancias a corto plazo de los hombres en un entorno familiar específico; al considerarlos como representantes de la distribución de los ingresos dentro de las familias de la clase trabajadora. También, plantear la cuestión acerca de lo acertado que supone considerar la contribución de las mujeres a la economía familiar.

Palabras clave: Mujeres, trabajo familiar, economía

INTRODUCTION

The contributions to the family economy by different family members have been studied by Richard Wall in a number of publications. One of the issues frequently underlined is that the family generally did not rely on a single income from a father breadwinner but was engaged in multiple strategies (Wall, 2010). In his efforts to tackle the
issue of female contributions Wall has brought to our attention the studies of Frederic Le Play from 19th century Europe demonstrating the many and long hours married women put in to advance the family economy (Wall, 1995).

The question of the male breadwinner was also tackled by Jane Humphries and Sarah Horrell (1990, 1995, 1998) in studies using British 18th and 19th century budgets. They analysed the effect of changes in rights to common land and urbanisation on the ability of women to contribute to the household income Humphries (2010) also put forward the view that such changes made women more dependent on a breadwinner and that the lack of employment opportunities made women turn to their children as alternative earners. While Wall and Humphries do not agree about the economic share of the wife for the welfare of the family in the 19th century, both raise questions around the model of the male breadwinner.

My intention in this paper is to analyse late 19th and early 20th century budgets and their promotion of the male breadwinner concept as well as the nuclear family as the “normal family”. I will point out indications that underlying attitudes and ideology affected the structuring of budget studies and that the structure of data collection pushed results in a specific direction. I will question the validity of the “normal family” as normal. I will also show that despite the best efforts in data manipulation many of the normal families could not live up to the male breadwinner model and that existing conclusions about family earnings cannot be taken at face value but that the female contribution has been underestimated.

1. BUDGET STUDIES, BACKGROUND AND AIMS

While increased rural proletarianisation was mainly a nineteenth century phenomenon in large parts of Europe, Britain saw the countryside populated by families with no access to land already at the end of the previous century. During years of economic crisis many families had to turn to society for assistance which in its turn generated interest in the issue of poverty and the ability of working class families to earn enough for their needs. Consequently already the 1790s saw two studies collecting information about the family economy of poor labourers in rural England (Davies, 1795; Eden, 1797).
Activity on these lines became more common on the European continent after the 1830s when awareness of new social problems penetrated society in the form of political movements and a fear of radicalisation of the industrialised and urbanised population. In the late 19th century and the early part of the 20th century information about living conditions of the working classes began to be collected in many parts of Europe, most famously Frederic Le Play (1877-79). Some were inspired by a growing concern about the plight of poor families, suffering from the negative consequences of urbanisation and industrialisation. In some cases the objective was to determine whether a problem existed that could cause political unrest and radicalisation. In others it started with considerable scepticism but ended with dismay at the plight of those living in poverty (Booth, 1892).

In the UK many of these studies were initiated by private individuals. The sanitary and dietary questions were also an issue for the medical profession. In Germany and the Nordic countries the statistical offices and to some extent government bodies studying labour conditions took the initiative in data collection. In the case of Denmark, “... the purpose of the national Statistical Bureau is to collect information about the conditions of different social groups, their earnings and consumption... plans were immediately set up for an enquiry into household statistics of the working classes” (Rubin, 1900). Many of the budget studies set out to collect information about how the working class lived (Erhebung, 1909; Hjelt, 1911; Bowley and Burnett-Hurst, 1915). However on some occasions the studies were explicitly motivated by politico-economic aims like finding out the premises for economic competition as in the case of The 6th and 7th Annual Report of the U S Commissioner of Labor 1890 and 1891: “The third feature was the collection of facts covering the cost of living, total earnings and expenditures of the men employed in the establishments called upon to furnish the data relative to cost of production, earnings and efficiency”(6th report 1890: 4).

2. IDEOLOGY AND METHODOLOGY

In an article from 1987 Edward Higgs raised the question of how family income was measured in the 19th century. Statisticians tended to view the world from their (middle class) perspective, the view of the male and female sphere affected how data was collected, occupations
and economic participation was defined. Production was divided into a market oriented measurable economy and female dominated domestic economy the production and productivity of which was not included in calculations (Higgs, 1987: 60). The absence of the ‘domestic’ part of the economy was raised by 1920s female economists and has been raised ever since (Harmaja, 1931; Froide, 2009: 467-468).

Too often it has been assumed or proposed that women in the past were not economically active but lived off the income of their husbands. Where the husband was running a business, just like in the countryside running a farm, assistance from the wife was natural but that did not mean that the husband stated it on the census sheet (The Census of Helsinki, 1900; Salmela Jarvinen, 1965: 38-39). The male attitude to female household work as self evident and free is exemplified in a budget where the husband, a barber, paid his apprentice in food and lodging only, but does not declare that his wife made any contribution to the household economy, even though her work saved him the cost of a salary (Hjelt, 1911: 132-33). In some cases female employment has been presented in relation to all women, i.e. including babies, toddlers and little girls with the resulting figures indicating low participation (Voionmaa, 1922: 158-159). In other cases even students of social history accept at face value oral history statements of questionable reliability. Collections from the 1930s would reflect the then prevalent domestic ideology and it is not unheard of that people suffer from selective memory loss when aspiring to please an interviewer or want to underline working class respectability (Pennigton & Westover: 6-8, 11-13). There have even been occasions when married women engaged in activities like washing, ironing, cleaning etc have been defined as not in employment because of the nature of and income from the work.

Men however have always been classified as economically productive and family providers, irrespective of type of occupation, disregarding the fact that a feature of the working year in manual occupations was seasonal unemployment (Waris, 1936: 327-328). In actual fact many working class biographies reveal that it was common for married women to engage in permanent or part time work, particularly washing and cleaning. Vera Hjelt found, when collecting budgets in 1908, considerable female activity of so called auxiliary kind but seldom viewed by the husband as an occupation. She also found defects in the registration of earnings by family members (Salmela Jarvinen, 1965:63; Hjelt, 1911: 8-11, 25-26).
A sample of married couples from the 1900 census of working class Helsinki revealed that when the sheet was filled in by the husband only 12 percent of the wives were registered as having an occupation. On the other hand, when women filled in their own sheets, as was the case with widows, only 16 percent did not consider themselves as occupationally active (The Census of Helsinki, 1900).

3. BUDGETS, DATA COLLECTION AND INFORMATION

The way that information has been gathered for what we today view as historical budget studies has varied considerably. Although Davies and Eden personally visited some of the families included in their data collections a lot of the information was based on estimates by persons outside the family or in optimal cases information from shopkeepers (Wall, 2012: 28, 166-167). Frederic Le Play piloted a system of observation which meant the continuous presence of the observer in the household that was studied. This was emulated in some cases but the standard 19th century systems of data collection were generally based on the filling in of forms that were distributed to specific occupational groups. Efforts at standardisation were made through international conferences of statisticians were guidelines were set up for the collection of information (Engel, 1895: 21-23). The middle class statistician would naturally see the male head of the family as the obvious source of information as he was expected to be the person in control of the family finances. Therefore the forms were often handed out in factories and other workplaces:

The facts (cost of living, total earnings and expenditures of the men) were gathered from the heads of families employed in the very establishments from which schedules relating to cost of production and pay accounts were obtained, and upon budgets uniform for all industries” (6th Report, 1890: 4, 605). The results were not however always satisfactory:

The department has aimed to secure accounts from a representative number of the employees of the establishments... and also from those families whose surroundings and conditions made them representative of the whole body of employees in any particular establishment. This representative character, however, has been impaired in some measure by two features: first some families have not been willing to give the information desired; while second, other families, perfectly willing, have not been able to give reasonable exact accounts of their living expenses. (6th Report, 1890: 610-611).
The system of approaching the male household heads was however replicated in many places even though the expectation was that the information might not always be complete:

“The budget schemes were distributed in the capital and towns and industrial centres by the main investigator and 43 assistants, including union representatives. The schedules were filled in by the household heads which resulted in possible omissions of casual earnings by family members” (Hjelt, 1911: 7-9).

There were, however surveys with a different approach, noting the fact that women tended to do the family shopping and attend to day to day expenses. In Denmark a budget sheet was set up 1896 that was distributed to schoolteachers in towns and the countryside, who often acted as health support inspectors. They were asked to distribute the sheets to the kind of labouring families that would be willing and capable to keep accounts for a year. They were also asked to help the housewives who had taken the sheets with how the questions should be answered (Rubin, 1900: 5-6). More books were distributed in urban areas to workers and craftsmen in Copenhagen, only a few of these were filled in satisfactorily (Rubin, 1900: 6-7).

In a study undertaken in New York a similar approach was favoured. The enumerators were social workers, teachers, trades union members and paid reporters financed by the Russell Sage Foundation. Personal visits were made to the families and the sheets filled in through questions and answers with the women of the family. Often the expenditure for the year had to be calculated on the basis of the weeks or some weeks expenditure (Chapin, 1909: 26-28). Altogether 251 schedules were rejected out of 642 (Chapin, 1909: 37).

4. DEFINITIONS OF THE NORMAL FAMILY, INCLUSION AND EXCLUSION

Budget studies seem to be of two different types, either they particularly target the poor (Eden, Davis, Booth). Or then they aim for the average family in industrial or agricultural work. 19th century budget studies often include mentions that those who participated were the elite of the workers. Those in temporary employment or unemployed were rarely included because of the collection techniques. Reputable workers were approached to make sure that they would fill in the
forms properly (Hjelt, 1911). Among those surveyed there was also a disinclination to reveal drinking habits, low incomes etc. In surveys where wives had been approached there were examples of the husband forbidding participation (Rathbone, 1909). Slum landlords also threw the surveyors out, not wanting the premises inspected or information about rents (Chapin, 1909: 31-32).

In the 19th century statisticians had created a phenomenon “the normal family”, a unit of husband wife and three or more children. The normal family regularly appears in surveys of budgets focusing on the household economy of ‘the working man’. Such households, as a rule containing young children and babies served their purpose in boosting male breadwinner ideologies. Bowley however, raised the issue, whether the normal family was normal, as in his studies of early 20th century household economy he found that actually only a minority of families fitted the criteria, 31 out of 693 households were so called “normal families” (Bowley and Burnett-Hurst, 1915: 63).

The “normal family”, can already be found in the work of Eden and Davies. Their studies were linked to an ongoing debate about the costs of the poor relief system and the families were often suffering from poverty. As families with two parents of working age were considered for assistance only if they had young children, the families under observation tended to be particularly well provided with infants and toddlers. The budgets of Eden include families with children under the age of 16 and in most cases children under the age of 10 (Eden, 1797, v. 3: CCCXI-CCCXLI). The families in the study by Davies are exclusively families of parents and young children, no co-residing relatives or lodgers (Davies, 1797; Sokoll, 1991: 38).

While Le Play did not see infants as an obligatory part of a family for it to be considered normal his spiritual children in the statistics offices of Europe went down this road as a man. At the International statistical congress in Brussels in 1853 a programme was adopted for generating budget studies of working class families. The families that were to be targeted were the “typical” working class families, as envisaged by Ducpetiaux, the criteria being that the family was to have father, mother and four children of whom the eldest was to be 16 or younger and the youngest 2 years old or thereabouts. Forcing the family selection into such a straitjacket was by no means an ideal arrangement and the decision was in fact criticized by Engel in the 1895 as one resulting in an unfortunate skewing of the data (Engel, 1895: 22-23).
The system however, imprinted itself on the collection process throughout the 19\textsuperscript{th} and early 20\textsuperscript{th} century, although the families in the 1860s British survey had children mostly under the age of 10 in line with Eden and Davis (Smith, 1864).

The Commissioner of Labor Studies of working families in 1890s USA and Europe defined normality as: “A married couple with 5 children or less, all children under 14 years old, no in-living relations or lodgers, family does not own its dwelling, registered information about rent, fuel, clothes, food” (7th Report 1891: 856-857).

Others allowed the inclusion of families with children up to the age of 18 (Hjelt, 1911: 67). However when a large amount of data had been collected special calculations could be done for the ‘normal families’, while the information about other types of units was retained and summarised separately (6th and 7th Report, Hjelt, 1911).

In other cases information is provided that data was actually excluded from the study because the family did not fit the ideal. The visitors in New York tried to find families of normal composition and size, that is having both parents and 2-4 children under 16 years of age (Chapin, 1909: 28). The number of persons in the standard family being assumed as 5, families containing 1 more and 1 less were included. 106 schedules rejected because of family size (Chapin, 1909: 37). In other cases we do not know anything about the selection process, we only know that the results conform with the expectations of family composition; 840 married couples 1948 children under the age of 15, the majority under the age of 10 (Erhebung, 1909). The 1896 Danish budget collection included 72\% families with children under the age of 5, 24\% families with children older than 5 years and 4\% childless couples (Rubin, 1900).

While complaints about getting people to fill in the forms were frequent, data was thrown out because the respondents did not fulfil the requirements of a “normal family. In many cases however we lack information about the collection process and its vicissitudes and are only faced with the results i.e. collections of budgets that invariably show families with very young children in the household. A more critical look reveals that the questions raised by Engel and Bowley were valid, it is questionable if the normal family was normal.
5. WHY IS THE FAMILY COMPOSITION IMPORTANT FOR THE OUTCOME?

In 19th century Britain age at marriage seems to have decreased and Horrell and Humphries accepted the budget studies as representative on the assumption that the working classes married early and that the young families would be fairly typical (Horrell, 1992: 852). Richard Wall, however has demonstrated that the nuclear family with children (of all ages) actually represented 50 percent or less of all families in Britain from the 18th to the 20th century. In the late 20th century the proportion was even lower (Wall, 2001: 217-241, 231). Therefore the nuclear families with children only under the age of 15 (not to say younger) represent a minority of the households.

Many budget studies do not have information about the age of the male breadwinner and his wife only the ages of the children. One can however assume that with young children go young parents. Unlike some of the other studies the 6th and 7th Report does include age data. These data reveal that of the British families only 13 percent had heads over the age of 50 (Tables 1, 2).

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age distribution of household heads in budget study, British working class households</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile</td>
<td>107</td>
<td>182</td>
<td>117</td>
<td>47</td>
<td>10</td>
</tr>
<tr>
<td>Coal</td>
<td>28</td>
<td>69</td>
<td>43</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Metal</td>
<td>81</td>
<td>125</td>
<td>84</td>
<td>42</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>22%</td>
<td>39%</td>
<td>25%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>CENSUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1881 GB</td>
<td>-35</td>
<td>35-45</td>
<td>45-55</td>
<td>55-65</td>
<td>65+</td>
</tr>
<tr>
<td>Men mar.</td>
<td>(-25 6%)</td>
<td>33</td>
<td>27</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>

While it is true that many men died in their 50s it is questionable whether such a sample reflects reality. A quick look at the census of 1881 reveals that no less than 20 percent of married British men were older than 55. Therefore we can conclude that a considerable de-selection of middle aged couples had taken place when setting up the study.

If the aim was to pinpoint the typical industrial worker it is only fair to point out that a very large proportion of these were not married at all but in their teens or early 20s. It has been pointed out more than once that unmarried women represented the largest part of the female labour force in the late 19th century. It has however less often been pointed out, particularly in connection with budget studies, that a large part of the male labour force was unmarried. A study of metalworkers in late 19th century Sweden registered 47 percent married and 53 percent unmarried. Of those who were married the mean number of children was 2.1 per household (Dahlqvist, 117-119).

In early 20th century Finland the industrial statistics revealed that on average only 59% of men (of all ages) in industrial work were married (Snellman, 1911: 62-63).

So if the ‘normal family’ did neither represent the typical industrial worker nor the typical family, why was it elevated to the status it gained? Could it be that if the wives were caring for newborn babies and toddlers, they were less likely to work and if the majority of the wives did not work we get a deflated idea of female economic activity? And if we get the idea that women were economically unimportant we have to accept the male breadwinner model. Also if families with older children are excluded the descending wages of aging men and the input of older children is eliminated.

### TABLE 2
**Income of household heads in budget study, British working class households**

<table>
<thead>
<tr>
<th>Age</th>
<th>-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile</td>
<td>91</td>
<td>83</td>
<td>58</td>
<td>52</td>
<td>72</td>
</tr>
<tr>
<td>Coal</td>
<td>98</td>
<td>93</td>
<td>68</td>
<td>60</td>
<td>77</td>
</tr>
<tr>
<td>Metal</td>
<td>97</td>
<td>92</td>
<td>77</td>
<td>74</td>
<td>70</td>
</tr>
</tbody>
</table>

6. FEMALE WORK PARTICIPATION REGISTRATION

The absence of economic statistics pre dating the 19th century censuses makes calculations of female economic activity in Britain difficult (Sharpe, 2007: 52-54). Pichbeck has argued that women were expected to work and did work in the 18th century agrarian economy. However, because a considerable proportion of the activity was within the sphere of household production or production together with husbands or fathers, it is difficult to measure the female input (Pichbeck, 1930: 1-2). There are many conflicting views on whether the Industrial Revolution increased the female employment opportunities, or if the result was a shrinking female labour market. The censuses seem to indicate that there was little change in the registered part of women in employment between 1870 and 1930, what happened between 1750 and 1850 is less clear (Roberts, 1988: 14-22). It has been argued that growing intensification and capitalism tends to lead to exclusion of women. It would also seem that the south east of England, in particular experienced a constricting labour market for women (Snell, 1985). On the other hand it has been suggested that the 19th century brought universally negative attitudes to married women’s work and as a consequence women worked on the sly in their homes in the sweated trades, invisible and unrecorded (Fuchs and Thompson, 2005: 61). Based on official statistics the participation rate of married women in Britain was radically different from that in France in the late 19th and early 20th century (table 3).

<table>
<thead>
<tr>
<th></th>
<th>Single</th>
<th>Married</th>
<th>Widowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany 1895</td>
<td>52</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>France 1896</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Britain 1911</td>
<td>70</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Germany 1907</td>
<td>60</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>France 1911</td>
<td>60</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Britain 1921</td>
<td>60</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Germany 1925</td>
<td>80</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>France 1921</td>
<td>65</td>
<td>50</td>
<td>42</td>
</tr>
</tbody>
</table>

Note: Percentage of all, single, married and widowed women
However, on community level where the local economy was oriented towards tasks like lace making activity levels of over 50 percent for married women have been found in rural Britain (Wall, 1986: 280-282; Wall, 1994: 326-328). It has also been argued that while censuses register a minute female participation in the agrarian sector in the late 19th century, there were considerable regional differences, particularly in relation to root crop cultivation, and that local wage lists counter census information about rural ‘housewifery’ (Pinchbeck, 1930: 58-63; Verdon, 2002).

The later arrival of industrialisation in the Nordic countries resulted in the agrarian sector being the largest field of economic activity in the 19th century. As in Britain the registration of the work of married women was problematic, only female household heads were viewed as active. The officials at the statistical offices were middle class with a tendency to view women as dependants. Although the women in the countryside were in fact working their activity did not fulfil the criteria set out by the statisticians for having an occupation.

As late as the 1940s the statistical series in Sweden did not recognise the economic input of women married to farmers. The only situation in which a farmer’s wife could be registered as active according to the rules of the census, was if she worked outside the home farm for a kinsman or a stranger. Because of the dominant position of farming as an economic sector the activity rate of married women was registered as around 3 percent in the year 1900. A re-definition of farmers wives as occupationally active by Nyberg in 1994 transformed the labour force participation rate of married women in Sweden to 45 percent in 1900 (Table 4a).

<table>
<thead>
<tr>
<th></th>
<th>1880</th>
<th>1900</th>
<th>1920</th>
<th>1940</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Including farmers wives</td>
<td>52</td>
<td>45</td>
<td>40</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Official statistics</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

TABLE 4B

Occupationally active women of all women over 15 in Sweden and Finland 1870-1950 (%)

<table>
<thead>
<tr>
<th></th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
<th>1910</th>
<th>1920</th>
<th>1930</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>agriculture</td>
<td>23</td>
<td>21</td>
<td>19</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>industry</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>15</td>
<td>21</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>32</td>
<td>31</td>
<td>33</td>
<td>40</td>
<td>37</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>industry</td>
<td>9</td>
<td>10</td>
<td>15</td>
<td>16</td>
<td>18</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>


While the male and the female sphere operated as complimentary and the notion of a farm without a woman would have appeared laughable in for example Norway, the registration of female work was to say the least, unsatisfactory (Sandvik, 2005:112, 118; Marthinsen, 1985 pp.9-13). Although the farms produced both for the home and the market the work of the wife of a farmer was amalgamated with that of her husband. It was not registered separately and therefore added to the male quota. The registered female share of work within agriculture in Norway was 25% 1875 and 27% 1890, these registered working women were however maids and adult daughters not wives. With the increase in importance of the industrial sector there was an increase in female work recognised by the statistics office and the female share in industry was registered as slightly more than 30 percent in the late 19th century. In trade and sales between one in four and one in three were women (NOS, 1978: 36-37; Morgenstierne, 1912: 38-39).

According to the official statistics of Finland 93.5% of those active in agriculture were men and 6.5% women in 1875. The only women registered as active were the female household heads (SVT, 1875: 58). In 1880 and 1890 unmarried daughters over 15 who “assisted” the household head in agricultural work were included and in 1920 the wives of farmers were recognised as having an assisting role in agriculture. This resulted in a radical increase of occupationally active women to 41 percent in 1880 and 56 percent in 1920 (Table 4b). Only in 1950 were wives working in a family business or on a farm finally registered as having an occupation in the statistical series (Vattula, 1983: 38-39, 49; Vattula, 1989: 21-22).
7. FEMALE PARTICIPATION

While it is true that 18th and early 19th century agricultural work tended to be family based and that there are problems in unravelling the input of the different family members, the enlightenment movements for economic progress and health also engaged in observational and survey work. One such organisation was The Society for Economic Advancement in Finland. In the 1830s a far reaching survey was conducted on agricultural production and productivity. The schedules were distributed in several hundred parishes and generated results from different parts of the country covering various modes of production and regional conditions. The survey included detailed questions about male and female work input and the female participation in harvest, ditching, ploughing, sowing, transport etc. were probed. The answers from the different regions confirmed, that half of the agricultural tasks were performed by women. In the south and west women participated in ditching while in the north west women shared in all the mentioned tasks and did more than two thirds of the ploughing (Table 5).

<table>
<thead>
<tr>
<th></th>
<th>South west</th>
<th>Central</th>
<th>South east</th>
<th>East central</th>
<th>North central</th>
<th>North west</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ploughing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50-75</td>
<td>0-75</td>
</tr>
<tr>
<td>Ditching</td>
<td>0-10</td>
<td>25-50</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>50-75</td>
<td>0-25</td>
</tr>
<tr>
<td>Haymaking</td>
<td>0-50</td>
<td>25-50</td>
<td>50</td>
<td>50</td>
<td>40-100</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Harvest</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Threshing</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Tar burning</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>10-20</td>
<td>0-20</td>
</tr>
<tr>
<td>Transport</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10-20</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Source: Survey of several hundred parishes in the 1830s, Carl Christian Bocker of the Society for Economic Advancement, National Archives, Helsinki.

Observers with a similar mindset and background had also studied these questions in late 18th century Northern Sweden. They had registered that in addition to having full responsibility for the care of animals, women engaged in ditching, sowing, harvest, haymaking and threshing. The fact that textile production, including flaxen cultivation...
was part of the female sphere was seen as self evident. In areas where
the men were occupied in seasonal transport and fishing, the women
took care of the harvest work unaided (Wichman, 1968: 36-41, 43-46,
52-53; Moring, 2006).

Finnish agricultural surveys of the early 20th century reveal similar
work input between men and women. However, with the increasing
importance of milk and butter production female activity in the fields
had decreased and was concentrated to a large extent to animal care
dairying. Agricultural activity studies before the outbreak of WWI
registered an average input of 55 percent male and 45 percent female
work days on average sized farms. On the larger farms the situation
was even more balanced between the sexes (Peltonen, 1992:216-217;

The issue of time use studies was generated by Frederic Le Play in
the 19th century. The introduction of fieldwork among anthropologists
and sociologists, made it possible to capture activity in the home and
work environment. Le Play and his co-workers studied female produc-
tivity by spending hours and days in families, recording all activity:
housework, work for the market and outside the home. Because of the
thoroughness of the studies the number of families that could be exa-
mined was limited. Therefore on the one hand there exists anthropolo-
gical data revealing that married women in 19th century Europe spent
more than half their time on production (table 6) on the other hand the
statistical series disregard the work of women who were married (Le
Play, 1877-79; Wall, 1994: 326-328).

<table>
<thead>
<tr>
<th>Workers</th>
<th>Master</th>
<th>Worker</th>
<th>Sharecropper</th>
<th>Piece Worker</th>
<th>Journeymen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males aged 15+</td>
<td>113</td>
<td>92</td>
<td>121</td>
<td>90</td>
<td>89</td>
</tr>
<tr>
<td>Women aged 15+</td>
<td>94.5</td>
<td>116</td>
<td>92</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td>All Household Members*</td>
<td>235.5</td>
<td>262</td>
<td>232.5</td>
<td>184</td>
<td>190</td>
</tr>
<tr>
<td>N. of Households</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

*Days worked in year per household member.
Source: Calculated from information on days worked per year in Frédéric Le Play (1855). All values are
medians.
The work by Le Play inspired anthropologists in many parts of Europe, among other places in the Nordic countries. The methods were applied in observational rural productivity surveys of the early 20th century. Finnish studies uncovered a system within which the female working day was longer than that of her husband. While the wives of farmers were responsible for about 30 percent of the agricultural tasks, they shouldered 51-52 percent of all work tasks, more than the men and children together. The increased share was naturally linked to housework, although it had a different meaning in the context of the farm economy. A farmers’ wife worked 12-13 hours per day, of this time she spent 50 percent on household work (broadly defined), 25 percent on agricultural work, 15 percent on production of textiles and items for sale. On large farms with many hired hands the share of housework could be as high as 278 days per year. As hired help generally came on contracts including food (and sometimes clothes), the housework was actually part of the farm production costs (Niskanen, 1998: 57, 62-65, 78-81; Saurio, 1947: 44-49, 164-169; Moring, 2006; SVT, 1923). Time use studies from farms in northern Sweden, in 1903, revealed equal work input by males and females in the summer. However, during harvest time the women also had to fit in milking of the cows. The mistress of the house also prepared 4 meals per day for the harvest workers and worked up to 17 hour days during this time period (Fjellstrom, 2002: 75-79).

While the registration of female participation in agriculture and home production remained problematical urban industrial activity usually brought a higher level of information. According to the Helsinki census of 1910, 55 percent of all women and 67 percent of all men over 15 were occupationally active or had an income\(^1\).

On the other hand even in this field it would seem there were some registration problems. For example in the early 19th century silk weaving was home based and needed the participation of the whole family, of which specific tasks fell on men and on women, at this point women were working but their exact share cannot be determined (Accampo, 1989: 25-26). On the other hand an ever larger part of the production had moved into factories by the latter part of the 19th century, but the

\(^1\) *Statistisk arsbok for Helsingfors stad 1914*, (Helsingfors: Helsingfors statistiska kontor 1916), included 57043 women over the age of 15.
problem of public opinion had entered the arena. Factory owners in the Lyon area underplayed the structure of the female workforce and presented it as dominated by young unmarried women while in actual fact half of the women were over 21 and a large proportion married. When restrictions were put on night work for young women the proportion married increased and shifts were organized to fit with the needs of housework and childcare. In addition the braid work could partly be performed at home as putting out work and in some factories of the 1880s 25 percent of the braid workers were occupied in their homes. While males were often occupied in the heavy industry the textile sector was in actual fact totally female dominated (Accampo, 1989: 84-85, 254).

Similarly in the industrial sector in Barcelona in northern Spain although the female participation rate was considerable an analysis of documented work reveals an under registration of married women of about 50 percent in the early 20th century (Borderías, González-Bagaría and Villar, 2011: 78-79).

While married women were registered as engaging in industrial work, particularly in sectors like tobacco where one in four female workers was married, activities that could be combined with housework like washing, cleaning, seasonal work or textile work in the home were more likely to engage women with families. Such activities did generally not find their way into occupational statistics (Snellman, 1911: 62-63; Snellman, 1912: 20; Hultin, 1911:44-47; Karlsson, 1995: 20-25; Moring, 2012)².

8. ECONOMIC CONTRIBUTION OF WOMEN

While it has been claimed that women have always been assigned to low paid tasks it would seem that the 19th century brought additional problems. The female wage levels in England dropped in relation to those of men (Feinstein, 1999). Women lost some of their work opportunities in agriculture and the remuneration for seasonal day labour dropped from 30 percent or more to less than 10 percent of the male wage (Pinchbeck, 37).

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² Chemical industry Stockholm 1890s female workers 25% (Dahlqvist: 66-67).
The problematic situation in rural areas had started earlier however. The labourers’ families in the countryside had no land or grazing rights, while the 19th century in other parts of Europe still saw societies with considerable importance of the agricultural sector, populated by family holdings. Keeping a cow had had a positive effect on the economy of the labourer, on the diet of his family, particularly that of his children, it had also enabled the wives of labourers to make a considerable contribution to the household economy (Humphries, 1990: 24-26; Humphries, 1995). However with increasing large cereal growing holdings, the labourers lost their rights to the common and became dependent on day labour and wives and children were treated as reserve labour, called upon when needed. The income and benefits of a cow could represent half a labourers’ wage but after the enclosure this addition to the family budget was no longer present. While broom-manufacture or berry picking and fuel gathering could be of some importance, closing the commons cut a severe hole into female productivity (Humphries, 1990: 27-33).

The budgets of labourers from the late 18th and early 19th century seem to indicate that the wife could only contribute with between 5 and 12 percent to the family economy (Horrell and Humphries, 1995:112). When work opportunities diminished budgets reveal that the casual and low paid work of women had drastic effect on their ability to contribute. Other studies of economic conditions in rural England have however, demonstrated considerable local and geographic variation in the labour market. Where women could engage in hop picking, straw plaiting, gleaning and textile work both the occupational level and the income could be far from insignificant (Sharpe, 2007: 63, 70-72; Verdon, 2007: 83-90; Goose, 2007: 114-116; Wall, 1994). In more urbanised areas the line between the home and workplace was not always absolute, particularly where it was possible to earn money through keeping lodgers or other occasional work (Roberts, 1988: 17; Booth, Avery et al., 1896: 31-37).

In the Nordic countries the issue of viewing women as economically non-productive revealed a rift between the rural and urban universe in 19th century political discourse. While the farmers had little interest in increasing female authority, they still saw them as co-producers, heading the female side of production and co-runners of the farming enterprise (Sandvik, 1994: 101-2; Lext, 1968; Moring, 2003). Such views were alien to the urban middle classes. When the urban
middle class ideology penetrated changes in legislation from collective to male focused individualistic, so did the promotion of the family ideal with female domesticity. Despite rising female participation in industrial work in the 1930s female production was often seen as belonging to the “domestic” sphere (Lahteenmaki, 1995: 48-57; Vattula, 1989: 28-9; Vattula, 1983: 48). The belittling of this sector caused severe rifts among economists and efforts to raise the profile of domestic economy were made (Harmaja, 1931). A survey in Denmark 1901, on agricultural workers, where the replies to the questions were gathered from the wives, included interesting information about household production and consumption. It revealed that while the income of the wife from work outside the home was only 5 percent of the total budget, 15 percent originated in sale of home produce and another 10 percent consisted of consumption of home produce. The wives of agricultural labourers kept animals and cultivated potato patches and sold whatever could be spared with the result that 30 percent of the household budget came from the hands of a woman that was not supposedly economically active (Rubin, 1901: 12-14, 52-60).

Until the early 20th century the remuneration of farm servants in Finland and Sweden consisted of payments in kind as well as in cash. Male servants were provided with a full set of clothes and the female servants were given the fabrics to make them. Of these products only boots were bought from the cobbles, the rest was produced in house. The system has been documented as fairly uniform from the late Middle Ages until the 1920s. In the early 20th century the garments formed 16 percent of the wages of a woman and 18 percent of the wages of a man in full time employment on a farm (Gylling, 1902: 91-95; SVT XXXII,1923: 5; Gardberg, 1948: 570-572; Wichman, 1968).

While a very small proportion of the farm income in 1920s rural Sweden was registered as coming from the production of wife and children, no less than 30 percent of the income originated in production within the household. At this point in time not an insignificant part came from the female dominated dairy sector (Historisk statistik for Sverige, 1960: 117). Farm budgets from the 18th and 19th century document income of which 40 percent originated from the male and 40 percent from the female sphere while the rest was the result of joint efforts and among crofters the income from keeping a cow was of vital importance (Puumala, 1936: 90-91; Gardberg, 1948: 561-563; Gylling, 1902: 174-175).
9. URBAN AND INDUSTRIAL EARNINGS

One of the comments made in connection with the results of the Commission of Labor study was that it would seem that the male breadwinner was often not capable of supporting his family unassisted by the other family members (Anderson, 1971).

This was not a situation unique to this particular survey. The study of working class budgets in Finland revealed that in one out of four couple headed households the family was unable to survive on the earnings of the father. Also in one out of four households was the contribution of the male household head 69 percent or less of the family income (Table 7).

<table>
<thead>
<tr>
<th>TABLE 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of husband of family income, Finland 1908-09</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>0-49%</th>
<th>50-59%</th>
<th>60-69%</th>
<th>70-79%</th>
<th>80-89%</th>
<th>90-99%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.6</td>
<td>7.2</td>
<td>10</td>
<td>9.4</td>
<td>18</td>
<td>21</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Hjelt (1911).

Where the mechanics of the household was probed in detail it transpired that in all cases but one the wife was engaged in some type of money generating activities. On the other hand an example was found of a family where the household head made no contribution to the budget apart from appearing intermittently to be fed or cadge money for drink from his wife. Despite this he was registered as household head and the family was registered as belonging to his occupational group (Hjelt, 1911: 52, 56). The women in industrial employment generally earned more than the female average recorded by the industrial statistics, in other types of employment the income was more variable. Determining the size of the earnings of married women in the budget study was problematic, as the earnings of different family members were not always separated. However in the families without children, with only young children or in cases where the survey provided information about the earnings of the wife, we find that out of 60 married women 50 percent earned less than 400 marks but 50 percent earned more. Lodgers generated a sizable part of this income, and in many cases board and lodging was provided. Even cleaning and washing could
bring in 400 marks per year or even more (Hjelt, 1911: 28-31). This would indicate that the earnings of adult women were about half of those of skilled workers and more than half of the unskilled. As the income of the wife was necessary in many families women did not stop working at marriage, they engaged in different types of work. The budgets sometimes exclude information about occasional earnings by the wife, used by her for food or for the children. Such earnings were not always disclosed to the husband who was filling in the survey forms. To avoid causing family conflicts by probing into such questions the people conducting the survey accepted certain discrepancies. Similar issues with hidden female earnings also arose in connection with German surveys (Hjelt, 1911:7-8).

The demand for lodging varied with locality and was particularly an issue in growing cities. The New York budget study demonstrated that it was possible to earn as much as 16 percent of the family income from keeping lodgers. Although this study records the income of the husband as varying between 76 and 97 percent of the total family income even here some information leaves us with question marks. Why do women employed as a janitress not have any information about earnings (Chapin, 1909: 66-67).

<table>
<thead>
<tr>
<th>Table 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>German 19th century working-class budgets</strong></td>
</tr>
<tr>
<td><strong>Husband, earnings</strong></td>
</tr>
<tr>
<td>Charlottenburg 1882</td>
</tr>
<tr>
<td>Charlottenburg 1882</td>
</tr>
<tr>
<td>Magdeburg 1872</td>
</tr>
<tr>
<td>Berlin 1882</td>
</tr>
<tr>
<td>Wallwitzhafen 1882</td>
</tr>
<tr>
<td>1885</td>
</tr>
</tbody>
</table>

Source: Hampke (1888: 14-28; 50).

While a survey of working class budgets from a number of German towns in 1909 recorded the earnings of the male household head as 82 percent of the household income, a study by of craftsmen’s budgets in Nurnberg some years earlier revealed a variation of the male share from 55 to 99 percent (Braun, 1901: 5-8; Erhebung, 1909). However
when studies are not restrained by the ‘normal family’ structure as a criteria for relevance the results look slightly different. A study focusing on female industrial workers in Germany before WWI reveal a very different input by the wife. Of the combined income of husband and wife the female party delivered 33 percent if the husband was in skilled work and 38 percent when husband was unskilled. In families where the wife worked part time her share of the combined income was 16 percent. On the other hand wives of disabled or part time working husbands brought in 55 percent. The overall income level of these women was around 60 percent of the income of an unskilled labourer. On top of this the total family income was boosted by earnings of children, particularly daughters (Kempf, 1911: 213-216).

The 6th and 7th Report of the commissioner of labour provided overviews of family budgets by industrial sector and by nationality. It is of some interest to note that considerable differences seem to have been at play in different sectors even though all the families were engaged in industrial work. For example the share of the income provided by the male household head in relation to other family members was higher in the glass sector and in heavy industries than in textiles. Particularly in the wool and cotton industries the employment rates of wives were higher and if not in employment they earned some money by keeping lodgers. The wives of glass and steel workers were rarely in employment and the situation within pig iron, bar iron and coal was the same. On the other hand when children reached working age they contributed to the family budget (tables 9, 10).

<table>
<thead>
<tr>
<th>Country</th>
<th>Glass</th>
<th>Wool</th>
<th>Cotton</th>
<th>Heavy industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>84</td>
<td>62</td>
<td>68</td>
<td>83</td>
</tr>
<tr>
<td>Belgium</td>
<td>76</td>
<td></td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td>69</td>
<td>60</td>
<td>73</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td>62</td>
<td>74</td>
<td>71</td>
</tr>
<tr>
<td>USA New York</td>
<td>87</td>
<td>69</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>USA Ohio</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA Virginia</td>
<td></td>
<td></td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

Source: The 6th and the 7th annual Report of the US commissioner of Labor 1890 and 1891.
TABLE 10
Contribution to family income, cotton industry (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Husband</th>
<th>Of remaining Wife</th>
<th>Of remaining Child</th>
<th>Of remaining Lodger</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>74</td>
<td>35</td>
<td>52</td>
<td>12</td>
</tr>
<tr>
<td>Germany</td>
<td>60</td>
<td>29</td>
<td>53</td>
<td>18</td>
</tr>
<tr>
<td>Britain</td>
<td>68</td>
<td>28</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>Switzerland</td>
<td>55</td>
<td>25</td>
<td>51</td>
<td>24</td>
</tr>
<tr>
<td>Virginia USA</td>
<td>62</td>
<td>24</td>
<td>47</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: The 6th and the 7th annual Report of the US commissioner of Labor 1890 and 1891.

It is of course well known that in textile areas the opportunities for women to find employment were better than in areas dominated by mining or heavy industry (Anderson, 1971). In Copenhagen where the employment opportunities were good, a survey of women in textile production in the 1890s registered the contribution of the wife with a working class husband as 30-50 percent of household income (Sveistrup, 1899: 578-79, 626). The situation in urban late 19th century Sweden point in the direction of a contribution between 15 and 30 percent of the household income depending on whether the wife was able to acquire full time work or had to be satisfied with part time activities like laundry and cleaning (Hirdman, 1983: 25, 293).

In areas with mixed economy each gender could orientate towards the sector that made employment available. While women in the silk industries of the Lyon area often had earnings representing only 30 percent of male income, full time factory work could bring in 25 percent of the household budget. Surviving on the wage of a husband was generally not possible particularly as seasonal unemployment was part of everyday life therefore many married women engaged in factory work. When women did leave the factory and performed work from the factories at home their income dropped to 1/10 of previous earnings. Therefore there was a shared interest among married women and factory owners to arrange crèche facilities (Accampo, 1989: 84, 90-91, 95, 252-253).

The low levels of female wages in 1850s Barcelona had the consequence that although the female input in work days could be very
high the contribution of wife to family income seldom rose above about 15 percent on average (Borderías, González-Bagaria and Villar, 2001: 41-43). On the other hand southern Spain, in Seville the situation of the female tobacco worker could be very advantageous in the early 20th century. Employment did not fluctuate in the same manner as in other sectors; therefore a steady income was available. In addition the tobacco factories were willing to adjust working hours to attract married women into employment. Some factories even provided health care and insurance. The women who entered such worked often stayed for life, through marriage and even widowhood. While the income per day was not particularly high the piece work rate was reasonable and the continuous employment made for yearly incomes that could make the wife the main bread winner (Gálvez, 1998).

CONCLUSION

The growing interest in the economic situation of the working class in the 19th century inspired a large number of budget studies of working men and their families.

For reasons related to the particular situation or the need to create comparative datasets a unit called 'the normal family' was created.

As the budget studies and their results have been used for assessments of the standard of living and the earnings of different family members it is of some importance to address the phenomenon of the 'normal family'. Is it really a correct reflection of reality in the past and how well do these budgets depict the contribution of women to the household economy.

The problem about how the ‘normal family was defined is that the definition generally excludes families with teenage and adult working children. It also forces on the study a framework with very young children that would have prevented the mothers from working. In addition families with in living relatives who could potentially assist with childcare are generally excluded. Sometimes even units with lodgers, a potential source of income for women, are excluded. Preference is given to families headed by men in their 30s and 40s, i.e. with maximum earning capacity.
As a result the male breadwinner model is enhanced and it is debatable if these families represent the average experience.

Another problem is the variation in the length of observation, out of necessity extrapolation of earnings becomes necessary, thereby excluding the issue of seasonal unemployment and its effect on male earnings. Seasonal unemployment was in fact part normal working class existence and male income based on an assumption of uninterrupted work is most problematic (Heikkinen; Accampo; Galvez; Black).

It cannot be denied that the registration of female work in the past suffers from many shortcomings. In rural areas the female contribution could be in kind rather than in cash, particularly in the case of wives of farmers and smallholders. However evidence exists for female activity in agriculture and even time use studies by for example Le Play, demonstrate considerable participation. Undeniably the ability of wives of landless workers to contribute to the family economy shrank with the restriction of access to commons. However, even in Britain where female engagement in the 19th century rural economy would seem marginal, the income from gleaning could finance the rent for the cottage for a year (King). In Denmark where access to space for home production was somewhat better the wives of landless workers produced both for the family and the market.

Although female industrial activity is better registered even there some shortcomings are detectable. Variation among different economic sectors in female work opportunities is clear, mining and heavy industries were not great employers of women unlike the textile sector. The hidden work in the home did not bring the levels of income of factory work but excluding families with lodgers, or not registering casual income generated by the wife most certainly distorts the image of the female input. There is also reason to note that studies which were not set up along the frame work of the ‘normal family’ record a higher input by the wife and adult daughters. Considering that leaving home in an industrial environment did not co-inside with entering the labour market it is quite likely that the ‘typical’ working class family was one of several working members rather than the male breadwinner, his (house) wife and four babies and toddlers. Rather than the ‘normal family’ we are likely to find the working wives studied by Le Play and the collaborating families described by Richard Wall.
REFERENCES


BOCKER, C. C. (1830-33): Survey of the rural economy in Finland 1830-1834, Society for Economic Advancement (Finska Hushallningssallskapet), manuscript collection, The National Archives, Helsinki.


Rowntree, S. & Sherwell (1900): *The temperance problem and social reform*


Sokoll, T. (1991): “Early Attempts at Accounting the Unaccountable: Davies’ and Eden’s Budgets of Agricultural Labouring Families in


Sundstrom, S. (1908): Untersuchungen Uber die Ernahrung der Landbevolkerung in Finland, Helsingfors.


