

RELATIVE POVERTY IN TWO EGALITARIAN SOCIETIES:  
A COMPARISON BETWEEN TAGANROG, RUSSIA  
DURING THE SOVIET ERA AND SWEDEN

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Relative poverty in urban Russia at the end of the Soviet era (using microdata for the town of Taganrog) is compared to relative poverty in Sweden. The results indicate that the extent of relative poverty was rather similar in the two societies, but also that differences in the structure of poverty existed. In urban Russia characteristics of the household head leading to a high risk of poverty were advanced age, a limited education and being female. Swedish poverty was concentrated to households with a young head.

1. INTRODUCTION

Considerable progress in cross-country comparisons of poverty in developed countries has been achieved in recent years. The statistical authorities of the European Communities have published tables for its member countries (Eurostat, 1990). There are a number of results based on the LIS-data base (for example Buhmann *et al.*, 1988 or Rainwater and Smeeding, 1991). However, poverty comparisons including the former Soviet Union or other Eastern European economies seem to be lacking. Several reasons for this can be suggested among which are: (a) The link between money income and economic well-being has been different and weaker in Eastern European economies compared to Western economies, (b) Analysts have not had the opportunity to work with microdata for Eastern European countries.

Actually, published official data do not say much about poverty in the former Soviet Union. In addition, the surveys on which the information is based can be criticised for not covering marginal groups well. In this paper we use a unique Soviet data set giving a much more satisfactory picture of poverty at the end of the 1980s. The data collection was made possible because of the focus on one geographic location, one medium-sized town in southern Russia. For illustrative purposes the results are compared to corresponding data for a Western country—Sweden. The choice of Sweden is motivated by the fact that in recent cross-country

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comparisons of developed economies, Sweden often has been shown to have less relative poverty than most (or all) other countries investigated.

The Soviet Union and Sweden during the late 1980s resembled each other in several aspects. In both, unemployment as commonly defined was not a big social issue. Labour force participation was high among women. Schooling and health services were mainly publicly provided and financed. Social security systems providing income for aged and disabled existed in both countries. However, differences also prevailed. The Swedish economy was (and is) much more developed. Sweden has a market economy while administrative allocation played a much larger role in the U.S.S.R. Income from self-employment and capital is of significance for some households in Sweden, but has had a much smaller role for households in the U.S.S.R.

The Soviet Union was a continent with large geographic variation in economic well-being and family structure. To talk about the average situation in the former Soviet Union might be misleading for many reasons. For example, after the break up of the Union, there is a reason to look at single republics. It can be argued that a comparison to a Western country is more meaningful if based on the European part of the Union.

Our research questions are: (1) "How large is relative poverty?" (2) "What is the structure of poverty?" Quantitative statements on poverty are based on a poverty line and data. In the next section we discuss the former while the latter is taken up in section 3. Results on the size of poverty are given in section 4, those on the structure of poverty in section 5. The conclusions are summarized in section 6. In an appendix the importance of transfers and income taxes are quantified.

## 2. CONCEPTUAL PROBLEMS WHEN MEASURING POVERTY

Of course there have been earlier writings on poverty in the two countries investigated and the ways to conceptualize and measure poverty differ between countries. What are the poverty lines used for earlier studies of the Soviet Union and what results stemmed from the studies? First a note on terminology. The terms "poverty line" and "the poor" appeared in Soviet economic publications in the period of "Perestroika" only. Earlier the term "low income groups of the population" was used.

Subsistence basket of goods has been calculated by some researchers and played a large role in establishing legally defined minimum wages. In 1975, households with a per capita income of 50 rubles per month and less were declared to be eligible for a new benefit for families with children. The recipients were mainly located in the Asian part of the Union and the system was short-lived. According to official statistics, 16 percent of wage earners and 39 percent of Kolkhoz-peasants fell below this income level in 1975. For this reason this level can be considered as the first semi-official poverty line in the Soviet Union. Based on this number and published diagrammatic material, McAuley (1979) concluded tentatively that 35 to 40 percent of the Soviet population in 1967-68 had a per capita income below this minimum level.

How has the size of poverty changed over time? The answer depends not only on what has happened with income, but also on how the poverty line is updated. If the poverty line is kept at a constant nominal level, inflation as well as economic growth makes fewer look poor. This is also the picture that emerges according to estimates published by Ofer and Vinokur (1992) showing the fraction decreasing from 50 percent in 1965 to 8 percent in 1980.

However, it does not seem to be reasonable to keep the same nominal definition. From the mid-1970s to the mid-1980s, per capita income grew by about 50 percent and new minimum subsistence levels were established. In 1988 the Goskomstat published new subsistence baskets at the level of 78 roubles per capita. Since tables on income per capita are published in classes, the per capita level of 75 roubles has been looked upon by Soviet writers as a new poverty line. With this definition 17.9 percent of the population fell below the poverty line in 1985, figures not very different from the ones reported using the criterion for the earlier period of measurement. For 1988 and 1989 the figures are 12.6 percent and 11.1 percent. More recently, after our period of observation, consumption prices have increased much faster than income. According to an estimate made in the Institute of the Social and Economic Problems of the Population, Moscow, the price of a minimum food basket was 30 times as high in April 1992 compared to 1989 while incomes had risen "only" 17 times. From this background one can understand the very high estimates on the incidence of poverty in Russia which have recently been reported by the media.

However, figures for the entire republic are not always helpful. Using the 75 roubles criterion and published tables for 1989, Atkinson and Micklewright (1992) report population proportions below the minimum level for various republics. These figures show very large variation. On one hand not more than 2 percent of the population in the Baltic Republics were classified as poor while between one-third and one-half of the population in most Central Asian Republics fell below the 75 rouble criterion. While 11 percent of the population in the entire union was below the line, the proportion was not more than 5 percent for Russia.

How has poverty been defined earlier in Sweden? There is no official poverty line for Sweden. However, estimates of poverty can be based on scales for social assistance for the beginning of the 1980s and assumption of housing costs. Results show about 10 percent classified as poor. [See, Gustafsson and Uusitalo (1990).]

When comparing poverty across countries, various approaches are possible. One alternative is to try to apply figures indicating the same basket of goods for the countries compared. This is the approach taken in the World Development Report 1990 (World Bank, 1990). Poverty is thus conceptualized absolutely. Alternatively, the poverty line can be specified relatively to median (or mean) economic well-being for each society studied. In this approach persons are considered poor if they have an economic well-being considerably lower than the average. For many observers it is attractive to define poverty relatively and we do so here. However, although many agree that there is a strong relative element in defining "poverty," far from all agree on the position that "poverty" is only relative. Thus this approach is not free from objections.

It is important to understand that our comparison is based on measures of money income in the Russian data. Most observers seem to agree on the view

that the relation between money income and welfare was weaker in the Soviet Union than in Western countries. Reasons for this were several: Typically low and fixed prices existed in government regulated shops where demand was often larger than supply. Much higher prices prevailed for goods provided by cooperatives, and by the illegal market. Some persons were compensated with income in kind. An analyst can acknowledge the existence of this problem, but it is very difficult to empirically control for it.<sup>1</sup>

For the pooling unit we use "Households" not the narrower "family" for both countries investigated. We are of the opinion that in comparative work the best choice is to use the same definition for all countries investigated. However, this is not the only possible position to take. One can for example argue that aged persons in Russia enjoy the same level of living as other household members while their Swedish counterparts have an economic situation separated from other household members. In that case the pooling unit should be different for each different country.

The common practice in the Soviet Union when adjusting disposable income for family size has been to divide by the number of family members. Equivalence scales allowing for economies of scale or taking the age of various household members into account were not used. From this we deviate by applying a common equivalence scale. The scale means that when setting expenditure needs of an adult living alone to 1.0 a value of 0.7 is added for each additional adult and a value of 0.5 for each child. We chose to apply this equivalent scale to both samples, a common practice in cross-country comparisons. However, there is also an alternative of using country specific scales because the extent of economies of scale can not be supposed to be identical in all countries.

### 3. DATA

Official family budget data collected for the Soviet Union and its successor countries have several limitations.<sup>2</sup> Data is obtained by separate procedures for households of wage-earners and collective farm workers ("kolkhozniki"). Limitations of the data are due both to how the original sample was drawn and on how it is updated (or rather not updated). For example at the factory level selection of respondents is not random, as individuals are included through suggestions by the factory management or trade unions. Once in the sample a family is kept there as long as there are possibilities to trace it. Results from these efforts have been published as a relatively small number of tables in the yearly book "Narodnoe Khoziaistvo SSSR" (*Economic Year Book of the U.S.S.R.*). Recently, the number of tables has increased somewhat, though they still contain little information. Up till now researchers have not had access to the microdata.

The former U.S.S.R., and to some extent present-day Russia, represent a large territory with very differing climates, socio-economic conditions, and national and ethnic populations which deeply influence the level and composition of consumption. In addition two fundamentally different types of demographic reproduction exist: the Asian and the European. Households living in the Asian parts of the

<sup>1</sup>See also Alexeev and Gaddy (1993).

<sup>2</sup>See Dimitriev (1989) and Atkinson and Micklewright (1992).

U.S.S.R. usually have a large number of children and they also have occupations different from other households. Unfortunately such differences are not visible in the published figures which might mislead the reader. For example the overwhelming share of "low-income households" are in fact living in the Asian regions. Thus the published figures are of a quite limited value if one is interested in the poverty situation prevailing in the European part of Russia.

Motivated by the methodological weakness in the official statistics, a group of scientists at the Central Economic-Mathematical Institute under the Academy of Sciences of the U.S.S.R. conducted at the end of the 1960s the most complete socioeconomic study of living conditions at the time. The research strategy was the same as Rowntree's in his study of poverty in the United Kingdom: to investigate a relatively large industrial city. The study, called Taganrog 1 after the city investigated, was followed in the late 1970s by the next project—Taganrog 2 (Rimashevskaya, (ed.) (1987; 1988a; 1988b; 1992). The latest study of the same town—Taganrog 3—was made in the late 1980s. We use data from this investigation made in the spring of 1989.

The city of Taganrog is located in the south of Russia with a population size of about 300,000. When originally chosen, Taganrog was considered a typical middle-sized Russian industrial town in terms of average income, pattern of employment, housing conditions and family size. In 1978 the average wage in Taganrog was about the same as in Russia as a whole, but during the 1980s average wages in Taganrog developed less favourably. In 1988 they were 13 percent lower in Taganrog according to the official statistics. The comparatively slow development of jobs in Taganrog was due to being concentrated in heavy industry and factories supplying the armed forces, sectors in which wage growth has been less favourable during the 1980s.

The unit of selection for the sample was the household, defined as a group of persons living together sharing housing and budget as well as being related by blood, marriage or adoption. A total of 1,200 households were selected on a territorial basis using a three level procedure.<sup>3</sup> The work started from a public register on housing which the authorities updated constantly. Each flat was characterized by district and ownership. There was a problem of establishing a link between the number of flats and the number of households. It originated from the fact that in the Soviet Union a large number of families live in so-called communal flats where two or more families share a kitchen and other facilities. It was necessary to consult "Litsevoi sthet," which is a register.

In case a potential respondent could not be traced or refused to answer, new respondents were selected. As in many research projects carried out in the Soviet Union, refusals were few. The set consisted of 1,187 households. In each household one person was the major respondent. This person was chosen in a procedure which attempted to make the sex proportion of respondents equal to the proportion in the population. Working members of a family were preferred as respondents rather than pensioners. The head of a family is the person (not necessarily the respondent) with the highest gross income.

<sup>3</sup>The selection did not include hostels for students. This means that single, young persons, most of whom are students (probably on low incomes) are underrepresented in the sample.

TABLE 1  
HOUSEHOLD STRUCTURE IN TAGANROG AND SWEDEN

Type of household:	Taganrog (%)	Sweden (%)
Single person	11.2	30.5
Two adults without children <sup>1</sup>	15.4	38.7
Two adults with children <sup>1</sup>	29.9	17.7
Single parents <sup>1</sup>	4.0	1.9
Multigenerational families	39.5	11.2

<sup>1</sup>A person is considered a child if it is younger than 18 years or a descendant of at least one of the adults and in addition has no income from work.

With few exceptions, income is monetary income from work. A proportion of the households had bank accounts on which an interest of 2 to 3 percent was paid, and this income is not in the data. However, on a whole such income must have been relatively small. Income from renting out (part or whole) of an apartment is in the data, but no imputed rents from owner occupied housing. Data covers transfer payments such as pensions, grants and allowances, but not private transfers such as gifts. Income taxes are deducted. Income data refer to one month. An indicator of the representativity of the sample is that mean per capita income in the sample is similar to what has been published for the broader region.<sup>4</sup>

The Swedish data are from the HUS-Project, which has a panel design.<sup>5</sup> We use data for 1986 where income refers to 1985 and use sample weights in all analyses. Compared to the Swedish Household Income Survey (HINK) used in many other studies it has two advantages. One is the definition of a household which is broader and similar to the one for Taganrog 3. Thus it is possible in this data to obtain a household consisting of more than two adults. Children 18 years and older living with their parents are considered in this data to be members of the same household as the parents. Secondly, data is easily accessible to researchers. The disadvantages are a smaller sample size (1,553 households) and the method of collecting income information.<sup>6</sup> While in the HINK-study all income information comes from tax-returns and public registers on transfers; this is the case in HUS only for respondents who agree on the procedure. Respondents who did not agree (a minority) were asked instead about the relevant information.

<sup>4</sup>Our data can be compared to samples of emigrants used in several Western writings on poverty and living conditions in the Soviet Union (for example Ofer and Vinokur, 1992). These datasets obtained from emigrants refer to 1973 for the Israel Soviet Interview Project and 1979 for the American Soviet Interview Project while our data refers to 1989. The target population for these surveys was the urban Soviet population, while our target is middle-sized urban Russia. It turned out that only a minority of the Jewish emigrants investigated originated from Russia. Obviously there is a problem of inference from those emigrating to the original population, because emigration can be supposed to be selective. There is also the problem of respondents recalling earlier circumstances.

<sup>5</sup>See Klevmarken (1990).

<sup>6</sup>The sample size does not make it meaningful to base the comparisons on Swedish cities having approximately the same size as Taganrog, which would have been a preferred alternative.

In our data sets usually not more than two adults in a household were interviewed. Income questions concerning other adult members were therefore not asked directly to the persons in question, but to other members of the household. Therefore one can assume that this information is of lower quality.<sup>7</sup> There are several reasons why estimates on poverty based on HUS will not necessarily be the same as those based on HINK, although we have tried to use the same definitions of income.<sup>8</sup> The definition of disposable income for the Swedish data is chosen to be as similar as possible to the one used in the published statistics. Disposable income is the sum of earnings, interests, dividends, business income, capital gains as well as transfers such as pension payments and sickness payments.<sup>9</sup> From this gross income taxes are deducted.

In Table 1 we compare the household-structure in the two samples. There are large differences. As many as 40 percent of the households in Taganrog are multigenerational (having more than two adults), while this is the case for only 10 percent in Sweden.<sup>10</sup> There are several reasons for the relatively large number of multigenerational households in Taganrog. First, family responsibilities are less narrowly defined in Russia than in Sweden. For example adult children often have obligations to support their old parents. This can be done by taking them into the household and in return the members of the old generation can provide services such as child care. Second, housing shortages make it difficult to form a new household. Third, the general level of living is low in urban Russia and living together is a way to economize on scarce resources.

How comparable are the data sets? We have been rather successful in being able to work with the same definitions of household in both data sets. A major difference between the sets is the time period for which income is recorded. For the Swedish set it is one calendar year, but for Taganrog it is one month during the spring. The choice of a month in spring means that bonuses paid out at the end of the year are not in the data, and the same applies to income in kind from private plots. Thus it is possible to argue that yearly income is on average higher than monthly income multiplied by the number 12. But what about inequality? Because we might expect at least some mobility in the distribution to exist during

<sup>7</sup>In the Swedish data set questions were asked on "gross income." We used a program of the Swedish tax system for 1985 written by Paul Olovsson, University of Göteborg to impute income taxes for these persons and then deduct them. In addition, for some persons no values on gross income were reported, and for them we impute the mean net income.

<sup>8</sup>Reasons for differences are as follows. (a) The pooling unit is families in HINK but households in HUS. (b) A smaller sample size in HUS. (c) Different target populations: HUS does not cover immigrants who do not speak Swedish and persons older than 75 years are less likely to be in the data. (d) For some respondents in HUS, income information does not come from tax returns. (e) Taxes are measured at a later stage in the process of assessing them in HUS. (f) Efforts to control for non-response are made in the sample weights used in HINK, but not in HUS. From HINK it is known that the extent of poverty among households headed by foreigners and persons older than 75 is higher than for other households. Thus estimates based on HUS are likely to result in an underestimation of the "true" extent of poverty in Sweden.

<sup>9</sup>As in the official data on household income in Sweden (and in the Russian data set), imputed rent from owner occupied housing is not covered.

<sup>10</sup>Most single persons in our sample of Taganrog are relatively old. The majority are over 60 years of age and approximately 75 percent are females. On the other hand the majority of single persons in Sweden are under 60 years. However, this difference is to some degree due to selection of the samples as discussed above.

TABLE 2  
POVERTY LINE INCIDENCE OF POVERTY IN TAGANROG AND SWEDEN

	Taganrog		Sweden	
	Whole	Restricted <sup>1</sup>	Whole	Restricted <sup>1</sup>
Sample used when extracting the poverty line	165.00 <sup>2</sup>	169.32 <sup>2</sup>	5779 <sup>3</sup>	5581 <sup>3</sup>
Median Income				
Incidence of poverty when the poverty line is set equal to the following percentages of the median.				
40	3.2	5.6	6.5	4.5
50	6.5	11.0	11.6	7.2
60	11.2	18.7	18.6	10.4

<sup>1</sup>Households headed by a person 20–55 years of age.

<sup>2</sup>Roubles.

<sup>3</sup>SEK.

a year, a longer accounting period will show smaller inequality. It is not unlikely that if it had been possible to measure income in Taganrog on a yearly basis inequality would have looked smaller. However, without further information it is difficult to quantify the importance of this difference.

#### 4. THE SIZE OF RELATIVE POVERTY

We define the poverty line as a constant percentage of median disposable equivalent income per household where the percentage is set to 40, 50 and 60 percent, respectively. In order to be able to compare our results with such from other countries we also use medians computed for households having a head 20–55 years of age. Using two poverty lines makes also sensitivity analysis possible.

The median increases somewhat in Taganrog when the population is restricted to those having a head 20–55 years old. However, the reverse happens for Sweden which is somewhat surprising.<sup>11</sup> Thus for Sweden applying a poverty line based on the restricted population means fewer falling below the poverty line, while the reverse holds for Taganrog.

Table 2 also summarizes our main conclusions on the extent of relative poverty.<sup>12</sup> Based on medians defined for the two samples it looks as if there is less poverty in Taganrog than in Sweden. For example 6.5 percent of the households fall below the 50 percent poverty line in Taganrog compared to 11.6 percent in Sweden. The former result is surprisingly similar to the 8.6 and 7.9 which Ofer and Vinokur (1992) report for urban Soviet Union in 1973 and 1979 based on samples of emigrants. However, if we use a median for the population restricted to those headed by a person 25–55 years old the reverse situation holds. Now

<sup>11</sup>One possible reason for this is that households headed by a person older than 75 are underrepresented and they can be supposed to generally have a low level of equivalent disposable income.

<sup>12</sup>In the Taganrog sample 10 percent of the households fell below a poverty line set equal to 75 roubles per capita. This percentage is very close to that reported the same year for the entire U.S.S.R. The proportion of individuals under the various poverty lines are somewhat lower than the proportion of households in both samples. For example based on a poverty line defined for the entire sample, the proportion under 40, 50 and 60 percent are 2.0, 5.0 and 10.5 in Taganrog and 5.6, 11.0 and 17.4 in Sweden.



TABLE 3  
 POVERTY RATES AT THE MID 1980s IN SOME WESTERN  
 COUNTRIES  
 (The poverty line set to 50% of median disposable  
 household income for households headed by a  
 person 20–55 years of age)

	Year	Poverty rate
Germany	1984	6.8
Sweden HUS-data	1985	7.2
Sweden HINK-data	1987	8.6
Netherlands	1987	7.6
France	1985	9.9
Urban Russia (Taganrog)	1989	11.0
United Kingdom	1986	12.5
Canada	1987	13.9
United States	1986	18.1

*Sources:* Smeeding and Rainwater (1991) and Table 2.

poverty looks smaller in Sweden. For example 11.0 percent of the households fall below the 50 percent line in Taganrog, but only 7.2 percent in Sweden. From these comparisons we conclude that relative poverty can be of a rather similar size in Taganrog and in Sweden.<sup>13</sup>

In Table 3 we broaden the comparison to other countries using results from Smeeding and Rainwater (1991) based on the Luxembourg Income Study. The estimate for Sweden refers to another data set and a different year than ours, but is nevertheless rather close. Based on our experience showing that rather small changes in definitions can produce different results on relative poverty we think that one should not read in too many differences for the numbers presented. The main message seems to be that relative poverty is not very different in Taganrog or Sweden compared to other European countries investigated. However, there seems to be more relative poverty in Canada and especially in the U.S.A.

How is relative poverty in the two countries affected by transactions with the public sector? There are many transfer programs in Sweden in comparison to those that existed in the Soviet Union. For example, benefits during unemployment, child allowances and parental benefits had no counterparts in the Soviet Union. However, both Sweden and the Soviet Union had various pension systems in which the main beneficiaries were old persons. The general retirement age in the Soviet Union was 60 years for men and 55 for women, and 65 for men and women in Sweden. However, on the average, benefit levels as measured in relation to wages were lower in the Soviet Union than in Sweden. Another difference between societies was that while most public sector transfers in Sweden were subject to income tax, this was not the case in the Soviet Union.

In the appendix we quantify the direct effect of public sector transfers and income taxes for relative poverty. As expected, the results indicate that more

<sup>13</sup>The conclusion is very much in line with what Bergson (1984) wrote about household income inequality in U.S.S.R. compared to Sweden during the 1970s. Bergson wrote that "It (inequality in the U.S.S.R., clarification added) is very possibly as great as or greater than that in Sweden."

households in Sweden are removed from poverty by transactions with the public sector than in Taganrog.

## 5. THE STRUCTURE OF POVERTY

We now look at the structure of poverty in the two samples. For this exercise we concentrate on the 50 percent of median poverty lines. We express the size of poverty using a family of poverty indices proposed by Foster *et al.* (1984). This class of indices nests the head count index.

If  $z$  is a family's poverty line and  $y$  its disposable income then for  $i=1, 2, \dots, q$  poor families (for whom  $y < z$ ) the class can be written as:

$$FGT(\alpha) = \frac{1}{N} \sum_{i=1}^q \left(1 - \frac{y_i}{z_i}\right)^\alpha = \frac{1}{N} \sum_{i=1}^q \left(\frac{g}{z}\right)^\alpha$$

where  $g (=z - y)$  is the poverty gap, and  $N$  the size of the entire population.

For  $\alpha$  equal to 0, the index is the head count ratio, that is the proportion of units classified as poor. With  $\alpha$  equal to 1, the head count ratio is weighted by the average for the normalized poverty gaps of the poor. Thus this index also takes into account the average depth of poverty. When  $\alpha$  is set equal to more than 1.0, large normalized poverty gaps are weighted heavier than small ones. Placing more emphasis on large normalized poverty gaps than on small poverty gaps makes this index distributive sensitive. Using all three indices gives a broader view of poverty than if one limits oneself to only one alternative.

Another advantage of using this family of poverty indices rather than other alternatives suggested in the literature is that they are additively decomposable. It is thus possible to split total poverty into parts attributed to various subgroups of the population.

In Table 4 we show poverty results for different categories for heads of household and we comment on how the extent of poverty for a category in one country relates to poverty for the entire population in the same country. What kind of differences between countries can be found?<sup>14</sup>

One out of four households in Taganrog are headed by females. That is, they are single parents living alone, widows or women who have never married.<sup>15</sup> The corresponding proportion is somewhat lower in Sweden. In Taganrog there is a very pronounced difference for all poverty indices between female- and male-headed households. The index shows values at least six times as high for female-headed households as for male-headed households. Most poor households in Taganrog are actually female-headed. In Sweden poverty rates also are higher for

<sup>14</sup>Comparing results for different indices, the largest noteworthy differences are found in the Russian sample. Taking account of the size of the poverty gap makes Russian urban poverty appear even more concentrated to female headed households compared to inspecting the proportion of households falling below the poverty line. The same applies also to households headed by a person having minimal education. The fraction of households headed by a young person falling below the poverty line is about the same as for the total population in the Russian sample. However, for other indices poverty among such households appears as larger than on average.

<sup>15</sup>The "head" of a household is the person having the highest income. Thus adult men can be present in a female headed household, but it turns out that they are quite few in our two data sets.

TABLE 4  
THE STRUCTURE OF POVERTY IN TAGANROG AND SWEDEN

Household Head	Total Population (%)	Extent of Poverty			Contribution to Aggregate Poverty (%)		
		$\alpha=0$	$\alpha=1$	$\alpha=2$	$\alpha=0$	$\alpha=1$	$\alpha=2$
<b>Male</b>							
Taganrog	73.5	2.8	0.45	0.14	31.91	24.68	21.66
Sweden	73.9	11.29	4.10	2.44	72.25	75.41	75.17
<b>Female</b>							
Taganrog	26.5	16.57	3.81	1.37	68.09	75.32	78.34
Sweden	26.1	12.29	3.79	2.28	27.77	24.59	24.83
<b>AGE</b>							
<b>0-24</b>							
Taganrog	5.1	5.39	2.24	1.59	4.28	8.53	17.62
Sweden	7.3	37.62	11.87	6.73	23.78	21.54	20.50
<b>25-34</b>							
Taganrog	20.6	4.80	0.75	0.16	15.32	11.53	7.16
Sweden	22.5	10.96	3.46	1.70	21.35	19.35	15.94
<b>35-44</b>							
Taganrog	30.3	2.95	0.64	0.17	13.84	14.47	12.52
Sweden	23.8	11.23	2.47	2.12	23.14	20.53	31.10
<b>45-54</b>							
Taganrog	21.7	1.66	0.20	0.03	5.58	3.24	1.86
Sweden	14.5	11.62	4.28	2.38	14.58	15.30	14.42
<b>55-59</b>							
Taganrog	8.2	3.27	0.06	0.02	4.16	0.40	0.34
Sweden	7.9	11.34	5.98	4.47	7.75	11.89	14.92
<b>60-65</b>							
Taganrog	5.8	13.68	2.96	0.92	12.30	12.83	11.60
Sweden	6.6	5.73	2.26	1.48	3.27	3.72	4.08
<b>65-</b>							
Taganrog	8.3	34.60	7.91	2.71	44.52	48.99	48.90
Sweden	17.4	4.07	1.75	1.25	6.13	7.57	9.05
<b>EDUCATION</b>							
<b>Level 1</b>							
Taganrog	20.3	17.50	4.21	1.62	55.09	63.78	71.49
Sweden	50.5	12.11	3.94	2.35	52.93	49.38	49.53
<b>Level 2</b>							
Taganrog	54.0	4.98	0.85	0.23	41.73	34.30	27.00
Sweden	32.4	12.82	4.75	2.85	35.96	38.28	38.54
<b>Level 3</b>							
Taganrog	25.7	0.80	0.10	0.02	3.18	1.92	1.51
Sweden	17.0	7.67	2.92	1.68	11.29	12.34	11.93
<b>TOTAL</b>							
Taganrog		6.45	1.34	0.46			
Sweden		11.55	4.02	2.40			

female-headed households than for male-headed households, but the difference is much smaller.

Next we will comment on results for households having heads of different ages. Here differences between samples are striking. In the Swedish sample there are considerably higher frequencies of households headed by a person below 25 years of age or above 65 years of age than in Taganrog. Households having an aged head are quite poverty prone in the Russian sample. Not less than one out

of three households in Taganrog headed by a person 65 and older is classified as poor and such households stand for about half of total poverty in the sample. Also households headed by a person 60–65 years of age in the sample are more poverty prone than the entire population.

As in other studies of Swedish poverty during the mid 1980s, not much poverty can be found among households headed by an aged person. The low percentage for aged poor in Sweden is mainly due to relatively generous pension payments.<sup>16</sup> What stands out most for Sweden is a high proportion of poor among the youngest. Actually half of poverty in Sweden can be attributed to households headed by a person below 25 years of age. When evaluating this, one should remember that an unknown, but probably significant proportion of young households classified as poor in Sweden are comprised of students. The economic situation of many students might thus be looked upon as the outcome of choice, and not necessarily of low potential earning capabilities.<sup>17</sup>

We need also to look at poverty for different levels of education for the household head.<sup>18</sup> Here striking differences between countries are shown. There is a strong negative relation between education of household-head and poverty in Taganrog, but this is not found in Sweden. While 17 percent of those headed by a person with the lowest education in Taganrog are classified as poor, this applies to less than one percent of the households which are headed by a person having the highest education level.

Why is a strong relation between education of household head and poverty index for Sweden not found? Differences in the household forming process should be one part of the answer. In Sweden young persons with a relatively high education are typically living alone, but in Taganrog they are most often members of a multigenerational household. Another reason could be that factors affecting poverty vary with education. The average level of education is highest for the youngest and young persons are more poverty prone in Sweden, while old persons (on average having a low education) are poverty prone in the Russian sample.

## 6. CONCLUSIONS

In this paper we have compared poverty in urban Russia at the end of the Soviet era using data from the city of Taganrog with Sweden by looking at monetary income. Because of shortages, differences in prices and more goods allocated by administrative methods, the relation between money income and welfare was probably weaker in the Soviet Union than in Sweden. Our research

<sup>16</sup>However, our estimates might underestimate poverty among aged in Sweden because single persons above 75 who can be presumed to have a rather low level of income are not in the dataset.

<sup>17</sup>Our figures might overestimate the difference between the countries in poverty among the youngest households because some young persons, probably having low incomes, are not in the sample of Taganrog. According to Table 4 statements on the extent of poverty among the youngest in the Russian sample is very sensitive to poverty index. Poor young households in the sample have much larger poverty gaps than other poor households. However, it should be remembered that such households are very few in the sample.

<sup>18</sup>Comparability cross countries in levels of education is lower than in other variables utilized here. We code in both samples educations normally requiring up to nine years of education as level 1, those requiring 10 to 13 years level 2 and those normally requiring more than 13 years as level 3.

strategy has been to work with microdata and harmonize definitions as much as possible. This gives much more satisfactory results than if one had relied on published tables only. However, as the relevant surveys were planned and realized independently of each other, some differences in measurement methodology still remain. Perhaps the most important is a shorter measurement period for Taganrog. Our approach has been to define poverty lines for each dataset and therefore to look at relative poverty. Although this approach nowadays is widely used in cross-country comparisons of poverty, it is not the only possible one.

What do the numbers show? For plausible definitions relative poverty looks larger in Taganrog than in Sweden, but for other also plausible definitions the reverse holds. This makes us conclude that relative poverty can have been of rather similar magnitude in both urban Russia at the end of the Soviet era and in Sweden. Relative poverty in the societies under study appears to be similar to what is found in other European countries, but less than in Canada and in the U.S.A.

While we found similarities in the total size of poverty, we found differences in the structure of poverty. Female-headed households are much more poverty prone than male-headed households in Taganrog, while this is much less the case for Sweden. While there is a clear relation between education of household-head and poverty status in Taganrog, this is not the case in Sweden. In Taganrog poverty was concentrated to households having an elderly head while in Sweden households with the youngest head are most likely to be poor.

#### APPENDIX. THE IMPORTANCE OF TRANSFERS AND INCOME TAXES ON POVERTY

We quantify the importance of public sector transfers and income taxes for relative poverty in the following way: We repeat the computations, but use “factor income” instead of “disposable income.” This means that we are setting transfers and income taxes to be zero and everything else (including the poverty line) is unchanged. Needless to say a hypothetical situation without transfers and income taxes is not likely to occur and if it would materialize it is hard to assume that everything else would be constant. For example, if all pension payments were abolished at least some pensioners could be supposed to do more market work and factor income is thus positively affected. Nevertheless, computations of poverty based on factor income can be instructive for showing the maximum importance of transfers and income taxes.

Because of more elaborated transfer-programs in Sweden it is natural to assume larger effects of transfers and income taxes on poverty than in Russia. Table A1 shows that the situation coincides with the expected. The proportion “factor income poor” is found to be 12.9 percent in Taganrog if one uses the 40 percent line and the corresponding proportion for Sweden is twice as high. One out of three households in Sweden falls below the 60 percent line but only one out of five households in Taganrog. The poverty reducing effect measured as the difference between estimates based on disposable income and factor income is thus largest for Sweden. About 10 percent of the households in Taganrog are removed from poverty while the figure is about 15 percent for Sweden.

TABLE A1  
EFFECTS OF TRANSFERS AND INCOME TAXES ON POVERTY IN TAGANROG AND SWEDEN

	Taganrog	Sweden
The proportion of the families falling below the poverty line. <sup>1</sup>	16.2	29.4
Households removed from poverty by transfers and income taxes. <sup>1</sup> (percentages of all households)	9.7	16.2
Households removed from poverty by transfers and income taxes. <sup>1</sup> (percentage of the factor-income poor).	60	55

<sup>1</sup>The poverty line is set equal to 50% of median equivalent income.

However if the effect of transfers and income taxes is expressed as a proportion of the factor income poor removed from poverty, the achievement of the two systems looks more similar. Transactions with the public sector reduces the number of extremely poor households by 75 percent in Taganrog and 63 percent in Sweden. The reduction of those falling below the 60 percent line is 48 and 41 percent respectively.

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