**Explaining the Gender Poverty Gap**
**in Developed and Transitional**
**Economies**

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**September 2000**

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## I. INTRODUCTION

As economies throughout the world experience large and wrenching changes, poverty has increasingly become a problem in country after country.  This is true regardless of whether these changes result from globalization, the economic transition from socialism to capitalism, increasing marketization and privatization, or some other major economic transformation (Aslanbeigui, Pressman & Summerfield 1994; Funk & Mueller 1993; Moghadam 1996).

A concomitant, disturbing aspect of rising poverty throughout the world is that poverty has increasingly become feminized-- women are much more likely than men to be poor. This phenomenon was first noticed in the US (Pearce 1978, 1989; Pressman 1988), but more recently the problem of the feminization of poverty has become an international concern as well (Pressman 1998; Casper, McLanahan & Garfinkel 1994).

This article employs the Luxembourg Income Study (LIS) to compare poverty rates for female-headed households (FHHs) with poverty rates for other households in a number of developed and transitional economies.  It then seeks to explain why, in some countries, female-headed households are so much more likely to be poor compared to other families.

The next two sections describe the LIS and discuss some of the problems encountered in measuring poverty.  The paper then computes poverty rates in individual countries for

female-headed households and for all other households using the LIS database. Given the problems associated with measuring poverty, we present several estimates of poverty for both types of household. Two sections then look at two theoretical explanations for the gender poverty gap-- human capital theory and a Keynesian approach that emphasizes the importance of fiscal policy as an antipoverty tool. The last section summarizes the main findings and draws some policy conclusions.

## II. THE LUXEMBOURG INCOME STUDY

The Luxembourg Income Study began in April 1983 when the government of Luxembourg agreed to develop, and make available to social scientists, an international microdata set containing a large number of income and socio-demographic variables.

One goal in creating this database was to employ common definitions and concepts so that variables are measured according to uniform standards across countries. As a result, researchers can be confident that the cross-national data they are looking at and analyzing has been made as comparable as possible.

By early 2000, the LIS contained information on 27 nations. Data for each country was originally derived from national household surveys similar to the US Current Population Reports, or from tax returns filed with the national revenue service. Datasets for additional countries

are in the process of being added to the LIS.

Currently there are four waves of data available for individual countries.  Wave I contains datasets for the late 1970s and early 1980s.  Wave II contains datasets for the mid 1980s.  Wave III contains datasets for the late 1980s and early 1990s.  Finally, Wave IV (currently in the process of being put online) contains country datasets for the mid 1990s.

LIS data is available for more than 100 income variables and nearly 100 socio-demographic variables.  Wage and salary incomes are contained in the database for households as well as for different household members.  In addition, the dataset includes information on in-kind earnings, property income, alimony and child support, pension income, employer social insurance contributions, and numerous government transfer payments and in-kind benefits such as child allowances, Food Stamps and social security.  There is also information on five different tax payments.  Demographic variables are available for factors such as the education level of household members; the industries and occupations where adults in the family are employed; the ages of all family members; household size, ethnicity and race; and the marital status of the family or household head.

This wealth of information permits researchers to do cross-national studies of poverty and income distribution, and to address empirically questions about the causes of poverty. It also allows great flexibility in how income and poverty

are measured.

**III. POVERTY CALCULATIONS USING THE LIS**

How to calculate poverty rates has been a matter of considerable controversy in the US since the 1960s. The method currently employed was developed by Mollie Orshansky (1965, 1969) of the Social Security Administration in the early 1960s. Orshansky first calculated the cost of the minimum amount of food that different types of families would need during one year. Since Agriculture Department surveys found that families spent around one-third of their after-tax income on food, the cost of an economy food plan for families of different types and sizes was multiplied by 3 in order to arrive at poverty lines for each family type. Poverty lines for each type of family are increased annually with the increase in consumer prices. Poverty lines thus represent a real standard of living for families of a particular type and size that remains invariant over time. The poverty rate is calculated as the percentage of US families whose income, before taxes, falls below the poverty line (for their family size and type) in a given year.

The Orshansky methodology for computing poverty rates has been criticized on a number of grounds. Rodgers (2000) argues that the minimum food requirements for a family were designed for short-term emergency situations only and would not be able to meet the nutritional needs of a family for an entire year. Since the food budgets used by Orshansky were 80 percent of

what was necessary to provide a nutritional diet for the entire year, Rodgers argues that the Orshansky poverty lines are 80 percent too low.  Schwarz and Volgy (1992) argue that food consumption has fallen from one-third to one-fifth of family spending, so current poverty lines should be based upon a food multiplier of 5 rather than 3.  This would raise poverty lines by two-thirds, and also make poverty-level incomes consistent with what public opinion surveys have found to be the amount of income people believe that a family requires to escape poverty.  Taking a slightly different tack, Watts (1986) argues that in the early 1960s the poor paid no income taxes and virtually no social security taxes.  But in the 1970s and 1980s, poor families faced a considerable tax burden.  Calculating poverty based upon pre-tax incomes ignores the fact that pre-tax incomes can buy less than a comparable or real pre-tax income from the 1960s.  Although this point was undoubtedly a good one during the late 1980s, it may no longer be valid given sharp increases in the earned income tax credit during the 1990s.

The most frequent criticism of the Orshansky methodology, however, is a philosophical one rather than a technical one. Orshansky developed an absolute measure of poverty.  Poverty is supposed to measure the minimum income necessary for a family to survive during the course of a year.  But several authors (Dunlop 1965, Fuchs 1965, Rainwater 1974, Ruggles 1990) have argued that human beings are social animals, and so

the standard of what is minimally necessary must vary from time to time and from place to place. For example, private baths and television sets were not necessities in the 1920s or the 1930s, but they are necessities today. Likewise, child care was not a necessity in the 1950s or 1960s. But as more and more families have two earners, or just one adult heading the household, child care becomes an important family expenditure. For this reason, these authors contend that poverty should be measured in relative terms, as some fraction of the average income at a particular time and in a particular place.

Additional problems arise when employing real, absolute poverty lines in cross-national studies. Whenever we compare two countries with different national currencies we have to compare incomes that are measured in different units. Consequently, some way has to be found to convert one income into an equivalent income denominated in some other currency. Exchange rates between two currencies is a first, logical suggestion. But exchange rates vary considerably from day to day, from month to month, and from year to year; and they vary for speculative reasons that have nothing to do with changes in the relative value of the two currencies or the relative living standards in the two countries.

One attempt to get around this problem is to look at purchasing power parity. The idea behind this notion is straight-forward. Some goods are sold virtually everywhere

throughout the world; by comparing the cost of these goods from country to country we can obtain a good measure of the real value of two different currencies.  If a McDonald's hamburger sells for $1 in the United States and 100 yen in Japan, then $1 and 100 yen should represent equivalent real incomes.  According to the purchasing power parity theory, regardless of the exchange rate between the dollar and the yen, $1=100 yen should be used when comparing real incomes in the US and Japan.

Unfortunately, serious problems with the notion of purchasing power parity make its use problematic when attempting to compare equivalent incomes in different nations. Purchasing power parity assumes that domestic prices for any good reflect only domestic costs.  Transportation costs and other costs of trade as well, as all trade restrictions, get assumed away.  So, too, do the different spending patterns that exist in different countries.  In the real world, however, these factors are all important in determining the price of goods in a particular country.

Because of the arguments in favor of a relative notion of poverty, and because of problems with comparing real incomes across nations, most LIS studies have employed a relative notion of poverty.  These studies usually define poverty lines as 50 percent of median adjusted family or household income, after taxes, within a country for a specified year.  Adjusted family income controls for the different sizes of different

families, and recognizes that $20,000 goes a lot further in a family of 2 than in a family of 5.  Most empirical studies using the LIS take the income needs of a second adult to be 70 percent of the income needs of a first adult and the income needs of children as 50 percent of the first adult.  These weights are similar to the implicit weights in the official US definition of poverty, and the family equivalence scales used by the OECD.

## IV. ESTIMATING THE GENDER POVERTY GAP

Following the standard LIS methodology for computing poverty, Table 1 presents poverty rates for those countries in Wave III of the LIS.  Poverty rates are calculated for households headed by a single female and also for all other households.  The last column of each table shows the difference between the poverty rate for female-headed households and the poverty rate for all other households.

For Wave III, the difference between these two poverty rates (the gender poverty gap) ranges from around -2%, (for Poland), meaning that poverty rates for female-headed households are two percentage points <u>lower</u> than other poverty rates for other families, to about +18% (for the US), meaning that poverty rates for female-headed US households are 18 percentage points higher than poverty rates for other US households. For Wave III datasets, the gender poverty gap averages 4.4% (unweighted).

A number of studies of the poverty gap (e.g., Casper,

McLanahan & Garfinkel 1994; Christopher et al. 1999) have
looked at the ratio of poverty rates for female-headed
households and other households rather than differences in
these two rates.  This approach may result from the habits of
labor economists, who typically examine and study earnings
ratios.  But looking at poverty rate ratios is objectionable
on two counts.  First, poverty rates are supposed to represent
the probability that a family is poor.  When comparing the
poverty rate for female-headed households with the poverty
rate for other households we usually want to know how much
more likely it is that female-headed household will be poor.
Differences in poverty rates give us this important
information; ratios do not.

Second, with ratios, small percentage point differences
can lead to large ratio differences that can be misleading
when we attempt to interpret the numbers or analyze the causes
of the gender poverty gap.  For example, if 1% of other
households are calculated to be poor and 2% of female-headed
households are poor (essentially the results for the Czech
Republic), ratios focus on the fact that women are twice as
likely to be poor as men.  But given the reporting errors in
survey data, plus the somewhat arbitrary nature of any
equivalence scales and poverty lines, the difference between a
poverty rate of 1% and a poverty rate of 2% is quite small and
may not be robust or significant.  Differences in poverty
rates makes this fact clear; poverty rate ratios do not.  To

the contrary, with ratios, a poverty rate for female-headed households of 20% and a poverty rate for other households of 10% (essentially the case of Canada) seem just as bad as the 2% and 1% case because it also yields a ratio of 2. But clearly, women in the Czech Republic are relatively better off than the women in Canada. To make this clear it is necessary to focus on poverty rate differences rather than on ratios of poverty rates.

The gender poverty gaps reported in Table 1 divide naturally into three different groups. First, there are countries with very small and insignificant gender poverty gaps. For Belgium (1992), the Czech Republic, Hungary, Italy, Luxembourg, the Slovak Republic and Spain there is virtually no difference between poverty rates for female-headed households and for other households; and in two countries (Poland and Switzerland) poverty rates for female-headed households are slightly below poverty rates for other households. Second, 11 countries (Belgium (1988), Denmark, Finland, France, Germany, Israel, the Netherlands, Norway, Sweden, Taiwan, and the UK) have slightly higher FHH poverty rates. For these countries the gender poverty gap ranges from around 2 percentage points (Norway) to a little more than 6 percentage points (United Kingdom). Finally, four countries have extremely large gender poverty gaps. In Canada, the gender poverty gap is almost 10 percentage points; and in Australia, the gender poverty gap exceeds 11 percentage

points.  Even worse performers are Russia, with a gender
poverty gap of almost 15 percentage points and the United
States where the gender poverty gap approaches 18 percentage
points.

Studies using other waves of the LIS, and examining
female-headed households and poverty (Wright 1995; Pressman
1998), have found a similar pattern. Those countries with a
small gender poverty gap in one year tend to have a small
gender poverty gap in the other year.  Australia, Canada and
the US do badly in both time periods (there is no Russian
database for Wave II); while Italy, Luxembourg and Poland do
well in both time periods. Countries falling in the middle
ground in one time period also tend to fall in the middle
ground in other time periods.  There thus appears to be
relatively little change from one wave or time period to the
next when it comes to rank ordering countries.  Put another
way, international differences in poverty are much greater in
one time period than intertemporal differences in poverty in
one nation.

One interesting question is what has happened in
transitional economies as a result of sharp reductions in the
role of government in economic activity and giving greater
sway to the market.  Wave II datasets provide a benchmark for
before the transition process; Wave III datasets give a
snapshot of the very beginning of the transformation process.
 These Waves show only small gender poverty gaps.  When Waves

IV and V datasets finally come online we will be able to see the impact of the full transition process.  Other evidence of the impact of this transformation on women (Funk & Mueller 1993; Aslanbeigui, Pressman & Summerfield 1994) prevents one from being optimistic about gender poverty gaps for these nations as the transition process moves forward.

**V. A SENSITIVITY ANALYSIS**

Given the problems with survey data, as well the problems with defining poverty that we discussed in section III, one important question that needs to be addressed is how much hinges on the decisions that get made when measuring poverty.  This section attempts to answer this question by means of a sensitivity analysis.

Table 2 uses Wave III of the LIS and the standard equivalence scales for deriving adjusted family income.  It differs only by using a slightly different definition of poverty. In Table 2, households are taken to be poor if the family income falls below 40% of mean adjusted household income (rather than the usual 50%).  Using this alternative poverty definition the stylized facts presented in section IV do not change very much.    The US still has the greatest problem of feminized poverty, although the poverty rate for FHHs and the gender poverty gap are both a bit lower due to the lower poverty line.  Moreover, the same four countries (Australia, Canada, Russia and the US) still have the largest gender poverty gaps and the highest poverty rates for FHHs.

Likewise, most of the countries with low gender poverty gaps using a 50% of median income poverty line also have low or no gender poverty gaps when defining poverty as having less than 40% of adjusted mean family income.  Poland has the lowest gender poverty gap in both instances.  And the same set of countries (the Czech Republic, Hungary, Italy, Luxembourg, the Slovak Republic, Spain and Switzerland) have negligible gender poverty gaps in both time periods.  The only major change in our results is that a number of countries with moderate gender poverty gaps when we set a higher poverty line now have negligible poverty gaps.  In the UK, for example, the gender poverty gap falls from 6.3% to 0.1%, while in Israel the gender poverty gap falls from 4.8% to 0.9%.  Overall, the correlation between the gender poverty gap using a poverty line set at 50% of median (adjusted) income and the gender poverty gap using a poverty line set at 40% of median (adjusted) income exceeds 80 percent.

Table 3 uses Wave III LIS datasets as well as the standard LIS poverty line-- 50% of median adjusted household income.  However, it differs from Table 1 by using a different equivalence scale to get adjusted household incomes.  Table 3 gives every person in a given household an equal weight, thereby assuming that no economies of scale exist for household consumption.  We can think of this as the other extreme to the normal assumption of fairly significant economies of scale in family size.

This change also does not seem to have much impact on our story about women and poverty. The main change here is that poverty rates are higher when we assume that each child has the same income needs as the first adult in the family (rather than needs that are one-half of that). This pushes down adjusted household income and many more households with children are categorized as poor. Since female-headed households typically have more children than other households (because married couples without children are all counted as part of other households), we get higher gender poverty gaps when we look at per capita household incomes.

Nonetheless, the trans-national story about women and poverty changes very little with our alternative measure of household income. Again, the US has the largest gender poverty gap of all countries examined as well as the highest poverty rate for FHHs. Likewise, the same set of four countries (Australia, Canada, Russia and the US) still have the largest gender poverty gaps and the four highest poverty rates for FHHs. At the other end of the spectrum, Poland continues to have the lowest (negative) gender poverty gap, while the same set of countries generally tend to have the low gaps. The correlation between the gender poverty gap estimated in Table 1 and the gender poverty gap on this alternative definition of adjusted household income is 70 percent.

**VI. POSSIBLE CAUSES OF THE GENDER POVERTY GAP**

Theoretical explanations for different gender poverty gaps among nations can generally be divided into three broad categories.

First, neoclassical economic theory attributes wage differentials primarily to productivity differences. Someone who is more valuable to their firm will get paid more than someone who contributes less to firm revenues. Human capital theory (Becker 1993) has taken this idea one step further, and has attempted to explain wage rates based upon the education and experience level of the individual. The insight of human capital theory is that more educated workers will be more productive and will thus receive higher pay. Likewise, more experienced workers will be more productive, and should also be paid more money than less experienced workers.

This theory can be applied to gender differences in earnings. If the education level of women who head up households is much less than the education level of men who head up married-couple families, we should expect the earnings and income of female-headed households to be much lower. Therefore, we should expect the gender poverty gap to be larger. Human capital theory traditionally proxies experience by looking at the age of the individual worker. Adopting this approach, we can look towards the age of household heads in order to explain the gender poverty gap. If female heads of house are younger than the men who head up other households, then according to human capital theory the wages of these

women should be lower than the wages of the men heading up other families.  Again, with lower relative wages, women should experience relatively greater poverty.

A second possible explanation for gender poverty gaps focuses on gender discrimination.  Societal views about the worth of women and the work they do have led to a situation where women receive lower pay than men, even when they do the same work and provide the same benefits to the firm.  Another take on the discrimination angle is the claim that occupational sex segregation has put women into a set of jobs with low pay (Bergmann 1974, Sawhill 1976, Strober & Arnold 1987) or a set of industries (the service sector) that pay poorly (Northrop 1990). Obviously, the greater the discrimination against women in the marketplace, the lower the earnings of women relative to men and the higher the gender poverty gap will be.

Finally, government fiscal policies can affect the gender poverty gap in two main ways.  Within a particular country, spending programs, or social transfer payments, can be geared more towards husband-wife households or more towards female-headed households.  The more that social programs give to female-headed households relative to other households, the lower the gender poverty gap should be.  Meager social insurance for female-headed families in the US has been cited (Rodgers 2000, Zopf 1989) as a major cause of high poverty rates for female-headed households.  This factor also may

contribute to different national gender poverty gaps.

In addition to spending money, governments also collect taxes. Poverty calculations are usually made using after-tax, rather than before-tax, incomes. If government tax policy in one country favors married-couple households over single tax-paying units, female-headed households will do relatively worse after-taxes than other households, and we should see a greater gender poverty gap.

**VII. TESTING ALTERNATIVE THEORIES OF THE GENDER POVERTY GAP**

This section examines two of the three theories discussed above. We first explore how human capital considerations affect the gender poverty gap. Then we look at the impact of fiscal policy on the gender poverty gap. Given the usual time and space constraints, tests of the feminist approach, which look to discrimination as the cause of the gender poverty gap, will be left for future research.

Table 4 examines one part of the human capital explanation for the gender poverty gap. It raises the following empirical question-- to what extent is the poverty of female-headed households due to the relative youth of the household head? To answer this question we take poverty rates as a weighted average of the poverty experienced by households whose heads fall into different age brackets. To derive the figures appearing in Table 5, six different age groups were distinguished-- (1) under 30, (2) 31-39, (3) 40-49, (4) 50-59, (5) 60-69, and (6) over 70. For most countries, especially

for developed countries, this results in six groups of
relatively equal size for other households.  Poverty rates for
each age group were calculated for both FHHs and other
households in each individual country.  Table 4 recalculates
poverty rates for FHHs as the weighted average of the
(constant) poverty rates for each age group, assuming that
female-headed households had the same age distribution as
other households.  The results of this computation are shown
in column 3.  Column 4 shows the change in poverty for FHHs in
each country due to the age distribution of female household
heads.

This exercise does not lend a great deal of support to
the human capital explanation for the gender poverty gap.  Of
the 23 countries for which it was possible to calculate
poverty rates by the age and gender of household head, in 15
instances poverty for female-headed households was lower due
to their actual age distribution.  In only 8 out of 23 cases
(a bit more than 33%) did the relative youth of female-headed
households increase their likelihood of being poor.  Moreover,
in only one instance (Russia) were poverty rates for FHHs
substantially higher due to the age distribution of FHHs.  On
average (unweighted), poverty rates of FHHs were one-tenth of
a percentage point lower as a result of the age distribution
of FHHs.  This is not significantly different from zero, and
so age cannot explain the gender poverty gap of Table 1.

One reason age is unimportant is that in many countries

FHHs are more likely to have <u>older</u> heads due to the greater life expectancy of women. Moreover, older households are less likely to be poor due to the generous provision of retirement income to the elderly.

To take just one striking example we consider the Australian (1989) case. Younger FHHs (under 40) had around a 28% chance of being poor. In contrast, only around 15% of middle-aged FHHs (40-59) were poor and less than 10% of FHHs with an elderly head (60+) were poor. Since women live longer than men, there are proportionately more older FHHs than older other households in Australia. Around 21% of other households are 60 and over, but more than 36% of FHHs were 60 and over. The fact that FHHs are more likely to be <u>older</u> reduced the poverty of FHHs by around 1.3 percentage points in Australia. If FHHs had the same age distribution as other households, their poverty rate would have been 20.5% (rather than the actual 19.1%).

Table 5 looks at the other part of the human capital explanation for the gender poverty gap. It address the extent to which the poverty of FHHs is due to their lower levels of education. As noted above, we can regard poverty rates for FHHs as a weighted average of the poverty experienced by families with different characteristics. Here the relevant feature is educational levels rather than age.

The LIS does not have standard educational achievement classifications that are used in all country databases. But

for each country, education categories are pretty much defined the same way for FHHs and for other households. In those few instances where categories were not identical, some minor recoding was needed. In these cases, only a very small percentage of households (less than one-half of one percent) had to be recoded, so recoding decisions will not affect the overall results. In a couple of cases (Israel and the United Kingdom) education data was available only by the age at which the individual last attended school; since this was not likely to be a very close proxy for educational attainment, these countries were excluded from Table 5. For Russia, the recoding task was too large (since educational attainment categories differ substantially by gender) and would likely affect the final results because of the large number (30) of education categories in the Russian LIS database. For this reason, Russia was excluded from the analysis of education and the gender poverty gap in Table 5.

Column 3 of Table 5 shows the poverty rates for FHHs under the assumption that they had the same educational distribution as other household heads. Column 4 of Table 5 then shows the increase in poverty for FHHs that is due to the lower educational attainment of the household head.

Again the results do not lend much support to the human capital explanation for the gender poverty gap. In 8 cases out of 20 (Belgium, Denmark, France, the Netherlands, Norway, the Slovak Republic, Sweden and Switzerland), FHHs actually

were <u>less</u> likely to be poor because of their education.  In three more cases (the Czech Republic, Finland and Luxembourg), educational attainment made virtually no difference at all. In contrast, for only 6 countries (Germany, Hungary, Italy, Poland, Spain, and the US) did educational deficiencies raise the poverty rate of FHH by more than 1 percentage point, and in only one of these (the US) did it raise the poverty rate of FHH by more than 2 percentage points.  The striking result of Table 5 is that educational levels matter very little.  On average (unweighted), lower education levels for women raised the poverty rate of FHH by one-half of a percentage point. Consequently, educational deficiencies by women can explain only a little more than 10% of the gender poverty gap that we estimated in Table 1.

While human capital theory does not help explain the gender poverty gap, Keynesian theory does considerably better.  The Keynesian argument is that income distribution in general, and poverty rates in specific, depend on fiscal policy decisions made by the government.  On the Keynesian view, the bigger the government safety net, and the broader and deeper (or more generous) the net, the lower the national poverty rate (see Pressman 1991).  Because FHHs are more likely to be poor without any government assistance, the more generous the level of government transfer payments, lower the gender poverty gap.

Tables 6, 7 and 8 allow us to examine this theory.  Table

6 assumes no government benefits and that no taxes are imposed
on earned incomes.  It also assumes that there are no private
transfers among households, such as child support or alimony
payments.  As a result, factor income (wages, interest,
dividends, rent, etc.) is taken to be total household income.
 Calculating poverty analogous to our method in Table 1-- not
receiving at least 50% of median (adjusted) household factor
income-- gives us enormously high poverty rates.  This is
especially so for FHHs, where poverty rates typically exceed
50% and reach as high as 70%.  This, no doubt, stems from the
fact that FHHs usually have only a single adult earner.  When
women head up families with children, they may have child
rearing responsibilities that limit the number of hours they
can work each day and each week, and therefore the sorts of
jobs they could hold.  Moreover, women typically earn less
than men, and so they suffer a further disadvantage.  The
result is that FHHs have low factor incomes and high poverty
rates compared to other households.

The gender poverty gap in Table 6 is rather striking; it
averages (unweighted) more than 30% when fiscal policy and
private transfers are excluded.  This contrasts with an
average poverty gap of 4.4% when taking the impact of
government spending and taxes as well as private transfers
into account (Table 1).  Also striking is the fact that when
we look at just factor incomes, the US gender poverty gap lies
a bit below the (unweighted) average gender poverty gap for

all countries in Table 6.  Likewise, the poverty rate of FHHs
in the US is below the (unweighted) average for all LIS
countries in Wave III.  What is true of the US is also true of
Canada and Russia, two of the other four countries with very
high gender poverty gaps.  Looking at only factor incomes,
both have <u>below average</u> poverty rates for FHHs and <u>below
average</u> gender poverty gaps.  Canada, in fact, has the second
<u>lowest</u> gender poverty gap and the third lowest poverty rte for
FHHs when looking at just factor income.  Australia, our last
poorly performing country, has a below average poverty rate
for FHHs, but a gender poverty gap that is slightly above
average.

Overall, Table 6 makes it quite clear that measured in
terms of income received from economic activity, women do
rather badly in one country after the next.  Ignoring all
private transfers and fiscal policy, in nearly every country
FHHs would stand a greater than 50% chance of being poor.
They would also be 32% more likely to be poor than other
households in virtually all countries.

Table 7 adds two important private transfers to factor
income-- child support and alimony payments.  Poverty rates in
each country are again computed based on whether adjusted
household income falls below 50% of median adjusted household
income.  The main result of Table 7 is that private transfers
seem to make very little difference.  Adding these payments to
household income reduces poverty rates for FHHs a little and

reduces the gender poverty gap a bit (each goes down by half a percentage point), but in both cases these rates remain very high.

Table 8 looks at gross income before taxes. Here we include all government benefits in family income figures as well as all private transfers. Poverty rates again are calculated as the fraction of families whose gross income (adjusted for family size) falls below 50% of median (adjusted) gross income. As before, the poverty gap is the difference between the poverty rate for FHHs and the poverty rate for other households.

The first striking thing about Table 8 is the sharp drop in poverty due to various government transfer payments. Government expenditures reduce the poverty rate of FHHs by around two-thirds and also reduce the poverty rate of other households by around two-thirds.

These declines, it is important to note, are <u>not</u> the result of just adding more types of income (and therefore more income) to each household. Poverty rates are computed based on a poverty line that is 50% of (adjusted) gross income; since gross income exceeds factor income for each family, median income rises for every family and the poverty line rises as well. In fact, if gross income rose proportionately to factor income for every household, there would be no change in poverty rates at all. So the sharp decline in poverty that we see in Table 8 must be due to the equalizing effect of the

added government expenditures.

The second thing to notice about the last column of Table 8 is the sharp drop in the gender poverty gap. On average (unweighted), government expenditures reduce the gap by nearly 24 percentage points-- from 30.7 percent to 7.2 percent-- or by more than two-thirds. Moreover, there is a sharp drop in the gender poverty gap in virtually every country. Among the major exceptions here are the US, Australia, Canada and Russia, where fiscal expenditures do relatively little to lower the gender poverty gap. As a result, these countries have gender poverty gaps of between 15 to 20 percent when measured using (adjusted) family gross income.

Moving from the last column of Table 8 back to Table 1, enables us to see the impact of taxes on poverty and the gender poverty gap. On average (unweighted), the tax system reduces the gender poverty rate for FHHs by 4.4 percentage points and the poverty rate for other households by 1.5 percentage points. Thus the poverty gap falls by 2.8 percentage points due to taxes.

But taxes are not equally effective at mitigating the poverty gap in all countries. In Australia, the poverty gap is reduced by nearly 9 percentage points; however, Australia still remains with a large poverty gap due to the ineffectiveness of government expenditures in helping low income FHFs. Similarly, in Denmark and Finland the gender poverty gap falls by around 8 percentage points (from 13% to

5% and from 12.5% to 4.4%, respectively); but since government expenditures are relatively ineffective in mitigating the Danish and Finnish gender poverty gap, Denmark and Finland still end up with moderately high gaps. In contrast, countries like the Netherlands, Switzerland, France and Czech Republic make little use of the tax system to equalize income and thereby reduce poverty for FHHs.  But since they make great use of government expenditures to lower the gender poverty gap, they all wind up with relatively low gender poverty gaps.
 In the US, taxes reduce the poverty gap by 3.2 percentage points, which is not that much above the (unweighted) average for all the countries we have examined.  But because the US started with such a large gender poverty gap before taxes get taken into account, taxes have little overall impact.  What is true of the US is also true of both Canada and Russia.  For all four countries with larger gender poverty gaps we see a failure to use fiscal policy, especially government spending programs, to buttress the incomes of those who make little money through market activities.

Table 9 pulls together the results of our analysis in this section.  It starts where most families start, with factor incomes, the money earned from market activities.  Had this been the only source of income for families, the gender poverty gap would be nearly 30 percent in most countries, and it would be quite invariant from country to country.  Adding private transfers (child support payments and alimony)

slightly lowers the gender poverty gap in virtually all
nations and slightly lowers it on average.  Most of the action
in lowering the gender poverty gap, however, occurs as a
result of fiscal tax and transfer policies, especially the
latter.  Countries that do the most for FHHs see the largest
reductions in the gender poverty gap; countries without a
fiscal policy that aids FHHs see little reduction from the
high gender poverty gaps that result when looking at only
factor incomes.

**VIII. SUMMARY AND CONCLUSIONS**

This paper has examined the gender poverty gap in a wide
set of countries using Wave III of the Luxembourg Income
Study.  It finds that the gender poverty gap was relatively
large in some countries during the late 1980s and early 1990s,
was moderate in other countries, and was very low or negative
in yet other countries.  These results were robust with
different attempts to measure poverty.

Next, the paper sought the causes of different gender
poverty gaps across countries.  It found the human capital
explanation wanting.  Neither age nor education can explain
much of the gender poverty gap.  A more Keynesian explanation
for the gender poverty gap proved more fruitful.  Fiscal
policy is able to explain a large proportion of the gap.
Excluding government, the poverty rate of FHHs and the gender
poverty gap are very large in all countries.  Some nations use
fiscal policy aggressively to assist FHHs; other less so.

Those nations that do more have much lower poverty rates for FHHs and much lower gender poverty gaps.  In contrast, nations like Australia, Canada, Russia and the US fail to employ fiscal policy aggressively in an attempt to assist poor families; as a result they wind up with large poverty rates. These countries also do not focus their fiscal assistance on FHHs and so these nations have high poverty rates for FHHs and large gender poverty gaps.  The results of this paper thus support other studies which found that the type of welfare state and the character of social policies and spending programs affect poverty rates for single mothers (Duncan & Edwards 1997; Lewis 1997).

This analysis also leads to two policy conclusions. First, attempts to improve the economic condition of FHHs by developing the skills and improving the education level of women are not likely to be effective.  Similarly, any sort of welfare reform, which <u>reduces</u> government benefits and forces women to work more, will likely exacerbate the problem of women and poverty.  Second, fiscal policy must focus more on the problems facing FHHs and the impact of any spending or tax changes on FHHs.  If countries are to effectively deal with problems of feminized poverty, then fiscal policy must be used to assist FHHs.

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TABLE 1
POVERTY RATES OF FEMALE-HEADED HOUSEHOLDS
AND OTHER HOUSEHOLDS IN DIFFERENT COUNTRIES (by percentage)

| COUNTRY | POVERTY RATE OF FEMALE-HEADED HOUSEHOLDS | POVERTY RATE OF OTHER HOUSEHOLDS | GENDER POVERTY GAP (female poverty rate minus other poverty rates) |
|---|---|---|---|
| | | | |
| Australia (1989) | 19.1 | 7.7 | 11.4 |
| Belgium (1988) | 7.5 | 4.5 | 3.0 |
| Belgium (1992) | 6.7 | 5.2 | 1.5 |
| Canada (1991) | 18.8 | 9.2 | 9.6 |
| Czech Republic (1992) | 1.9 | 0.8 | 1.1 |
| Denmark (1992) | 10.4 | 5.4 | 5.0 |
| Finland (1991) | 7.9 | 3.6 | 4.3 |
| France (1989) | 11.8 | 9.2 | 2.6 |
| Germany (1989) | 10.1 | 4.2 | 5.9 |
| Hungary (1991) | 7.0 | 6.0 | 1.0 |
| Israel (1992) | 16.3 | 11.5 | 4.8 |
| Italy (1991) | 9.6 | 8.9 | 0.7 |
| Luxembourg (1991) | 3.2 | 3.1 | 0.1 |
| Netherlands (1991) | 9.1 | 5.3 | 3.8 |
| Norway (1991) | 6.1 | 3.9 | 2.2 |
| Poland (1992) | 6.0 | 8.4 | -2.4 |
| ROC Taiwan (1991) | 12.1 | 6.7 | 5.4 |
| Russia (1992) | 27.4 | 12.6 | 14.8 |
| Slovak Republic (1992) | 2.1 | 1.4 | 0.7 |
| Spain (1990) | 10.5 | 8.9 | 1.6 |
| Sweden (1992) | 10.8 | 5.8 | 5.0 |
| Switzerland (1992) | 10.3 | 10.6 | -0.3 |
| United Kingdom (1991) | 16.5 | 10.2 | 6.3 |
| United States (1991) | 30.9 | 13.3 | 17.6 |
| AVERAGES | 11.3 | 6.9 | 4.4 |

SOURCE: Luxembourg Income Study, Wave III

TABLE 2
THE GENDER POVERTY GAP
(with alternative poverty line of .4 median income)

| COUNTRY | POVERTY RATE OF FEMALE-HEADED HOUSEHOLDS (.4 of median) | POVERTY RATE OF OTHER HOUSEHOLDS (.4 OF MEDIAN) | GENDER POVERTY GAP |
|---|---|---|---|
|  |  |  |  |
| Australia (1989) | 11.7 | 4.6 | 7.1 |
| Belgium (1988) | 4.7 | 2.0 | 2.7 |
| Belgium (1992) | 5.0 | 2.6 | 2.4 |
| Canada (1991) | 11.4 | 5.3 | 6.1 |
| Czech Republic (1992) | 0.8 | 0.4 | 0.4 |
| Denmark (1992) | 7.4 | 3.7 | 3.7 |
| Finland (1991) | 3.3 | 1.8 | 1.5 |
| France (1989) | 6.1 | 6.0 | 0.1 |
| Germany (1989) | 6.8 | 2.1 | 4.7 |
| Hungary (1991) | 5.7 | 4.1 | 1.6 |
| Israel (1992) | 6.5 | 5.6 | 0.9 |
| Italy (1991) | 5.2 | 4.3 | 0.9 |
| Luxembourg (1991) | 1.6 | 0.5 | 1.1 |
| Netherlands (1991) | 5.4 | 3.4 | 2.0 |
| Norway (1991) | 4.6 | 2.9 | 1.7 |
| Poland (1992) | 2.1 | 3.7 | -1.6 |
| ROC Taiwan (1991) | 4.8 | 2.6 | 2.2 |
| Russia (1992) | 14.9 | 7.8 | 7.1 |
| Slovak Republic (1992) | 0.8 | 0.5 | 0.3 |
| Spain (1990) | 5.2 | 4.8 | 0.4 |
| Sweden (1992) | 7.9 | 4.1 | 3.8 |
| Switzerland (1992) | 8.2 | 7.6 | 0.6 |
| United Kingdom (1991) | 4.9 | 4.8 | 0.1 |
| United States (1991) | 21.7 | 8.3 | 13.4 |

Source: Luxembourg Income Study, Wave III

## TABLE 3 .GENDER POVERTY GAPS
### (based on per capita income)

| COUNTRY | POVERTY RATE OF FEMALE-HEADED HOUSEHOLDS | POVERTY RATE OF OTHER HOUSEHOLDS | GENDER POVERTY GAP (female minus other poverty rates) |
|---|---|---|---|
| | | | |
| Australia (1989) | 17.6 | 9.5 | 8.1 |
| Belgium (1988) | 7.0 | 6.0 | 1.0 |
| Belgium (1992) | 7.0 | 7.2 | -0.2 |
| Canada (1991) | 17.2 | 10.4 | 6.8 |
| Czech Republic (1992) | 2.7 | 1.7 | 1.0 |
| Denmark (1992) | 10.2 | 6.1 | 4.1 |
| Finland (1991) | 4.3 | 4.3 | 0.0 |
| France (1989) | 10.7 | 12.0 | -1.3 |
| Germany (1989) | 9.3 | 6.8 | 2.5 |
| Hungary (1991) | 7.2 | 7.4 | -0.2 |
| Israel (1992) | 10.1 | 15.2 | -5.1 |
| Italy (1991) | 7.9 | 12.1 | -4.2 |
| Luxembourg (1991) | 8.4 | 6.9 | 1.5 |
| Netherlands (1991) | 9.5 | 7.9 | 1.6 |
| Norway (1991) | 7.1 | 5.1 | 2.0 |
| Poland (1992) | 5.0 | 11.6 | -6.6 |
| ROC Taiwan (1991) | 9.7 | 7.6 | 2.1 |
| Russia (1992) | 17.4 | 12.4 | 5.0 |
| Slovak Republic (1992) | 2.7 | 3.0 | -0.3 |
| Spain (1990) | 9.1 | 11.1 | -2.0 |
| Sweden (1992) | 9.8 | 6.7 | 3.1 |
| Switzerland (1992) | 10.9 | 14.7 | -3.8 |
| United Kingdom (1991) | 12.9 | 11.0 | 1.9 |
| United States (1991) | 27.3 | 15.1 | 12.2 |

SOURCE: Luxembourg Income Study, Wave III

TABLE 4. THE IMPACT OF AGE ON THE GENDER POVERTY GAP

| COUNTRY | ACTUAL RATE OF POVERTY FOR FEMALE-HEADED HOUSEHOLDS | POVERTY RATE OF FEMALE-HEADED FAMILIES WITH MALE AGE DISTRIBUTION | CHANGE IN POVERTY RATE DUE TO AGE DIFFERENCES |
|---|---|---|---|
| Australia (1989) | 19.1 | 20.5 | -1.4 |
| Belgium (1988) | 7.5 | 7.7 | -0.2 |
| Belgium (1992) | 6.7 | N.A. | N.A. |
| Canada (1991) | 18.8 | 20.9 | -2.1 |
| Czech Republic (1992) | 1.9 | 2.6 | -0.7 |
| Denmark (1992) | 10.4 | 9.2 | 1.2 |
| Finland (1991) | 7.9 | 6.9 | 1.0 |
| France (1989) | 11.8 | 13.1 | -1.3 |
| Germany (1989) | 10.1 | 11.1 | -1.0 |
| Hungary (1991) | 7.0 | 7.3 | -0.3 |
| Israel (1992) | 16.3 | 15.5 | 0.8 |
| Italy (1991) | 9.6 | 9.7 | -0.1 |
| Luxembourg (1991) | 3.2 | 4.9 | -1.7 |
| Netherlands (1991) | 9.1 | 11.1 | -2.0 |
| Norway (1991) | 6.1 | 5.2 | 0.9 |
| Poland (1992) | 6.0 | 3.8 | 2.2 |
| ROC Taiwan (1991) | 12.1 | 11.8 | 0.3 |
| Russia (1992) | 27.4 | 23.6 | 3.8 |
| Slovak Republic (1992) | 2.1 | 3.1 | -1.0 |
| Spain (1990) | 10.5 | 11.5 | -1.0 |
| Sweden (1992) | 10.8 | 9.6 | 1.2 |
| Switzerland (1992) | 10.3 | 10.7 | -0.4 |
| United Kingdom (1991) | 16.5 | 17.2 | -0.7 |
| United States (1991) | 30.9 | 31.5 | -0.6 |
| AVERAGES | 11.3 | 11.4 | -0.1 |

Source: Luxembourg Income Study, Wave III

## TABLE 5. THE IMPACT OF EDUCATION ON THE GENDER POVERTY GAP

| COUNTRY | ACTUAL POVERTY RATE OF FEMALE-HEADED HOUSEHOLDS | POVERTY RATE OF FEMALE-HEADED HOUSEHOLDS WITH MALE EDUCATIONAL DISTRIBUTION | CHANGE IN POVERTY RATE DUE TO EDUCATIONAL DIFFERENCES |
|---|---|---|---|
| | | | |
| Australia (1989) | 19.1 | 18.4 | 0.7 |
| Belgium (1988) | 7.5 | 7.7 | -0.2 |
| Belgium (1992) | 6.7 | N.A. | N.A. |
| Canada (1991) | 18.8 | 18.2 | 0.6 |
| Czech Republic (1992) | 1.9 | 1.8 | 0.1 |
| Denmark (1992) | 10.4 | 10.7 | -0.3 |
| Finland (1991) | 7.9 | 7.4 | 0.5 |
| France (1989) | 11.8 | 12.3 | -0.5 |
| Germany (1989) | 10.1 | 9.0 | 1.1 |
| Hungary (1991) | 7.0 | 5.4 | 1.6 |
| Israel (1992) | 16.3 | N.A. | N.A. |
| Italy (1991) | 9.6 | 7.7 | 1.9 |
| Luxembourg (1991) | 3.2 | 2.7 | 0.5 |
| Netherlands (1991) | 9.1 | 10.1 | -1.0 |
| Norway (1991) | 6.1 | 6.7 | -0.6 |
| Poland (1992) | 6.0 | 4.3 | 1.7 |
| ROC Taiwan (1991) | 12.1 | 11.4 | 0.7 |
| Russia (1992) | 27.4 | N.A. | N.A. |
| Slovak Republic (1992) | 2.1 | 2.9 | -0.8 |
| Spain (1990) | 10.5 | 9.1 | 1.4 |
| Sweden (1992) | 10.8 | 11.6 | -0.8 |
| Switzerland (1992) | 10.3 | 10.7 | -0.4 |
| United Kingdom (1991) | 16.5 | N.A. | N.A. |
| United States (1991) | 30.9 | 27.4 | 3.5 |
| AVERAGE | 10.5 | 9.8 | 0.5 |

Source: Luxembourg Income Study, Wave III