Relative or absolute poverty in the USA and EU?

The battle of the rates

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Abstract (short)

US poverty is much higher than poverty in Europe when a relative poverty measure is used. Using an absolute poverty measurement method, the picture looks different: poverty in some European countries is higher. This paper estimates poverty rates for all the countries of the (old) EU and the USA applying the official measurement methods of the United States (absolute) and the European Union (relative) to all the countries. The differences in poverty levels both in time and between the 16 countries are analysed identifying the various sources for the variance in the figures. Using annual data of the EU and the US from 1994 to 2000, we illustrate how some differences in poverty levels are inherent to the choice for an absolute or a relative approach, while other differences are related to aspects common to both absolute and relative poverty measurement but working out differently depending on the estimation method use. The results of our analysis points out that using a single figure is often misleading both for policy design and for policy monitoring.

Keywords: poverty, absolute, relative, United States, European Union
Detailed abstract

The differences in poverty levels between the European Union and the United States are striking: almost one out of four persons in the USA was poor in 2000 against around one out of ten (10 percent) in most European countries. More precisely, in 2000, 23.5 percent of the US population lived below the poverty line if the official EU poverty estimation method is used. Following the same estimation method, poverty levels in 2000 were 13.3 percent in Belgium and 10.4 percent in Sweden. However, when using the official poverty estimation method of the USA, poverty rates for 2000 are 8.7 percent in the USA against 3.6 percent in Belgium and 6.7 percent in Sweden. The “official” poverty estimation method for the EU (further referred to as Laeken methodology and Laeken indicators) is based on a relative poverty concept. The official poverty estimation method for the USA is based on an absolute poverty concept (further referred to as Orshansky method and indicators). The difference between relative and absolute poverty estimates for the same country and the same year are considerable but far from uniform. The differences in the figures quoted above are for example very large for the USA and Belgium but much smaller for Sweden. For the first time in poverty analysis research, this paper estimates poverty levels using both methodologies for the USA and all (old -15) EU countries and analyses the sources of the differences between the two estimates. Absolute and relative poverty rates are estimated using data from the European Community Household Panel (ECHP) and the Panel Study on Income Dynamics (PSID). The estimates can be made for all the years between 1993 and 2000.

Table 1 provides the estimates according to the 2 methodologies for 1995 and 2000 for the 16 countries under study. From table 1 it can be seen that across 16 countries the USA shows by far the highest poverty rate when the EU (relative) methodology is used, although the Mediterranean countries (Greece, Spain and Portugal) and Ireland show high figures as well. Using an absolute poverty estimate, as done with the US methodology, the picture becomes very different. Albeit still higher, the USA poverty rates do not show that much difference with most European countries while Greece, Spain and Portugal have figures 4 times higher than the USA. In general, the differences in poverty levels
between countries seem smaller when an absolute poverty concept is used compared to an
relative based estimate, but Belgium shows even lower poverty rates than Sweden that in
turn does no longer differ that much from the USA. Even we can not yet calculate
absolute poverty rates for the new EU Member States, we find similarly large differences
in relative poverty for these countries (Eurostat, 2001). For instance, relative poverty in
Lithuania is 17 percent but only 8 percent in the Czech Republic, the lowest poverty rate
in the whole European Union! Moreover, differences between absolute and relative
poverty rates not only influence poverty levels but also affect the poverty developments
over time: since 1993 absolute poverty in Ireland declined with 19 percentage points to
11 percent in 2000 while relative poverty increased with 4 percentage points to 21
percent over the same period.

Table 1: Poverty incidence (in % of individuals over the period 1995 and 2000)

<table>
<thead>
<tr>
<th>Laeken (relative) poverty</th>
<th>Orshanksy (absolute) poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium 15.3 13.3 6.0 3.6</td>
<td>Denmark 9.5 10.8 3.3 3.4</td>
</tr>
<tr>
<td>Germany 14.0 11.1 7.5 5.1</td>
<td>Greece 21.0 20.5 27.5 26.1</td>
</tr>
<tr>
<td>Spain 18.0 18.8 29.1 19.1</td>
<td>France 15.2 15.4 8.4 6.5</td>
</tr>
<tr>
<td>Ireland 19.5 21.4 25.3 10.6</td>
<td>Italy 20.1 19.3 28.0 16.7</td>
</tr>
<tr>
<td>Luxembourg 11.8 12.5 0.7 0.6</td>
<td>Netherlands 11.7 11.3 8.4 6.6</td>
</tr>
<tr>
<td>Austria 14.0 11.9 5.2 4.8</td>
<td>Portugal 21.5 20.1 40.2 32.2</td>
</tr>
<tr>
<td>Finland 8.1 11.4 4.1 4.9</td>
<td>Sweden na 10.4 na 5.7</td>
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<tr>
<td>United Kingdom 19.5 17.1 15.2 9.3</td>
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<tr>
<td>United States 23.8 23.5 10.6 8.7</td>
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1 Not available.

How can these differences between absolute and relative poverty rates be explained? If
absolute and relative poverty rates can differ so much within and between countries, what
does this imply for specific groups in the population? What does it mean when children in
some country have a high absolute poverty risk while at the same time, they are not more
likely to be poorer than other groups in relative terms? These questions will be addressed in the paper.

Focussing on (differences in) official poverty estimates makes a lot of sense for these statistics are used by governments to evaluate and/or adjust social and economic policies. Politicians and interest groups quote them to argue their case and the publication of the results receives considerable media coverage every year. The official USA poverty measurement methodology was developed by Molly Orshansky in the 1960s and is based on an absolute concept of poverty. Albeit regularly criticized and by times hotly debated, the Census Bureau still uses this method for its annual poverty assessments. At the start of this millennium, the Member States of the EU agreed to use a common set of poverty and social exclusion indicators also called the ‘Laeken’ indicators. The subset of these indicators that is concerned with financial poverty in EU Member States uses a relative concept of poverty.

These “official” poverty statistics influence social policy design and implementation in the US and the EU. In the US, household’s eligibility to social assistance programs such as food stamps and family allowances (partly) depends on whether their income falls below some percentage of the official poverty line. In addition, because the federal food stamp program funds 100 percent of the benefits, it also redistributes federal tax funds unevenly across states. In the European Union, policies to combat poverty and social exclusion are first and foremost the responsibility of national governments. Nevertheless, all Member States agreed to use the Laeken indicators to monitor progress on their National Action Plans on Social Inclusion (NAPincl). Some Member States specify explicit poverty targets in their action plans (Atkinson et al, 2002). The Laeken indicators facilitate inter-Member State comparisons in terms of poverty and social exclusion and are used for redistribution between Member States at a European level through the European Social Fund (ESF) and the European Regional Development Fund (ERDF). These funds are aimed at socially excluded groups or the development of disadvantaged regions. Although access to these funds is not based on “scores” of the Laeken indicators,
funding proposals as well as project evaluations increasingly use Laeken indicators to argue their case.

Given the importance of these official poverty statistics for policymaking and advocacy groups, it is important to be able to explain the differences between absolute and relative poverty rates. Are they the result of conceptual and methodological differences in the measurement of absolute and relative poverty or do they simply reflect differences in social and economic policy regimes? In this paper we focus on the technical reasons that account for the differences between relative and absolute poverty rates and their impact on poverty levels and poverty trends. This exercise enhances our understanding of how poverty statistics are influenced by, often hidden and forgotten methodological and technical decisions. Our analysis shows how some poverty differences are inherent to choosing either an absolute or a relative approach to poverty while other differences are related to more general aspects of poverty measurement. In short, we explain and illustrate how differences in inequality and changes in inequality over time affect absolute and relative poverty levels and poverty trends. Additionally, we investigate the impact of Purchasing Power Parity rates (PPP) and year to year updating methods of poverty lines on poverty. Finally, even though (sometimes implicit) equivalence scales are used in every poverty approach, we show that equivalence scales have a different impact on absolute and relative poverty rates and explain how this result comes about.

Does it make more sense to use an absolute or a relative approach for (semi-) official poverty statistics? The results of our analysis strongly recommend to policy makers to use both. An absolute approach helps to identify those people who are not able to attain a minimum living standard; a relative approach to identify those whose living standard is low compared to the society they live in and therefore face difficulties to participate fully (be included) in that society.