Just Numbers?Theoretical and Practical Considerations on the Measurement of Poverty in Rich Societies

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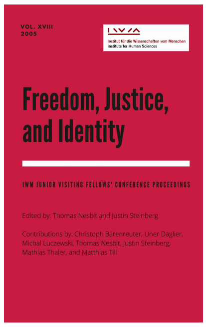

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> *"The poor as a sociological category emerges not by a particular degree of need and want, but by the receipt of support or if social norms would demand that support should be given"* (Georg Simmel 1908).

1. Counting the poor to make the poor count in the European Union

While value judgments render a purely rational and scientific solution impossible, a particular definition of poverty may still be widely recognized and accepted. One such widely accepted notion of poverty has evolved recently for the European Union. Following the Union's commitment to "combat social exclusion" and the need to monitor progress towards a reduction of poverty, a framework of statistical indicators has finally been endorsed at the Laeken European Council in 2001. These indicators on social inclusion derive from the so-called structural indicators,[1] which had been established earlier to measure progress towards the Lisbon objectives and have been the subject of an expert evaluation (Atkinson et al. 2002). Four basic dimensions of social inclusionare considered in that framework: income inequality, unemployment, education and health. The framework is organized along three hierarchical tiers, with a core set of 10 primary indicators and 8 secondary indicators giving additional information. The definition of a third level of indicators is left to the individual country's action plans to highlight areas of particular national relevance and support the interpretation of the primary and secondary indicators.

European policies rely largely on statistical indicators as can easily be recognized when thinking of the stability criteria for the European Monetary Union (EMU) defined in the Maastricht Treaty (cf. Haller 2001). With the Laeken framework the issue of poverty is now placed firmly on the European social agenda including concrete technical decisions about how poverty is to be measured.[2] Such a common language puts a normative limit to the arbitrariness of poverty measures and facilitates comparative investigations. There remain however various drawbacks which need to be acknowledged since the Laeken indicators are intended to guide policies as well as improve our understanding of poverty. The main caveats of this framework are to be distinguished on at least three levels:

1) Guidelines without a concept?

First, the so-called Laeken framework of harmonized primary and secondary indicators of social inclusion deserve serious criticism for their lack of any theoretical grounding for social exclusion or inclusion. There has been some debate even on the normative value of the Laeken Indicators; their normative content does not seem to fit any single ideological framework (cf. Mabett 2004 p14). Some people might regard a lack of ideological persuasion as a requirement for statistical measures but in my view this is only symptomatic for a framework which did "[…] not attempt to provide a thorough grounding for the terms 'social exclusion' or 'social inclusion' […]" (Atkinson et al. 2002, p. 3). Instead, their core concepts are essentially data driven and reflect administrative categories rather than the circumstances relevant to the social praxis of poverty. Consequently, it is difficult to frame any new strategic targets in these terms. Be this intentional or not – the lack of a concept of social inclusion ensures that no particular line of action is suggested. For the same reason the indicators remain flexible enough to accommodate a wide range of ideological or theoretical views.

In addition to the conceptual fuzziness one particular conceptual choice has shifted indicators even further away from concrete action. By design, the indicator framework puts emphasis purely on welfare outcomes (e.g. low incomes) without reflecting also the policy input (e.g. social expenditure) or output (e.g. numbers of beneficiaries under certain transfer schemes). Without substantial analytical interpretation such descriptive findings on outcomes are mostly appealing to the general public or social policy researchers but so far they have shown relatively little impact on the responsible authorities.[3]

2) Missing the point?

The present framework appears far from exhaustive, and important aspects of social inclusion are not reflected. Most importantly this relates to the housing dimension. On average, one Euro out of four across European households is spent on housing (Till 2005) and the share of housing cost in income is increasing together with the number of homeless people. Due to a substantial direct policy impact in most countries housing integration should not depend solely on income. In addition, the Laeken indicators on education and health are clearly of *ad hoc* character rather than being based on profound reasoning and research. Further, deprivation is at best indirectly assessed through low income, while poverty ultimately becomes visible if the availability of non-monetary goods and services is considered (see Atkinson et al. 2004 for a recent discussion). Finally, the lack of any explicit regional dimension ought to be seen as a severe drawback of the indicator framework.

3) Inaccuracies in measurement

The measurement of indicators such as income poverty has peculiarities that the conventional framework tends to disguise. It may even turn out that the data that drives the commonly used notion of poverty does not fulfil some fundamental quality standards. Indeed the European Community Household Panel is a rather bad representation of the population of concern, lacking coverage of institutionalized or homeless persons as well as immigrants. Other non-trivial statistical problems that are mostly overlooked in the discussion of poverty estimates include imputation procedures employed to fill information gaps arising from complex and lengthy questionnaires or the increased weighting of respondents in the survey to represent also non-respondents. On a more analytical level the problem of identifying the standards by which the disposable income households of different size can be regarded as equivalents remains unsolved. From a technical viewpoint the Laeken indicators define a statistical benchmark as much as they are a challenge to methodologists.

In summary, the drawbacks of the Laeken Indicator framework lie in its lack of a conceptual basis, its insufficient coverage, and in the challenges that it faces for implementation into reliable statistics. Nonetheless, it ought to be acknowledged that Laeken makes poverty a social fact. With Member States regularly reporting on poverty according to their commitment in the "Open Method of Coordination," those who wish to combat social exclusion find solid ground for their arguments. Clear policy targets in terms of the indicators remain however yet to be established (cf. Atkinson et al. 2004).

The paramount point of my criticism is hence not limited to inefficient use of research resources but the problems of a potentially misleading social policy. This would be the case if serious developments that would demand action are not so recognized. In light of this we should not allow ourselves to remain complacent simply because the official definition of poverty is largely uncontested.

Poverty statistics clearly aim beyond mere statistical exercises. In their function to make social problems visible they always point to a certain need for action. If statistics, however, disguise such problems they will also imply the absence of such need. This becomes immediately clear if we consider the Austrian situation: as housing and social protection are not included in the harmonized framework of primary and secondary indicators, they are also not discussed in the National Action Plan. One does not have to be a genius in social policy analysis, however, to find that Austria's most severe poverty problems (and also those which could most easily be solved) are precisely the lack of any harmonized system of social assistance and homelessness. These problems are within the competencies of the Länder, which means any remedy would be at their expenses and they thus have little interest in any third level indicators on housing and social assistance that might bring them into trouble.

Poverty statistics can not be viewed just as numbers without reference to potential consequences. However, we may ask: can they be scientifically justified measures for the social phenomena of concern? Moreover, can they contribute to a just society?

2. Collective wealth and national accounting

If we trust in Adam Smith, then a nation's wealth corresponds to the annual labor. The primary cause of collective wealth is in Smith's terms the skills, dexterity and judgement with which labor is generally applied. In particular, Adam Smith referred to the division of labor as a prerequisite for the improvement of supply. We would hence expect a rich society to be characterized by a lot of useful, cleverly organized work. We may have reason to question this for our western societies if we consider that they produce a lot of useless but nevertheless cleverly organized work, for example in the finance sector by which we control rather useful work in developing countries. For illustration, we may consider the amount of work required in developing countries to produce a pair of sport shoes and fashionable clothing and compare it to the amount of work the producing countries receive in turn—the huge imbalance is obvious.

We may well question whether the concepts of National Accounting underlying the GDP as the standard measure of collective wealth is doing justice to the labor based approach Adam Smith had drafted. At least, it must be seen as defected and incomplete. The relevance of national accounts depends on the degree to which the produce of labor is "monetized" or can be adequately represented in monetary terms. Several arguments can be offered as to why national accounting gives a poor representation of collective wealth: It is clear that despite rising dependency on commodities which are available on markets, we still enjoy many things which are free in principle (such as fresh air and water but also leisure time and health). Beyond this, a significant part of production through labor is not monetized. The share of unpaid housework and care for children alone amounts for between 30 and 60% of an adjusted measure of GDP. Thus productive labor worth about 100% of a conventional GDP is usually hidden. Besides such underestimation of productive labor, also its valuation through market processes may be fundamentally flawed. This becomes striking in times of economic crisis and hyperinflation. Finally, a nation's GDP may not only assign misleading values to a limited part of a society's affluence, but it also tends to assign positive value to mostly unfavorable processes. For example, the big flood some years ago contributed significantly to economic growth, as more goods had to be produced and consumed. Likewise we inevitably augment our GDP whenever we are stuck in a traffic jam producing only useless waste, and even harmful pollution (the cost of which to get rid of again adds to the GDP).

Without going too much into detail here, this general reasoning on wealth beyond income has its relevance also for individuals. Being rich may not be determined exclusively by legal ownership of money, but by the factual possession of all kinds of capital which open opportunities for investment and consumption. Thus, wealth, socially perceived, is equivalent to any massive accumulation of financial capital. The book value of the latter may not necessarily reflect true wealth.

3. Approaching wealth through the standard of living

Otto Neurath envisaged a potentially fruitful approach to the measurement of both wealth and poverty. It considers an inventory of the standard of living, which encompasses all elements that either improve or worsen living conditions. He gave strong emphasis to complementary commodities, i.e. the interaction of the different parts of a standard of living. As examples for a complementary commodity he mentioned a stove filled with coal whereas the same stove filled with dynamite would immediately turn into a discommodity. As a consequence he stated clearly “We cannot regard it [the standard of living] as a weight made up of the sum of the weights of the various parts” (Neurath 1980, p 143). A profile of the standard of living should be obtained by means of intelligent selection of relevant characteristics and scaling of units.

The selection of characteristics is a cumbersome task and cannot be replaced by the idea of a “*homo oeconomicus*”. To Neurath such assumed dominance of purely monetary economic motivations was a manifestation of absolutistic metaphysics. For one important example, Neurath has already in 1937 proposed to consider sustainability as “the possible significance of the waste of natural resources for a future decline in the standard of living” (ibid. p 144). Another of Neurath’s extremely practical considerations refers to the multiplicative effect of leisure time only by which useful quantities can be established. For example a specific number of available books or garden land may imply very different standards of living, depending on the amount of time which is available for its “consumption”. This aspect is usually disregarded when wealth is measured.

In light of Neurath’s deep Marxist persuasion and his engagement in setting up and administering a working economy in kind in Saxony, it appears natural that he does not consider the approach as mere statistical exercise. Rather—he claims—the totality of living conditions should always be related to specific social developments. Neurath recognized society as the producer of the standard of living instead of only positively valued labor units. This leads Neurath to the notion of ‘measurements in kind,’ which are very distinct from the accountant’s perspective. While the latter is indifferent for example whether surplus production in heavy industries is obtained at a higher rate of accidents, the standard of living approach considers negative aspects explicitly. Measurements in kind do not play any important role in economic policy today. A comprehensive measurement in kind would, however, be the only way to verify the validity of monetary accounting. So long as such comprehensive computations are not achieved, systems of national accounting have to be viewed purely as conventions.

4. How does poverty relate to wealth?

Now let us return to the original question of poverty: What does all this reasoning on wealth have to do with want and destitution? The relationship is indeed fairly complex and far from being resolved either empirically or theoretically. We may take an easy position and simply argue that any society that experiences poverty cannot be called rich. Consequently any government claiming credit for the country’s prosperity will be well advised also to downplay or simply ignore the fact of poverty. We know examples of this kind from the administrations of Ronald Reagan, Margaret Thatcher or Helmut Kohl. Likewise, we could however take a society’s generosity towards their poor as a sign of its wealth.

Now, as far as the relationship between wealth and poverty is concerned, we do not come to any definitive conclusions. There are however important aspects of concomitant variation in any possible direction.

The first situation refers to the simultaneous increase of progress and poverty as theoretically postulated by George Henry in the mid-19 th century.[4] Another scholar of this time—Alexis de Tocqueville—observed empirically such correlation between wealth and poverty in what was then the most prosperous economy of England. As a reason for this relationship, he identified the increased vulnerability of workers whose produce serve secondary needs. The demand for the latter he saw to be far less stable than that for the produce of agricultural work so that industry workers became relatively more exposed to market risks. Further, Tocqueville recognized that with increased possibilities for consumption, inevitably also the likelihood of not being able to fulfil the new consumption needs rises. Finally, Tocqueville saw entitlements to social welfare as a particular cause of people falling into a poverty trap.[5]

A second type of relationship refers to rising wealth and vanishing poverty. This situation is typically associated with the post war period of extraordinary economic growth, full employment and practically no poverty. This type of situation however is not of a very long-lasting kind.

On the other hand, decreases in wealth also usually have consequence for poverty. This holds in particular, if abrupt economic crisis leads to mass unemployment and poverty. While welfare states usually tend to detach the labor market risk from poverty risks, this can in most cases not be sustained for very long, particularly in conservative social security systems that are labor market centered. Generally, the loss in wealth will correspond also to a loss in the revenues of the exchequer, which in turn limits the states' ability to safeguard its citizens against poverty.

Finally, there is also empirical evidence for less frequently observed decreases in wealth which are related to a decrease in poverty: Amartya Sen (2000, p. 207) has described such a situation in India where massive shortages of food supply were countered by employment measures which indeed effectively prevented famine.

5. Conclusions on the measurement of poverty in rich societies

The way poverty is measured today is closely tied to the practice of national accounting. In the preparation and the early years of the ECHP it is apparent that the surveys' content was much driven by a strong desire to obtain income information consistent with national accounting. However, with the retirement and replacement of key actors and increasing technical difficulties, the ambitions to assure compatibility between income surveys and national accounting became weaker. That the two statistical instruments appear rather distinct today may also reflect fears that the political authority associated with SNA (e.g. Maastricht criteria) could be carried over to poverty standards, which would give them similar prominence.

Poverty is not only a problem that concerns economists or the political sphere. Wealth and poverty are also proper subjects of sociology. They relate to the most fundamental problems of society formation and cohesion. Social organization, particularly with regard to labor, indeed functions to establish collective wealth, even if it may not always be justly shared. Persisting economic polarization is perhaps the strongest centrifugal force to society. However, stability is not only endangered by classic revolutions but also by the increasing segregation of the ultra rich and their strategies to escape social responsibility both as individuals and as nation states.

As Simmel's justified normative notion of poverty leaves open the question of whose norms shall count for the definition of poverty there is both opportunity and responsibility for the scientific inquiry.

I have here tried to present Otto Neurath's measurement in kind approach as a particularly promising alternative for a social accounting of poverty and wealth. However, although it was re-discovered already in the early 1990's by German poverty researchers the standard of living approach is theoretically as well as empirically still very much in its childhood days.

Income-based poverty measures are not likely to disappear overnight and this should even be prevented. In view of a desirable interim solution it may seem strategically appropriate to set the monetary yardstick with reference to the GDP to make it a politically effective guideline with equal legitimacy as the GDP itself.

In any case we remain far from a state where we may put our thought at rest. Non-monetary aspects of social inclusion, in particular with reference to housing, social protection and regional variation, deserve special attention for future sociological research and policy indicators. Moreover, we should strive for a measurement of poverty that does better justice to the asymmetric interaction patterns characteristic to poverty. These point to multiplier effects of social relationships that reach far beyond possessions or feelings. Only if such social responsibility is duly considered may our measures of poverty be called just and only then would they be capable of supporting a just society.

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Appendix : The indicators of the Laeken framework on social inclusion

Table 1: Primary Indicators

	Indicator	Definition
1	At-risk-of-poverty rate	Share of persons with an equivalized disposable income below 60% of the national equivalized median income. Equivalized median income is defined as the household's total disposable income divided by its "equivalent size", to take account of the size and composition of the household, and is attributed to each household member.
2	Income quintile ratio (S80/S20)	Ratio of total income received by the 20% of the country's population with the highest income (top quintile) to that received by the 20% of the country's population with the lowest income (lowest quintile). Income must be understood as equivalized disposable income.
3	Persistent at-risk-of-poverty rate	Share of persons with an equivalized disposable income below the at-risk-of-poverty threshold in the current year and in at least two of the preceding three years.
4	Relative median poverty risk gap	Difference between the median equivalized income of persons below the at-risk-of poverty threshold and the threshold itself, expressed as a percentage of the at-risk-of poverty threshold.
5	Regional cohesion	Coefficient of variation of employment rates at NUTS (Nomenclature of Territorial Units for Statistics) level 2. Employment rates are calculated as the share of the population (aged 15 years or more) who are in employment (ILO definition).
6	Long term unemployment rate	Total long-term unemployed population (?12 months; ILO definition) as a proportion of total active population aged 15 years or more.

7	Population living in jobless	Proportion of people aged 0-59 years who live in a jobless household as a proportion of all people in the same age group. Students aged 18-24 years who live in households composed solely of students are not counted in either numerator or denominator.
8	Early school leavers not in education or training	Share of persons aged 18 to 24 who have only lower secondary education (their highest level of education or training attained is 0, 1 or 2 according to the 1997 International Standard Classification of Education – ISCED 97) and have not received education or training in the four weeks preceding the survey.
9	Life expectancy	Number of years a person aged 0 is expected to live.
10	Self-defined health status by income level.	Proportion of the population aged 16 years and over in the bottom and top quintile of the equivalized income distribution who classify themselves as in a bad or very bad state of health.

Source: Social Protection Committee (2001)

Note: Income is to be understood as equivalized disposable. Indicators to which this seems applicable are to be broken down by gender and age, additional breakdowns for household type, activity status, work intensity and tenure status have been foreseen explicitly.

Table 2: Secondary Indicators

	Indicator	Definition
12	Dispersion around the at-risk-of-poverty threshold	Share of persons with an equivalized disposable income below 40%, 50% and 70% of the national equivalized median income.
13	At-risk-of-poverty rate anchored at a moment in time	In year t, share of persons with an equivalized disposable income below the at-risk-of-poverty threshold in year t-x, uprated by inflation.
14	At-risk-of-poverty rate before social cash transfers	Relative at-risk-of-poverty rate where equivalized income is calculated as follows: – excluding all social cash transfers – including retirement and survivors pensions and excluding all other social cash transfers. – including all social cash transfers (= indicator 1) The same at-risk-of-poverty threshold is used for the three statistics, and is set at 60% of the national median equivalized disposable income (after social cash transfers).

15	Gini coefficient	Summary measure of the cumulative share of equivalized income accounted for by the cumulative percentages of the number of individuals. Its value ranges from 0% (complete equality) to 100% (complete inequality).
16	Persistent at-risk-of-poverty rate (50% of median equivalized income)	Share of persons with an equivalized disposable income below 50% of the national median equivalized income in the current year and in at least two of the preceding three years.
17	Long-term unemployment share	Total long-term unemployed population (? 12 months; ILO definition) as a proportion of the total unemployed population aged 15 years and over.
18	Very long term unemployment rate	Total very long-term unemployed population (? 24 months; ILO definition) as a proportion of total active population aged 15 years and over.
19	Persons with low educational attainment	Share of the adult population (aged 25 years and over) whose highest level of education or training is ISCED 0, 1 or 2.

Notes:

1. Structural indicators cover six areas: economic background, employment, innovation and research, economic reform, social cohesion and the environment.

2. Such as counting individuals rather than households, or using the modified OECD scale of equivalence for comparing the incomes of households of different size and the 60% of the Median threshold for setting a poverty line.

3. The Commission in a recent communication recognized the special need to include social protection into the open method of coordination and proposed a new a Joint Report on Social Protection to be launched in 2005. (European Commission 2003)

4. Another prominent scholar for this matter is J.M.Keynes. He predicted long term economic stagnation due to market saturation. This would imply that profits will be possible only by reducing employment. With disappearing tax revenues also the welfare state's social security system will get under pressure and a rise of poverty appears inevitable.

5. A modern and even more peculiar aspect of wealth and poverty may relate to the importance of information and communication technologies. While expenditure on IT is rising rapidly, it creates formerly unknown differentials. For one example information technologies are likewise capable of improving employment and education chances as to exclude from such opportunities. With regard to mobile communication its higher tariffs are indeed increasing social distances by imposing a kind of communication tax. It can not be expected that these technologies are universally beneficial and empirical evidence on arrears with telephone bills makes it hard to believe that increased economic strain is indeed balanced through corresponding gains in social capital.

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