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Title:
The validity of a national vs. a pan-European perspective on poverty and inequality in the EU: what can we learn from cross-national differences in consumption patterns?

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Abstract

In the EU there is a long-standing discussion on how poverty and inequality should be measured. In particular, scholars have debated whether a national or pan-European perspective is more appropriate. Living standards vary a lot across EU countries, particularly when considering the new EU Member States. In countries like Romania, Bulgaria and Lithuania, middle and high-level incomes are low when compared to those in West European countries, even after correcting for price differences [1]. In addition to differences in purchasing power, scholars have also argued in favour of a national or pan-European perspective on the basis of cross-national variations in subjective economic stress and differences in material deprivation. In this paper we join this debate by looking at consumption patterns, a factor that has remained out of the picture so far, even though it is a key aspect of living standards. More in particular, we explore how the level and composition of consumption expenditures vary across income groups within and between countries and identify which income groups across countries are most alike each other, and which parts of consumption expenditures differ most between income groups. This teaches us something about how comparable living conditions of the poor are when poverty is measured with a nationally-defined, a pan-European or a 'weakly relative' poverty line.

In this paper, we study how living standards can be compared across EU countries given differences in consumption expenditure patterns. Household Budget Surveys (HBS) are seen as a potentially rich source of information on consumption expenditure, collecting records of household expenditures on different kinds of goods and services over a specified period of time. Even though the HBS falls under the responsibility of the National Statistical Institutes (NSI) in each Member State (MS), Eurostat and NSIs have continuously joined efforts to come to a common framework by which this type of information can be pooled into a harmonized dataset, allowing for a more meaningful comparison between them. Using the 2010 harmonized HBS microdata for a selection of EU countries, we identify for each their consumption expenditure

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[1] Godemé, T. ; Zardo Trindade, L. ; Vandenbroucke, F. 'A Pan-European Perspective on Low-Income Dynamics in the EU' in Cantillon, B., Goedemé, T. & Hills, J. (eds.). Decent income for all. Improving polices in Europe. Lessons, Oxford University Press. In press.

patterns, how they distinguish between lower income and upper income households, and how these patterns differ across countries.

We start by analysing how total household consumption is allocated across major expenditure categories in each of the selected countries (e.g. food and beverages; clothing and footwear; housing, water, electricity, gas and other fuels; furnishings; health; transport; communication; recreation; education; restaurants and hotels; etc.), accounting for potential issues on quality and harmonization of HBS data, We relate expenditure shares for each category to the total expenditure across different income levels [2]. In particular, we divide the population in 'country-income groups', i.e. country-specific income quintiles, and explore which country-income groups are most alike across the EU. Subsequently, we identify the expenditure categories that contribute the most to differences in consumption patterns across income levels and countries. To do so, we will use a linear discriminant analysis. The linear discriminant analysis is a multivariate analysis whose main objective is to discriminate and classify objects. To perform this task, a linear function is derived in order to maximize the variance between the groups in relation to the variance within the group itself. In other words, the objective can be seen as the attempt to maximize the distance between groups from a set of independent variables, in order to improve the ability to distinguish each case according to the groups studied (Fisher, 1936). Through this function, it is possible to identify which are the variables (or, in our case, expenditure categories) that most contribute to differences between groups.

At last, for each country considered in the analysis, we relate household consumption expenditure to different income levels to understand how expenditure priorities varies with income, and to separate differences that are due to budget effects from those that truly reflect differences in expenditure priorities. The budget effect reflects resource constraints; households with a more limited budget must first pay for the essential elements of daily life (e.g. food and housing), leaving less of the budget available for luxuries (e.g. recreation and culture), while households with similar priorities but larger budgets can afford to spend more of their budgets on the luxuries. Differences in consumption priorities reflects sociocultural differences across groups; under similar resource constraints, households in different groups might allocate the same budget differently across consumption categories because they assign different priorities to the competing consumption categories [3]. To measure and isolate these two distinct effects on budget allocations and better assess the contribution of income stratification in explaining consumer expenditures, we fit a simplified model for consumption budget allocation [4] using category prices, household composition, country and income level as predictors.

We conclude with a discussion of what these analyses teach us regarding the application of national vs pan-European poverty thresholds to study poverty in the EU.

[2] Aitchison, J., & Brown, J. A. C. (1954). A synthesis of Engel curve theory. The Review of Economic Studies, 22(1), 35–46.

[3] Du, Rex Y., & Kamakura, Wagner A. (2008). Where did all that money go? Understanding how consumers allocate their consumption budget. Journal of Marketing, 72, 109–131

4 Kamakura, W. A.; Mazzon, J. A. (2013) Socioeconomic status and consumption in an emerging economy. Intern. J. of Research in Marketing, 30, 4-18. Elsevier.