

# Multidimensional Well-being in Switzerland: Towards New Synthetic Measures for Social Reporting

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## **Paper Abstract:**

### *Background*

Well-being is a multidimensional concept and as such cannot be reduced to any economic performance indicator. The Swiss Social Report, edited every four years (cf Suter et. al 2009) documents and examines the quality of life and well-being in Switzerland in a multidimensional way.

In the framework of the current edition of the Swiss Social Report (to be published end of 2016) we aim to develop synthetic measures of multidimensional well-being and quality of life based on the five conceptual dimensions used in the Swiss Social Report: (1) the production and distribution of social goods (e.g. education, employment, income, wealth, poverty), (2) cultural diversity (e.g. nationalities and migration, languages, religion, media, leisure, lifestyles), (3) social integration and social cohesion (e.g. family and social networks, population and age structure, social security, equality and fairness, health, voluntary work, crime and insecurity), (4) political participation and integration (e.g. political trust, freedom, political mobilization, democracy), and (5) environment and ecological sustainability (e.g. use of environmental resources, energy consumption and climate change, environmental behavior, ecological awareness). A synthetic measure is expected to allow monitoring long-term social change, distinguishing between societal and individual well-being as well as combining objective and subjective indicators.

Nowadays, several subjective indicators were already proposed and evaluated in European and International reports during the last decade (OECD, 2011; Helliwell, Layard and Sachs, 2013) to assess societal well-being in reaction to objective indicators. To capture the multidimensional

aspect of well-being in a robust and reliable operationalization, several challenges come up: the definition of relevant dimensions of well-being (which is related to the theoretical framework), the quality of the indicators chosen (depending on the available data) and how indicators are combined into a synthetic measure (based on the methodological approach).

Therefore, following the Swiss Social Report's theoretical model, this paper aims to develop and compare various measures of multidimensional well-being using different synthesizing methodologies, in order to show their advantages and shortcomings, in particular regarding the monitoring of social changes.

### *Methods:*

Different methodological approaches are proposed in the literature to construct and aggregate synthetic measures, notably measures based on Alkire and Foster's counting approach (2009). In our contribution, we propose to compare this later approach with a more recent method of partially ordered set theory (POSET). The POSET approach (posetic approach) developed by Maggino and Fattore (2011) and Fattore et al. (2012) points to important shortcomings of the counting approach, notably regarding weighting and aggregation issues, and proposes to measure and synthesize quality of life, well-being, inequality or other complex multidimensional phenomenon on the basis of ordinal data. The objective is to create a synthetic statistical measure providing different profiles from large micro data sets through evaluation processes. The comparison and evaluation of different profiles is obtained by applying the partially ordered set theory (POSET). The main advantages of the POSET methodology compared to Alkire and Foster's counting approach is that the assessment of profiles does not require any aggregation process.

The development of these two multidimensional measures was done using the Swiss Household Panel (SHP) data, a longitudinal yearly panel data survey available since 1999. The SHP is a comprehensive survey addressing a broad range of life domains and topics that allow us to include all five conceptual dimensions (and their related life domains) of well-being as defined by the Swiss Social Report. Both measures, the POSET based profiles and the Alkire and Foster's counting approach, will cover the five dimensions of the Swiss Social Report. These measures will be applied to 2013 Swiss Household Panel (ordinal data) by combining both objective and subjective indicators. All the analyses will be performed using partial order R package PARSEC (Arcagni and Fattore, 2015).

The main contribution of the proposed paper is to evaluate two different synthetic approaches to measure multidimensional well-being, the counting and the posetic approaches. The results will demonstrate the advantages and shortcomings of each two approaches, the impact of using both objective and subjective indicators, and will present well-being profiles by household structures in Switzerland. The proposed contribution addresses topics of session 7 on well-being.

**Key words:** well-being, quality of life, POSET, counting approach, Switzerland, social reporting, synthetic measures.