## GLOBALINDEX (WORKING TITLE)

## A MULTIDIMENSIONAL APPROACH TO MEASURING GLOBALIZATION

## Marcel Raab - Michael Ruland - Benno Schönberger - Hans-Peter Blossfeld

Globalization definitely was one of the most discussed issues in social sciences during the last decade, and still is today. Many theoretical articles and books have been published but only few efforts have been made to measure globalization empirically. In this paper we suggest a theory-based Globalization Index which is partly based on the Globalization Index of the Swiss Economic Institute (KOF) at the ETH Zürich. This index (in particular the 2006 version) does not consider the cultural dimension of globalization in an appropriate way. We therefore concentrated on this dimension in particular. Referring to John Meyer and his research group on "world society" we focus on the diffusion of globally shared values such as human rights, mass education, sexual equality, and the belief in progress. Besides some quite self-explaining indicators such as school enrollment and the Freedom House Index of Human Rights we also used variables measuring the structural implications of the cultural values of modern (western) societies, for example, the total gross domestic expenditure on research and development or the share of services as percent of GDP.

Like the KOF Index our Globalization Index (called GlobalIndex) delivers data for more than 120 countries for the last 30 years. With 27 indicators we measure four dimensions of globalization:

- Economic Globalization
- Social-technical Interconnectedness
- Cultural Globalization
- Political Globalization

As data isn't available for all years and countries we had to impute missing values. To achieve an adequate imputation we used the method of linear interpolation, among others. To guarantee commensurability of our time series data we transformed all variables to an index on a scale of one to ten. After the standardization of variables we calculated weights for each variable using the principal component analysis. When data are missing over the entire sample period, the weights are readjusted by proportional reweighting of the remaining variables.

After having calculated the index we focused on the development of globalization in different theoretically interesting regions of the world, in particular in different welfare regimes (typology based on the GlobaLife project) and the so called Tiger and Panther States in Asia. With regard to the absolute values of the index and the annual growth rates we came to the following results, among others:

- Throughout the whole world the degree of globalization has noticeably increased since the mid-eighties
- Globalization is a process of polarization: the distance between the most developed (Europe and North America) and the least developed (Africa) regions has increased during the last decades
- Since the mid-nineties Asia, especially the Tiger and Panther States, has experienced an accelerated growth

- The Globalife Welfare Regimes can be ordered by their degree of globalization in the following way: 1. Social democratic 2. Liberal 3. Conservative 4./5. Post-socialist and family-oriented
- After a short shock following the system change the post-socialist countries have experienced a phase of accelerated growth

## In summary, our GlobalIndex:

- 1. enables us to capture the complex phenomenon of globalization with just one number;
- 2. offers a multidimensional globalization measurement which takes adequate account of the cultural dimension of globalization, too; and
- 3. can be used in diffusion models (combined with other macro-variables) or multilevel analysis, for example, to measure period effects.