

## **Quantification of the Contributions of Productivity Growth and Globalization to National Consumption Growth Rates (1995-2006)**

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Traditional growth accounting quantifies the contributions of MFP-growth and growth in the amounts of various inputs to output growth. As was emphasized by Weitzman (1976, *Quarterly Journal of Economics*), current output levels are not necessarily a good indicator of current welfare, since large chunks of output might be invested rather than consumed. Our analysis focuses not only on changes in consumption levels as the phenomenon to be accounted for, but also deviates from Solow's approach with respect to the contributors to changes. We use an input-output framework to study the contributions of labor productivity growth and increasing international trade (next to a few other factors, like changes in the composition of consumption bundles). Labor productivity growth allowed for more output at given labor supply levels, while increasing international trade enabled countries to benefit from deploying comparative advantages. In this paper, we will quantify the importance of these determinants for the period 1995-2006 for the G7 and the BRIC countries.

The analysis is based on a structural decomposition analysis approach introduced and empirically implemented for the UK by Dietzenbacher, De Groot and Los in a 2007-Review of Income and Wealth article. It combines supply side and demand side effects at the industry level. The important novelty contained in the present paper lies in the international focus. The availability of an annual time series of world input-output tables constructed by the WIOD-consortium (see [www.wiod.org](http://www.wiod.org)) does not only allow for comparative analyses ("Do consumers in BRIC countries benefit relatively much from labor productivity growth, while consumers in the G7 benefit more from increasing trade?"). The explicit information on bilateral trade in intermediate products between industries contained in the data can serve to address novel distributional questions as well. Hence, the second part of this paper will quantify to what extent consumers in each of the countries have benefited from productivity growth in a specific country ("How (un)even have the consumption gains caused by labor productivity growth in China been distributed internationally?"), and study to what extent changing trade structures have affected these distributions over time.