Title: *Industry Level and Aggregate Measures of Productivity Growth with Explicit Treatment of Taxes on Products*
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We derive industry and aggregate level measures of TFP growth in an open economy as well as the aggregation/decomposition rules from/to the industry level. Net taxes on products in intermediate uses are assumed to be nonzero also at the economy level and different industries are allowed to face different tax rates for the same intermediate inputs. The economy is assumed to be maximizing either the value of deliveries to final demand or value added. In the final demand approach the aggregation equation includes, besides terms representing reallocation of labour and capital, also terms representing reallocation of products in intermediate uses. In the case of Törnqvist indices, if double deflation is used, even reallocation of deliveries final demand between industries contributes to the aggregate TFP growth. For value added there are two alternatives, the approach based on the production possibilities frontier of the industries' value added and the one based on the economy level production function. In the latter case also reallocation of value added between industries contributes to the aggregate TFP growth. When the theoretical continuous time Divisia indices are used reallocation terms disappear if tax rates/ prices are identical across industries. In the case of the Törnqvist indices a reallocation term relating to an input only disappears if the growth rate of the input and its value share in the industry's total output are identical across industries. Our results can be generalized to differences in the prices paid by the purchasers caused by any other factor as well. The paper includes an empirical experiment based on the Finnish data.