

Trade and Qualification - Linking Trade Flows to Qualification Needs by using the dynamic inter-industry Model INFORGE

Topic: Input-output analysis for policy making 7

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For Germany's economy, the trade channel is one of the major contributors to economic growth. Foreign markets determine more than ever success and failure of those industries that have become reliant – directly and indirectly – on foreign demand. But world trade does not only affect the production structure of domestic industries, it also impairs the demand for employment. The number of employed persons that are directly or indirectly linked to export flows is increasing. When looking beyond labour market, this also invokes changes in occupational fields and qualification requirements.

This paper has two major objectives. First, it aims to disclose the direct and indirect influence of major trading partners on Germany's production, employment, and qualification needs. Second, it calculates a simulation on a shift in Germany's export destinations from the industrialized economies towards emerging markets. The simulation shall enlighten the consequences of this shift on production, employment, and on occupational and qualification needs.

Methodological, this paper uses a modelling approach that extends the dynamic macro-econometric input-output model INFORGE in two economic areas: First, German exports are linked to and determined by a trade module that considers explicitly bilateral trade by countries and by products. Second, the labour market is extended to a qualification module that converts employment by sectors to employment by occupational fields and qualification levels.

It is expected to obtain the following results: First, industrialized economies are the most important determinants for employment especially in the manufacturing industries and indirect trade effects affect mostly the sector of business-related services. Second, the growth impact of the industrialized nations is declining over time and the impact of the BRICS nations is gaining momentum. Third, a change in country specific export shares will alter the structure of production, employment as well as the demand for occupation and qualification needs.