

Abstract for INFORUM Organised Session (Demographic shifts and economic modelling): Detailed labour market modelling using the INFORUM model INFORGE

Topic: Demographic Shifts and Economic Modelling

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Detailed labour market modelling using the INFORUM model INFORGE

Developments on the labour market are characterised by demographic shifts and technologically induced economic structural change, which is triggered by digitalisation. These changes on the labour market are examined in detail within the QuBe project (Qualifikation und Beschäftigung; engl.: qualification and occupation; www.qube-projekt.de) in order to derive specific recommendations for action or to show possible strategic directions to political actors.

The QuBe project is supported by the Federal Institute for Vocational Education and Training (BIBB), the Institute for Employment Research (IAB) and the Institute for Economic Structures Research (GWS) and is based on the macroeconometric INFORUM Input-Output model INFORGE (INterindustry FORecasting for GERmany), which has been developed by GWS and adopts a bottom-up modelling approach. Besides data input from the Federal Statistical Office, detailed data regarding the labour market supply on a disaggregated industry level in Germany (source: IAB) as well as the available education and qualification level(s) (source BIBB) are used within the INFORGE modelling. Thus, the QuBe project has led to a substantial extension of the GWS INFORUM-model INFORGE including an independent demographic projection, a detailed mapping of the education system and a comprehensive modelling of the labour market according to sectors and occupations. Meanwhile, the results of the QuBe project are also used by the Federal Ministry of Labour and Social Affairs (BMAS). Within this context, a special focus lies on the requirements for continuing vocational education.

The essential components of the macroeconometric model INFORGE including its extension Q(ualification)-INFORGE will be described: What are the requirements for the database? How are detailed labour market figures integrated into INFORGE modelling? Besides, resulting changes on the labour market and possible fitting problems will be discussed. Finally, the meaningfulness of INFORUM models along development paths will be presented by using the example of the construction industry.