

# **The Impact of Health and Education on Labor Force Participation in Aging Societies — Projections for the US and Germany from a Dynamic Microsimulation (and Accompanying Technical Report)**

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## **Key Findings and Policy Implications**

This paper compares labor force projections in Germany and the United States up to 2060, using a stylized dynamic simulation model that incorporates potential future changes in education and health policy. It uses U.S. data from the 2017 ASEC public use file and U.S. Census, and German data from the 2014 European Union Statistics on Income and Living Conditions (EU-SILC), the 2017 EU-SILC ad-hoc module “Health and children's health,” and Eurostat. The paper finds that:

- In the baseline projections, both the US and Germany experience significant population aging, but their demographic fundamentals and labor force implications differ starkly. Between 2020 and 2060, the U.S. labor force is projected to increase by 16.2 percent in the age groups 15 to 74 (corresponding to 25.2 million workers), while the German labor force is projected to decline by 10.7 percent (4.4 million workers). In these baseline projections, improvements in the education structure will add about two million workers in the U.S. and about half a million workers in Germany.
- In a series of “what-if” simulations, increasing the number of people who achieve more than lower secondary education has the strongest positive impact on labor force participation. Shifting people from intermediate to higher education levels also increases labor force participation in higher age groups, though this is partially offset by lock-in effects at younger ages.
- In the health simulations, improving the labor market integration of people with health limitations presents a particularly promising approach to increasing labor force participation. For example, if U.S. labor force participation rates by health were increased to the level currently observed in Sweden, the U.S. labor force would have 14.9 million incremental workers in 2060.

The fiscal and economic challenges presented by population aging can be moderated with higher labor force participation among those who are able. The projection models developed in this study suggest that increases in education and labor market integration of people with health limitations could have large effects on labor force participation. The accompanying technical report demonstrates that the effects on employment and hours worked are even larger, due to the incremental impact of these policies in reducing unemployment.

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