

Demographic change and industry-specific innovation patterns in Germany

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In Germany, a threat to growth is perceived from demographic change. Demographic change means that a population is aging with the perspective of shrinking. The key question is whether an aging and shrinking population has enough talents to sustain the innovation process that is at the basis of our prosperity. In this paper we deal with the age distributions of inventivity. Specifically, we confirm past conjectures that inventive productivity is age dependent and unequally distributed among inventors. Additionally, we advance the new hypothesis that any age-bias in innovation activity should show up as industry-specific. The reason is that creative productivity is depending on the rate of technological change that on its part is industry specific. We test this hypothesis with European patent data for Germany.

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