

FISCAL SUSTAINABILITY AND DEMOGRAPHIC CHANGE

KARINA DOORLEY



FISCAL SUSTAINABILITY AND DEMOGRAPHIC CHANGE¹

*Karina Doorley (ESRI)

ESRI Research Bulletins provide short summaries of work published by ESRI researchers and overviews of thematic areas covered by ESRI programmes of research. Bulletins are designed to be easily accessible to a wide readership.

INTRODUCTION

Ongoing long-term demographic changes are widely considered a risk to fiscal sustainability in developed countries. A shrinking labour force, combined with a growing old age dependency ratio, is expected to reduce tax revenues and raise pension expenditures in the future. This may threaten government capacity to fund social welfare systems and provide other public goods. The issue is more relevant in the aftermath of the Great Recession, which has weakened governments' fiscal positions, even before these demographic developments. This paper assesses to what extent concerns about future fiscal budgets in Europe are justified. Pension systems in virtually all industrialized countries have been subject to recent reforms in order to stabilise fiscal budgets. Taking the example of a further increase in the statutory retirement age as a potential policy reaction to demographic change, this paper projects the likely fiscal consequences.

DEMOGRAPHIC CHANGE IN EUROPE

The European labour force will undergo three major transitions by 2030: an overall decrease in size and a shift towards older and higher-skill workers. The share of older workers is projected to rise in nearly all countries, most notably in the Southern European countries. This development will be accompanied by increasing educational attainment, resulting in significant increases in the share of high-skilled workers in every country. The developments along both dimensions are visualized in Figure 1. This figure, based on detailed demographic

¹This Bulletin summarises the findings from: Dolls, M., Doorley, K., Paulus, A. et al., Fiscal sustainability and demographic change: a micro-approach for 27 EU countries, *International Tax and Public Finance* (2017). <http://doi.org/10.1007/s10797-017-9462-3>

*Karina.doorley@esri.ie

projections for 2030 from the Netherlands Interdisciplinary Demographic Institute, plots the percentage point change in the share of high-skilled workers in the workforce on the vertical axis and the percentage point (ppt) change in the share of older workers in the workforce on the horizontal axis. The share of older workers is projected to slightly decrease only in Finland and Malta, but to rise in all other countries, with Spain at the top of the spectrum experiencing an increase of around 12 percentage points (ppt). The increase in the share of high-skilled individuals is lowest in Germany at 1 ppt, while other countries exhibit stronger increases, e.g. 11 ppt in Poland and Lithuania. Ireland can expect strong increases, both in the share of older workers (8 ppt) and the share of high-skilled workers (6 ppt).

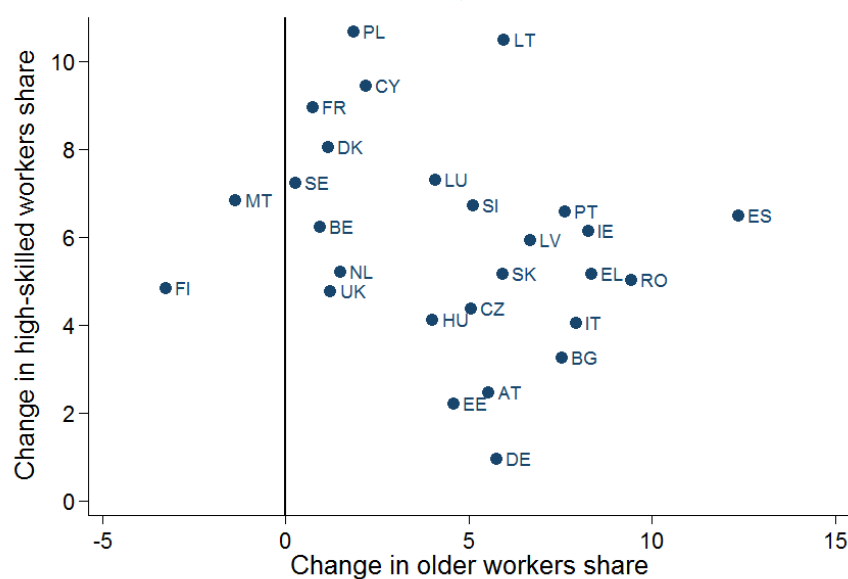


Figure 1 Structural changes in the work force composition between 2010 and 2030 in percentage points. Older workers are defined as 50 years and above. High education is defined as completed tertiary education

THE FISCAL OUTLOOK AND PATHS TO REFORM

The likely impact of this demographic change on the fiscal balance between 2010 and 2030 is considered. The fiscal balance is defined as the sum of personal taxes and social insurance contributions received by the government, less expenditure on benefits, health care, old age care, child care and education. On the one hand, increased spending on (old age) benefits can be expected in most countries while, on the other hand, increased taxes and social insurance contributions can be expected from an older and better educated labour force. Projections based on flexible wage conditions, i.e. assuming that labour demand and supply respond to demographic change, suggest that labour scarcity will lead to strong wage growth and small employment increases, which will counteract the worsening fiscal balances. However, overall, the European fiscal balance can still be expected to decrease by around 2%, that is, the aggregate European fiscal deficit will increase by 2% compared to its 2010 level. The fiscal outlook is broadly similar across

European countries, with Ireland's fiscal balance expected to worsen by around 1%.

An analysis of the change in the fiscal burden also reveals that, under existing tax-benefit systems, the working-age population will assume an even greater role in financing the government in the next few decades as their share of payments relative to the population share is projected to rise

Lastly, the analysis also shows that a retirement age reform that increases the current statutory retirement age by 5 years in each European country, roughly corresponding to the projected increase in life expectancy, could more than offset the impact of demographic change on fiscal balances. This is mainly due to increased taxes as there is a strong correlation between the increase in the number of people in work and the fiscal balance, though the reduction in the welfare bill also matters.

Whitaker Square,
Sir John Rogerson's Quay,
Dublin 2
Telephone **+353 1 863 2000**
Email **admin@esri.ie**
Web **www.esri.ie**
Twitter **@ESRIDublin**