MAX-PLANCK-INSTITUT FÜR SOZIALRECHT UND SOZIALPOLITIK
MAX PLANCK INSTITUTE FOR SOCIAL LAW AND SOCIAL POLICY

mea *Munich Center for the Economics of Aging*

Note on the Myth that Older Workers Delaying Retirement Creates Unemployment for the Young

Axel Börsch-Supan

24-2014

MEA DISCUSSION PAPERS

mea – Amalienstr. 33_D-80799 Munich_Phone +49 89 38602-355_Fax +49 89 38602-390_**www.mea.mpisoc.mpg.de**

Note on the Myth that Older Workers Delaying Retirement Creates Unemployment for the Young

Axel Börsch-Supan*
Munich Research Institute for the Economics of Aging (MEA)
at the Max-Planck-Institute for Social Law and Social Policy (MPISOC),
Technical University of Munich, Germany, and
National Bureau of Economic Research (NBER), Cambridge, Mass.

This version:
October 2014

Abstract

A common concern when raising the retirement age is that the delayed retirement of older workers will crowd out younger workers from the labour market causing an increase in youth unemployment. This note shows that there is little empirical evidence to support this concern. Rather, the opposite is more likely to be true and older workers delaying their retirement may actually improve the employment opportunities for the young.

* Munich Center for the Economics of Aging at the Max-Planck-Institute for Social Law and Social Policy, Amalienstr. 33, 80799 Munich, Germany. Email: boersch-supan@mea.mpisoc.mpg.de.

Note on the Myth that Older Workers Delaying Retirement Creates Unemployment for the Young

Axel Börsch-Supan

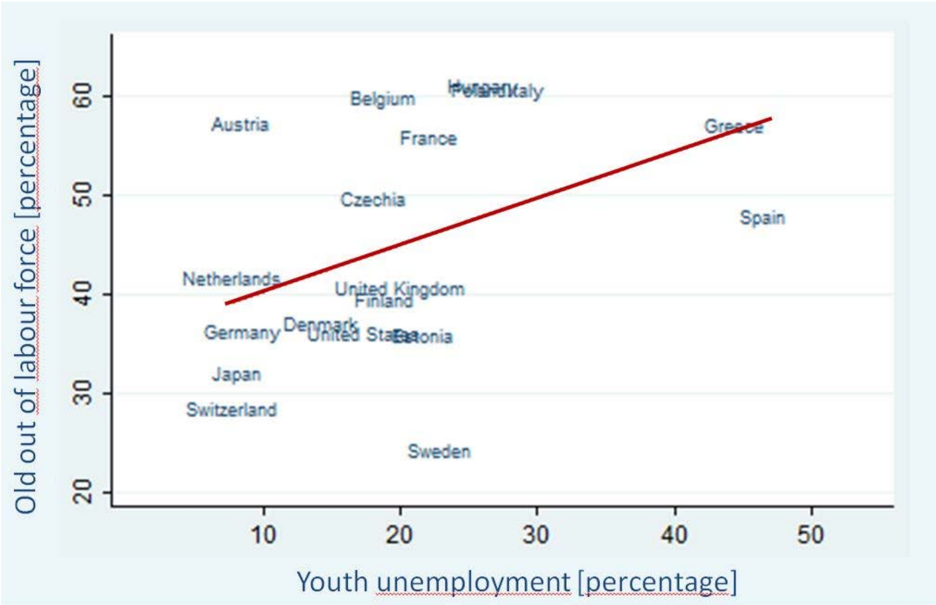
One of the responses to increasing life expectancies and questions over the sustainability of many pension systems is working longer to increase retirement income. A common concern, however, is that the delayed retirement of older workers will crowd out younger workers from the labour market causing an increase in youth unemployment. This view is an example of the "lump of labour" fallacy and there is little empirical evidence to support it. Indeed the opposite is more likely to be true and older workers delaying their retirement may actually improve the employment opportunities for the young.

The "lump of labour" or "boxed economy" fallacy assumes that there is a fixed amount of output in an economy and therefore a fixed amount of labour. This may be true for a small enterprise but it does not hold when extrapolating this view to an entire economy. In economics this is also known as fallacy of composition.

Figure 1 below shows that in cross-national comparison, higher employment of older individuals is actually *positively* correlated with higher employment of the young, i.e., countries with a high prevalence of early retirement have, in general, *higher* unemployment rates and *lower* employment of the young.[1] Nevertheless, the misconception of a fixed lump of labour which has to be shared between the old and the young continues to dominate much of the policy debate on pension reform in ageing industrial economies.

[1] The R-squared of the correlation, a measure of statistical tightness, is 18%. This is not driven by the outliers Greece and Spain. Omitting these crisis-affected economies, the positive correlation is actually stronger with a R-squared of 21%.

Figure 1: Early retirement and unemployment in the OECD

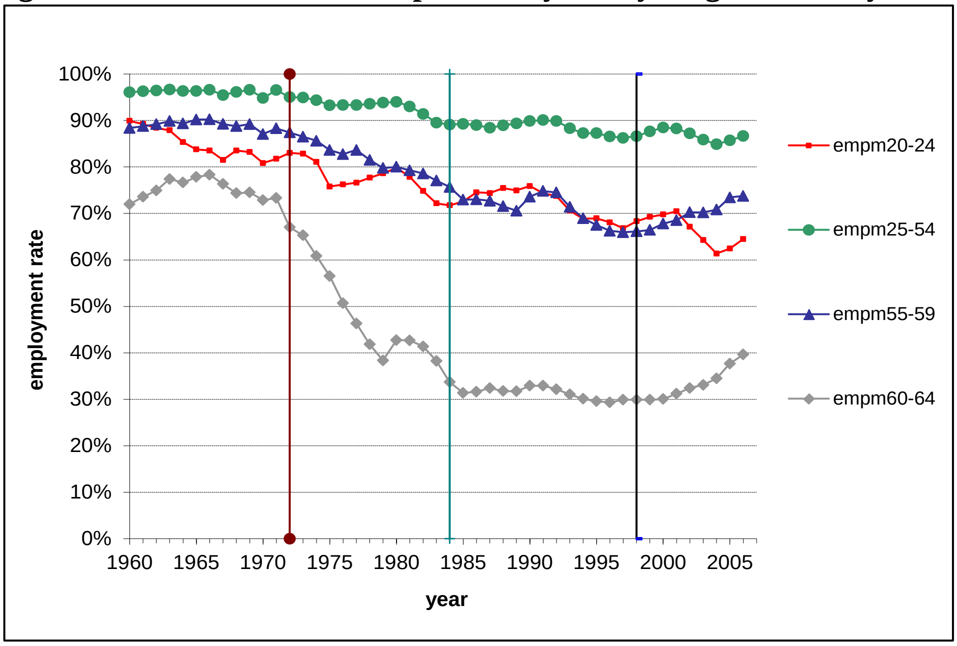


Source: Own calculations based on OECD Employment Outlook 2012

The findings shown in Figure 1 may be challenged as there are many confounding factors operating at the same time in aggregate data. Strong and isolated reforms are more suitable to empirically identify the effects of pension policies on labour market outcomes for the young. It is therefore instructive to examine the impact of specific pension reforms on employment rates at different ages.

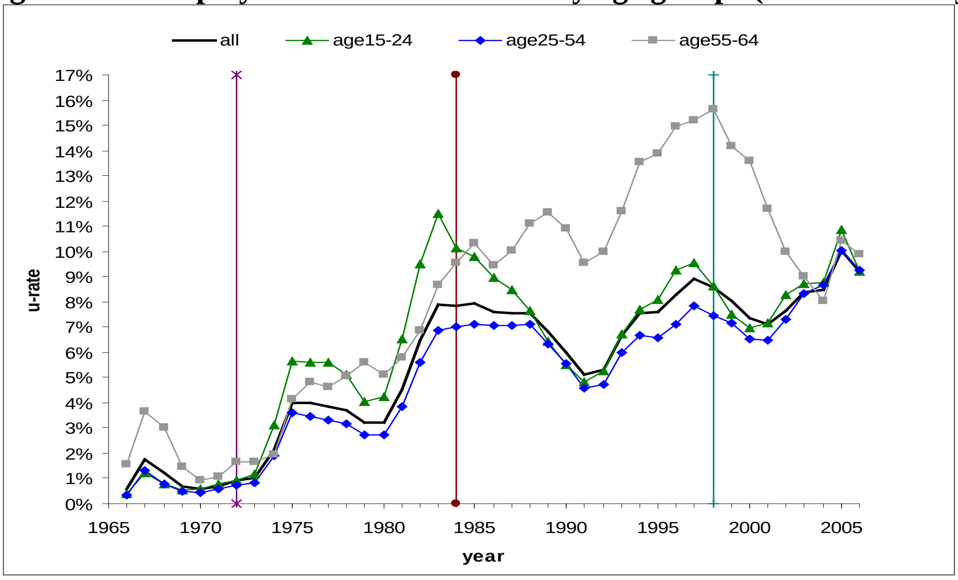
Germany (see Börsch-Supan and Schnabel 2010) provides a particularly neat case since three strong and isolated reforms in the years 1972, 1984, and 1998 dramatically changed retirement incentives. Figure 2 depicts the labour force participation rates for four age groups, and Figure 3 presents the corresponding unemployment rates.

Figure 2: Labour Force Participation of youth, young and elderly males



Source: German Mikrozensus

Figure 3: Unemployment rates 1966-2006 by age groups (West Germany)



Source: Bundesagentur für Arbeit

These figures reveal:

- The 1972 reform dramatically reduced retirement age, labour force participation, and employment of older individuals. In spite of this youth employment did not increase.
- The "bridge to retirement" introduced in 1984 substantially increased the unemployment rate of those aged 55-59, as unemployment insurance was used as an early retirement pathway. Employment of the young, however, did not go up in response.

- The phasing in of “actuarial” adjustments after 1998 reversed the trend of early retirement. Employment increased from 30% to 40% in the age group from 60 to 64 years. There is a very slight concurrent decrease in employment of the young.

The first two cases are clear cut: employment of the young and the old moved in tandem. Does the third case put doubt on this? The answer is no. For the third case Börsch-Supan and Schnabel show in their regression analyses that the slight decrease in employment of the young is in fact a reflection of the business cycle and not a response to the introduction of actuarial adjustments.

The German analysis is part of the work by an international team found in Gruber and Wise (2010) using pension design changes in 11 countries to identify how changes in the employment of older individuals has affected the employment of the young. The results vary considerably across specifications, but in these studies there are many more cases which refute the “lump of labour” hypothesis than support it.

To quote Gruber et al.: “The overwhelming weight of the evidence, as well as the evidence from each of the several different methods of estimation, is contrary to the boxed economy proposition. We find no evidence that increasing the employment of older persons will reduce the employment opportunities of youth and no evidence that increasing the employment of older persons will increase the unemployment of youth.” [NBER WP 14647, p. 69, which is the introduction chapter in the Gruber and Wise volume referenced below.]

The reality is that, in contrast to the small enterprise envisaged in the “lump of labour” fallacy, national economies can grow, increasing the demand for all goods and services, and therefore also the demand for labour. Moreover unless a pension system is fully funded there is a tax cost for retirement, whether early or not, which must be spread over the entire economy. This will raise the total labour compensation to be paid by employers for all workers, including the young. The more older workers that leave the workforce, therefore, the more likely it is to reduce the employment prospects of the young.

References:

Börsch-Supan, A. und R. Schnabel (2010): Early Retirement and Employment of the Young in Germany, In: Gruber, J. and D. A. Wise (Eds.), *Social Security Programs and Retirement around the World*, University of Chicago Press, Chicago, 147-166.

Gruber, J. and D. A. Wise (Eds., 2010): *Social Security Programs and Retirement around the World: Youth Employment,* University of Chicago Press, Chicago.

OECD (2012): *Employment Outlook,* Paris: OECD. http://www.oecd.org.