



Unemployment is a greater threat than demographics

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It is increasingly common to hear claims that Europe is facing a demographic time-bomb.

As populations age, the ratio of old people to the young rises, putting pressure on health services and pensions. In many European countries, the size of the working population has passed its peak. In others, declines in the working-age population are prevented only by the arrival of younger immigrants.

While demographic pressures are real, it is argued in this Policy Viewpoint that they may be overstated. In many European countries, unemployment – youth unemployment in particular – is a more significant issue.

The problem of an ageing population is usually framed in terms of 'dependency'. The production of goods and services is done by those of working age: the young and the elderly are dependent on the working age population for their consumption

needs. The pressure arising from demographic change is therefore often represented using the 'dependency ratio'. This is the ratio of the combined population of the young (less than 15) and old (greater than 65), relative to those of working age (15-64): $\text{Dependency Ratio} = (\text{Young} + \text{Old}) / (\text{Working Age})$

As the population ages, the number of elderly dependents increases while the number of young and working-age people falls. Eventually, falls in the young population are outweighed by increases in the elderly population, and the dependency ratio begins to rise. The ratio is also affected by migration. Since migrants tend to be of working age, inward migration will lower the dependency ratio while outward migration will raise it.

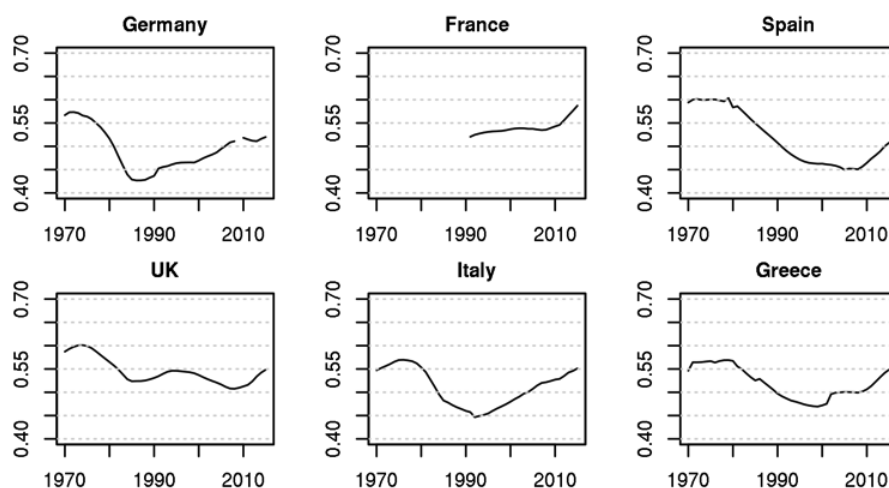
This is illustrated in Figure 1 which shows the dependency ratio for six European states. There is a common pattern of an initially falling ratio followed by reversal

and an increase (except in France for which the data are limited). In countries such as Germany, Italy and the UK, the primary driver is the change in population structure due to ageing. In Greece and Spain, on the other hand, migration plays a bigger role: these countries saw high inflows of working-age people during the boom, followed by outflows in the wake of the 2008 crisis.

This ratio does not tell the whole story, however. It does not take into account that people are working more in later life. More importantly, it does not take into account unemployment and labour market inactivity. People of working age who are unemployed, sick or in full time education are dependent on those in employment for their consumption needs.

A fuller picture is therefore obtained by removing the non-employed working age population from the denominator of the ratio and including it in the numerator.

FIGURE 1. DEPENDENCY RATIO





The resulting ratio is known as the economic dependency ratio: $\text{Economic Dependency Ratio} = (\text{Young} + \text{Old} + \text{Working Age Not Employed}) / \text{Employed}$

This ratio is shown in Figure 2, for the same six countries. Also included, for comparison, is the pure demographic dependency ratio shown in Figure 1. This provides a different picture. The absolute value of the economic dependency ratio is much higher than that of the demographic measure, and the degree of variation both within and between countries is much greater. The trend direction also differs between countries, unlike the demographic dependency ratio.

Germany and the UK have the lowest ratios, reflecting high levels of labour force participation – particularly among women – and low rates of unemployment. In these countries, the economic dependency ratio has continued to fall, despite a rising demographic dependency ratio: increased employment among the working-age population has more than offset the effects of demographic pressure.

Italy and France have higher ratios of economic dependency, reflecting lower levels of workforce participation and higher unemployment rates than in the UK and Germany. In Italy's case, demographic shifts and higher unemployment since the crisis have combined to produce an upward trend since around 2008.

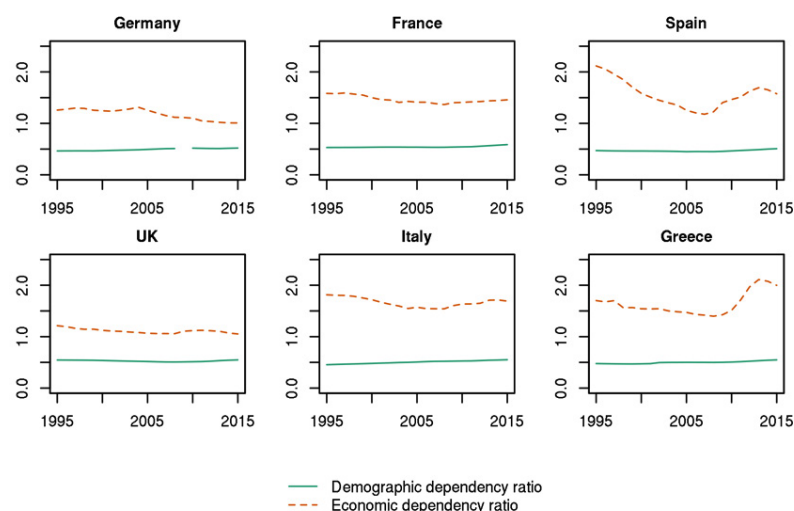
In Greece and Spain, the picture is different. In both countries, the ratio fell steadily until the crisis of 2008, at which point it rose sharply, driven by rising unemployment and outward migration of the working age population. In Greece the economic dependency ratio reached a peak in excess of two – meaning there are two dependent persons for every person in employment.

Comparing the two series shows the extent to which variation in employment within the working-age population contributes to dependency. The United Kingdom, Italy and Greece all have demographic dependency ratios of around 0.55. But the economic dependency ratio is 1.0 in the UK, 1.5 in Italy and around

2.0 in Greece. Despite similar demographic structures, there is large variation in dependency across the three countries, driven by differences in labour force participation and unemployment rates.

This suggests that trying to deal with ageing through policies such as raising the age at which pensions can be claimed and reducing entitlements to health services may be misplaced. In those countries where unemployment is high and labour force participation is poor, tackling these issues will have a greater impact on dependency than keeping those who are already employed in work for longer. Furthermore, increases in employment will lead to higher tax revenues, offsetting pressure on public finances. Dealing with unemployment and labour market exclusion should be the primary aim for European policy-makers.

FIGURE 2. ECONOMIC DEPENDENCY RATIO



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