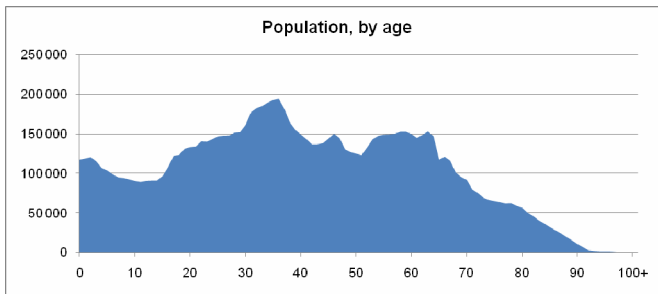


## Discussion to the paper by David Kocourek and Filip Pertold

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The Czech Republic is undergoing a demographic shift. The youth population share has steadily declined over the past two decades, at a rate faster than the OECD average, and fertility has declined. Meanwhile, the post-World War II generation is reaching their mid-sixties. The result is a population that will skew older for the foreseeable future (*Figure 1*).

**Figure 1 Population of Czech Republic, by Age**



Source: Czech Statistical Office

These social changes present a number of consequences, notably with regard to financing public sector retirement benefits. As the population ages, the burden of paying for the welfare state is falling on a smaller share of the population. Many countries are already struggling with these obligations. One approach to mitigate the effects of demographic changes, tried in the Czech Republic during its 2001 reforms, is to reduce the generosity of early retirement benefits in order to (in theory) lengthen the length of time workers contribute to the pension financing system. Evidence on the effects of early retirement has been mixed, and there has been limited research on the Czech case specifically. David Kocourek and Filip Pertold have conducted a useful investigation of the effects of a reduction in early retirement benefits on the labor supply of older male Czech workers. The relevance of the paper, particularly to Czech policymakers, is clear.

Kocourek and Pertold use a relatively straightforward probit model to analyze Czech labor force survey data of workers close to the retirement age. Their major conclusion is that the relatively small reduction in generosity of early retirement benefits significantly decreased the probability that a worker would be out of the labor force during the period under which they underwent early retirement, which implies that older male workers have a relatively elastic labor supply. However, some

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workers possibly joined the ranks of the unemployed or went on disability rather than continuing to hold jobs.<sup>1</sup>

The authors concede that there are limitations in the analysis. Notably, there is no information on wages and retirement benefits,<sup>2</sup> and the data set is restricted to men. The former limits the analysis in two ways. First, as Kocourek and Pertold note, it means estimating the exact elasticity of older male workers labor supply function isn't possible given the results. Second, perhaps more significantly from a policy evaluation perspective, the lack of information on wages and nongovernment retirement benefits means understanding the distributional effects of this reform isn't possible using the survey data. This is a significant limitation to the extent that, as the authors point out, the reforms in question likely had a more significant impact on lower-income workers. The degree to which the reform was regressive, and whether or not this had significant consequences for inequality is important for policy makers (and the public) as they try to evaluate the relative costs and benefits of reforms.<sup>3</sup>

Moreover, the restriction of the data set to men means that this study only reveals part of the dynamics of labor force participation. On one level, the restriction simplifies the analysis. Women in the Czech Republic have a lower degree of labor force participation and are more likely to work part-time than men (OECD Labor Force Statistics). They also face a different institutional environment (particularly, they can retire at a younger age; the age is partially dependent on the number of children raised; and they likely face different social pressures that may affect their work habits). But economists also need to consider the effects of policy on female workers. Women's share of civilian employment in the Czech Republic has declined since the early 1990s. Understanding the incentives created by the state pension systems and their effect on women's labor force participation in the Czech Republic would be a worthy topic for future research.

These limitations should not detract from Kocourek and Pertold's contribution. Understanding the impact of pension reforms on the extensive margin of labor supply of older workers is important as the Czech Republic continues to wrestle with ongoing demographic changes. The paper represents a good first step in that regard.

<sup>1</sup> The authors control for the possibility of receiving disability in later specifications, and point out that the number of workers in the treatment group who change labor market status was relatively small. Nevertheless, they conclude that "the change was not purely fiscal improving since some [workers] switched to unemployment as a substitute to early retirement".

<sup>2</sup> It seems probable that at least some of the significance the model attributes to education and geography is actually due to differences in occupation and wages.

<sup>3</sup> Another impact relevant to a holistic evaluation of the policy change is the announcement effect. Kocourek and Pertold control for this in later regressions to restrict their results to the change attributable to the different present values of retirement income before and after the reform. This seems appropriate, econometrically. However, the announcement effect is, after all, an effect of the policy. In considering the success or failure of retirement reforms, policy makers might also be interested in whether they contribute to a change in normative attitudes about aging workers remaining in the labor force. Organizational anthropologists and sociologists likely have a comparative advantage to economists in this regard, but the latter group could benefit by attempting to integrate (or at least account for) the findings of the former groups into their models.