Inequality in Denmark through the looking glass

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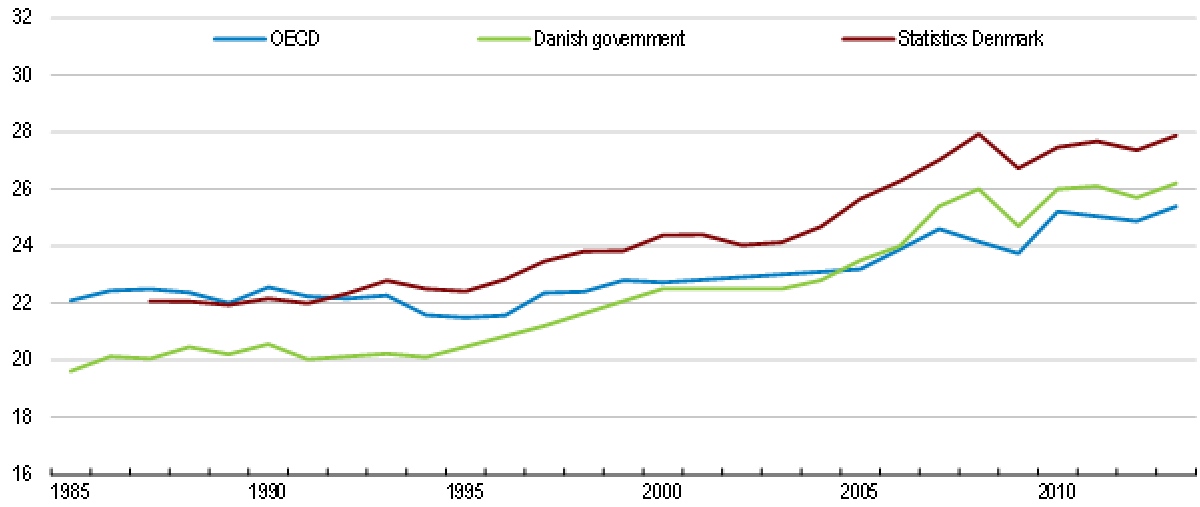
Although Denmark is one of the least unequal countries in the world, it has like many other OECD countries experienced a rise in income inequality. But by exactly how much has the Gini coefficient risen over the last decades? There is significant disagreement between various official sources (Figure 1): The Danish government and Statistics Denmark report a substantial increase, of 5.7 Gini points, since 1990, whereas the OECD figures only convey a rise of 3.1 Gini points (close to the OECD average; see OECD, 2015). And while national sources agree on the trend, they diverge on the level by almost 2 Gini points (26.2 for Danish government vs 27.9 for Statistics Denmark in 2013). While such measurement muddle may seem uninteresting, it emphasises how crucial methodological choices can be for inequality assessments. In this respect, Denmark is an interesting laboratory due to high-quality administrative data and almost full population coverage. In Causa et al. (2016) we therefore uncover the methodological differences behind the development illustrated in Figure 1.

Figure 1. Gini coefficient for household disposable incomes in Denmark



Source: Ministry of Economic Affairs and the Interior (2015); OECD Income Distribution Database, Statistics Denmark (2016).

The differences between inequality trends reported by international and national sources are mainly due to differences in the treatment of:

- *Negative income elements*: e.g. from indebted households paying interest expenses and from self-employed experiencing transitory income losses. Negative income elements are set to zero by the OECD to ensure cross-country comparability, which significantly raises the inequality level compared to the Danish government in the 1990s and early 2000s. One can think of individuals with high interest expenses, who typically also have high incomes from employment and therefore appear even more affluent from this adjustment.
- *Unmeasured housing services enjoyed by homeowners relative to tenants*: to ensure comparability in living standards between homeowners and tenants it is possible to estimate the value of self-provided housing services and add this to homeowners' income – the so-called imputed rents. National statistics include imputed rents, whereas they are excluded from OECD figures because of poor cross-country comparability. Along with the decline in interest rates from 2000 onwards and a

house price boom in Denmark, imputed rents have driven up the Gini coefficient reported by national sources compared to the OECD.

Two other methodological differences mainly influence the reported level of inequality:

- *What defines a household?* International standards define a household as a group of people living together, while the Danish institutions also impose that they have family ties and this tends to raise inequality because of more and smaller households.
- *How much economies of scale do people living together enjoy?* A household of four can share many goods and do not need to spend four times as much on heating and electricity as a lone-person household. Material living standards of households of different sizes can be made comparable by use of an "equivalence scale" (for OECD figures calculated as the square root of household size). In the case of Denmark, the three institutions use three different scales.

Who is right about inequality in Denmark then? Well, that would depend on the purpose. For international comparisons one should obviously use OECD figures that comply with the same international statistical protocols and conventions. But from a national perspective, statistics produced by the government and Statistics Denmark are better tailored to the data source and can provide a more comprehensive picture.

References

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