

DANMARKS
NATIONALBANK

Monetary Policy and Inequality

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Effects of expansionary monetary policy on inequality

CHANNELS

EFFECT ON INEQUALITY

Income-composition channel

(employment, wages, profits, transfers)



Interest-sensitivity channel

Higher asset prices favour the richer and inflation harms the poorer



Savings-redistribution channel

Benefit borrowers and hurt lenders



Household/Firm – heterogeneity channel

(access financial markets, discount rates, mortgagors, small young firms)



Labour earnings heterogeneity channel

(skills)



Source: Dolado, Juan J, ECB Forum on Central Banking 2021, Part 7: Monetary policy, employment and inequality and own additions.

Literature overview

Paper	Country	Data	Shocks	Distributions	Method	Inequality measures	Effect of expansionary MP shock
Coibion et al. (2017)	USA	CEX	Romer-Romer	Total pre-tax income, earnings, expenditure, consumption	Aggregate inequality measures	Gini, P90-P10 (log), sd (log)	Decrease in inequality
Andersen et al. (2021)	Denmark	Admin	Germany/ Euro Area	Within-age total income	Household-level effects	Income shares along the distribution	Increase in inequality
Amberg et al. (2021)	Sweden	Admin	High-frequency	Total post-tax income	Individual-level effects	Gini, percentile ratios, top income shares, sd (log)	Increase in inequality for Gini, top shares, P90/P50; decrease for sd, P90/P10 P50/P10
Holm et al. (2020)	Norway	Admin	Romer-Romer	Disposable income, consumption, wealth	Aggregate inequality measures	P90-P10 (log)	Decrease in income and consumption inequality, increase in wealth inequality

Within-age income groups

The paper sorts households by income *within* each age group.

Advantage

Likely better proxy of lifetime income.

Disadvantage

Households with very different incomes end up in the same "bin" or part of the distribution:

- The average household income of the top 1 per cent of 25-year-olds (youngest group) was 511 thousand DKK in 2014.
- The average household income of the top 1 per cent of 50-year-olds was 2.8 million DKK in 2014.

Optimal strategy depends on which inequality concept we are interested in: overall versus within-age.

Other papers from the literature look at overall inequality

⇒ Would results look similar if one use the aggregate income distribution?

Low-income households

In the paper, bottom 20 per cent of households by within-age income:

- Have some wealth relative to income: net wealth (without pensions) = 210 per cent of disposable income.
- Have a debt-to-assets ratio (i.e., leverage) comparable to the top 2-10%.

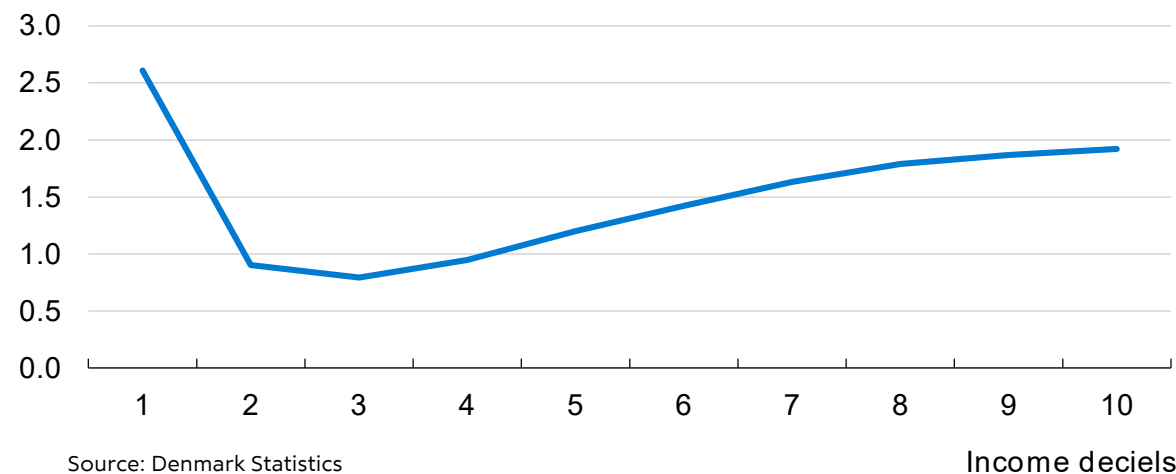
<20th percentile: debt-to-assets = 0.41

90-99 percentile: debt-to-assets = 0.43

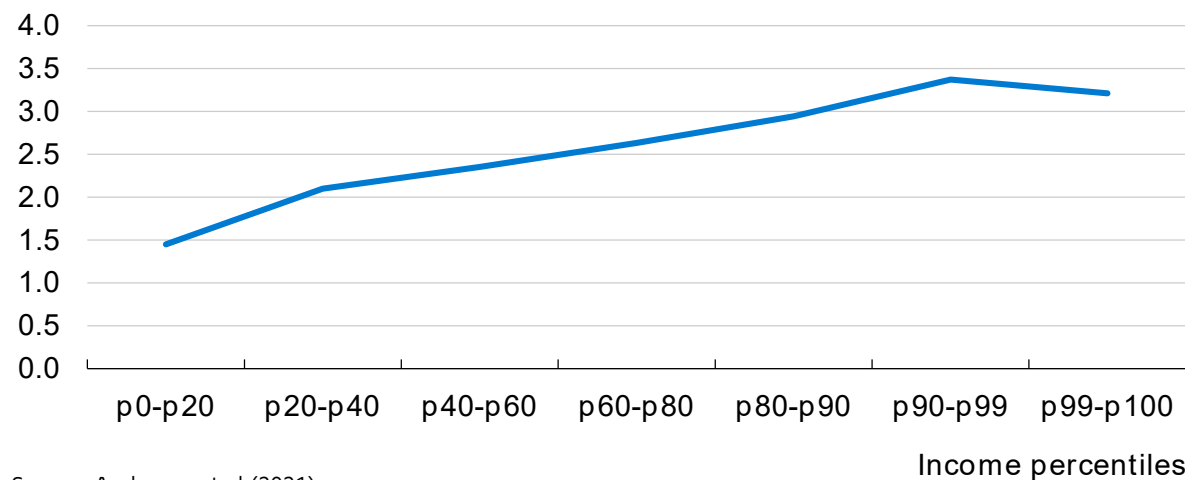
>99 percentile: debt-to-assets = 0.32

Censoring at 10,000\$ and 25 years of age.

Debt-to-income ratio (2019)



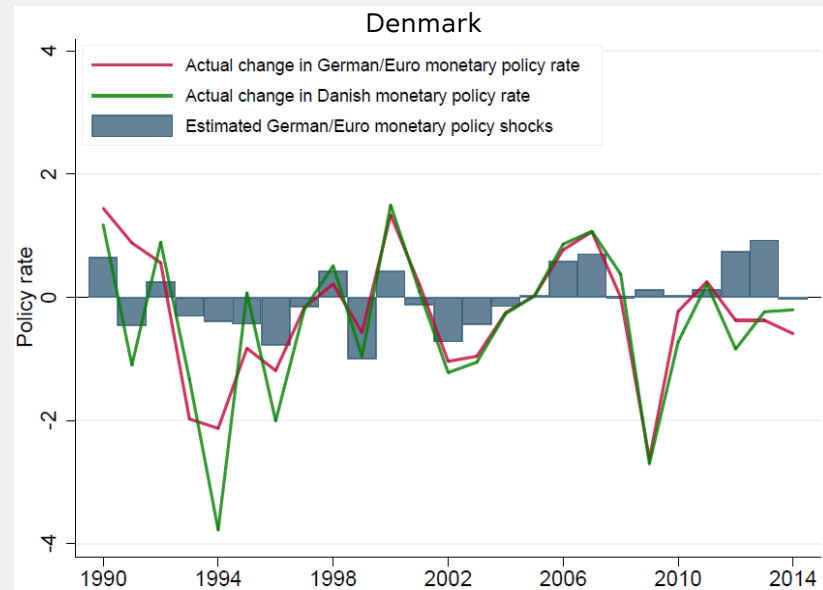
Debt-to-income ratio (paper)



Identification of monetary policy shocks

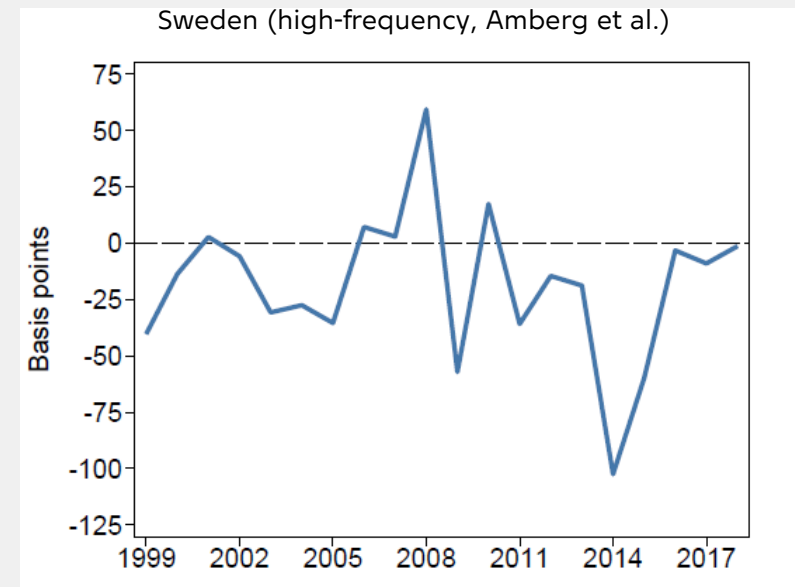
Many ways to identify monetary policy shocks in the literature

This paper uses data on macroeconomic aggregates



Source: Andersen et al (2021).

The paper by the Riksbank uses high-frequency data on changes in yields of Swedish Treasury bills

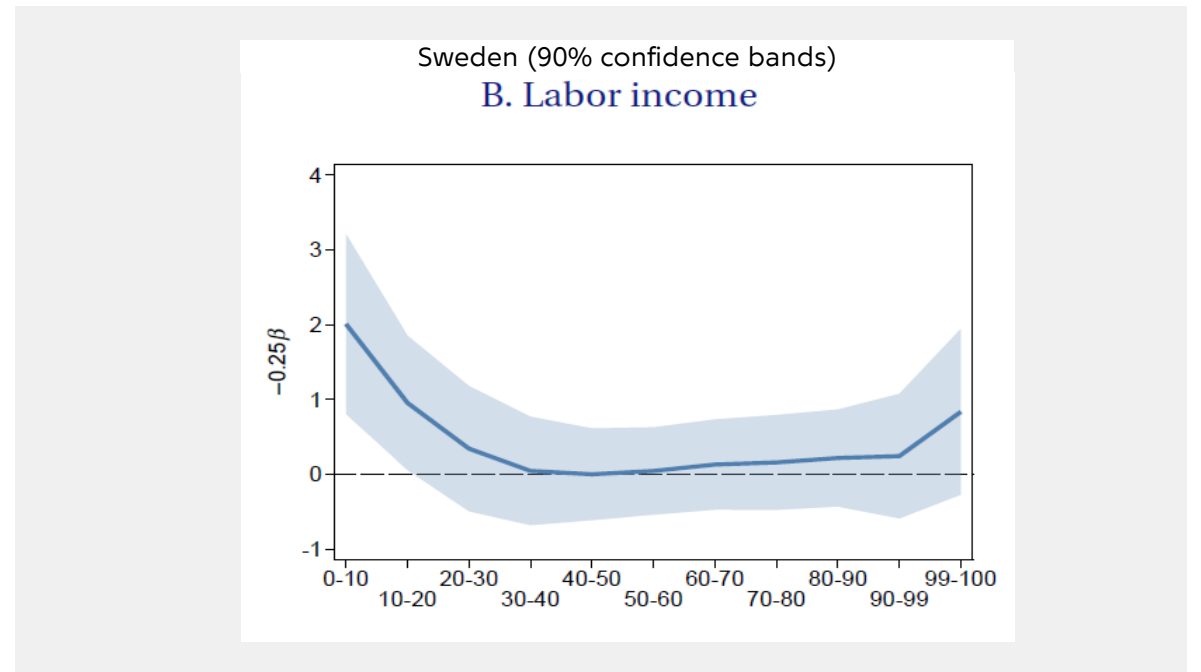
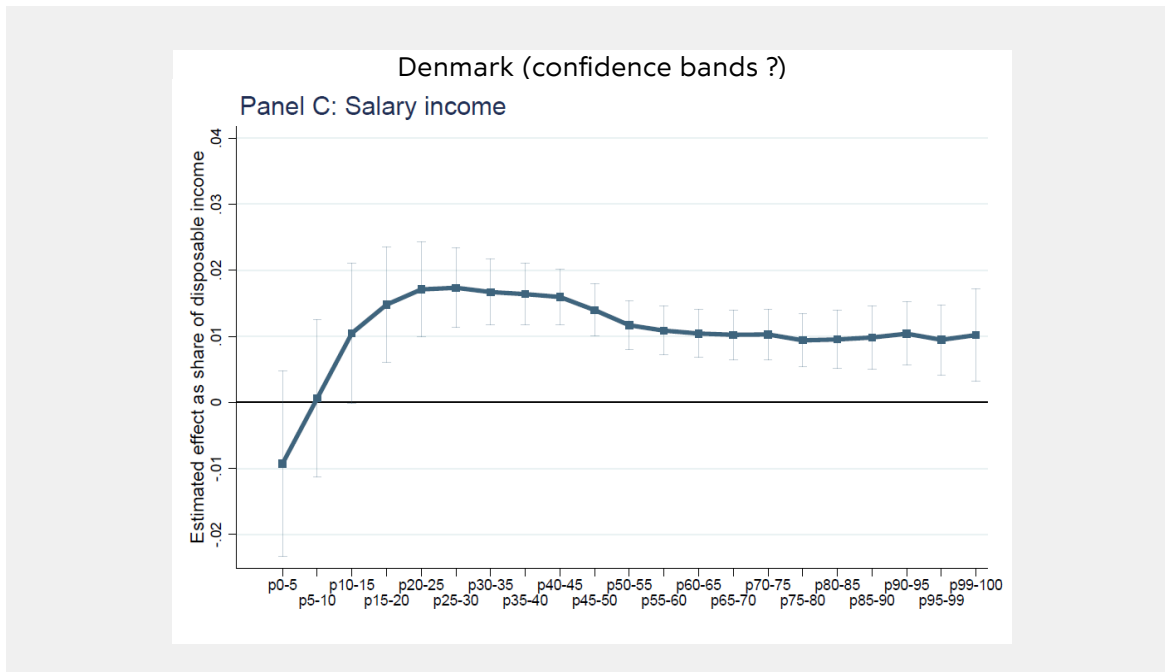


Source: Amberg et al (2021).

The two methods can lead to shocks of different magnitude and volatility

Confidence bands

- It looks like the estimates from the paper are more precisely estimated than in the related literature
- Could the difference in the confidence level be due to the monetary policy shock which is used?



Central banks should be aware of the consequences of policy on inequality, but fiscal policy is better suited to tackle the issue



The current mandate of most central banks does not include inequality, but is rather focused on inflation, financial stability, or exchange rates.

Central banks should be aware of the consequences of policy on inequality and should monitor how these can alter the transmission of monetary policy

Ignoring growing inequality can lead to political changes that might hinder central bank independence and mandate in the long run.

But policy makers should not forget that changing the mandate of the central bank to accommodate another policy goal can erode the agreement between governments and central banks,

This may jeopardize other important objectives such as price and financial stability

Fiscal policy is better suited to tackle different issues societies are facing such as inequality.

References

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Many thanks
