The Impact of Housing on Wealth Inequality

Rolf Aaberge
NFS, Department of Economics, University of Oslo and Research Department, Statistics Norway

Workshop, Housing policy and Wealth Inequality, LIS/LISER, 28-29 November 2023
Motivation

• Recent literature points to importance of housing for understanding evolution of wealth inequality

• Empirical evidence suggests that larger shares of home ownership result in smaller overall wealth inequality (e.g. Kaas, Kocharkov and Preugshatc, 2019)

• Administrative tax records have a number of advantages
  * e.g., full coverage; third-party reporting

  ... but also some serious limitations

• Key challenge: Measures of wealth are incomplete
Cross-country evidence

- Wealth inequality is much higher than income inequality, in part reflecting lifecycle effects as wealth accumulates over time.
- **Housing** has an equalizing effect on the distribution of wealth because housing is *more equally distributed* than other real and financial assets and is also the *most important asset* for most households.
Evolution of the Gini coefficient for distributions of market income and assessed wealth, Norway 1912 - 2018

Source: Aaberge, Modalsli and Solbakken (2023): «Measuring Long-Run Wealth Inequality», Mimo, Statistics Norway
Accounting for market values of housing, 1969 - 2018

Gini coefficient

Source: Aaberge, Modalsli and Solbakken (2023): «Measuring Long-Run Wealth Inequality», Mimo, Statistics Norway
Interpretation of the Gini coefficient

$$G = \frac{\text{mean of all pairwise differences}}{2 \cdot \text{mean}}$$
Gini coefficient for wealth and housing wealth, Norway 1995 - 2016

Source: Aaberge and Stubhaug (2018)
Decomposition of the Gini coefficient

As demonstrated by Rao (1969) the Gini coefficient admits the following decomposition with regard to wealth components,

\[ G = v_i(G) = \sum_{i=1}^{s} \frac{\mu_i}{\mu} \gamma_i \]

where \( \mu_i \) is the mean of wealth component \( i \), \( \mu \) is the overall mean income, and \( \gamma_i \) is the concentration coefficient of component \( i \).

The concentration coefficient \( \gamma_i \) can be interpreted as the conditional Gini coefficient of component \( i \) given the rank order in total wealth. The inequality contribution \( v_i(G) \) is the product of the income share and the concentration coefficient.

Note that the ratio \( \gamma_i/G_i \), where \( G_i \) denotes the Gini coefficient for wealth component \( i \), can be considered as a measure of the re-ranking effect for component \( i \).
Wealth components’ contribution to wealth inequality
(measured in percentage points)

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
The re-ranking effect of wealth components ($\gamma_i/G_i$)

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
The wealth composition in different parts of the wealth distribution, Norway 2001 - 2018

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
Growth in housing wealth for different segment of the wealth distribution

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
Growth in financial wealth for segments of the wealth distribution

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
«Market value» of unlisted companies

Source: Aaberge, Mogstad, Vestad and Vestre (2021)
Conclusion

• Wealth and housing wealth inequality measured by the Gini coefficient increased from 0.62 and 0.53 in 1995 to 0.72 and 0.61 in 2016
  – The mean pairwise difference in wealth increased from 1.23 times the mean wealth in 1995 to 1.45 times the mean wealth in 2016

• Accounting for market values of housing reduced the estimate of the Gini coefficient for wealth by 23 – 33 per cent for the period 1969 - 2018

• Financial wealth is the dominating wealth asset for the top 1%, while housing is the dominating wealth asset for the bottom 99%

• Housing accounted for
  – 60% of the gross wealth in 1995 and 71-72% after the mill
  – 74-79% of the (net) wealth inequality after 1995

• Limitation: The assessment of unlisted companies are based on book values
Thank you!

Comments welcome
Wealth by decile and age, Norway 2016

Source: Aaberge and Stubhaug (2018)
Distribution of wealth by segments

Source: Aaberge, Mogstad, Vestad and Vestre (2021)