



# Veien inn på boligmarkedet: En førstegangskjøpers muligheter

**NBBL**

Frokostmøte 19. mars 2024



# Førstehjemindeksen 2023

## Hvilke boliger har førstehjemkjøperen råd til?

Utviklingen over tid: 2003 – 2023

Resultater for: Norge – 43 kommuner

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# Førstehjemindeksen

- Andelen av omsatte boliger en typisk førstehjemkjøper ville ha råd til i sin kommune
- Basert på inntekt, boligpriser, rente, boliglånsregler og utgifter til øvrig gjeld og kostnader.

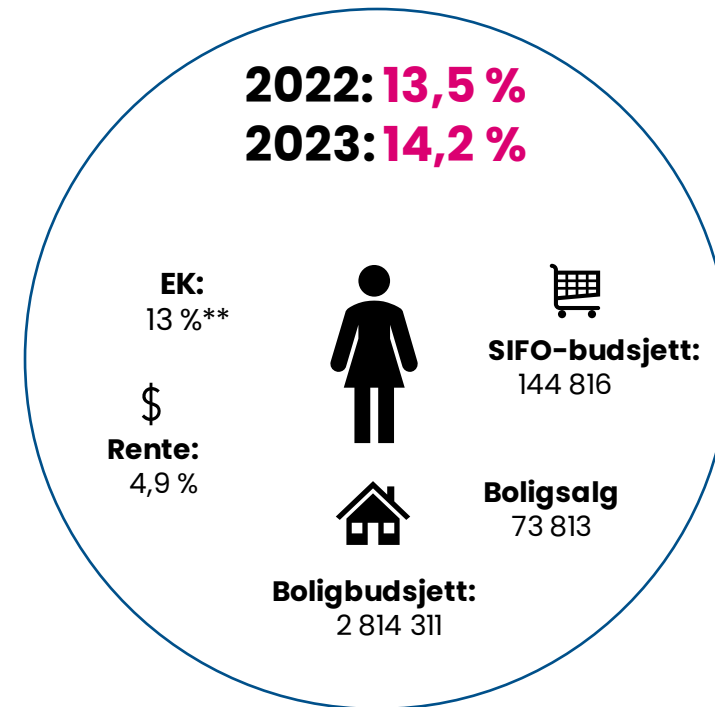
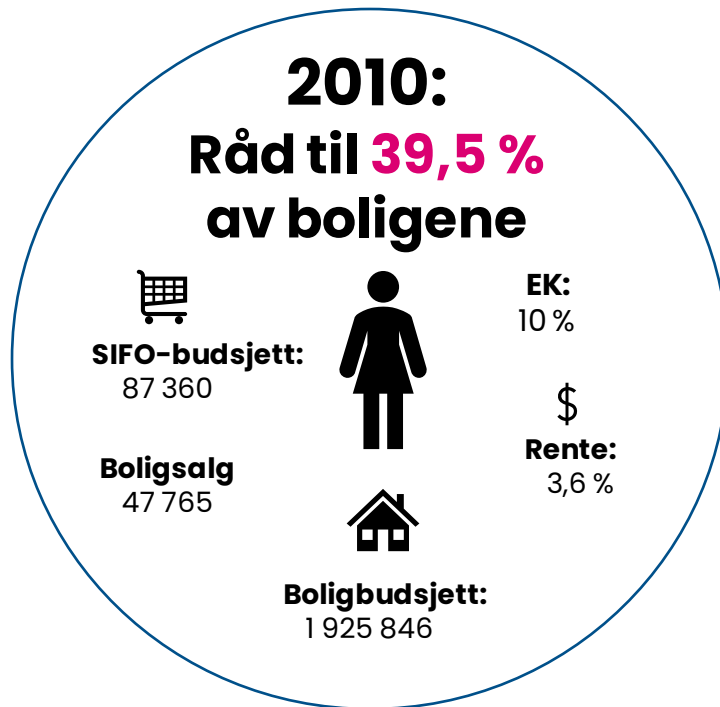


## Forutsetninger

- **Gjeldsgrad:** samlet gjeld skal ikke overstige fem ganger årsinntekt
- **Betjeningsevne:** må tåle renteøkning på 3 prosentpoeng (minst 7 prosent rente)  
=> basert på inntekt og alle relevante utgifter, herunder renter, avdrag på lån og normale utgifter til livsopphold.
- **Belåningsgrad:** 13% egenkapital => Antas tilfredsstilt
- **Bruttoinntekt** – gjennomsnittlig for førstegangskjøpere
- **Boligpris** i alle boligtransaksjoner i hver region, vi finner andelen FK har råd til.



# Resultater Norge\*: Den typiske single førstehjemkjøperen i 2010 og 2023

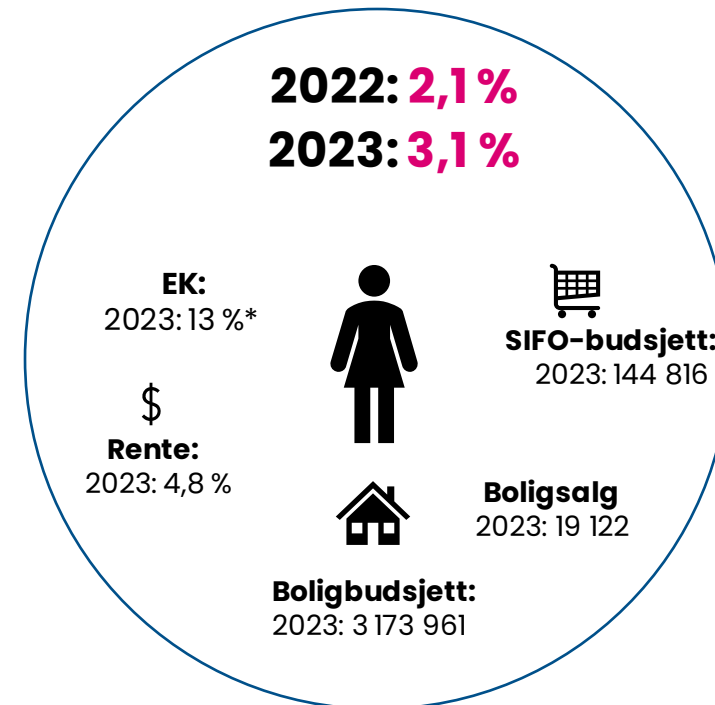
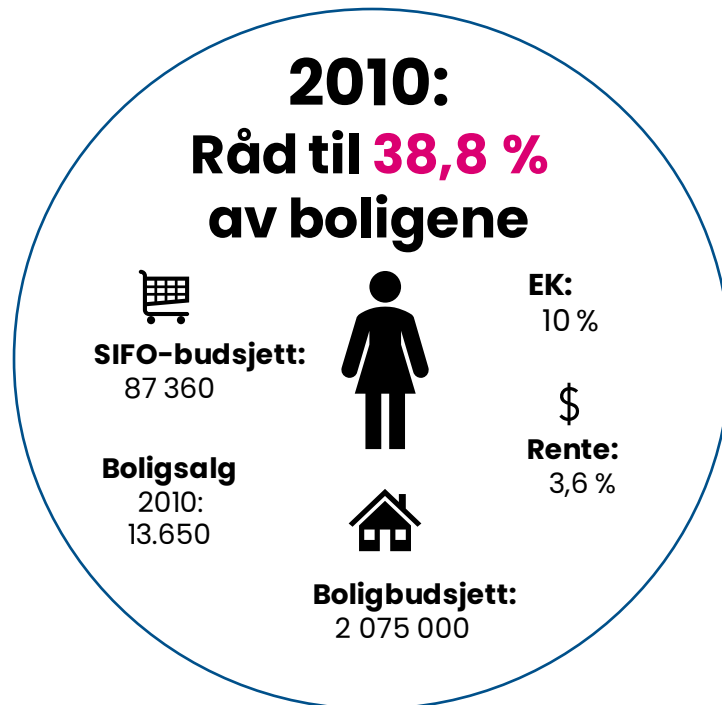


[5] **Kilder:** Mikrodata for boligsalg fra Eiendomsverdi AS. Øvrige tall fra SSB, Norges Bank, SIFO og Finanstilsynet.

\*Gjennomsnittet av de 43 kommunene i undersøkelsen

\*\*Pga. fleksibilitetskvoten er egenkapitalen i gjennomsnitt noe mindre enn utlånsforskriftens krav på 15 prosent.

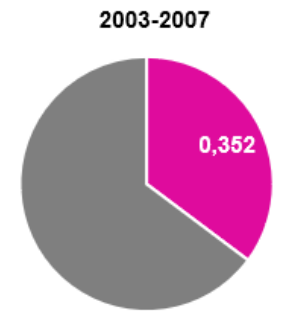
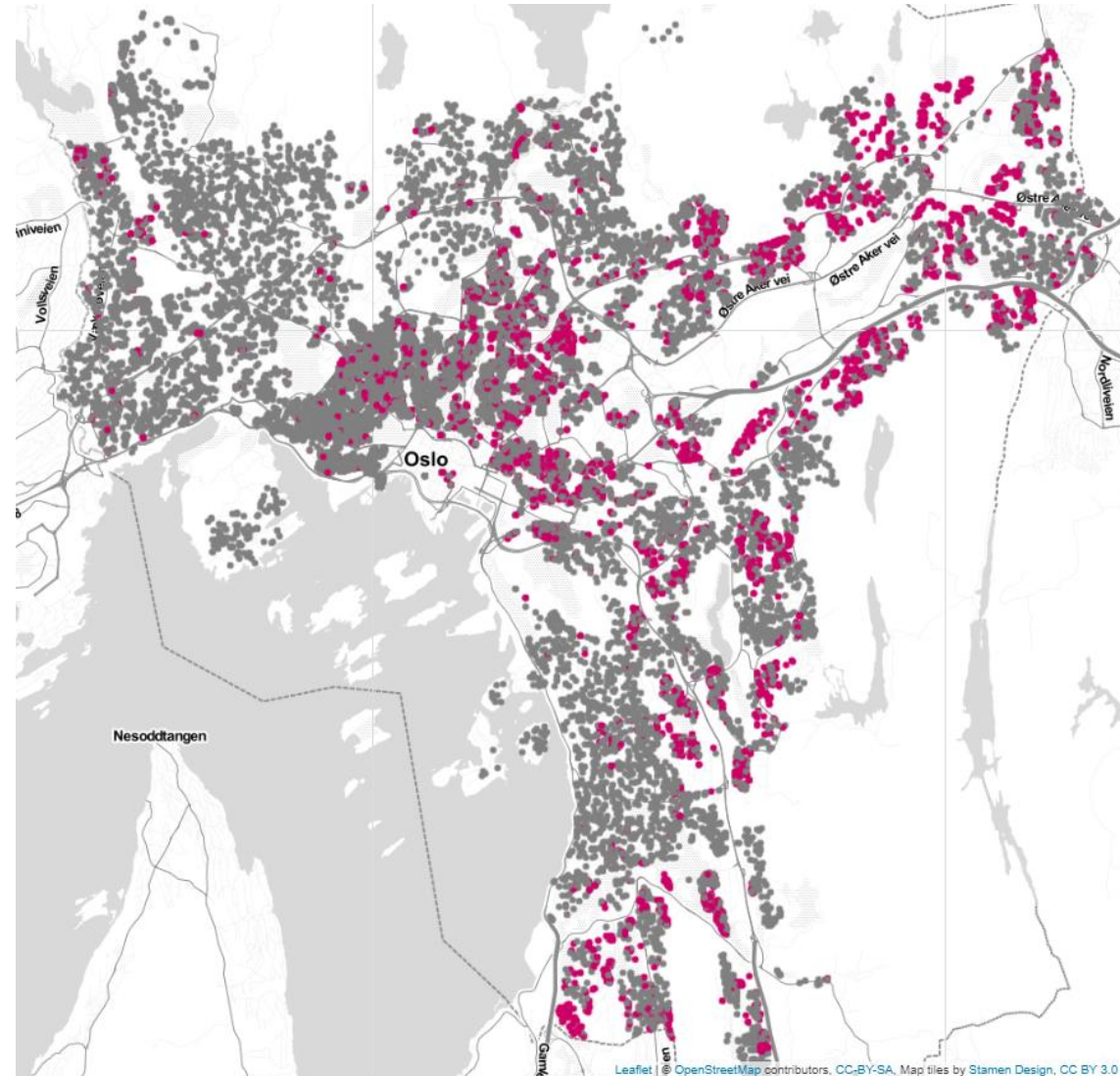
# Resultater Oslo: Den typiske single førstehjemkjøperen i 2010 og 2023



[6] **Kilder:** Mikrodata for boligsalg fra Eiendomsverdi AS. Øvrige tall fra SSB, Norges Bank, SIFO og Finanstilsynet.  
\*Pga. fleksibilitetskvoten er egenkapitalen i gjennomsnitt noe mindre enn utlånsforskriftens krav på 15 prosent.

# Førstehjemkjøper

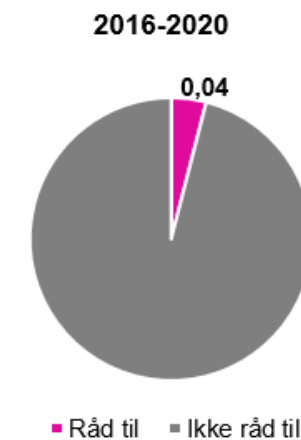
## Boligkjøpekraft Oslo – Resultater 2003–2007



■ Råd til ■ Ikke råd til

# Førstehjemkjøper

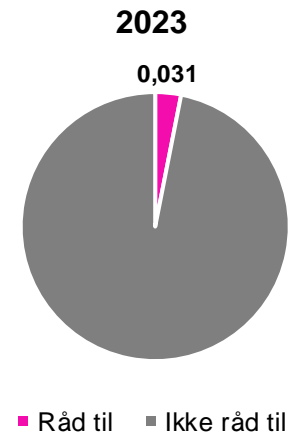
## Boligkjøpekraft Oslo – Resultater 2016–2020





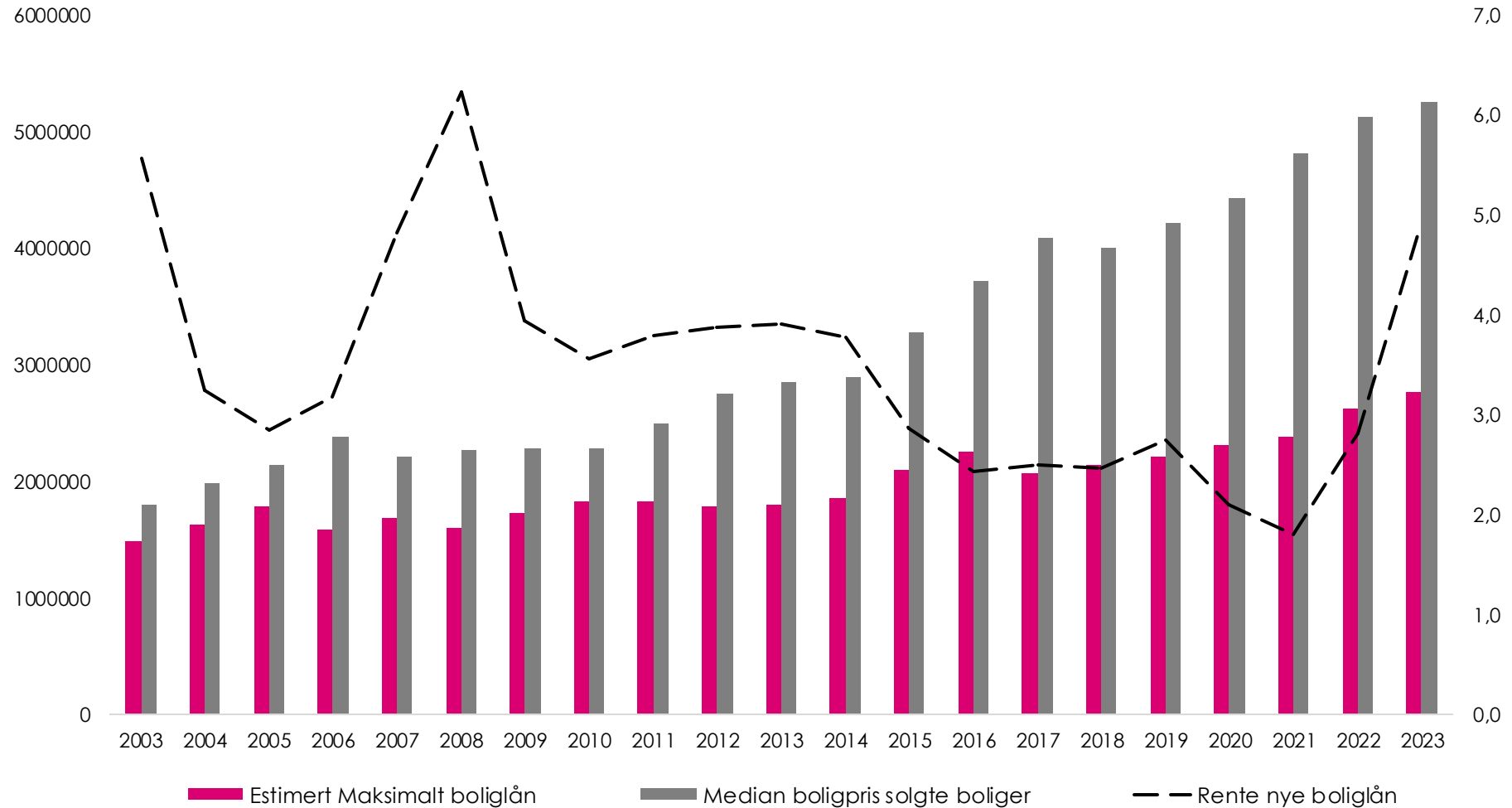
# Førstehjemkjøper

## Boligkjøpekraft Oslo – Resultater 2023



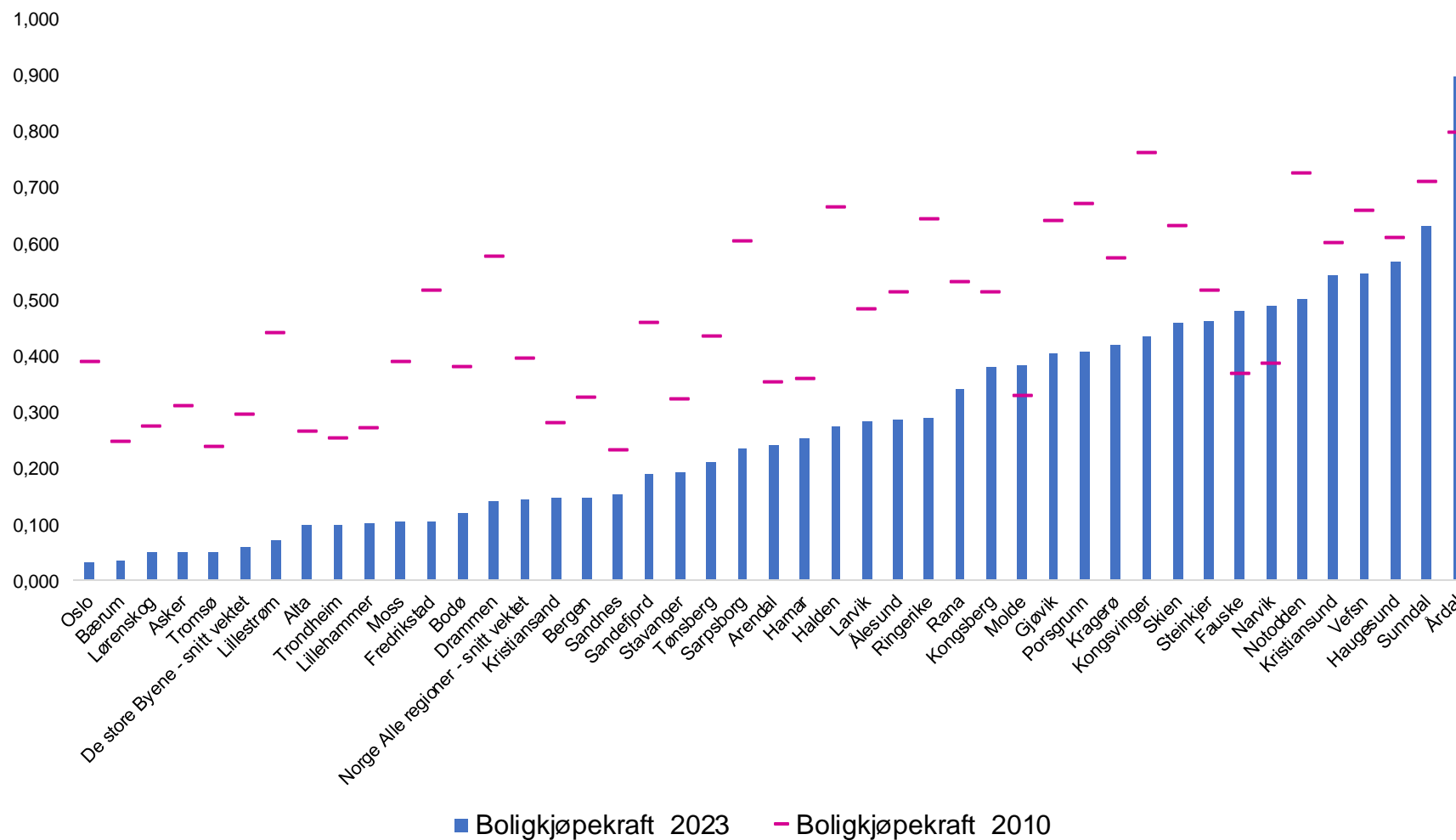
# Maksimalt boliglån, boligpris og rente

Maksimalt boliglån, rente og boligpris Oslo



# Førstehjemindeksen i 2010 og 2023

Kjøpekraftindeks førstegangskjøpere Norge (43)





Takk for oppmerksomheten

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# Førstehjemindeksen 2023

Frokostmøte i NBBL

**Hilde Midsem**

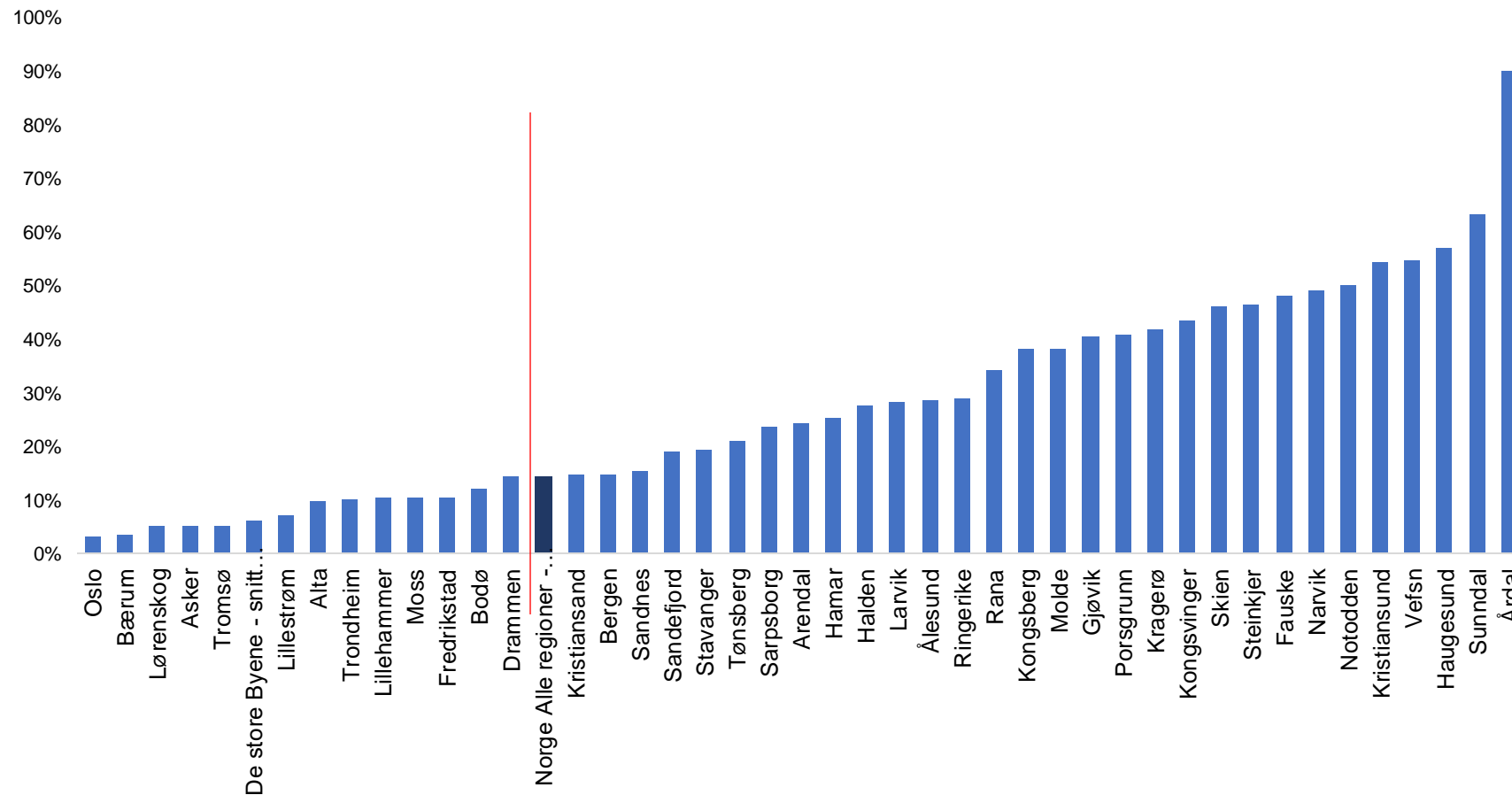
Sjeføkonom i NBBL

19.03.2024

# Mange boligmarkeder i Norge

2,8 mill. Egenkapital: 370 tusen. 14 prosent. 43. Store variasjoner. Store byer: 6% i snitt. < Norge:

Kjøpekraft førstegangskjøpere Norge  
2023 og 2010

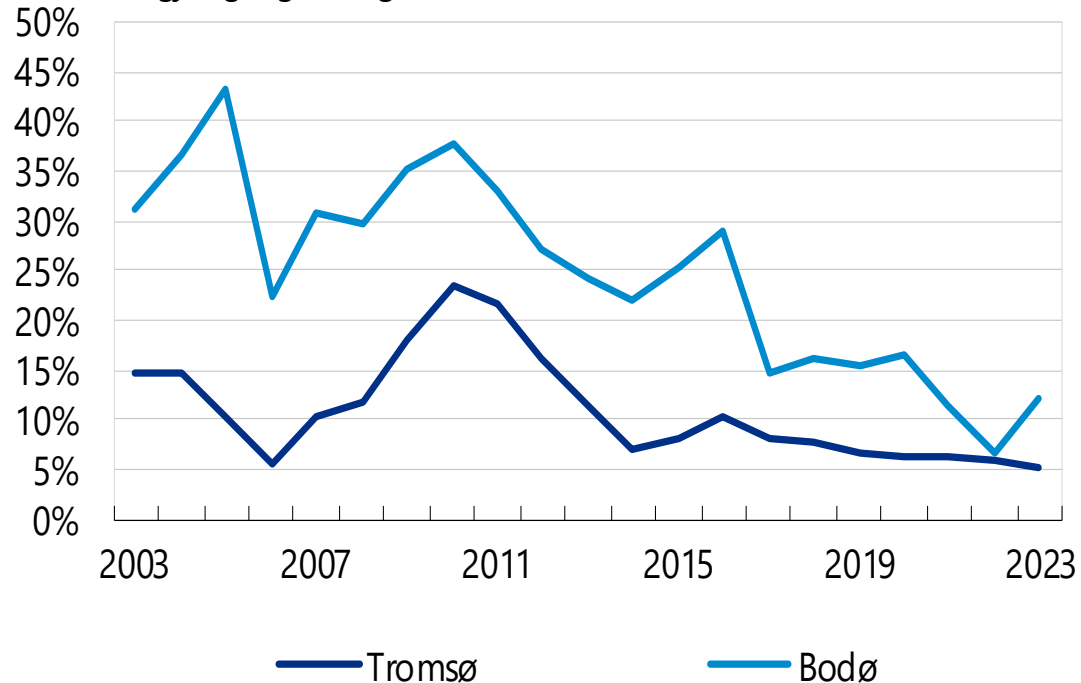


# Boligmarkedet har snørt seg kraftig til

Norge: 2010: 40% -> 20%. Tromsø og Bodø. Byer på Østlandet.

## Førstehjemindeksen 2023

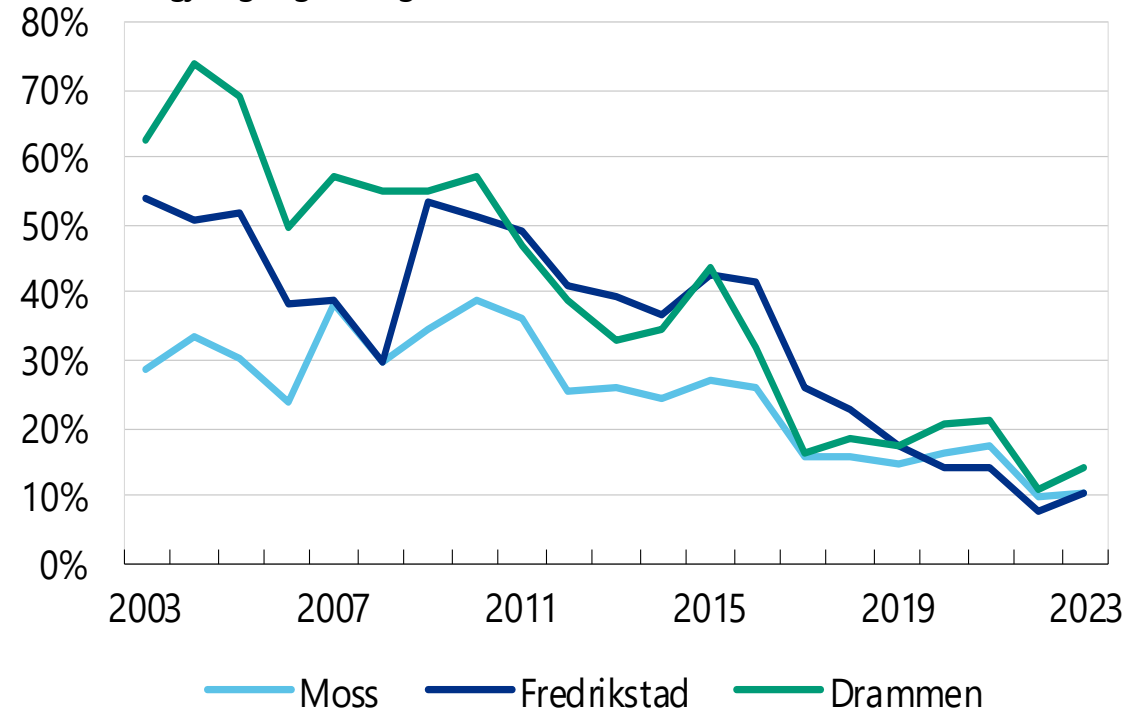
Andel tilgjengelige boliger. Prosent.



Kilde: Førstehjemindeksen 2023, SØA / NBBL

## Førstehjemindeksen 2023

Andel tilgjengelige boliger. Prosent.



Kilde: Førstehjemindeksen 2023, SØA / NBBL

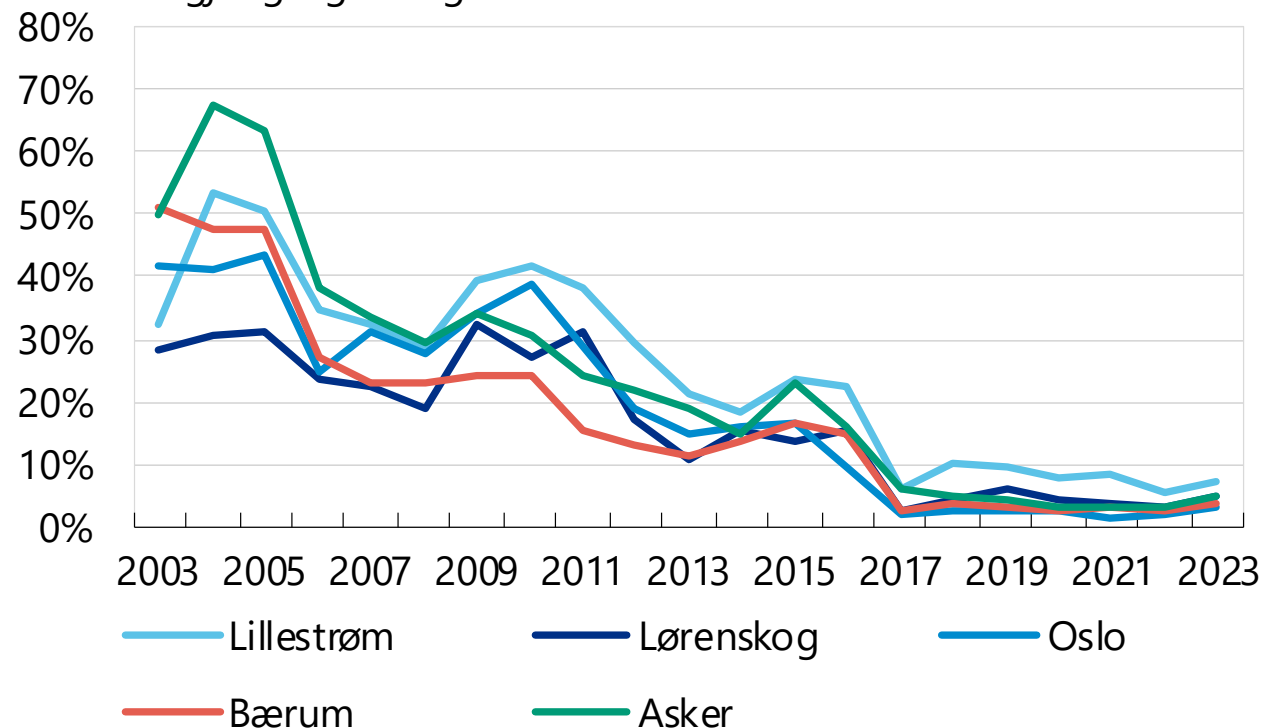


# Oslo-området bare for noen få?

Bo-/arb.reg.: 1 million. 20%. Kjøpekraft: <7%. EK. 2017. Boligpriser/inntekt.

## Førstehjemindeksen 2023

Andel tilgjengelige boliger. Prosent.



Kilde: Førstehjemindeksen 2023, SØA / NBBL



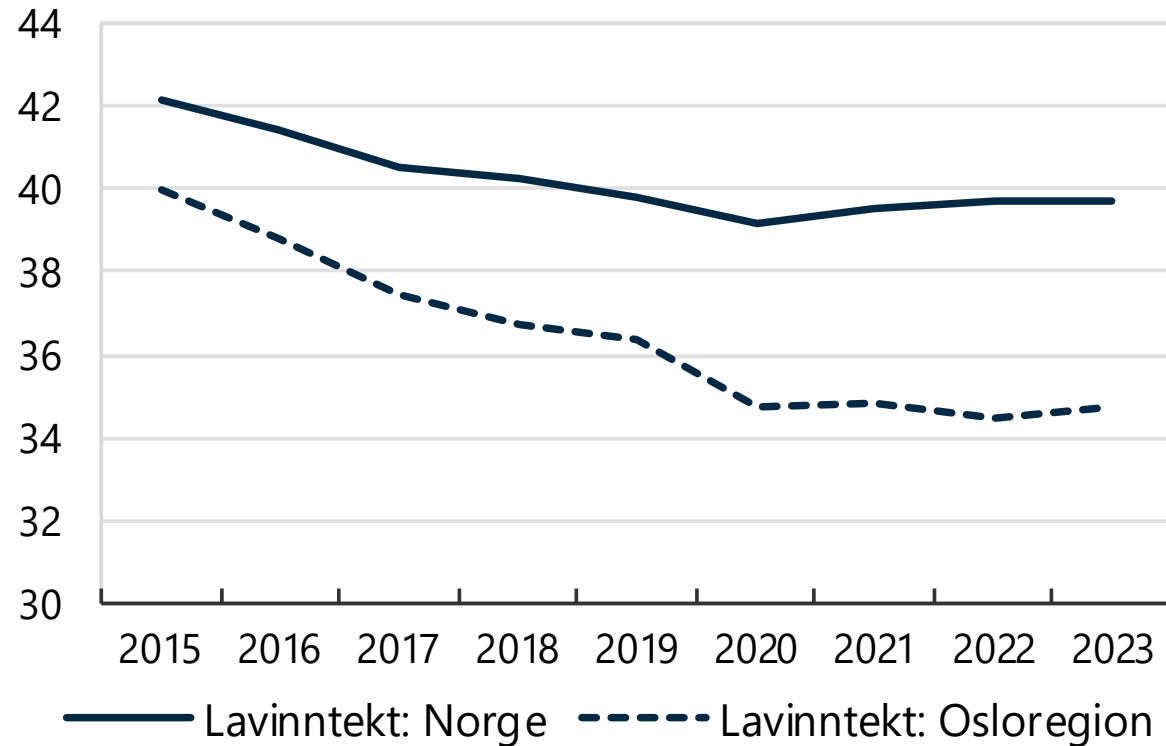


# Færre eier blant de som tjener minst

Lavinntekt: Norge: 42% -> 40%. Osloregionen: 40% -> 35 %

## Husholdninger: Boligeie

Prosentvis andel. Stiplet: Bærum, Oslo, Lørenskog



Kilde: Statistisk sentralbyrå / OECD, Affordable housing database / NBBL



Hva betyr det at terskelen for boligkjøp blir høyere?



Takk for meg!



# The Housing Channel of Intergenerational Wealth Persistence

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Ella Getz Wold, Knut Are Aastveit, Eirik Brandsaas, Ragnar Juelsrud & Gisle Natvik

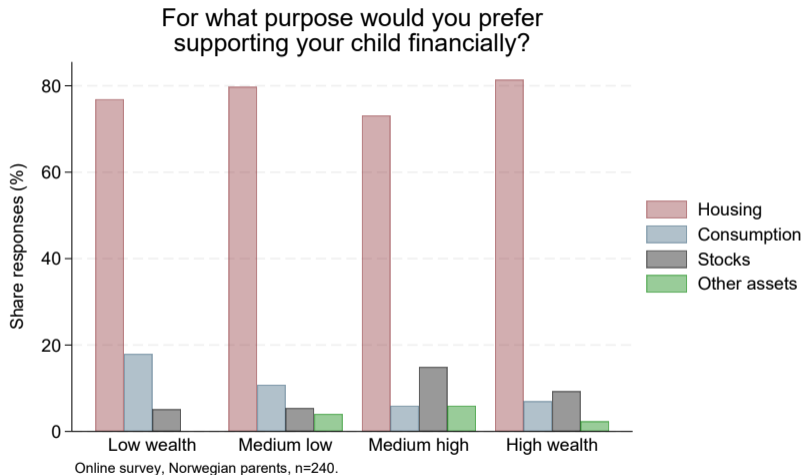
March 2024

BI Norwegian Business School, Federal Reserve Board and Norges Bank

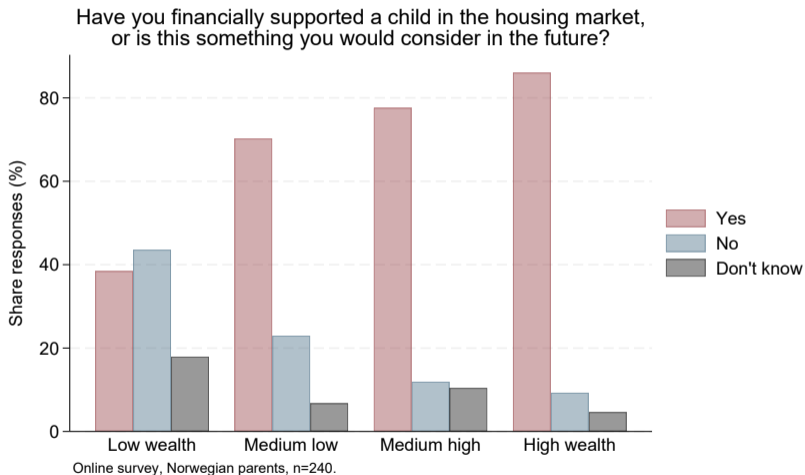
**Disclaimer:** This paper should not be reported as representing the views of Norges Bank or the Federal Reserve System. The views expressed are those of the authors and do not necessarily reflect those of Norges Bank or the Federal Reserve System.

- **How important is housing for intergenerational wealth persistence?**
  - parent wealth → housing outcomes → later-in-life wealth
  - ... in particular via entry in the housing market

# Survey: housing is the preferred support form among all parents

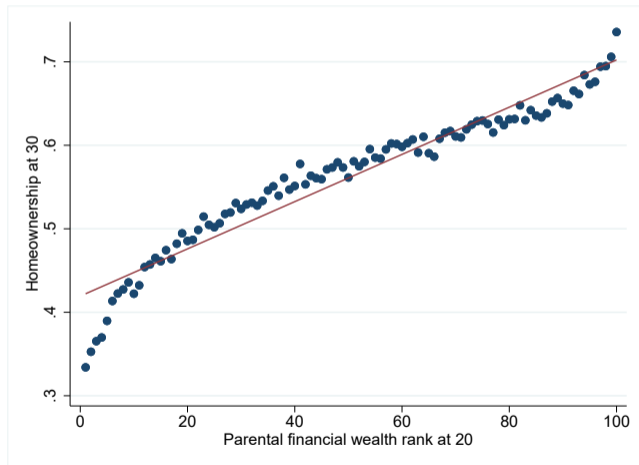


# Survey: 70% have given or consider housing support - clear wealth gradient



# Registry data: clear correlation between parental wealth and home ownership

Homeownership at age 30 by parental wealth rank:





1. Norwegian tax data w/parent-child links
2. Housing transactions from The Land Registry
  - Data period: 1992-2017, hh id's available from 2004
  - 1.5 million households
    - condition on observing parent wealth when hh is 20 years old  
→ (child) households born 1972-1997
  - In addition: **online survey** directed at parents (no more in this prez)

1. Parent wealth matters for offspring's housing outcomes
2. Housing outcomes matter for intergenerational wealth persistence
3. *Mechanisms for parental support*
4. *Counterfactuals using life-cycle model with housing and parental wealth*

## Mediation analysis: parent wealth → housing outcomes

Assume that a **housing outcome**  $h_i$  can be written as

$$h_i = \beta_0 + \beta_1 p_i^{w20} + \beta_2 p_i^o + \beta_3 x_i + \eta_i \quad (1)$$

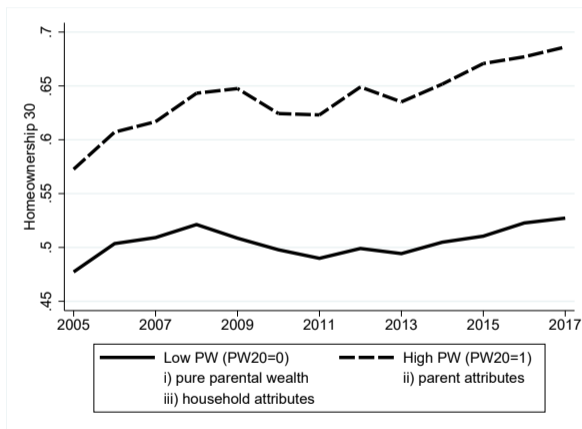
- $h_i$  is a housing outcome (entry, price, leverage) at a given age
- $p_i^{w20}$  is **parent financial wealth** (above/below median) when child is 20
- $p_i^o$  includes parent attributes (income, education, location, nr children)
- $x_i$  captures household attributes (income, wealth, location, hh size, age)

NB!  $\beta_1$  is *not causal* since  $p_i^{w20}$  correlates with a lot, including  $p_i^o$ ,  $x_i$ ,  $\eta_i$

- Mediation analysis: Estimate equation (1) (the  $\beta$ s). Then combine with estimates of how  $p_i^{w20}$  correlates with the other terms
  - A way to describe patterns in the data, and attribute them to variables.
  - *Not causality*

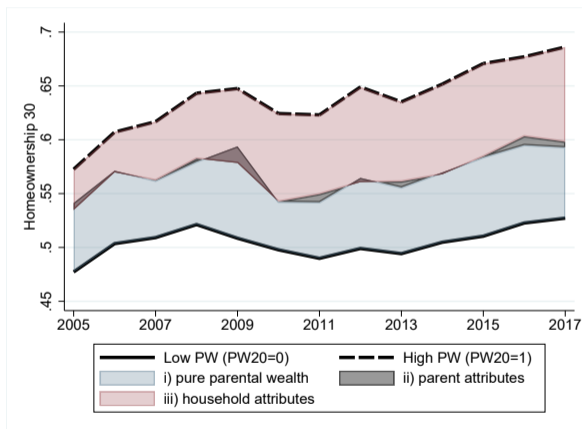
## Mediation results: parent wealth → homeownership at 30

With richer parents: 17 pp (=33%) more likely to be homeowners at age 30



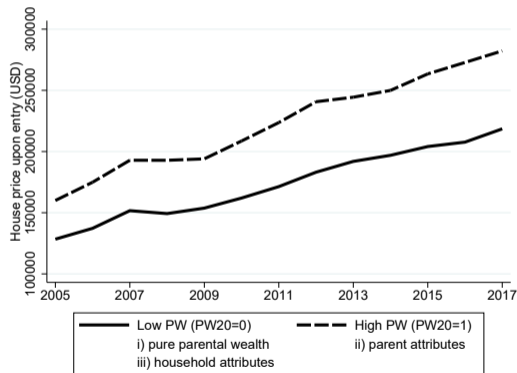
# Mediation framework: parent wealth → homeownership at 30

With richer parents: 17 pp (=33%) more likely to be homeowners at age 30

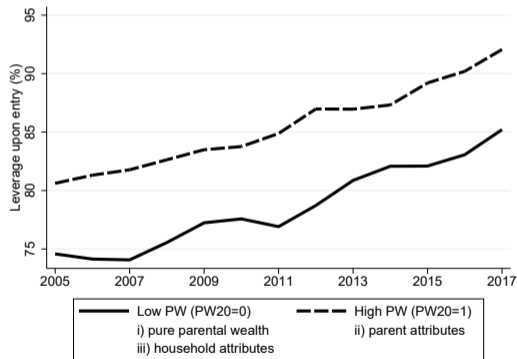


# Mediation results: parent wealth $\rightarrow$ purchase price and leverage upon entry

Hh w. richer parents: homes worth \$75,000 (=33%) more and leverage 7 pp (=8%) higher



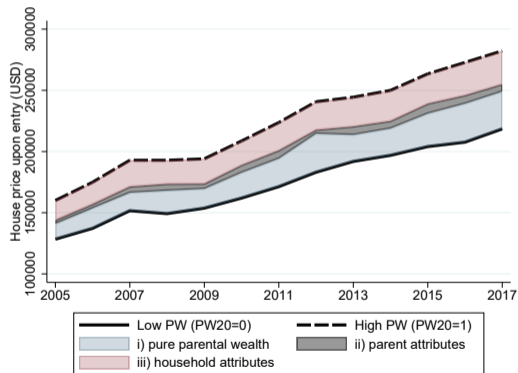
(a) Purchase price upon entry



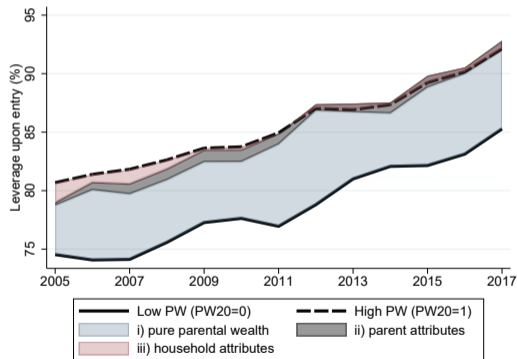
(b) Leverage upon entry

# Mediation results: parent wealth $\rightarrow$ purchase price and leverage upon entry

Hh w. richer parents: homes **worth** \$75,000 (=33%) more and **leverage** 7 pp (=8%) higher



(c) Purchase price upon entry



(d) Leverage upon entry

## Causal effect of parental wealth?

- Parental wealth important according to mediation analysis
  - ... but is it causal?
- What we want: Estimate how *shocks* to parental stock market wealth affect offspring's housing outcomes
- Our strategy: Use **exogenous variation in parental wealth** caused by the combination of
  - international stock market returns and parents' stock market exposure
- **Finding:** Parents rich → Entry probability ↑ 1.9 pp ( $\approx 40\%$ )  
→ implies 13 pp higher homeownership rate at 30



1. Parent wealth matters for offspring's housing outcomes
2. **Housing outcomes matter for intergenerational wealth persistence**
3. *Mechanisms for parental support*
4. *Study counterfactuals using life-cycle model with housing*

## Mediation analysis: housing → midlife wealth

Assume that **midlife wealth**  $\bar{w}_i$  can be written as

$$\bar{w}_i = \alpha_0 + \alpha_1 p_i^{w20} + \alpha_2 \bar{p}_i^o + \alpha_3 \bar{x}_i + \alpha_4 h_i + \epsilon_i \quad (2)$$

- $\bar{p}_i^o$  captures parental attributes at midlife (income, education,...)
- $\bar{x}_i$  captures household attributes at midlife (income, education,...)
- $h_i$  captures housing outcomes

NB! again:  $\alpha_4$  is not causal since  $h_i$  correlates with lots of stuff

Our interest: quantify the link from parental wealth to  $h_i$  to midlife wealth

Mediation analysis: “isolate” the correlations from parental wealth to child housing to child wealth

## Mediation framework: housing → midlife wealth

$$\underbrace{\frac{\text{cov}(\bar{w}_i, p_i^{w20})}{\text{var}(p_i^{w20})}}_{0.15} = \alpha_1 + \underbrace{\alpha_2 \frac{\text{cov}(\bar{p}_i^o, p_i^{w20})}{\text{var}(p_i^{w20})}}_{5\%} + \underbrace{\alpha_3 \frac{\text{cov}(\bar{x}_i, p_i^{w20})}{\text{var}(p_i^{w20})}}_{13\%} + \underbrace{\alpha_4 \frac{\text{cov}(h_i, p_i^{w20})}{\text{var}(p_i^{w20})}}_{27\%} + \frac{\text{cov}(\epsilon_{i,t}, p_i^{w20})}{\text{var}(p_i^{w20})}$$

- Having richer parents makes you 15 pp (=35%) more likely to be rich yourself
- 27% is working through housing ("gross housing channel")
  - 12% is working through the impact of parent wealth on housing ("net housing channel")
- Is 12% big?
- Parent wealth → housing ≈ Parent wealth → income, education, location, household members

## Causal effect of housing entry → midlife wealth

- We'd ideally want to know the causal impact of housing on midlife wealth ( $\alpha_4$ )
- **Our strategy:** Estimate how **timing of grandparent death** affects **age of entry** into the housing market
  - the logic: grandparent death → earlier entry → mid-life wealth
  - sample: households with exactly *one* observed grandparent death
- **Finding:** 1 yr delayed entry → midlife wealth down  $\approx$  \$10,000
  - probability of having above median wealth down 1.1 pp
  - wealth rank down 1.4

1. Parent wealth matters for offspring's housing outcomes
2. Housing outcomes matter for intergenerational wealth persistence
3. *Mechanisms for parental support*
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Parental wealth itself matters. **How?**

## 1. Transfers

## 2. Dynastic home equity

- Parents extract home equity to help kids (Benetton, Kudlyak, Mondragon 2022)
- More prevalent for richer parents

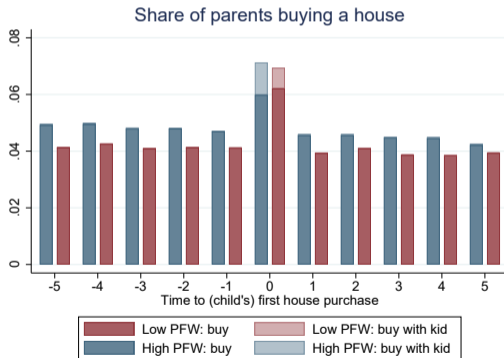
## 3. **Intra-family transactions**

- Co-purchasing
- Intra-family sales – at sizable discount

survey results

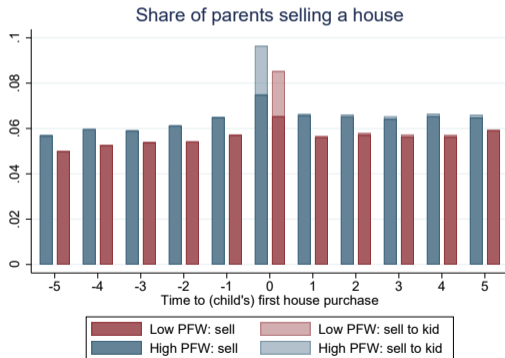
## Mechanism: Parent-child co-purchasing

Co-purchasing explains 2/3 of excess propensity to buy when child enters the housing market - richer parents are 60% more likely to co-purchase



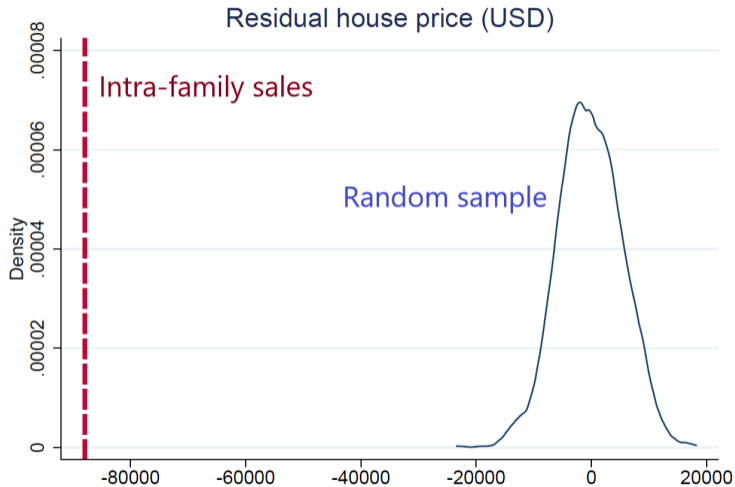
## Mechanism: Intra-family sales

Richer parents are 13% more likely to sell a house at the time of entry than poorer parents, and 8% more likely to sell a house *directly* to offspring





# Mechanism: Intra-family sales at \$85,000 (=25%) discount



1. Parent wealth matters for offspring's housing outcomes
2. Housing outcomes matter for intergenerational wealth persistence
3. *Mechanisms for parental support*
4. *Study counterfactuals using life-cycle model with housing*

# A model to answer "what if" questions

- What if ... ?
- Strategy
  - Design a model of household behavior that is consistent with the data
  - Then study what households would have done in the model
    - if house prices were flat?
    - if house price expectations were low?
    - if borrowing constraints were removed?

# Model exercises

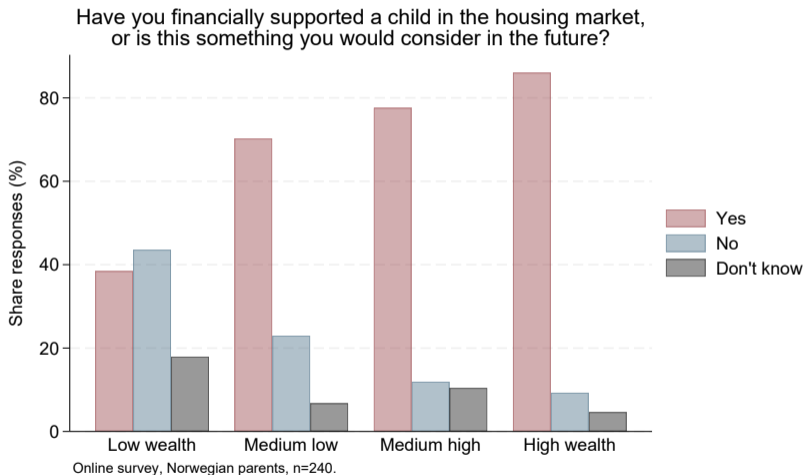
- **Exercise I:** lowering *realized house price growth* house prices
  - modest decline in "housing channel"
  - driven by smaller impact of housing on later-in-life wealth
- **Exercise II:** lowering *realized and expected house price growth*
  - larger decline in "housing channel"
  - driven both by smaller impact of housing on later-in-life wealth *and* by smaller impact of parent support on housing
- **Exercise III:** changing *LTV-cap*
  - "housing channel" hump-shaped in LTV-cap – two opposing forces
  - Cap initially makes parental support *more* important, until it becomes "prohibitively strict" and limits gearing of transfers

## Conclusion

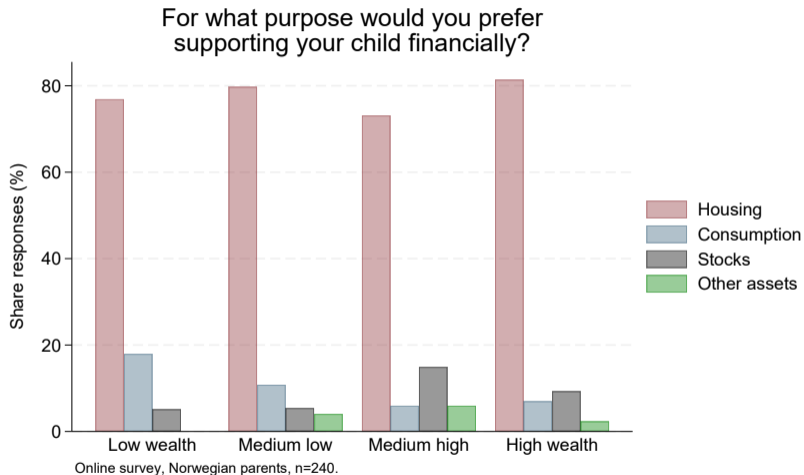
- Having parents in the upper half of the wealth distribution makes you **8 pp (=15%) more likely to be a homeowner** at age 30
  - due to transfers, equity extraction, co-purchasing, discounted sales
- The direct impact of parental wealth on homeownership can explain **12% of intergenerational wealth persistence**
  - ... out of 15 pp (=35%) average intergenerational persistence
  - $\approx$  the direct impact of parental wealth on income, education, location and household members!
- Model exercise suggests (1) big role for investment in expectation of rising house prices; (2) lending regulation propagates the housing channel of intergenerational wealth persistence

Thank you!

# Survey: 70% have or would consider supporting their child in the housing market

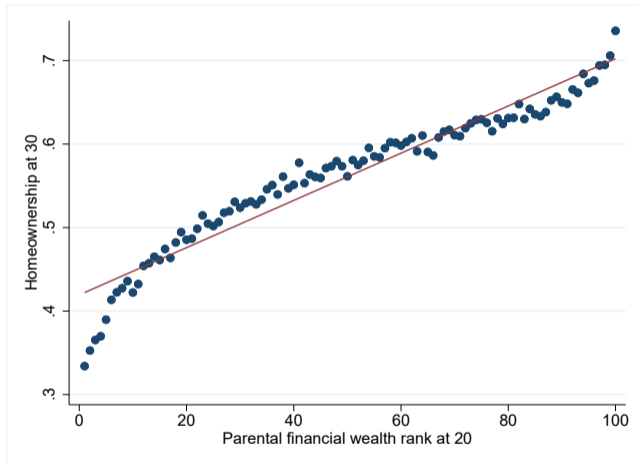


# Survey: housing is the preferred support form





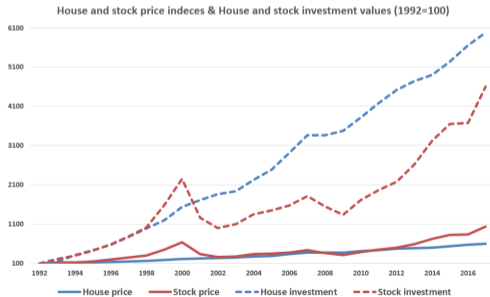
# Homeownership at 30 by parental wealth rank



[back](#)

# House and stock prices

1. Invest \$100 in **housing** at 90% leverage in 1992 – pay down mortgage over 25 years
  - average leverage 23%, **value after 25 years: \$6,000** [Sharpe=0.8]
2. Invest \$100 in **stocks** in 1992 – reinvest interest cost from 1. every year
  - **value after 25 years: \$4,500** [Sharpe=0.4]

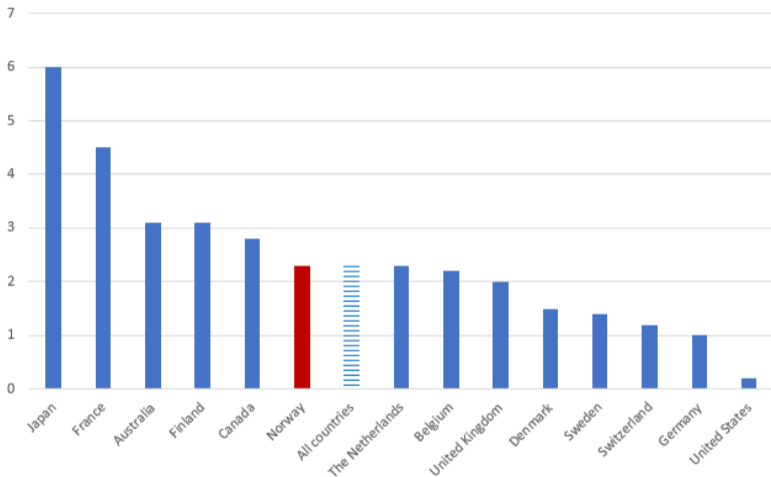


# Summary statistics

	Full sample	Low parental wealth	High parental wealth
$p^{w20}$	0.5	0	1
Parent financial wealth <sup>20</sup> (USD)	32,000	6,000	60,000
Financial wealth <sub>t</sub> (USD)	21,000	14,000	27,000
Homeowner <sub>t</sub> (%)	47	41	52
Total income <sub>t</sub> (USD)	45,000	42,000	47,000
Max education	4.6	4.3	4.9
Age	30	30	29
Household members	1.3	1.2	1.4
Siblings	1.7	1.7	1.7
N	837,260	474,564	481,399

**Table 1:** Summary statistics 2017. Average (per capita) values.

# Real house price growth post-WW2 (Knoll, Schularick and Steger 2017)

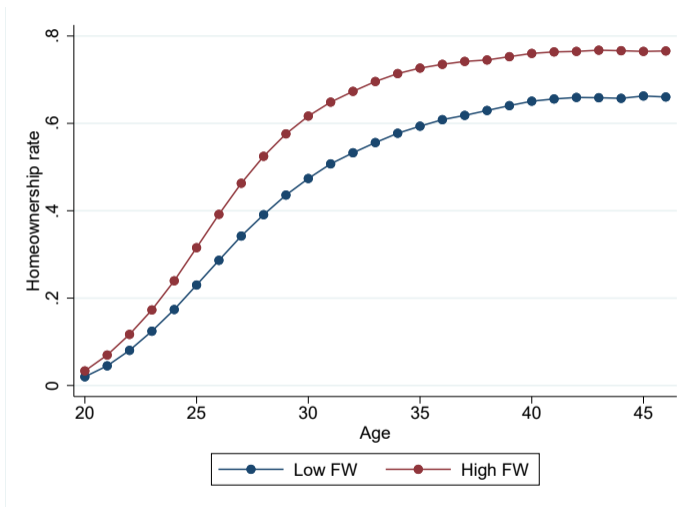


# Controlling for financial wealth effects: impact for age of entry on midlife wealth

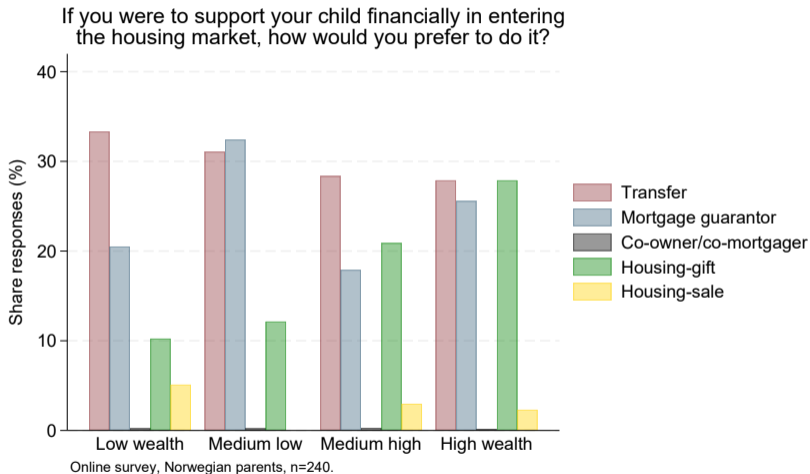
- No significant increase in financial assets at time of grandparent death
- Results robust to controlling for financial asset dynamics and to removing anyone with increase in financial assets at time of grandparent death

	$\bar{w} = \{0, 1\}$		$\bar{w}$ -rank		$\bar{w}$ in USD	
	IV	OLS	IV	OLS	IV	OLS
<b>Excluding those with increase in financial wealth at time <math>t = 0</math></b>						
Age of entry	-0.015 (0.0095)	-0.013*** (0.0022)	-1.94*** (0.702)	-1.23*** (0.164)	-19,614** (8,471)	-6,086*** (1,964)
N	2,580	2,580	2,580	2,580	2,580	2,580
<b>Controlling for financial wealth at 30, 35 and 40</b>						
Age of entry	-0.047* (0.0248)	-0.010*** (0.0018)	-4.46*** (1.95)	-1.37*** (0.142)	-26,895** (11,016)	-6,593*** (785)
N	4,113	4,113	4,113	4,113	4,113	4,113
Controls	Yes	Yes	Yes	Yes	Yes	Yes

# Homeownership over the life cycle



# Survey: no single support mechanism stands out





# Veien inn på boligmarkedet: En førstegangskjøpers muligheter

**NBBL**

Frokostmøte 19. mars 2024

