Tax-exempted inter-generational transfers: do they reduce household mortgage debt?

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Vrije Universiteit Amsterdam & Netspar

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  - Mortgage interest deduction (MID) $\rightarrow$ ‘financial innovation’: non-amortizing, interest only loans (60%)
  - Very high LTV (loan to value) ratios. (Cap: 120% (before 2008q2) $\rightarrow$ 106% (since 2013) $\rightarrow$ 100% (in 2018))
Why study mortgage debt

- 2008q2 - 2013q4 housing crisis in NL. To reduce indebtedness and residual debt (underwater house when sold):
  - Make residual debt portable. Those selling a house with negative equity → Residual debt after selling a house is kept recording in old loan with negative equity → benefit of the related MID
  - Increase the threshold of tax-exempted inter-generational transfers, aiming at debt-repayment of younger generation. → focus of this study.
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Taxes of inter-generational transfers in NL

- Use tax-free inter-generational transfers to reduce mortgage debt (debt $\geq$ the amount received).

1990's - 2013q3:
- Tax-free threshold: 52,000 euro
- Age: $\leq$ 35
- Source: parents

2013q4 - 2014q4:
- Extension period
- Tax-free threshold: 100,000 euro
- Age: no limit
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2015q1 - now:
- Tax-free threshold: 52,000 euro
- Age: $\leq$ 40
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Receive tax-free inheritance, and repay mortgage debt only once in one's lifetime.
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- Template of European DataWarehouse (centralized platform in Europe that collects and stores standardized ABS loan level data).

Collected quarterly. 14 waves: 2012q4 to 2016q1. Covers 80% of the total Dutch population. 3 million borrowers and 5.5 million loans per wave. Total 20 GB (stata format)

All information of mortgage application: original/current loan balance, age, income, partner, interest rate, NHG, occupation, housing value, LTV, LTI, type of loans, payment frequency...

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- Low limit imposed by banks due to administrative costs. $\rightarrow$ Large & irregular drops $\geq 2000$ euro $\rightarrow$ voluntary repayment.
Limitation of our definition

- Cannot distinguish the source of voluntary repayment: inter-generational transfers? personal household savings? lottery winning?

- Cannot observe: one uses inter-generational transfers as down-payment when buying a house.
- Those with \( \geq 2 \) voluntary mortgage repayments: which one is from tax-free inheritance?
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National total amount of voluntary mortgage repayments (in billion euro)

- Source: anyone
  - Inheritance taxes free amount: 100,000 euro
  - Recipient age: no limit

- Source: parents
  - Inheritance taxes free amount: 52,000 euro
  - Recipient age <= 40

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  - Inheritance taxes
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Voluntary repayment (in billion euros)

<table>
<thead>
<tr>
<th>Year</th>
<th>201301</th>
<th>201302</th>
<th>201303</th>
<th>201304</th>
<th>201401</th>
<th>201402</th>
<th>201403</th>
<th>201404</th>
<th>201501</th>
<th>201502</th>
<th>201503</th>
<th>201504</th>
<th>201601</th>
</tr>
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<tbody>
<tr>
<td>Value</td>
<td>3000</td>
<td>2000</td>
<td>1500</td>
<td>3500</td>
<td>2500</td>
<td>2200</td>
<td>2100</td>
<td>7500</td>
<td>3800</td>
<td>3000</td>
<td>2800</td>
<td>6000</td>
<td>4500</td>
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Density of voluntary mortgage repayments
Quasi-experiment setup

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Treatment1
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  - **Treatment1** + **Treatment2**
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- **Treatment1**it: eligibility of receiving tax-free €52,000 from parents:

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  Treatment1_{it} = \begin{cases} 
  1 & \text{if } t \leq 2013q3 \text{ and } age_{it} \leq 35, \text{ or,} \\
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\[ y_{it} = \beta_0 + \beta_1 \cdot Treatment1_{it} + \beta_2 \cdot Treatment2_{it} + \beta_3 \cdot D1_{(age \leq 35)} + \beta_4 \cdot D2_{(36 \leq age \leq 40)} + \beta_5 X_{it} + \epsilon_{it} \]

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- \( X_{it} \): Age, income, interest rate, NHG, occupation, housing value, loan to value, loan to income, payment frequency, maturity....
## Regression results (random select 1/5 of total population)

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As reference:
- Aged 36 - 40 in 2013q1 - 2013q3 ($Treatment_{1&2} = 0$ before the extension period), average of voluntary repayments: 950 euro.
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- During the period of the extension of the tax benefit, voluntary repayments have increased.

- Inter-generational transfers can be an effective tool to shorten household debt.

- Forthcoming: does it reduce indebtedness of highly indebted households, for instance underwater mortgage loans?
Thank you for your attention!