This Paper

• We focus on the American **Mortgage Interest Deduction (MID)**
  • Allows to tax deduct mortgage interest on owner-occupied homes
  • Among top 10 tax breaks in the US code
  • Constant debate around reforming MID

• We evaluate MID reforms by highlighting 2 features of housing:
  1. Housing is an illiquid asset
  2. Illiquid wealth may serve as a commitment device to curb overspending

• Q: If agents are willing to opt into housing due to commitment aspect:
  Is MID more/less conducive to homeownership and welfare?
What We Do

• Calibrate DSGE framework with heterogeneous agents + housing

• Agents’ preferences exhibit self-control problems à la Gul-Pesendorfer

  🌟 I care about what I consume + what I could have consumed

• Evaluate long term effects of eliminating MID

  🌟 “GE” is key difference with Schlafman (2021), Attanasio et al. (2021)
What We Find

- We find that eliminating MID decreases homeownership and increases welfare (= other papers)

- **But** ignoring self-control issues leads to:
  1. Overestimating decrease in homeownership
  2. Underestimating welfare gains

  ➔ MID hurts individuals with imperfect self-control *more*

  ➔ Key: MID increases “cash-on-hand,” amplifying self-control costs
Model: Main Ingredients

- Incomplete markets à la Aiyagari, OLG, endogenous housing tenure
- Housing is an illiquid asset:
  1. Proportional transaction cost $\psi^s$ when selling
  2. Selling proceeds available with 1-period delay
- Gul-Pesendorfer preferences over the budget set $B$:

$$W(i, \Omega) = \max_{z \in B(i, \Omega)} \left\{ u(c, s) + \beta \mathbb{E} \left[ W(i + 1, \Omega') \mid z, i, \Omega \right] + \lambda u(c, s) \right\}$$

$$- \max_{\tilde{z} \in B(i, \Omega)} \lambda u(\tilde{c}, \tilde{s})$$

where $(i, \Omega)$ are states, $z$ are controls, $s$ is housing shelter, $\lambda u > 0$ is temptation utility

- HHs bare the self-control cost $\lambda [u(\tilde{c}, \tilde{s}) - u(c, s)]$
Results

- Policy reform: Eliminate MID, increase transfers to balance budget

<table>
<thead>
<tr>
<th></th>
<th>$\lambda = 0.00$</th>
<th>$\lambda = 0.15$</th>
<th>$\lambda = 0.30$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeownership</td>
<td>-13.01</td>
<td>-9.45</td>
<td>-3.41</td>
</tr>
<tr>
<td>Home Equity (share in portfolio)</td>
<td>-8.81</td>
<td>-5.43</td>
<td>-0.34</td>
</tr>
<tr>
<td>Welfare (in CE units)</td>
<td>0.45</td>
<td>0.64</td>
<td>0.99</td>
</tr>
<tr>
<td>Self Control Costs (in CE units)</td>
<td>-</td>
<td>-0.85</td>
<td>-3.29</td>
</tr>
</tbody>
</table>

- Ignoring $\lambda > 0$ leads to:
  - overestimating effects on homeownership
  - underestimating average welfare gains
Results: Welfare

- The larger the $\lambda$, the larger the welfare gains from eliminating the MID

- Key channel:
  - Given $h$, the MID is a *liquid* source of income
  - In the case of a homeowner:
    
    \[
    \text{liquid income} = x + w\gamma_i\eta(1 - \tau^{ss} - \tau^y) + \mathbb{I}_{i \geq i_R}SS + tr \\
    + p^r(1 - \tau^y)h^r + \underbrace{\tau^yr_m(h,n)}_{\text{MID}}
    \]

- Eliminating MID restricts liquidity, thus reducing self control costs:
  
  It decreases $(\tilde{c} - c)$ and $(\tilde{s} - s) \Rightarrow \downarrow \lambda[u(\tilde{c}, \tilde{s}) - u(c, s)]$
Results: Welfare

Figure: Welfare Changes

(a) *Before Transfers*

(b) *After Transfers*

- In essence, the reform implements a compulsory savings scheme which benefits individuals with self control problems more
Ongoing Work

- Endogeneizing housing price
  - Can dampen effect on homeownership, but amplify positive welfare effect of the reform

- Allowing for home equity withdrawals
  - Lower “commitment premium” of housing, but do not eliminate it due to transaction costs

- Calibrating $\lambda$ internally
  - Target: Proportion of home equity in total net worth