

# INSURANCE VERSUS MORAL HAZARD IN INCOME-CONTINGENT STUDENT LOAN REPAYMENT

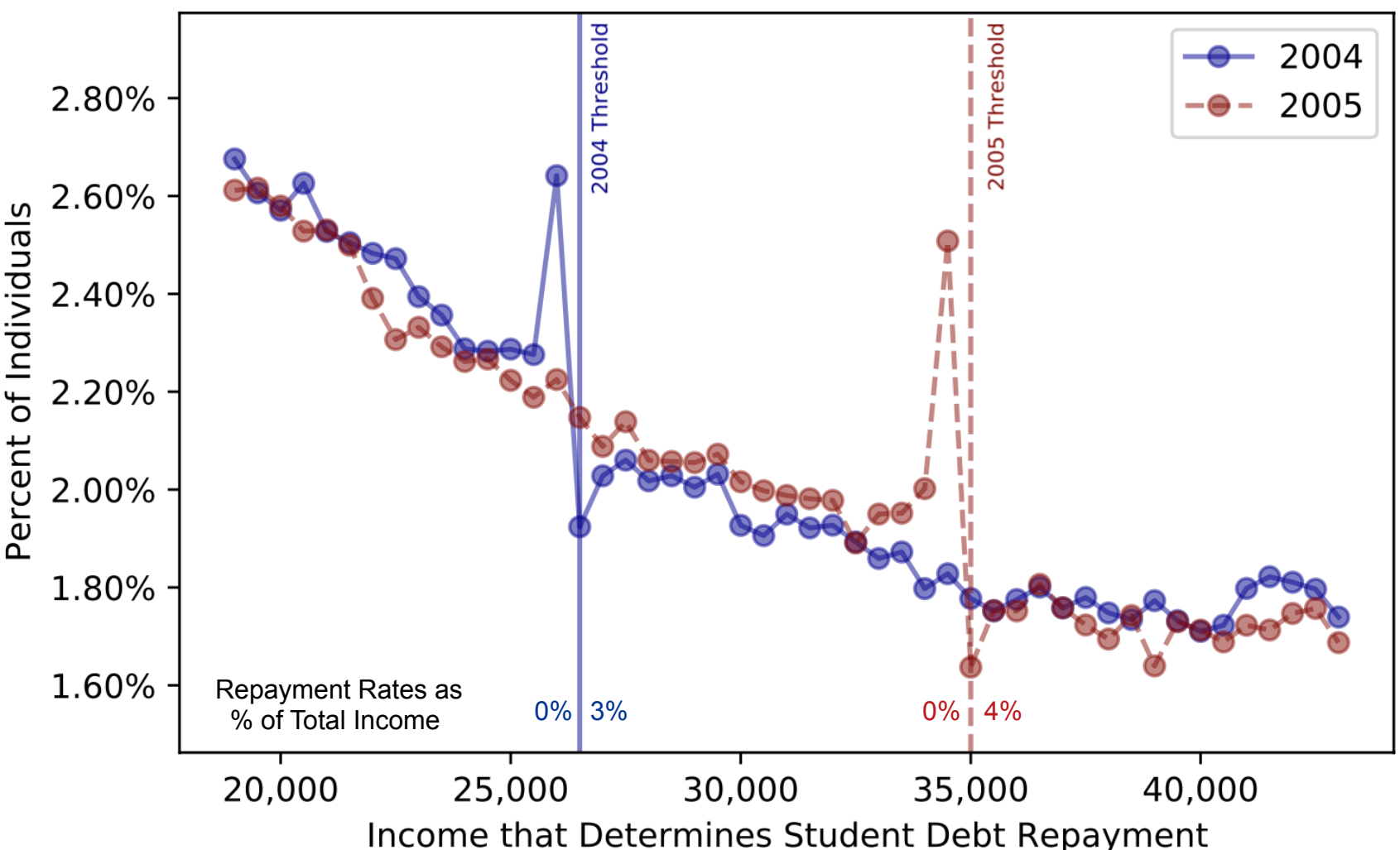
Tim  
de Silva  
MIT Sloan

- Governments often provide subsidized financing for higher education
  - Student loans = \$1.6 trillion in US and 10% of household debt in US and UK

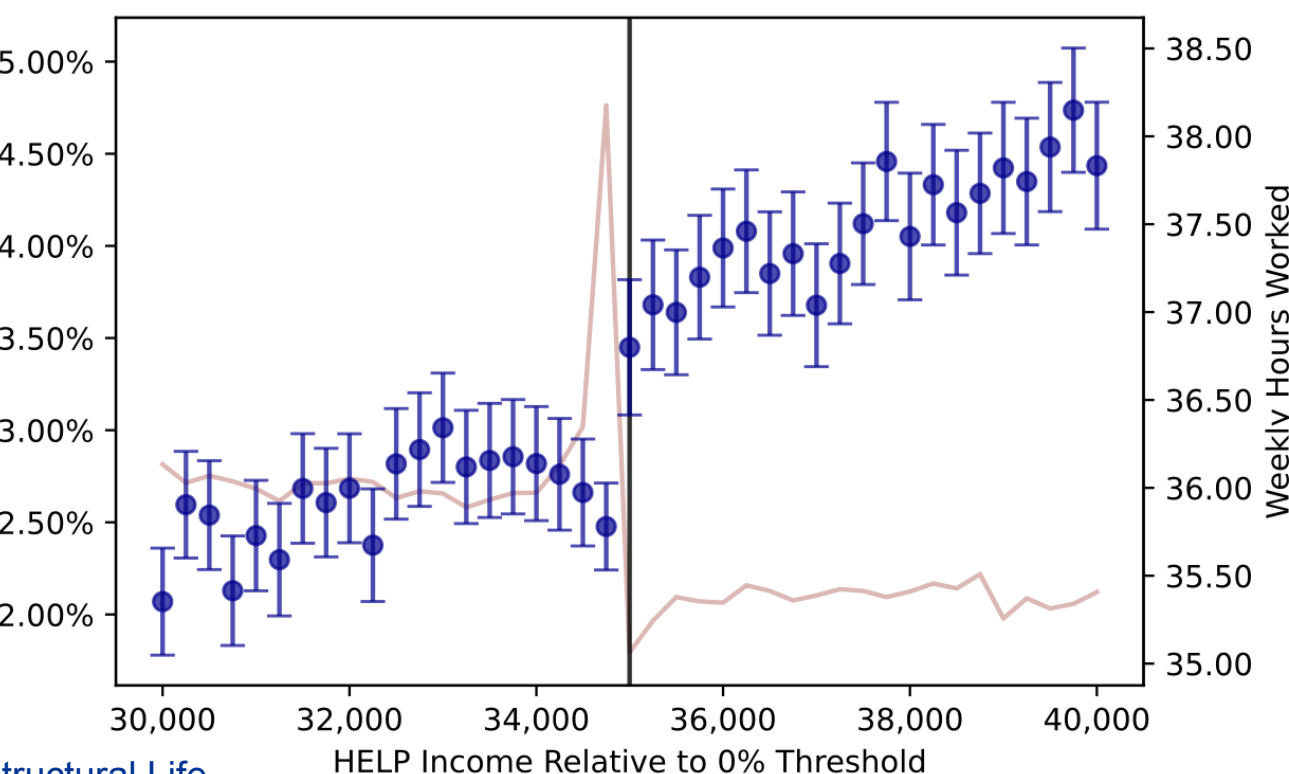
Debt	Income-Contingent Loan	Equity
<ul style="list-style-type: none"><li>• Standard contract in US</li><li>• Hard to discharge</li></ul>	<ul style="list-style-type: none"><li>• Used in US, UK, Australia, Canada</li></ul>	<ul style="list-style-type: none"><li>• Share of earnings</li><li>• Limited successful examples</li></ul>
✗ Borrowers bear most of risk	✓ Insurance	✓ Empirical Strategy
	✗ Disincentivize labor supply	Data: <ul style="list-style-type: none"><li>+ income tax returns</li><li>+ student debt balances</li><li>+ repayments</li><li>+ household Census</li></ul>
	✓ Encourage risk-taking	Sample: all Australian citizens
	✗ Incentivize over-borrowing	Policy variation: change to design of income-contingent loans
	✗ Adverse selection	

**RQ:** How does income-contingent affect **labor supply** and **welfare**?

Bunching Below Point at which Income-Contingent Repayments Begin



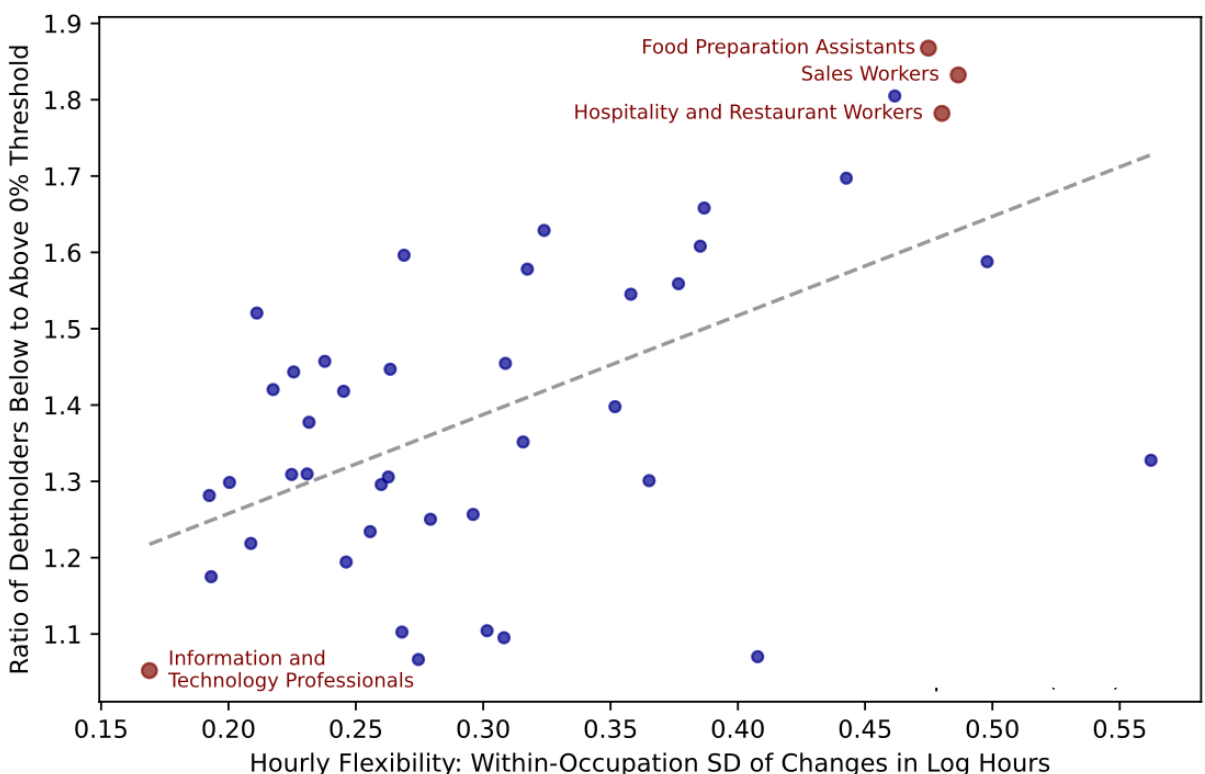
Borrowers Work Fewer Hours to Avoid Repayment



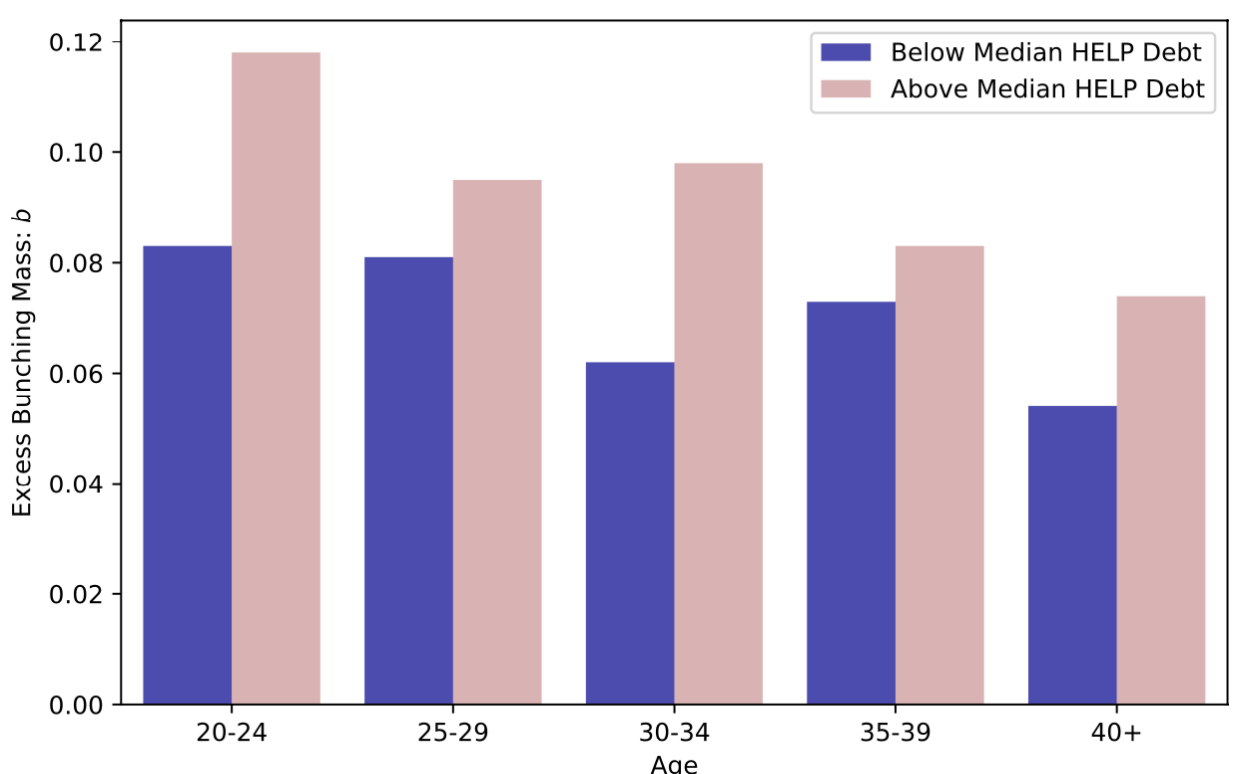
Structural Life  
Cycle Model

+ endogenous labor supply  
+ optimization frictions  
+ incomplete markets

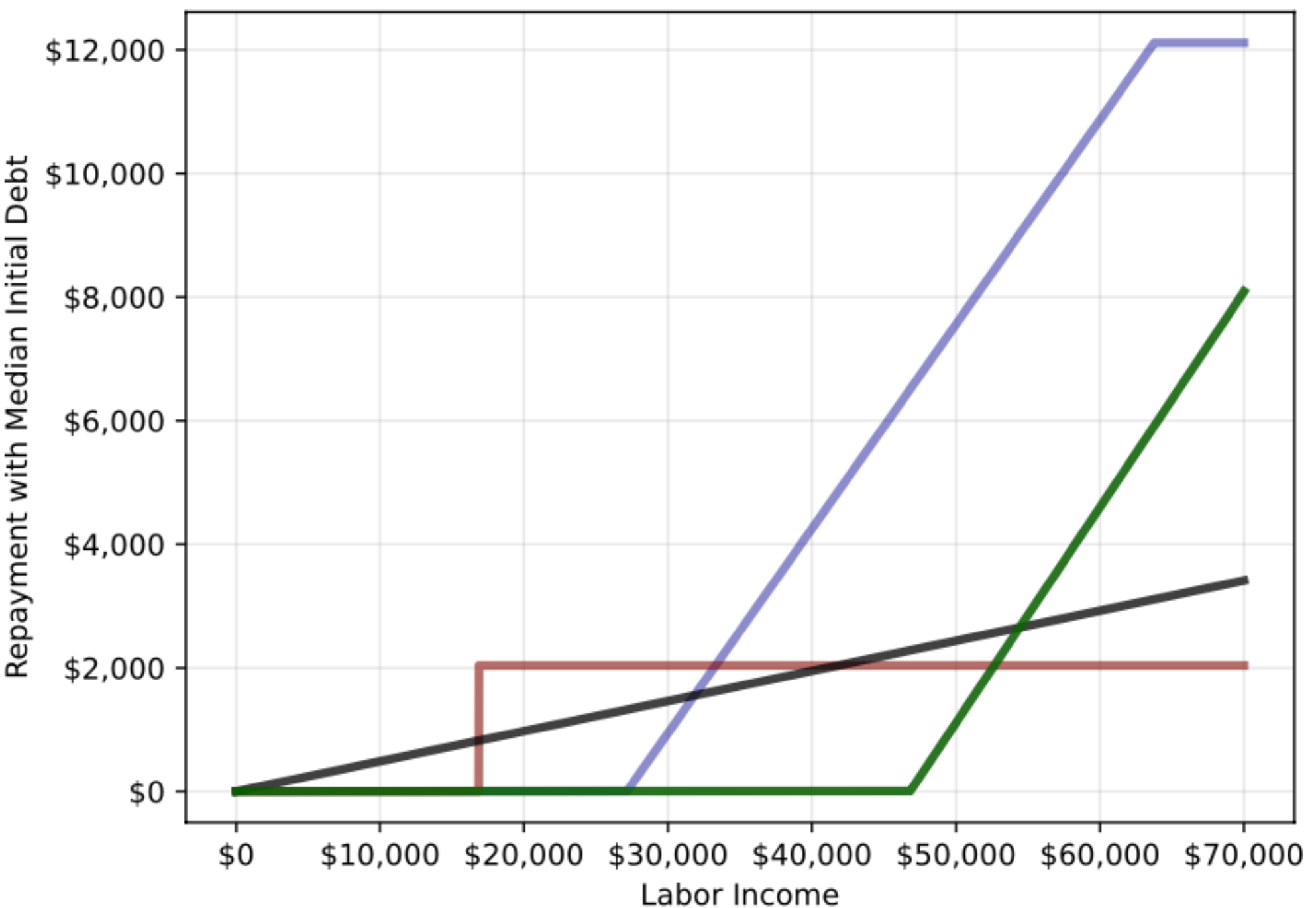
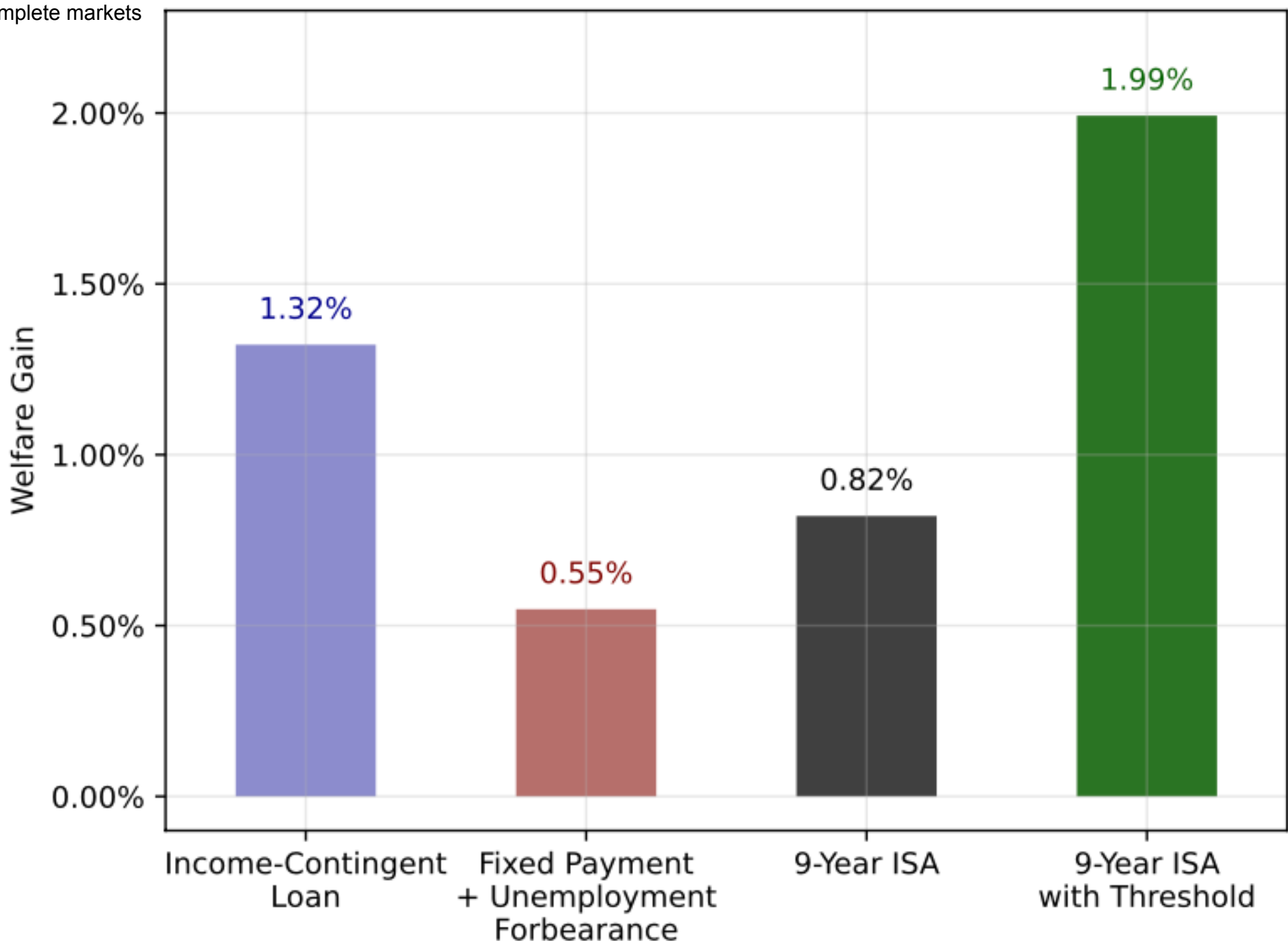
More Bunching in Occupations with Hourly Flexibility



Bunching Higher among Young Borrowers with More Debt



Significant Welfare Gains from Improving Insurance with Income-Contingent Contracts that Accelerate Payments from High-Income Borrowers



**Takeaway:** Income-contingent repayment creates moral hazard, but it is too small to justify fixed repayment