

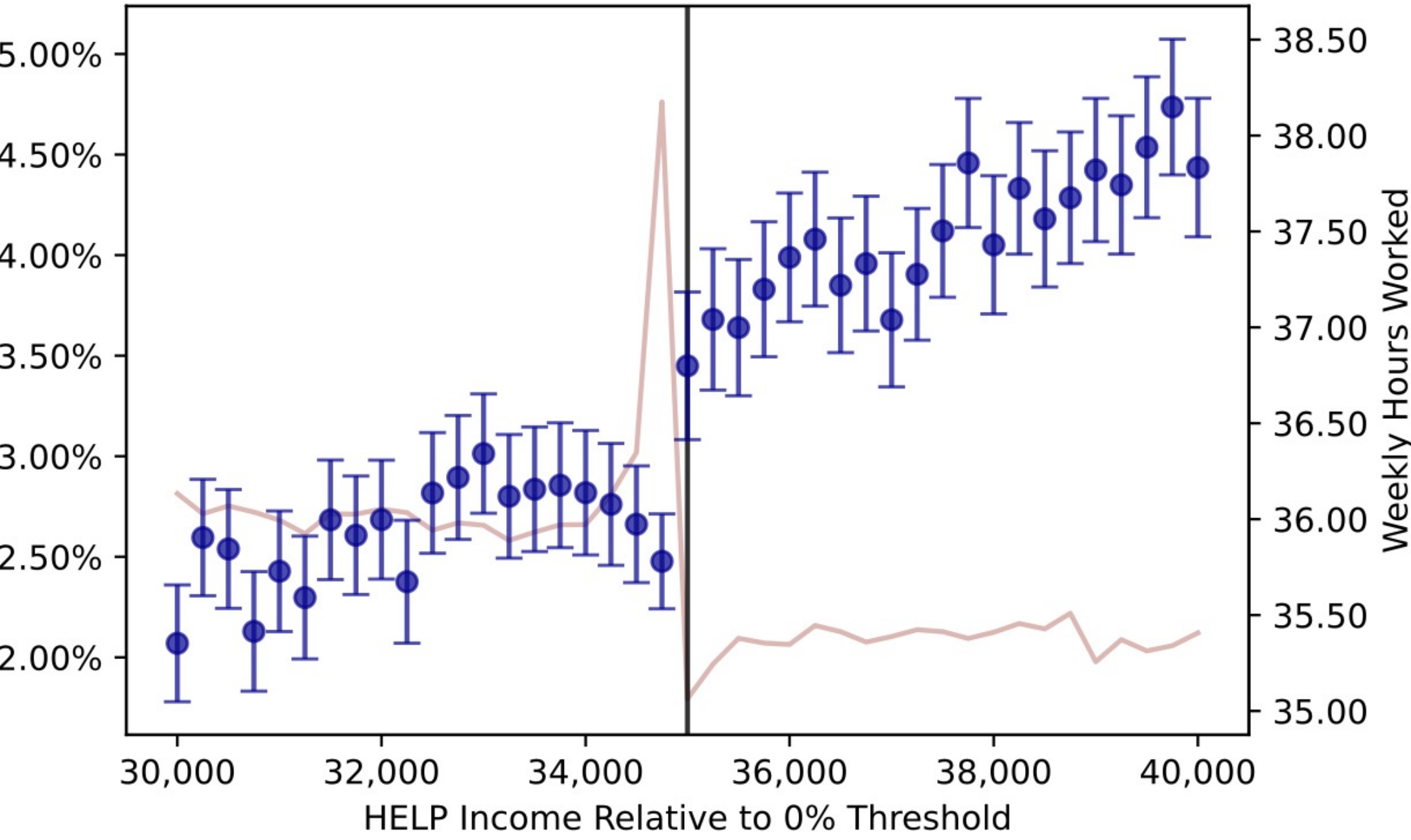
INSURANCE VERSUS MORAL HAZARD IN INCOME-CONTINGENT STUDENT LOAN REPAYMENT

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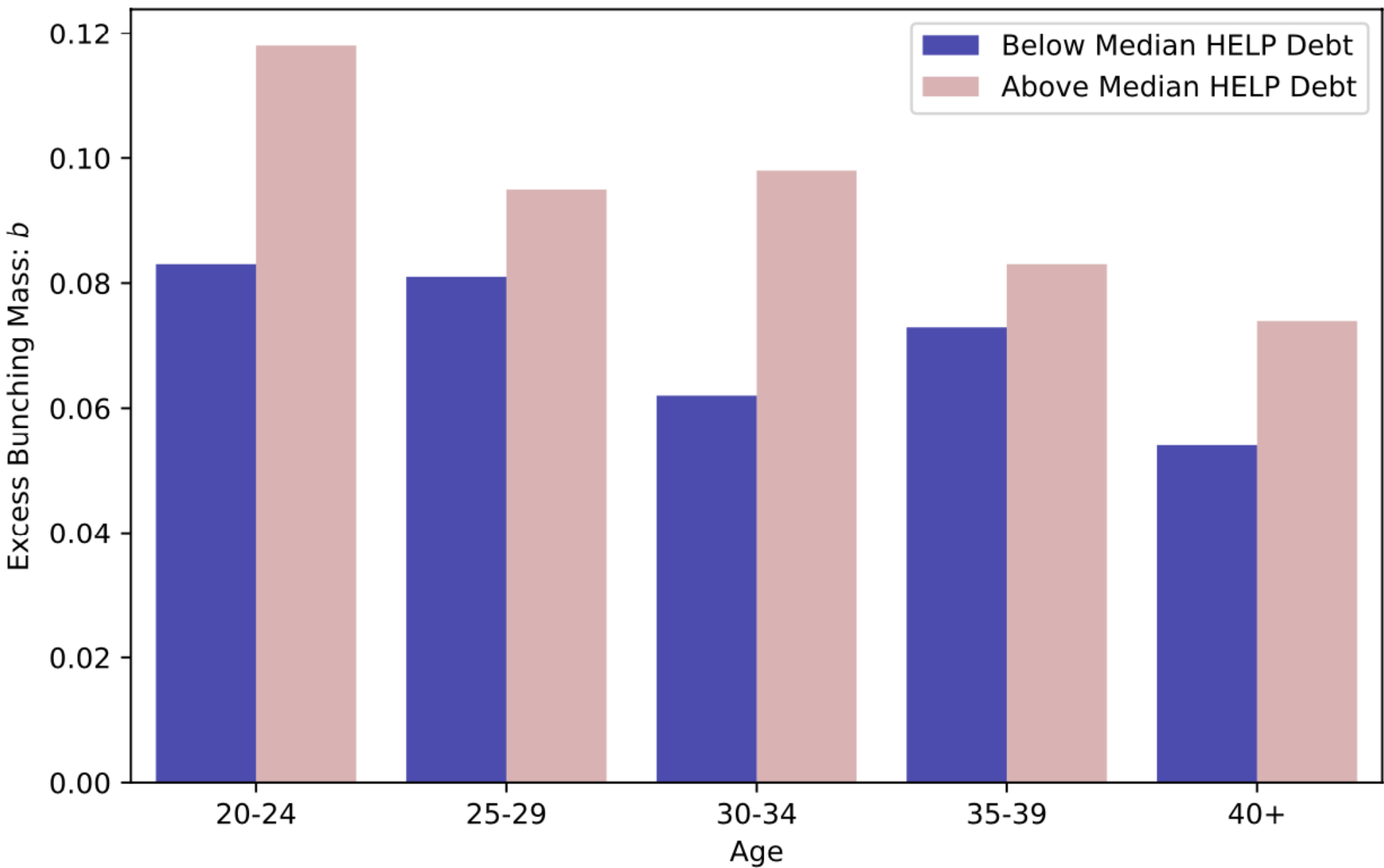
- Governments often provide subsidized financing for higher education
 - Student loans = \$1.6 trillion in US and 10% of household debt in US and UK

Debt	Income-Contingent Loan	Equity
<ul style="list-style-type: none">• Standard contract in US• Hard to discharge	<ul style="list-style-type: none">• Used in US, UK, Australia, Canada	<ul style="list-style-type: none">• Share of earnings• Limited successful examples
<ul style="list-style-type: none">✗ Borrowers bear most of risk	<ul style="list-style-type: none">✓ Insurance✗ Disincentivize labor supply✓ Encourage risk-taking✗ Incentivize over-borrowing✗ Adverse selection	
RQ: How does income-contingent affect labor supply and welfare?		

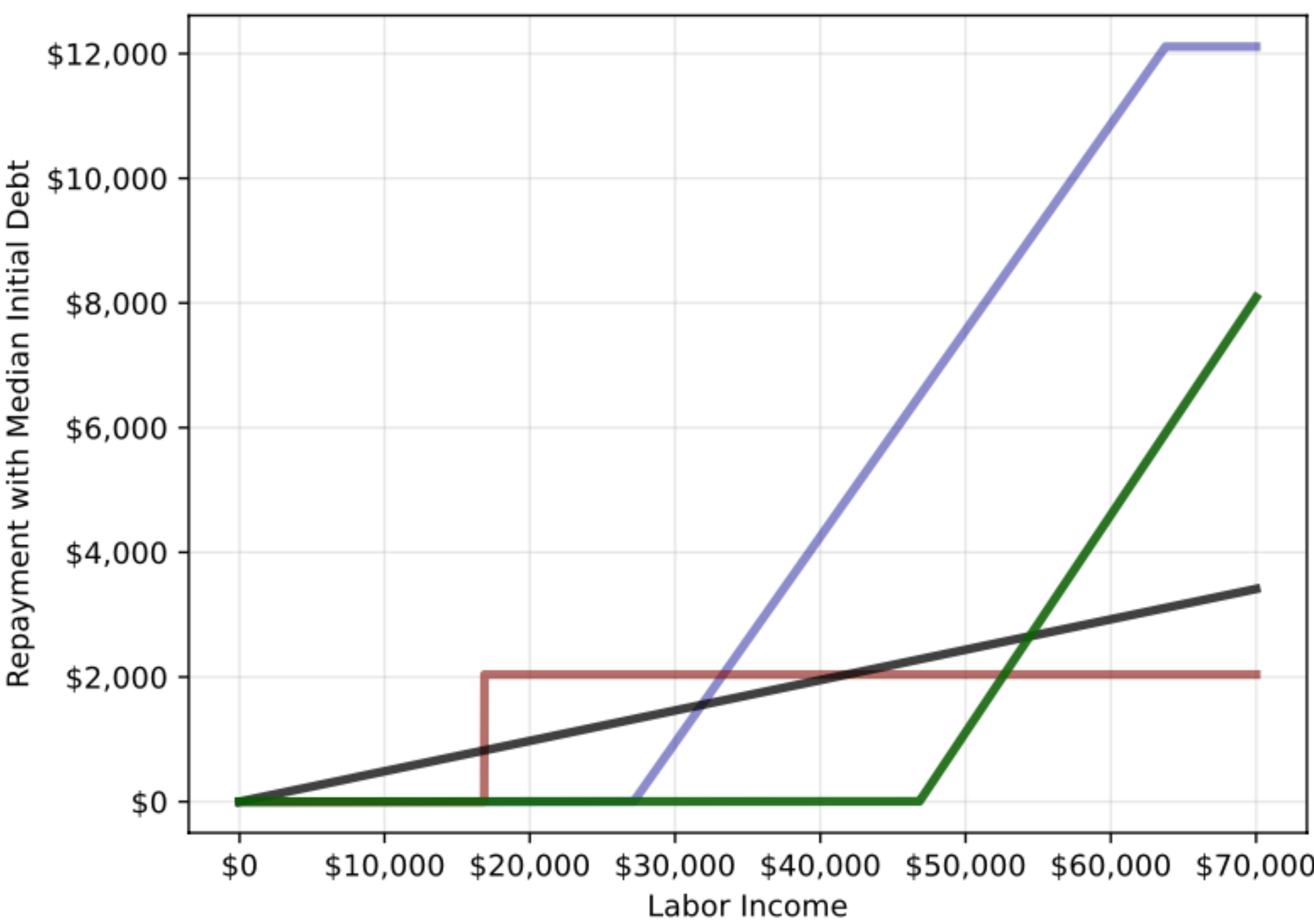
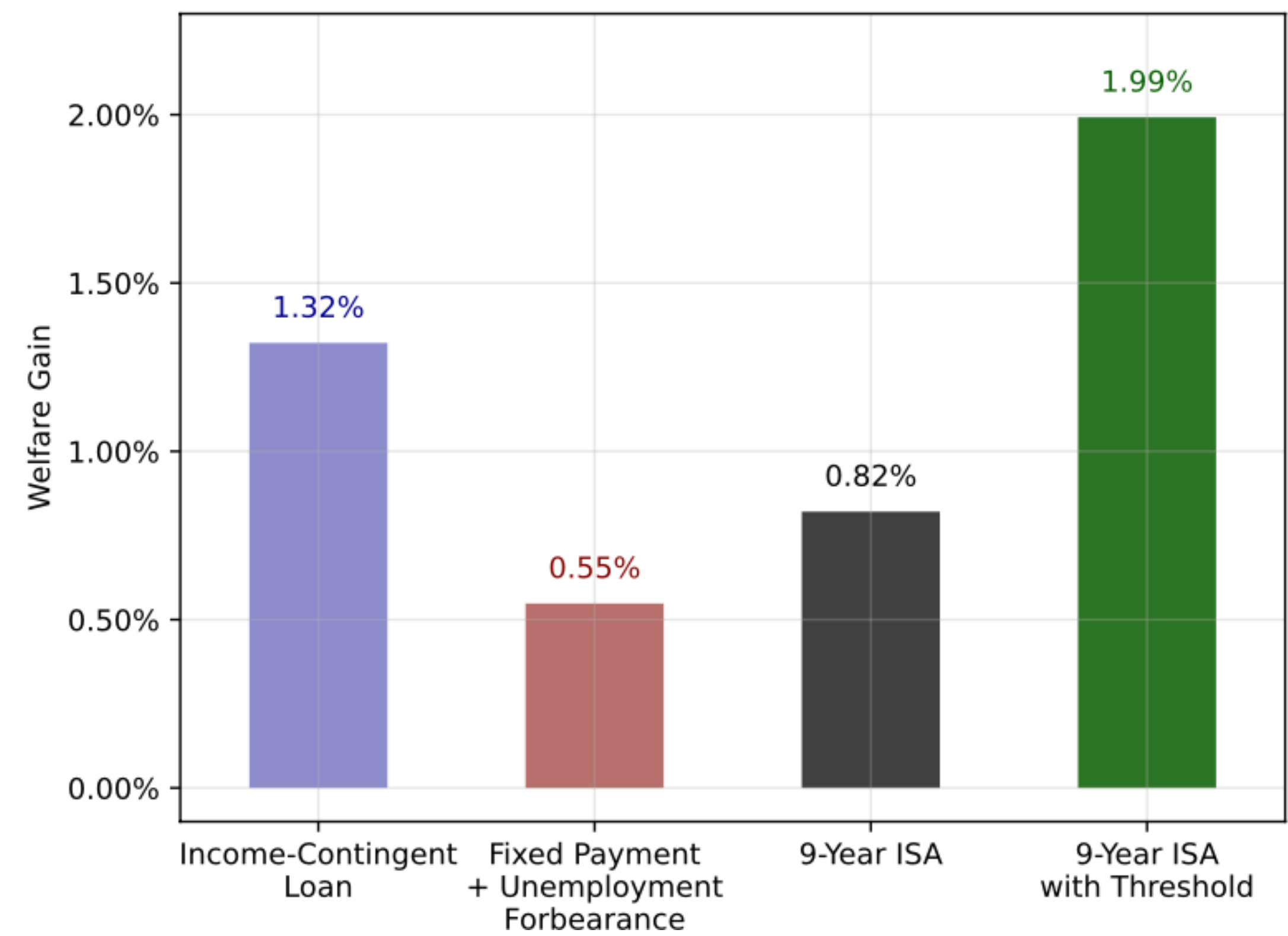
Borrowers Work Fewer Hours to Avoid Repayment



More Bunching among Young Borrowers with More Debt



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

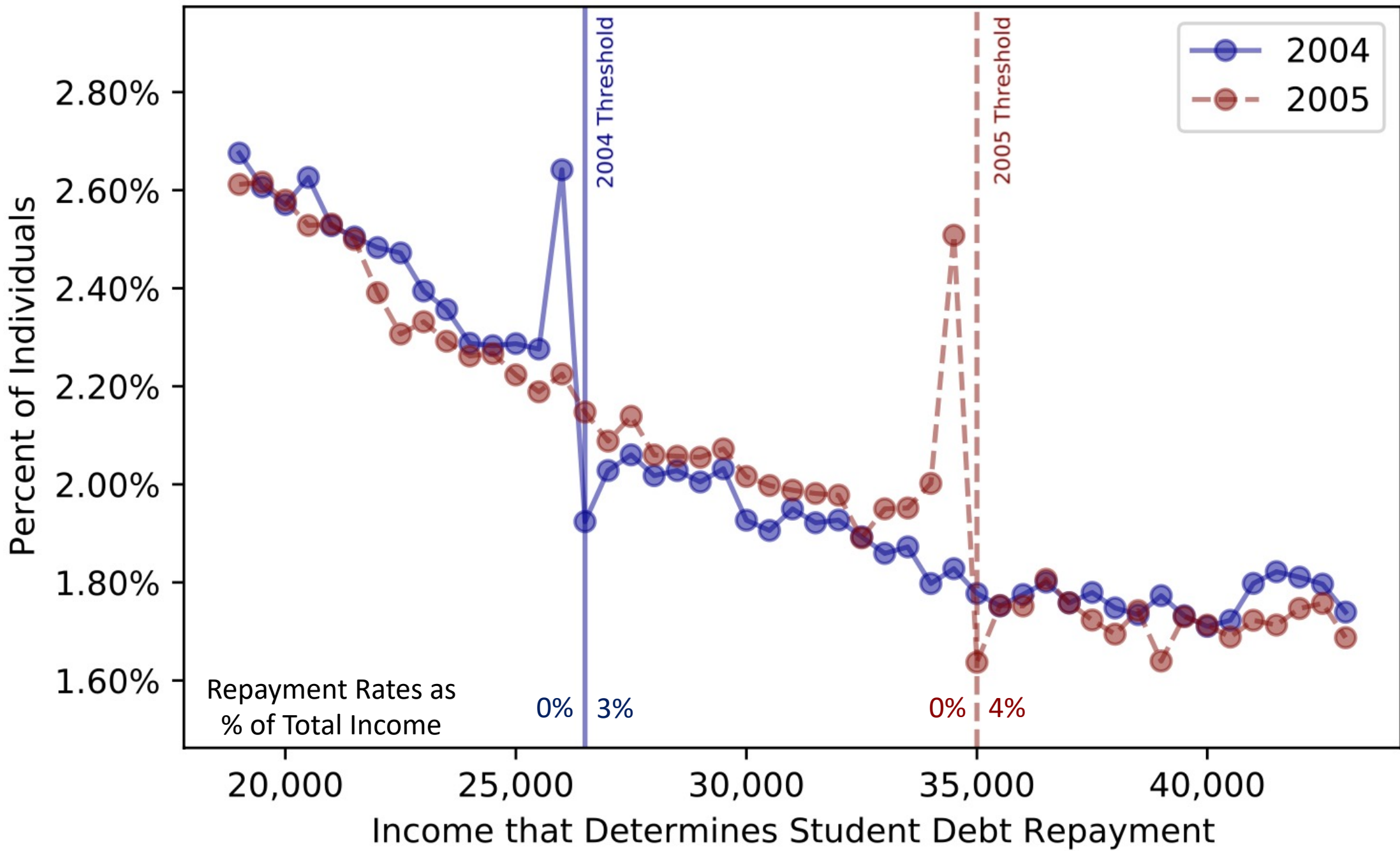


Empirical Strategy

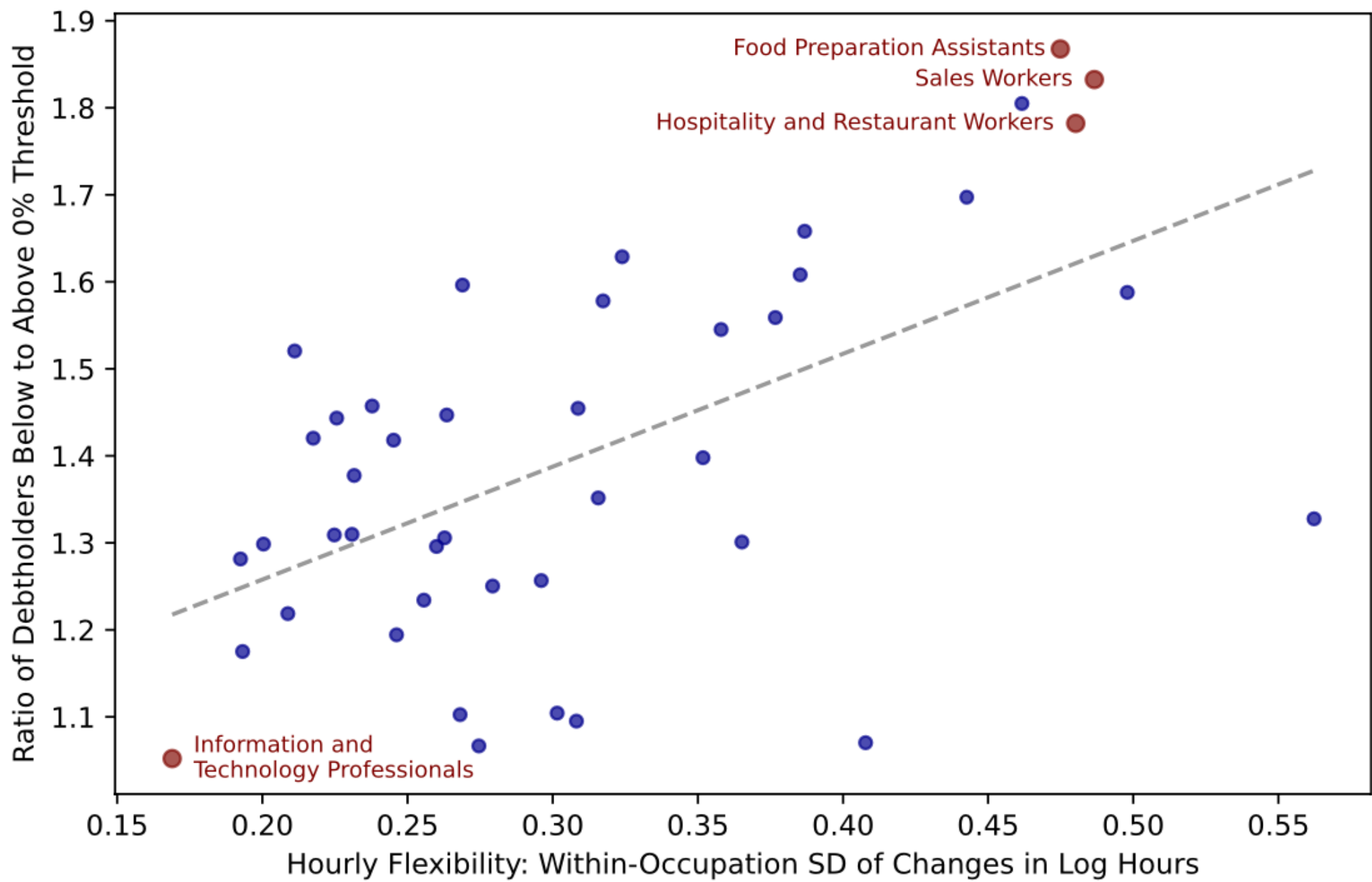
Data: income tax returns + student debt balances + repayments + household Census for **all** Australian citizens

Policy variation: change to design of gov't income-contingent loans

Bunching Below Point at which Income-Contingent Repayments Begin



More Bunching in Occupations with Hourly Flexibility



Key Ingredients in Structural Life Cycle Model

- Endogenous labor supply = **moral hazard**
- Optimization frictions = **dynamic** choice of labor supply
- Uninsurable risk + borrowing constraints = **demand for insurance**
- Planner that solves **optimal policy** problem with fixed budget
 - Baseline contract: 25-Year Fixed Repayment

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