Financial Markets Deregulation and Income Inequality: A Tale of Two Tails

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Motivation

- Finance & Insurance, FI: growing sector
- Important for economy
- Here: effect of deregulation in US on incomes, resp. income distribution

Approach

- Three types of deregulation
  1. Bank branching in 1970s to 1980s
  2. Removal of interest rate ceilings in 1970s to 1980s
  3. Repeal of Glass-Steagall in 1999
- Panel regression(s) on inequality measures
- Evidence on potential mechanisms

Main Finding

Heterogenous effects:

1. Bank branching decreased inequality by increasing incomes at bottom
2. Removal of interest rate ceilings decreased inequality by increasing incomes at bottom, but insignificant
3. Removal of Glass-Steagall increased inequality by increasing incomes at top

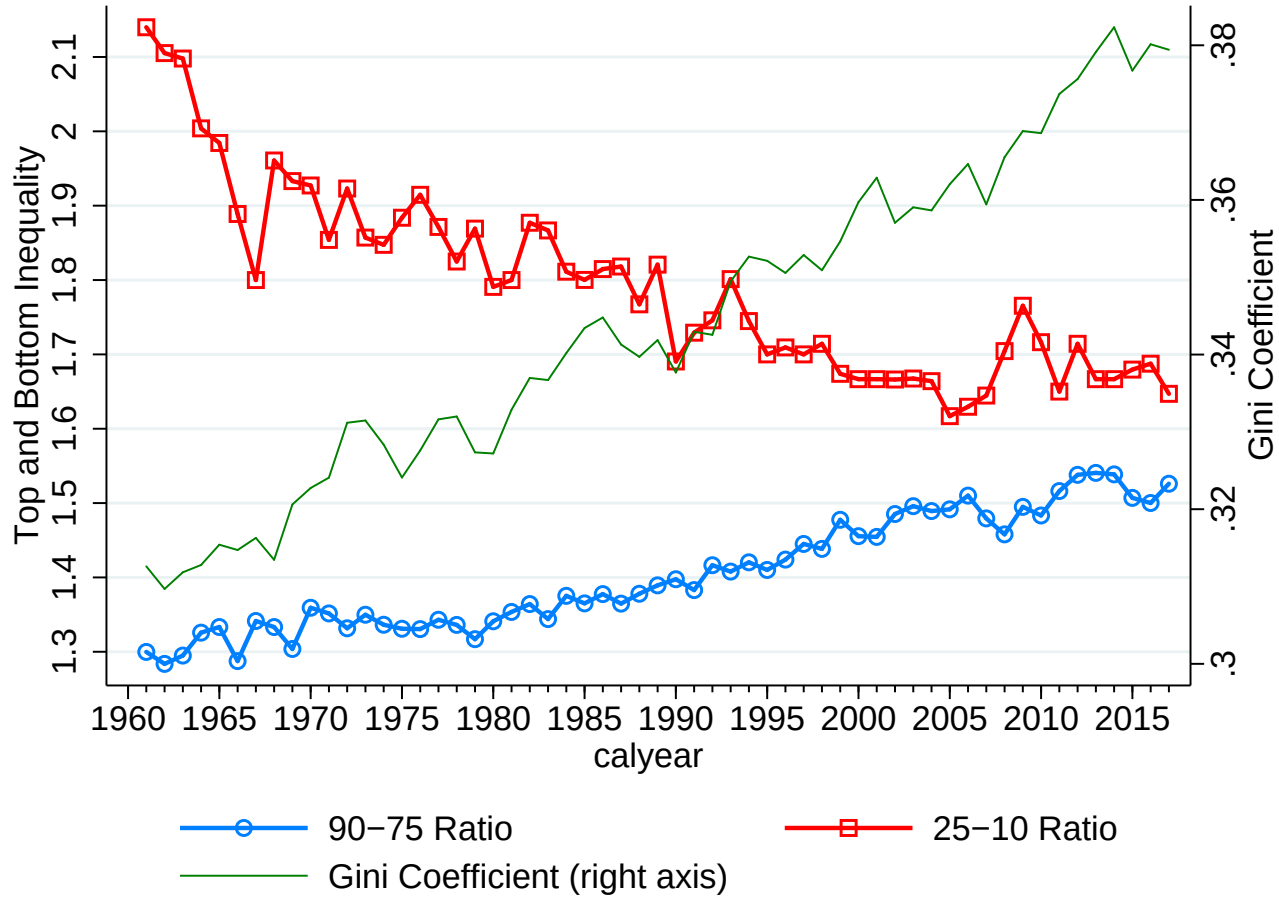
Contribution

Mixed evidence: Financial deregulation

- increased inequality: Philippon and Reshef (2012), Jerzmanowski and Nabar (2013)
- decreased inequality: Beck, Levine, and Levkov (2010)

Outline

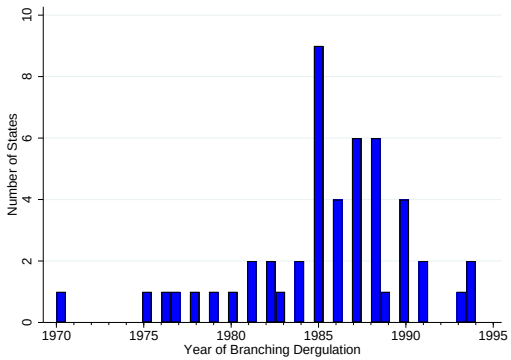
Evolution of Income Inequality



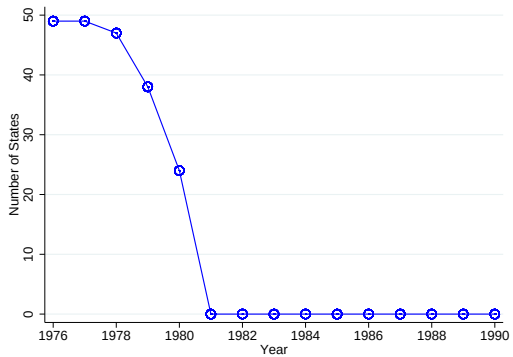
- Source: CPS
- Gini increased
- 90-75 ratio increased
- 25-10 ratio decreased

Measures of Financial Deregulation

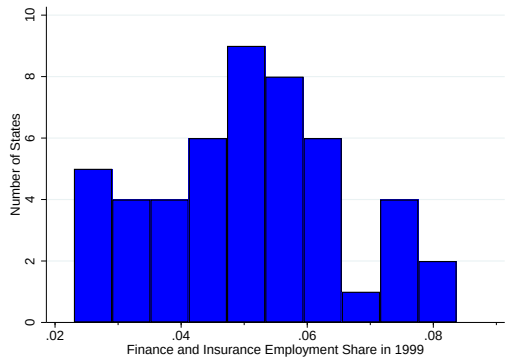
(a) Year of Permitting Bank Branching



(b) States with Binding Usury Rates



(c) Finance and Insurance Employment Share in 1999



- Sources: Strahan (2003), Vandenbrink (1982), CPS
- Cross-state variation of bank branching deregulation and binding usury rates
- Construct cross-state variation of Glass-Steagall by employment share before reform

Outline

Empirical Approach

- Follow Beck, Levine, and Levkov (2010):

$$\ln(y_{st}) = \alpha + \Sigma_i \beta^i D^i_{st} + \delta X_{st} + \mathbf{A_s} + \mathbf{B_t} + \epsilon_{st},$$

- y_{st}: inequality measure in state s, year t
- D^i_{st}: reform dummy, resp. interaction with employment share

Testing Exogeneity

	Levels				
	Gini	Theil	90/10	90/75	25/10
Branching	-0.26	-0.27	-0.13	0.99	-0.43
Ceilings	0.90	0.89	0.42	-0.10	0.02
Repeal	-1.61	-1.68*	-1.50	-0.25	0.38

- no significant effects from regressing deregulation measures on prior inequality

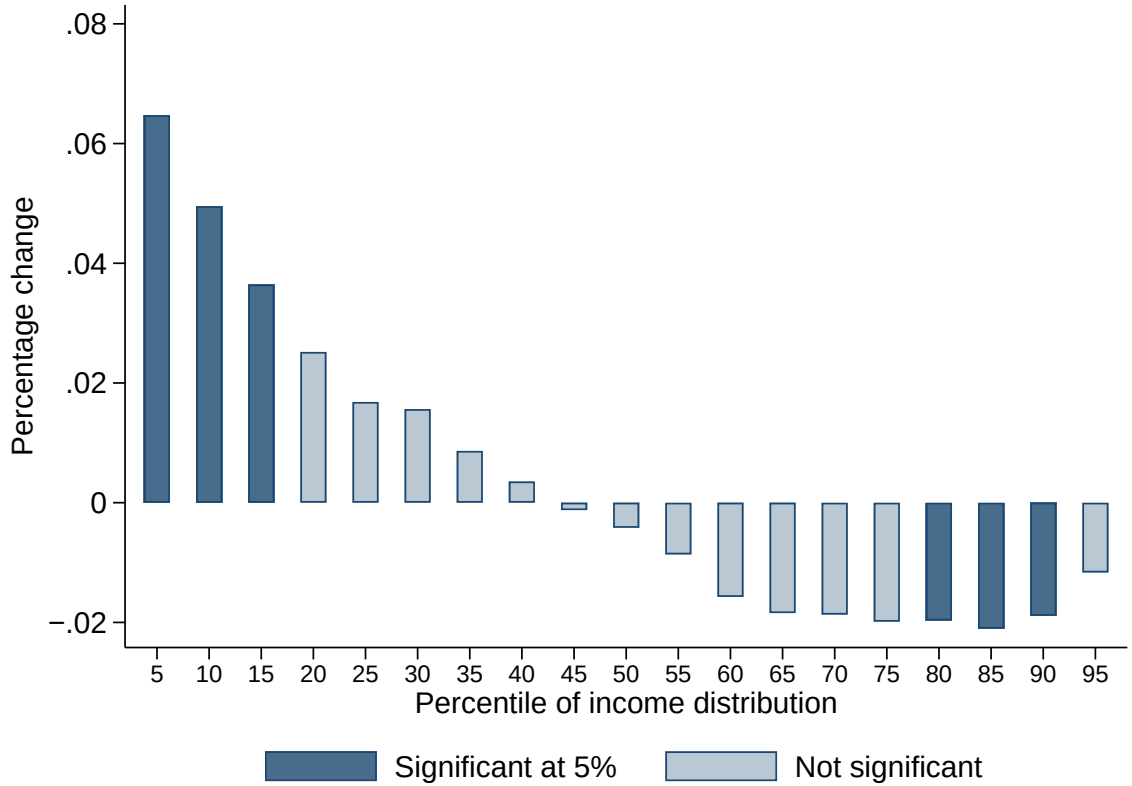
Outline

Impact on Inequality

	log(Gini)	log(Theil)	log(90/10)	log(25/10)	log(90/75)
			With Controls		
Branching	-0.020***	**-0.037***	-0.064***	-0.029***	-0.001
	(0.004)	(0.008)	(0.013)	(0.008)	(0.005)
Ceilings	-0.014*	**-0.030***	-0.025	-0.010	-0.009
	(0.008)	(0.015)	(0.018)	(0.014)	(0.009)
Repeal	0.626*	1.206*	1.369*	-0.026	0.201
	(0.315)	(0.607)	(0.789)	(0.256)	(0.202)

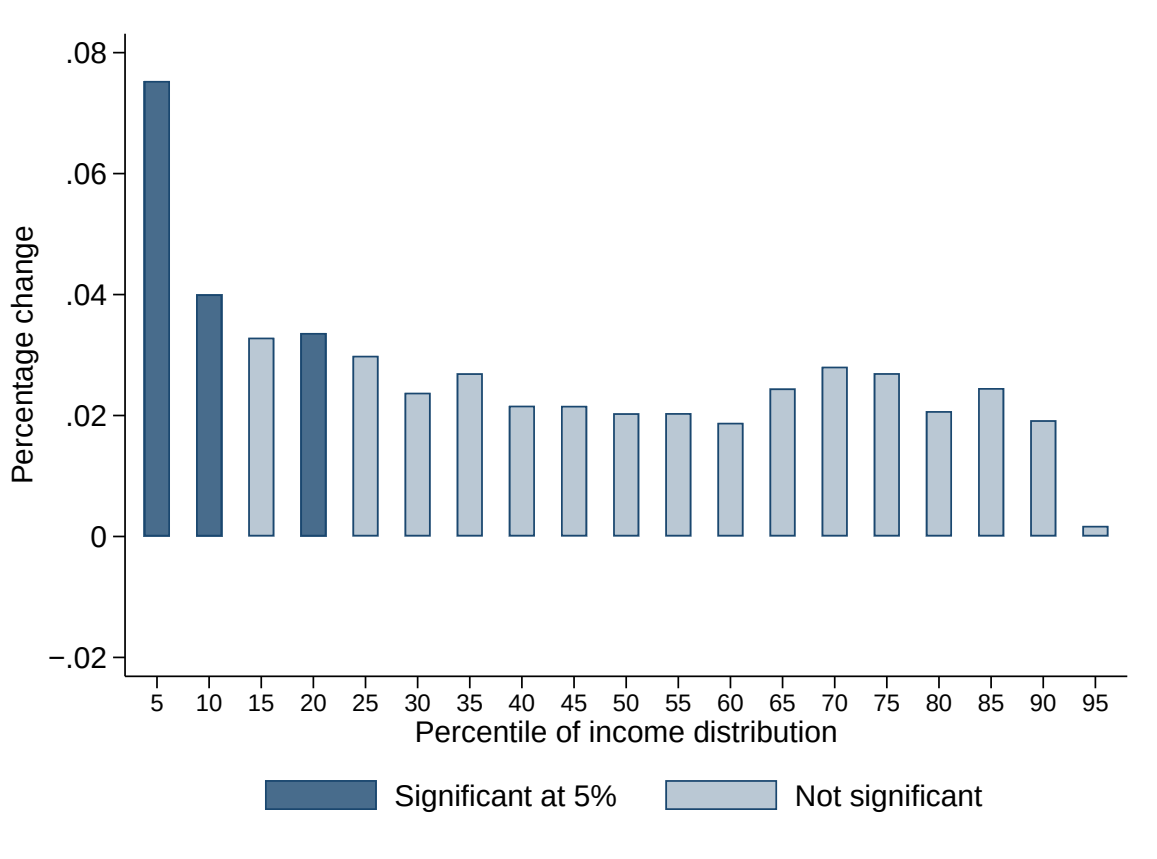
- Branching / ceilings: reduced inequality
- Repeal increased inequality
- Effect of repeal, weighted with employment share: 3.8%, **7.5%**, 8.2% for Gini, Theil, 90-10 ratio

Heterogenous Impact: Income Percentiles, Branching



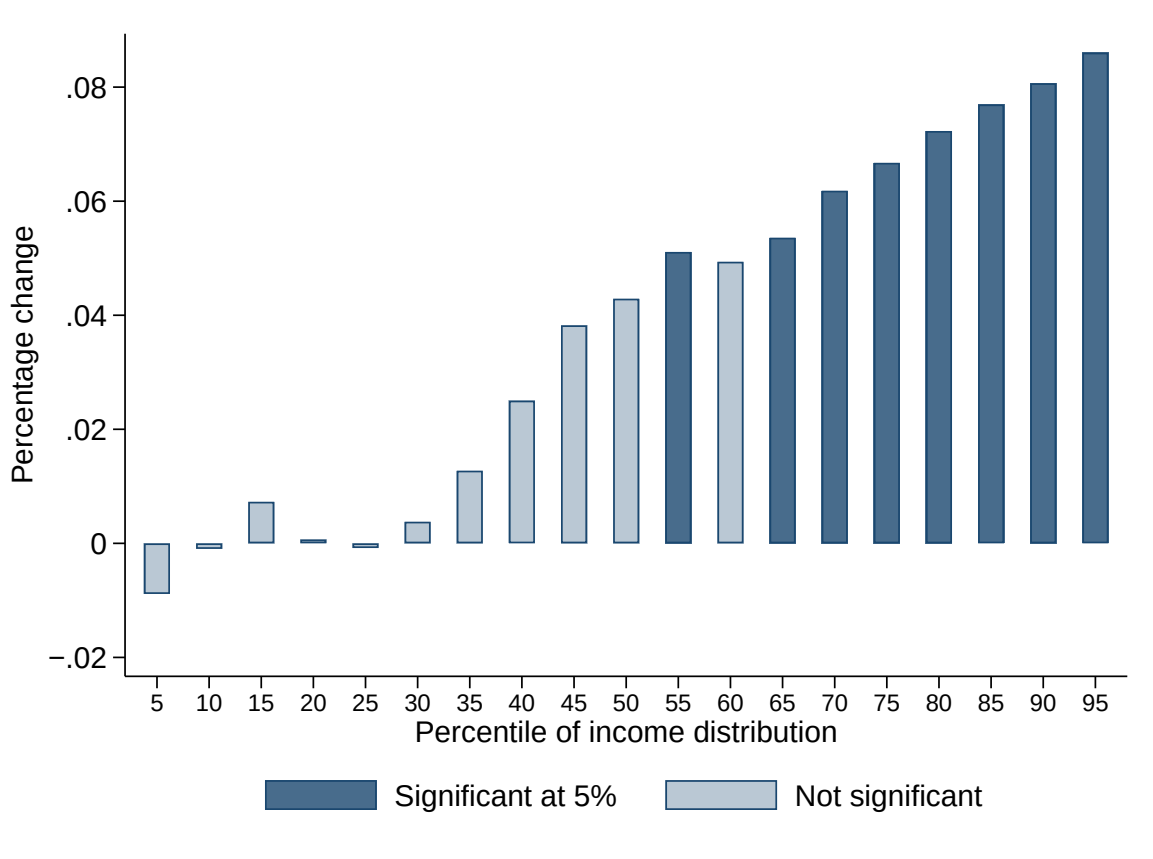
- Branching increased incomes in lower percentiles
- Replication of Beck, Levine, and Levkov (2010)

Heterogenous Impact: Income Percentiles, Ceilings



- Ceilings increased incomes, significant for lowest percentiles

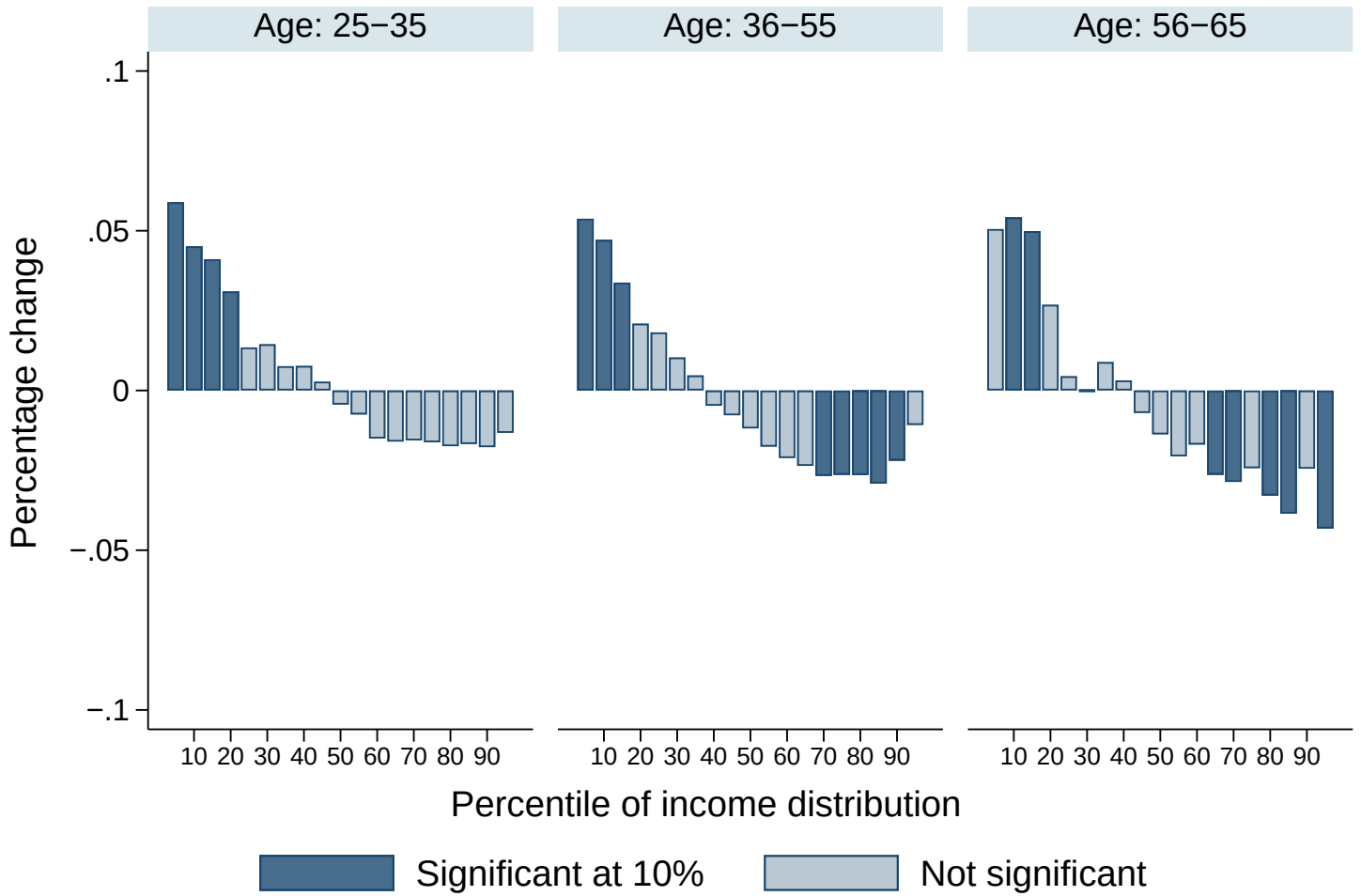
Heterogenous Impact: Income Percentiles, Repeal



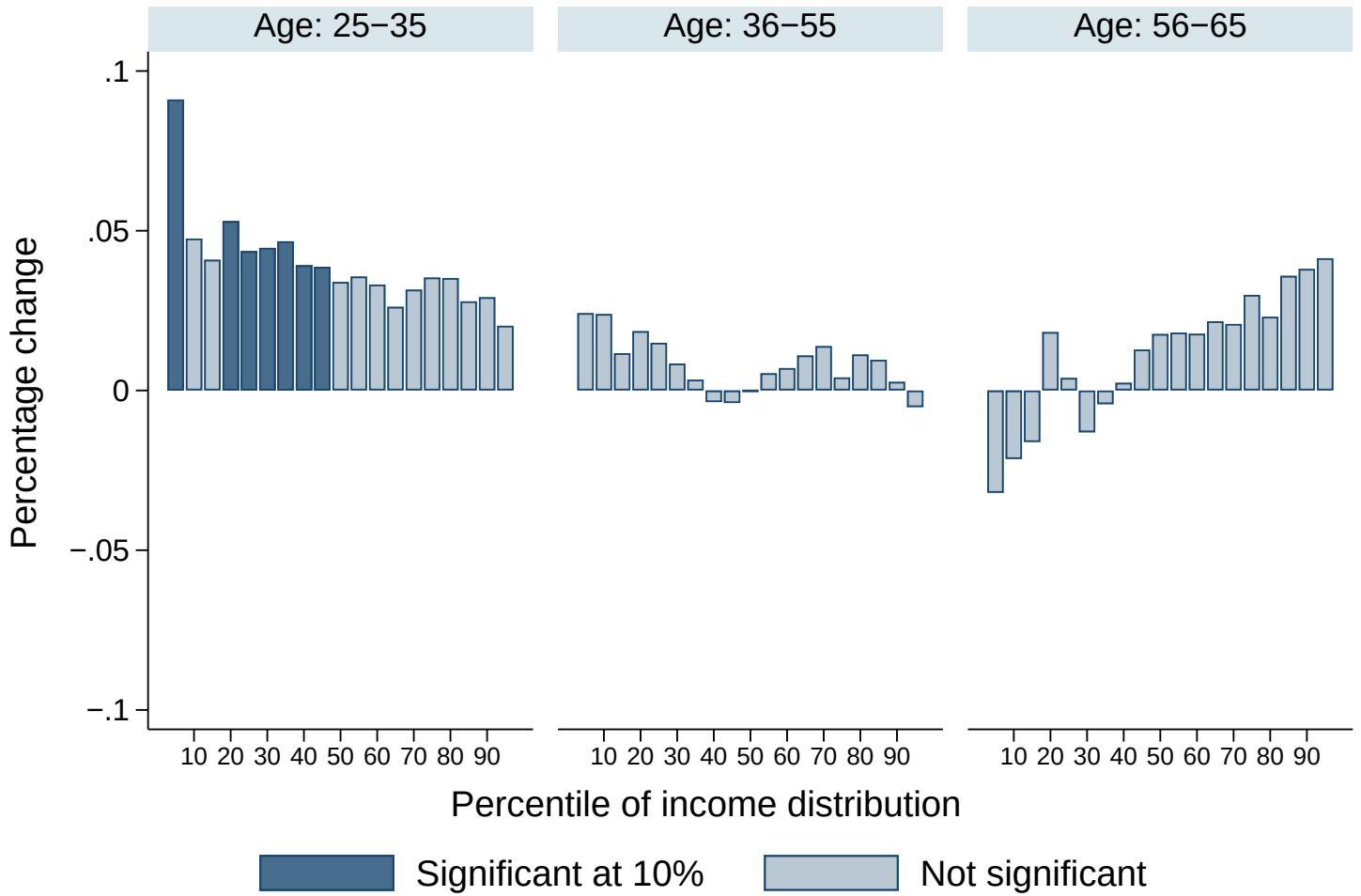
- Repeal increased incomes in higher percentiles

Outline

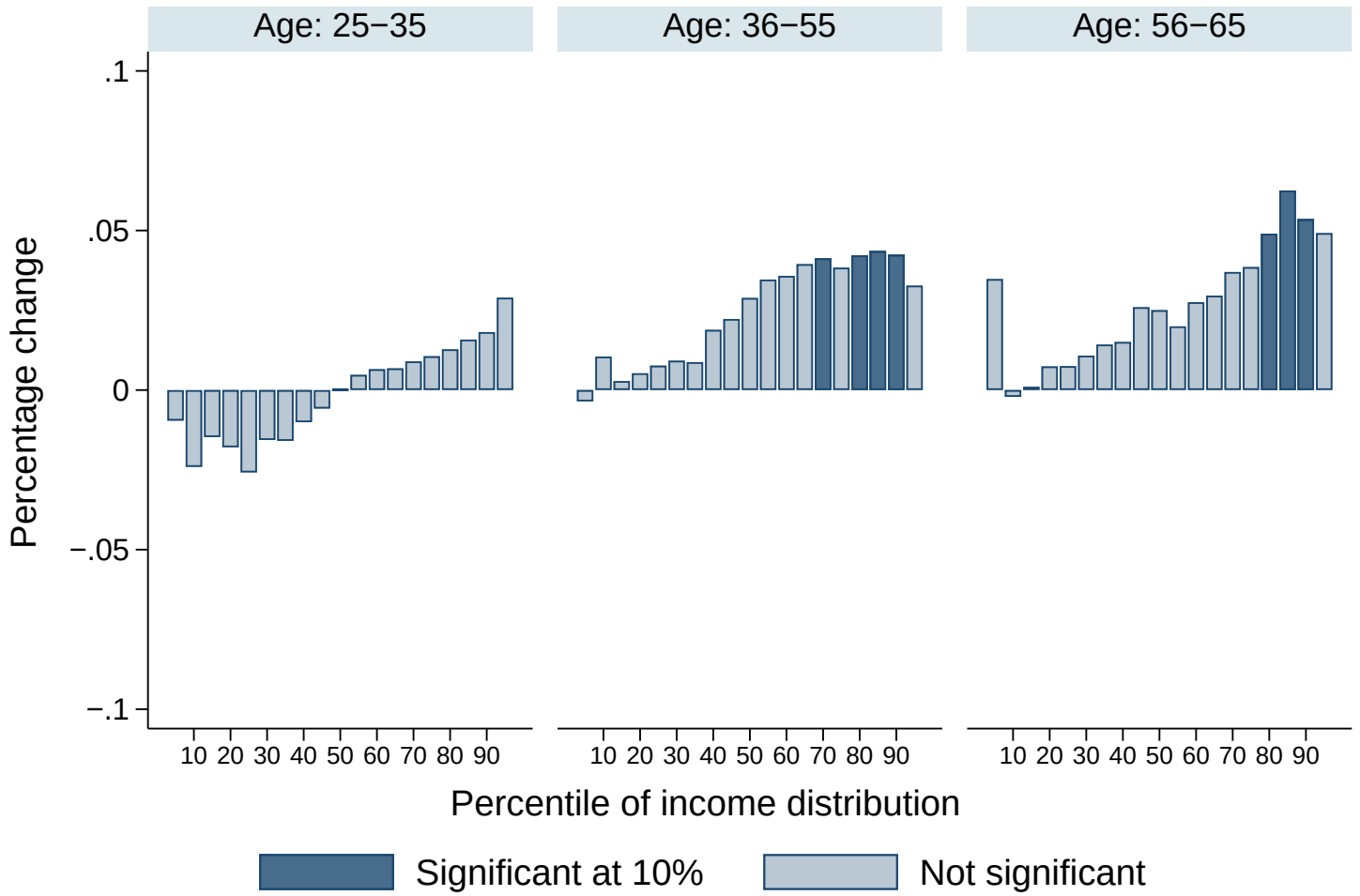
Heterogenous Impact: Bank Branching, Age



Heterogenous Impact: Interest Rates, Age



Heterogenous Impact: Glass-Steagall, Age



Decomposition: Within and Between Groups

				Sector Groups	
	Total	Between Group	Within Group	Not in FI	FI
Branching	-0.0074***	-0.0005	-0.0069***	-0.0073***	-0.0009
	(0.0021)	(0.0003)	(0.0019)	(0.0019)	(0.0051)
Ceilings	-0.0049	0.0001	-0.0049*	-0.0050*	-0.0007
	(0.0029)	(0.0003)	(0.0029)	(0.0029)	(0.0075)
Repeal	0.0147**	0.0032***	0.0115*	0.0130*	-0.0045
	(0.0068)	(0.0007)	(0.0064)	(0.0068)	(0.0056)

- Theil index in levels
- Branching / ceilings: within group
- Repeal: 22% (=0.0032/0.014) between group effect
- Effects mainly on “not in FI”

Impact on Sectoral Inflows

	Any Industry	High Skill Services	Manufacturing	Wholesale & Retail
Branching	0.002	-0.045*	0.051***	-0.014
	(0.005)	(0.023)	(0.014)	(0.020)
Ceilings	-0.011	0.022	0.071*	-0.094*
	(0.008)	(0.051)	(0.039)	(0.051)
Repeal	-0.293*	0.644	-0.789*	-0.221
	(0.146)	(0.777)	(0.459)	(0.466)

Outline

Conclusion

- Different types of reform have different impacts on different people
- Branching deregulation and removal of interest rate ceilings: reduction of inequality
- Repeal of Glass-Steagal: increased inequality
- Mechanisms important for model: counterfactual analysis

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