

Discussion:
Distributional Effects of Monetary Policy
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Distributional Effects of Monetary Policy

- Inflation exposure
- Interest rate exposure
- Asset price exposure
- Earnings heterogeneity

This paper: Distributional Effects of Inflation

- Unanticipated jump in the price level of 65%
- Anticipated 5p.p. higher inflation for ten years
- (1p.p. drop in real rate for 10 years)

Unanticipated jump in the price level of 65%



Inflation exposure accounting framework:

- Incidence of inflation across households from the data

Life-cycle household problem:

- Response of consumption, hours worked, housing
- Long-term nominal assets (only nominal rigidity)

Not modeled:

- Real rate, wages, goods prices
- Portfolio response

Summary of accounting framework

- Follows Doepke and Schneider (2006)
- Group households by age 25-2.5-75 and rich vs non-rich (renters vs homeowners)
- Short real and short, mid, and long nominal
- Duration of mid equals 6 years and long 10 years
- Combine both assets to achieve duration observed in the data

Summary of household model

Households

- Overlapping generations
- States: Age, house ownership, productivity, time preferences, asset portfolio
- Choices: Consumption, renting vs owning, hours worked, total savings

Housing market

- Fixed supply of housing
- Rental rate equals world return on capital

Government

- Supplies bonds
- Taxes consumption and labor

Heterogeneity in inflation exposure

		Age cohort					
		≤ 34	35 – 44	45 – 54	55 – 64	65 – 74	> 74
EA	Rich HHs	-1.5	5.5	10.3	13.9	12.3	20.7
	Middle Class	-80.4	-15.3	1.0	9.6	13.7	22.8
	Poor HHs	1.0	-4.2	9.4	14.5	12.4	15.5
	Total	-48.3	-11.6	3.1	11.0	13.2	19.3
US	Rich HHs	-14.0	3.8	6.6	16.3	16.7	27.5
	Middle Class	-114.0	-31.6	-4.8	14.0	25.2	38.1
	Poor HHs	-36.6	-33.8	-5.5	7.5	17.5	26.4
	Total	-42.6	-10.1	2.3	15.2	19.4	30.6
CA	Rich HHs	-2.7	2.2	16.4	17.5	27.5	29.8
	Middle Class	-89.4	-26.5	11.4	26.0	29.4	33.9
	Poor HHs	-52.1	-27.1	-3.3	20.7	14.2	23.8
	Total	-35.8	-11.2	13.1	22.1	27.9	31.9

Table 5a: Inflation exposure (NNP/NW, % points) across age cohorts

Adam & Zhu, 2016

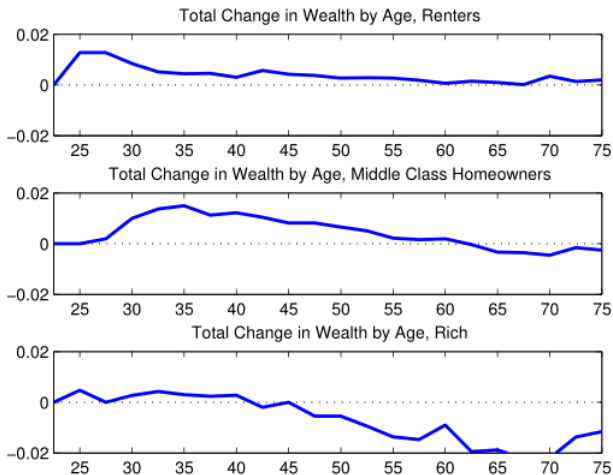
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Redistribution via unanticipated inflation shock



Model gives household responses in

- Consumption, labor, and housing to inflation shock
- Welfare across households

- Retirees: Consume less
- Workers: Consume more, work less, buy housing
- Total: Consumption falls, hours fall, house prices go up

Anticipated inflation

- Similar results with anticipated inflation
- Maturity now matters (e.g. renters not affected)
- Size of effects smaller but same sign

What is the right model of retirees?

- Bequest
 - Wealth effects on the labor supply of heirs
 - Intergenerational precautionary savings
- Health expense shocks
- Empirical evidence on MPC of retirees?

- Portfolios fixed
- Government and foreign holdings of nominal assets
- Nominal rigidities in labor and product markets

- This paper assumes a fixed portfolios over k, b_0, b_1, b_3
- However, inflation affects
 - 1 Portfolio choices
 - 2 Quantity of assets (liquidity)

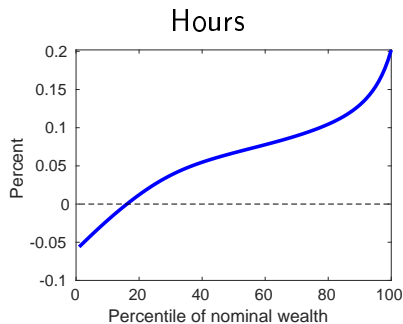
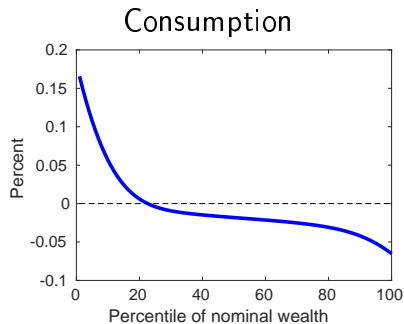
Endogenous Portfolio Choices

- Two-asset HANK model with liquid nominal bonds and illiquid real capital (random participation in capital market, Luetticke (2018))
- Endogenous value of liquidity that varies across households and across time
- $LP = E_t \frac{q_{t+1} + r_{t+1}}{q_t} - E_t \frac{R_{t+1}^B}{\pi_{t+1}} = 200 \text{ basispoints}$

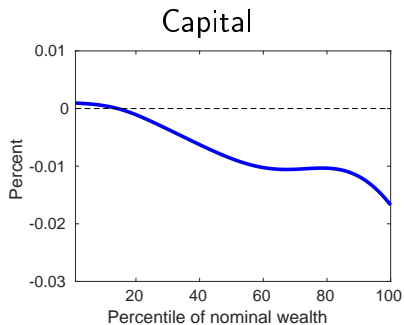
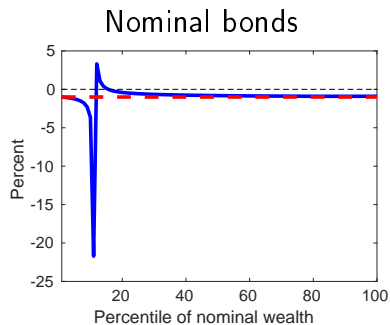
New mechanism:

- Heterogeneity in household portfolio responses
- Insurance via liquidity

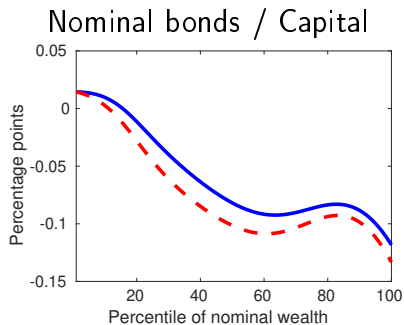
Household response to inflation shock (1%)



Household response to inflation shock (1%)



Household response to inflation shock (1%)



Inflation as amplification channel

- Fisher channel:

Aggr shock (monetary, financial, real)

1 inflation falls

2 real value of debt goes up

3 consumption falls

1' inflation falls

etc

Two-asset HANK model in GE (Luetticke, 2018)

